

THE SOUTH AUSTRALIAN

DAIRYMEN'S . . .

Journal



Official Publication of the

Published Bi-monthly

Vol. 8, No. 4.

Adelaide, JANUARY-FEBRUARY, 1969



DAIRY FOODS INFORMATION CENTRE

NATIONAL OFFICE OF THE AUSTRALIAN DAIRY PRODUCE BOARD

20 LEIGH STREET, ADELAIDE

PRICE

20c

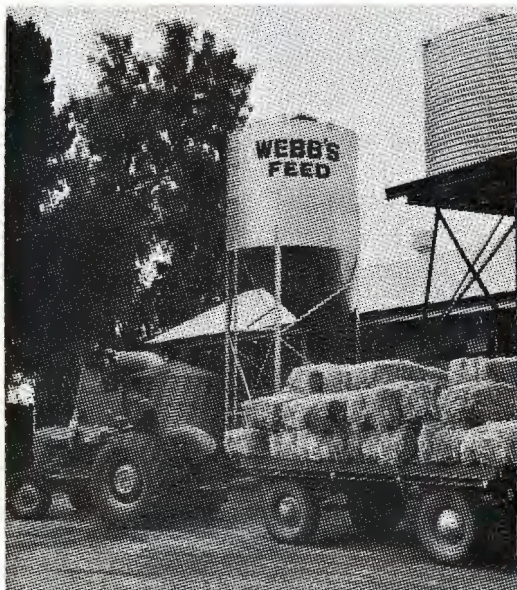
Printed at GPO, Adelaide
and to be post as a periodical.

\$1.20 per Year, Post-Paid

Whyalla Dairy

Shortage of water for irrigation in Whyalla district made a change to dry feed of dairy stock inevitable . . . results have been beneficial with Webb's Stockfeeds.

Dry feeding has successfully replaced irrigated perennial pastures at BHP's Hematite Dairy at Whyalla.



Dry feeding was introduced to counter the rising costs of irrigating perennial pastures.

Since the change-over to dry feeding was made in October, 1965, milk output per cow has risen by about half a gallon a day and labor costs have been reduced slightly.

Health of the stock has not been adversely affected by the changed method of feeding.

The diet decided on consisted of hay, bought from Eyre Peninsula and Wirraloro growers, concentrates as dairy pellets, from Webb's, Adelaide, and some oats.

The only grazing available to milking stock now is occasional light grazing of lucerne, following winter rains. Dry stock and heifers also have access to saltbush.

It pays to use the **Best!** And the Best is . . .

WEBB'S STOCKFEEDS Pty. Ltd.

465 GRAND JUNCTION ROAD,
WINGFIELD. 5013. 'Phone 45 7077.

THE SOUTH AUSTRALIAN DAIRYMEN'S JOURNAL



Published by

**THE SOUTH AUSTRALIAN DAIRYMEN'S ASSOCIATION
INCORPORATED**

Aston House, 13 Leigh Street, Adelaide. 51 3034

President: General Secretary:
N. M. GREEN DAVID J. HIGBED

Advertising Rates on application

DEVALUATION PAYMENTS

Enquiries reaching the Commonwealth Dairy Produce Equalisation Committee Ltd. in recent weeks indicate that some producers are anticipating a further equalisation distribution following Parliamentary and press announcements that substantial payments have recently been made by the Government in fulfilment of its undertaking to the Industry on devaluation losses.

It is acknowledged that the Government has already made substantial payments in this regard but the Committee wishes to point out that, as far as the year 1967/68 is concerned, the Step-ups of 75 cents per cwt. butter and 50 cents per cwt. cheese made in November last took into consideration not only devaluation compensation payments then available but the further reimbursements which it was known would be made by the Government in due course.

With regard to the current year (1968/69), actual market returns have fallen well short of the level necessary to achieve the average equalisation values which have operated since the commencement of the period (1st July, 1968), and Government devaluation payments to date have only served to help bridge the deficiency.

The position has been explained in the Committee's advices to butter and cheese manufacturers.

It should be clear, therefore, that current average values take fully into consideration anticipated devaluation payments by the Government in respect of exports ex production of the periods involved, and in the circumstances producers cannot look for any further improvement in returns on this account. In accordance with practice, however, sales levels and returns in respect of unfinalised pools are under constant review, and interim values will be increased whenever warranted.

DAIRY FOODS INFORMATION CENTRE

has been established at 20 Leigh Street, just across the road from Aston House, where the South Australian Dairymen's Association office is situated. Members are invited to inspect this important sector of dairy produce promotion.

REFRIGERATION AND BULK COLLECTION INCREASE

Milk Board Annual Report Reveals

The Metropolitan Milk Board's Annual Report for 1967/68 reports that the development of bulk collection caused a further decline in the number of refrigerators used for milk handled in cans. Although 34 dairymen installed refrigerators during the year the number of dairymen using refrigerators for milk in cans fell from 551 to 468. In all cases the refrigerators were replaced by refrigerated farm milk tanks.

At present 1,033 producers are using some form of refrigeration for the production of city milk of which 565 are refrigerated farm milk tanks.

MILK QUALITY

Methylene Blue Results

Milk quality as determined by the methylene blue test followed the same trend as in previous years with quality being consistently satisfactory during the winter months, but producers without refrigeration found difficulty in complying with the standard when the atmospheric temperatures were high.

As the methylene blue test was not serving any useful purpose and was in fact misleading producers when applied to refrigerated milk, this test was discontinued during the year for milk handled in refrigerated farm milk tanks. This was replaced by the preliminary incubation methylene blue test with an advisory standard of 2½ hours.

With the standard methylene blue test producers were able to comply with the standard even when the dairy hygiene was well below that required by the Board.

The main purpose of the preliminary incubation methylene blue test is to obtain an indication of the sanitary conditions which apply at the point of production. This enables the Board where necessary to take steps to ensure that the quality of the milk is safe-guarded.

With good hygiene and refrigerated storage temperatures the consumer can be assured of milk of considerably higher bacteriological quality than is possible with unrefrigerated water cooled milk.

The monthly summary of the percentages of tests conforming with the standard for 1965-66, 1966-67 and 1967-68 is listed below:—

Period	1965-66	1966-67	1967-68
June—July	99.28	99.14	99.61
July—August	98.74	99.44	99.46
August—September	98.07	98.27	98.95
September—October	94.70	97.24	98.04
October—November	97.36	97.87	98.46
November—December	94.87	87.65	92.44
December—January	68.26	94.29	92.87
January—February	92.16	96.13	88.37
February—March	97.11	93.16	91.68
March—April	93.45	95.13	90.19
April—May	96.68	96.79	98.29
May—June	98.73	98.99	98.92

SUSPENSION OF MILK PRODUCERS' LICENCES

With the number of licences suspended at 114, the total suspensions were 23 less than for the previous year.

Details of the suspensions for the years 1966-67 and 1967-68 are as set out hereunder:—

	1966-67	1967-68
Below standard Methylene Blue	97	80
Adulteration with water	11	13
Antibiotics	23	17
Unclean Premises	6	4
Total	137	114

BULK COLLECTION OF MILK

Despite the unfavourable conditions during the major part of the year there was a marked increase in the number of refrigerated farm milk tanks. During the year 241 refrigerated farm milk tanks were installed bringing the total number of refrigerated farm milk tanks used by producers licensed by this Board to 565. In addition to these tanks there are 66 unrefrigerated tanks also in use from which milk is collected twice a day except during the winter months.

An investigation made during the year showed that slightly more than half the milk produced in the city milk production area is now handled by the bulk collection method. All of the producers on the lower Murray Irrigation Area are using farm milk tanks.

Two factories are handling the whole of the milk intake from producers by bulk collection and approximately 75 per cent of the milk intake at three factories is handled in bulk.

The rapid increase in the number of bulk farm milk tanks is in excess of that anticipated when the system first started within the production area under the Board's control.

It seems certain from the interest shown in this method of milk collection that many more refrigerated farm milk tanks will be installed on farms licensed by the Board. This will materially assist in the maintenance of high quality milk.

U.K. BUTTER QUOTAS

Australian producers are assured of access to the British market for 65,100 tons of butter in the next quota year commencing 1st April next. This represents a reduction on the quota entitlement in 1968/69 but exceeds actual shipments due to reduced production in Queensland and Northern N.S.W. resulting from the effects of drought.

Total permitted imports from all countries would be limited to 397,000 tons. This compared with the total quota in 1968/69 of 462,000 tons. The control over British imports of "near butters" which was introduced last year would be continued in 1969/70.

Butter stocks in the United Kingdom have risen to very high levels and threaten price stability in that market. The reduced level of imports should enable stocks held in the U.K. to be significantly reduced and thereby ensure that the present price of Australian butter of £stg.300 per ton will be maintained.

The Australian Dairy Produce Board had been closely consulted at all stages of the discussions with the British authorities.

REFRIGERATION IN — PROBLEMS OUT?

It is not so many years ago that farmers struggling to maintain milk quality during the summer months — paying scrupulous attention to hygiene, milking only late at night, covering cows with wet bags, rigging up water sprays, and so on — might have dreamed about the possibility, one of these days, of solving all their problems with one stroke, by refrigeration.

And the gradual introduction of stock coolers and insulated, or refrigerated, can cabinets gave some hope of success in this direction, but certainly did not do all that we had looked for, and been promised.

It seemed that another step was necessary if we were to achieve what we sought. A big and an expensive step — bulk tank refrigeration.

So the step was taken, and for a time the problems were solved.

Or so it seemed, until the Milk Board jacked up the standard. At least that is how the producer saw it, and wondered whether the Board was making the introduction of refrigeration a jumping-off point for higher quality standards.

Not so. One set of problems may have been solved; another set has been created.

The following article describes how, and why.

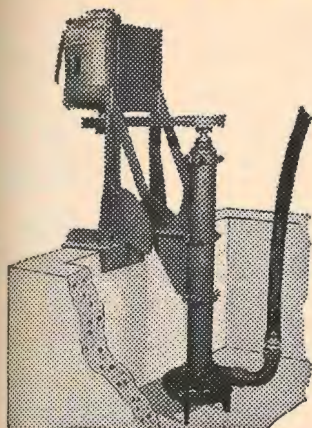
Bacteriological Quality of Farm Refrigerated Milk

**By J. McPHILLIPS, B.Sc.Agr., Ph.D., H.D.D.,
Officer-in-charge, Milk Board Laboratory, University of Sydney.**

It would not be unreasonable to expect that the introduction of farm refrigeration and bulk collection would result in an immediate and spectacular improvement in the bacteriological quality of milk. Whilst there are many instances of this being the case there is no doubt that **experience throughout the world indicates that the bacteriological problems of milk have certainly not disappeared with farm refrigeration. They have merely changed.**

EFFECT OF REFRIGERATION ON THE BACTERIOLOGICAL PATTERN

Under the can system where the milk is at atmospheric temperature for varying periods the acid producing lactic acid bacteria, which include such organisms as **Streptococcus lactis**, lactobacilli and coliforms, usually predominate. These organisms cause acid flavour and if the process goes too far the milk clots. Since such milk is usually picked up twice daily in the warmer months and cooled on arrival at the receiving depot, little deterioration occurs. Even where considerable numbers of organisms have developed they are easily killed by pasteurisation and a satisfactory pasteurised milk results, provided too much acid development hasn't occurred. Under this system, only rarely would flavour defects due to protein or fat breakdown be encountered.



**Easy to instal --
efficient operation**

The **IBC** DUMAC filter cut liquid manure pump

**Designed for dairies
and piggeries this versatile
pump saves you money.**

Simply mount the pumps (as illustrated) over the edge of a small pit, e.g., a round or rectangular pit 2—6 feet deep. There's no priming required as the pump is immersed in the liquid.

BY COUPLING THE IBC-DUMAC FILTER CUT PUMP WITH THE "DISPERSA" LIQUID MANURE

SPRINKLER, EVEN DISTRIBUTION OF EFFLUENT IS ASSURED OVER LARGE AREAS OF PASTURE.

Spare parts are inexpensive — easy to get — easy to instal.

Get more details on the IBC-Dumac Filter — Cut Liquid Manure pump now!

Post this coupon today.
Please send me further details on the IBC-Dumac Filter-Cut pump without obligation.

INTERCOLONIAL BORING CO. LTD.
"Water House", 98 Churchill Rd., Prospect,
S.A. 5082. Phone 65 6944.
Head Office: 450 Ann St., Brisbane, Qld.
Branches all States.
MT. GAMBIER: Stuart Richardson, 5 Rotary
Ave. 5290. Phone 2 3482.

NAME

ADDRESS

POSTCODE

With the introduction of farm refrigeration where milk is held on the farm at temperatures close to 40°F. for relatively long periods and further maintained at this temperature until pasteurised, a situation quite different from that found with the can system operates. The growth of the normal lactic population is inhibited and those bacteria that can grow at low temperatures will develop. Bacteria that prefer low temperatures (below 15° or 59°F.) for growth and development are termed psychrophiles but those important in farm refrigerated milk should more correctly be termed "psychrotrophic" (i.e. able to thrive at low temperatures) as their optimum growth temperature is 68°-86°F. The types found developing in refrigerated milk include *Pseudomonas*, *Flavobacterium*, *Alcaligenes*, *Achromobacter* and certain coliforms. These bacteria are predominantly gram negative rods and most of them can attack fats and proteins. Thus in going from cans to refrigerated bulk milk we have changed the bacterial population from predominately gram positive rods and cocci to one in which gram negative rods predominate.

THE DEVELOPMENT OF BACTERIA IN REFRIGERATED MILK

First consider the case where bacteria are allowed to develop in milk at their optimum temperature. Four phases of growth occur, namely the lag phase, the log phase, the maximum or stationary phase and finally the death phase.

In milk which has been refrigerated the growth pattern is distinguished by a greatly extended lag phase. This is primarily because the bacteria are subjected to temperatures well below their optimum and all growth processes are slowed down. The development of bacteria at 40°F. is shown in Table 1 where the difference between good and bad milk is clearly indicated.

Table 1. Effect of storage at 40°F on the total count of milk.

Period of Storage at 40°F (days)	Sample No. 1	Sample No. 2	Sample No. 3	Sample No. 4
0	33,000	22,000	320,000	720,000
3	77,000	120,000	5,000,000	3,700,000
4	960,000	760,000	13,000,000	6,200,000
5	10,000,000	3,700,000	44,000,000	8,300,000

The effect of small differences in storage temperatures over 3, 4, & 5 days storage is shown in Table 2.

Table 2. Effect of storage time and temperature on the total count of milk.

Storage (days)	Sample 1		
	38°F	40°F	45°F
0	34,000	34,000	34,000
3	30,000	127,000	1,870,000
4	106,000	1,580,000	13,500,000
5	870,000	6,800,000	39,000,000
Storage (days)	Sample 2		
	38°F	40°F	45°F
0	1,260,000	1,260,000	1,260,000
3	2,380,000	65,000,000	138,000,000
4	14,000,000	114,000,000	224,000,000
5	32,000,000	107,000,000	410,000,000

It is clear from these tables that even well produced milk starts to increase significantly in bacterial numbers after 3 days' storage at 40°F. Further, the importance of relatively small variations in temperature over long periods of storage is clearly demonstrated.

EFFECT ON MILK QUALITY OF BACTERIA DEVELOPING AT REFRIGERATION TEMPERATURES

The psychrophilic or psychrotrophic bacteria are generally proteolytic and lipolytic, that is, they break down proteins and fats. The development of very large populations of these organisms would undoubtedly lead to a serious deterioration in milk quality which would take the form of very unpleasant off-flavours and these, if severe enough, would make the milk undrinkable.

It is probable that large populations of psychrotrophs are necessary to cause serious off-flavours in milk but whether this is likely to occur as a result of present commercial operations will be the subject of future research in the Milk Board Laboratories. The point that should be borne in mind is that the older milk becomes the more likely is there to be a loss in palatability. It is hard to escape the conclusion, after considering the figures quoted above, that milk should not be more than 72 hours old when it is pasteurised and this milk should be of good initial quality.

ASSESSING THE QUALITY OF FARM REFRIGERATED MILK

One of the most difficult questions to decide has been how to assess the bacteriological quality of farm refrigerated milk. In the case of the can system milk supplies were expected to meet certain standards in regard to bacterial counts and methylene blue reduction time after the milk had reached the factory. Thus, before testing, these milks had undergone a varying period of atmospheric temperature and, with the exception of the thermoduric count, would not necessarily reflect the bacteriological condition of the milk on production. It is obvious that in the case of refrigerated milk much stricter count standards should be applied, since the quality of the milk is being virtually assessed at point of production. It is also a well known fact that the ordinary methylene blue test is of no practical use with refrigerated milk and this is a pity, since from the point of view of convenience the methylene blue test has no equal. Why is it unsatisfactory for testing refrigerated milk?

As we have seen, subjecting bacteria to refrigeration conditions has the effect of greatly slowing down their life processes and even when the milk sample from the farm vat is incubated at 37°C. in the methylene blue test it takes a considerable time for the bacterial systems to attain a normal level of activity. Thus growth and development are delayed for a number of hours; in effect the lag phase of the bacterial growth cycle is extended. This has the result that methylene blue times on refrigerated milk have little relationship to existing standards.

How can this be overcome? The obvious way would be to subject the milk sample to a period of incubation before carrying out the methylene blue test. The temperature of this "preliminary incubation" is selected to encourage the growth of those bacteria which can develop at refrigeration temperatures. The period of incubation at this temperature is chosen so that the duration of the test is convenient for laboratory operations. The time/temperature combination selected for the Preliminary Incubation Methylene Blue Test at present on trial with refrigerated milk in the N.S.W. Milk Zone is 60°F. for 24 hours and the standard is that the sample must remain blue for 2½ hours when the methylene blue test is applied.

It is imperative that the preliminary incubation test should provide a measure of these bacteria which can cause spoilage at low temperatures and Table 3 indicates that this is so.

Table 3. Effect of Preliminary Incubation of Bacteria in Milk

ORGANISM	Before P.I.	After P.I.
Gram negative rods—not coliforms ...	31	54
Coliforms	9	30
All gram negative rods	40	84
Streptococci	10	5
Lactobacilli	4	4
Staphylococci	17	3
Micrococci	10.5	0.5
Corynebacterium	14	0
Bacillus spp.	1.7	0.5

anderson

REFRIGERATED FARM MILK TANK UNITS

The **first** and **only** manufacturer to have a **complete range** of farm milk units in Victoria (appointed as testing authority for farm milk units) and found to comply with A

CERTIFICATES OF TEST

MODEL:	R150	R200	RH250
CERT. No.:	C.P.65C9	C.P.66C3	C.P.66C1

National Standards Commission Pattern approval Certificate of Agriculture required

- 7 models to choose from 150-500 gallons capacity
- stainless steel construction
- Rigid polyurethane insulation



anderson

ADELAIDE: 179 Gilles Street
'Phone 23 4917

SYDNEY: W
MELBOURNE
BRISBANE: 4

(A Unit of DAIRY FARMERS ASSOCIATION)



Bank units tested by the State Electricity Commission of
the Australian Standing Committee on Agriculture)
Australian Standard N46-1963.

OF PERFORMANCE

R250	R300	R400	R500
C.P.66C10	C.P.66C8	C.P.66C13	C.P.66C9

SC No. 8/4 Complies with Milk Board and Department
standards in every State.

Round design for minimum space requirements • All
insulation • Low height for easy cleaning.

For information contact

equipment

co-operative Ltd.

& Egerton Sts., Lidcombe, N.S.W. 648-1084.

Charles St., North Coburg, Victoria. 35-2347.

Stanley St., South Brisbane, Qld. 4-5452.

(CO-OPERATIVE LTD.)

The high proportion of gram-negative rods in the original milk and their increase with preliminary incubation is of great interest. It has been shown in overseas work that the higher the initial count the higher the proportion of gram negative rods. Further, as we have seen, it is the gram negative group of organisms that increases during storage at refrigeration temperatures. Thus the Preliminary Incubation Methylene Blue Test would seem to be most influenced by those organisms that are likely to cause deterioration in the quality of refrigerated milk. It is also interesting to note that the proportion of streptococci and staphylococci is decreased by preliminary incubation, indicating that this test is not greatly influenced by mastitis organisms.

HOW GOOD IS THE PRELIMINARY INCUBATION TEST?

The test was shown by research workers in Queensland to give a very good assessment of milk quality. Not only has this been confirmed here but there is no doubt that the test also gives a good indication of production conditions. Many hundreds of test failures have been investigated and with very few exceptions the cause of failure has been obvious. In every case advisory action has resulted in subsequent samples passing the test.

SUMMARY OF MAIN POINTS

1. *Farm refrigeration inhibits bacterial growth and development for only a relatively short time in milk.*
2. *With extended storage at refrigeration temperatures the bacterial pattern in milk is changed from that found under the can system. Gram negative rods replace the lactic acid bacteria. These organisms can cause serious off-flavours in milk.*
3. *Small temperature differences in the refrigeration range are important with respect to bacterial development, particularly during extended storage. A temperature of 38°F. is much preferable to 40°F.*
4. *Present indications are that the Preliminary Incubation Methylene Blue Test (60°F/24hr.) is the most convenient test of farm refrigerated milk. Trials have shown that it is sufficiently sensitive in indicating unsatisfactory milk supplies.*

8,000 TONS OF CHEESE TO JAPAN IN 1968/69

Sales of Australian cheese to Japan in the 1968-69 season, ending on June 30, 1969, are expected to total about 8,000 tons.

Sales to the Japanese market in the last two seasons were:

	1966-67 tons	1967-68 tons
Australia	7,172	7,305
Norway	4,995	5,805
New Zealand	3,937	4,018
Holland	3,454	2,852
Denmark	1,211	1,145
Sweden	972	1,020
Italy	33	20
Belgium	—	1,046
Others	406	535
TOTAL	22,180	23,746

NEW..

A revolutionary
Australian development

FERTILIZER BAGS which

- ARE ROT RESISTANT
- ARE CLEAN EMPTYING
- REQUIRE NO WASHING
- STRONGER & LIGHTER THAN JUTE
- ARE EASY TO HANDLE
- EXCELLENT AFTER USE VALUE
- ELIMINATE SWEATING PROBLEM

YOU TOO WILL BE ORDERING YOUR FERTILIZER SOON. WHEN YOU DO YOU'LL BE WISE TO SPECIFY "DELIVERY IN KOALA P.P. WOVEN BAGS."

FERTILIZER IN P.P. WOVEN BAGS IS AVAILABLE FROM ALL LEADING FERTILIZER COMPANIES IN VICTORIA & SOUTH AUSTRALIA.



An all-Australian Development. Made in Australia by:

A. Abrahams & Sons Pty. Ltd.

Operating Company for NATIONAL BAG COMPANY OF AUSTRALIA LIMITED
BRANCHES IN ALL STATES

DAIRY RESEARCH IN S.A.

Dairy research is divided into many compartments, but the two most important are **on the farm and in the laboratory.**

The Research Centre at Northfield fulfils the second admirably, and has already made some noteworthy contributions to our knowledge, but we are less warm in our commendation of the location of the "on the farm" research. Are we prepared to admit that problems on dairy farms in the Adelaide Hills or on the Murray Swamps, or in the South East can be solved by research on a farm on the Adelaide Plains (with a 21" rainfall and a hot, dry summer)? Can we accept that the results of research carried out on a plains farm, with heavy loam over clay is applicable to the steep contours and acid soils of the Hills or to the sandy soils of the Lakes region, or the irrigated peat swamps.

Central Council says "No", and sent the following letter to the Minister of Agriculture.

Dear Sir,

The conditions applying to dairy farming in the Adelaide Hills, which form the major concentration of dairying in South Australia, are, we believe, unique in the Commonwealth in respect to such factors as the amount and seasonability of rainfall, the annual and diurnal temperature range, the length (or, rather, the shortness) of the growing season, and the variability of summer rainfall, and have demanded the development of a special type of husbandry with an emphasis upon fodder conservation and a long period of hand feeding and dry grazing. Superficially, in comparison with other areas more favoured by climate conditions, these practices would appear to indicate that dairying is carried on in this region under considerable handicap, and no person intimately acquainted with the industry would claim otherwise, yet the average production per cow from this region ranks high (even, perhaps, pre-eminent) in dairying statistics in Australia, as instanced by the fact that the average production per cow in the city milk area (most of which is included in the Adelaide Hills region) is of the order of 640 gallons, slightly in excess of the State production of 620 gallons and equalled in Australia only by the figure of Victoria, a State in which climatic conditions are accepted without doubt as being most suited to dairying, and contrasting very favourably with the Commonwealth average of 520 gallons.

But even so there are no informed persons who will admit that productivity per cow (which is one of the most important criteria of efficiency) is approaching its upper limit, or what dairy farming in the region is not beset with a wide range of problems and unknown factors relating to nutrition, reproduction and disease.

In the past the advances which have led to these very commendable overall results have been the results of a combination of general good farming practice coupled with common sense and modified by the results of experience, and the extension throughout the region of the knowledge so gained by the effort of officers of the Department of Agriculture.

But it is common to all activities, not only to dairying, that each step in improvement is more difficult than that which preceded it, and having now attained a relatively superior position in terms of productivity in spite of adverse climatic conditions, dairy farmers find further improvement more difficult, and it is apparent that the obvious advances which result from better nutrition, optimal seasonal calving, and artificial breeding have now been substantially exhausted by all but a small fraction of producers.

Further advances must come by marginal improvements gained by the application of scientific methods superimposed upon the general level of efficiency already achieved, and such scientific methods must be

intimately related to all the peculiar conditions of the region, of climate, seasonability, soil, pasture species, and the genetic potential of the cow population.

This Association believes that this can be achieved by a programme of scientific research carried out in South Australia by State Departments of Agriculture, and applauds the work now being done at the Northfield Research Centre. But the Association also believes that the conditions applying at Northfield are so very different from those applying in the true dairying areas that much of the effort may be wasted or misapplied and the results obtained not sufficiently applicable for the best practical results.

For this reason the Association earnestly requests the establishing of a Dairy Research Station in a typical dairying area in the Adelaide Hills and the transfer to such Station of the dairy husbandry research now being carried out or planned for Northfield.

We would appreciate the opportunity to confer with you to put this request in greater detail.

THE MINISTER'S REPLY

The Northfield Research Centre was taken over by the Department of Agriculture in February 1963. During the interim period, activities have been directed at rehabilitation of the property to the point where dairy production and related studies can be developed.

Significant progress has been made in weed control, fencing, establishment of laboratory facilities and appropriate farm buildings, staffing and development of a dairy herd of over 200 animals. The dairy shed complex is behind schedule and this could affect future development schedules and investigational work.

Land has been provided for the Artificial Breeding Centre and laboratories of the Institute of Medical and Veterinary Science.

Progress to date has been facilitated by significant financial assistance from Commonwealth and Industry Funds.

None of the dairy production studies at Northfield will be wasted as they have been developed to embrace the broad fields of genetics, calf rearing and disease control on the one hand and milk consumption studies on the other.

Geographical areas are not important for these studies and results will have application under a wide range of conditions.

Basic studies on pastures are being carried out in the Adelaide Hills and will continue.

Co-operative assistance from farmers has helped to develop programmes on a regional basis and it is anticipated this will increase in the future. This will enhance application of results of research on a wider basis within South Australia.

Currently our resources are strained to the limit in developing Northfield Research Centre and at least another five years will be required to achieve the proposed programme or rehabilitation.

Development of a research centre requires large resources, particularly in the way of funds to purchase land and provide equipment, buildings, qualified staff, etc. Difficulties experienced in recent years suggest it would be best to concentrate in developing Northfield rather than disperse present meagre resources.

The Council has decided to continue to press this subject in the hope that finance and other factors will eventually enable a more satisfactory arrangement to be achieved.

PRODUCTION ESTIMATES ON DAIRY PRODUCTS FOR 1968/69 SEASON

The Australian dairy industry expected to produce about 200,000 tons of butter, 70,000 tons of cheese, 66,000 tons of both spray and roller dried skim milk powder and 28,000 tons of casein in the year ending June 30, 1969.

Mr. E. B. Gilbert, general manager of the Australian Dairy Produce Board, said that a significant increase had occurred in casein production. However, butter production still had not climbed back to pre-drought levels, and production of skim milk powder was about 20,000 tons less as a result of severely depressed prices on the export market. Cheese production would be about the same as previous years.

Actual figures for the last two seasons, compared with 1968/69 production estimates, were:

	1966/67	1967/68	1968/69
Butter	218,400	192,984	200,000
Cheese	68,719	70,032	70,000
Skim Milk Powder	84,189	86,663	66,000
Casein	20,452	18,506	28,000

Mr. Gilbert emphasised that these were only four of the products produced for export by the Australian dairy industry.

Others included sweetened and unsweetened condensed milk; full cream milk powder; infant and invalid foods and beverages; cream; butter milk and whey; butter concentrate; canned butter; Ghee; malted milk; ice-cream; ice-cream mix; co-precipitate milk proteins and stockfeed.

Last season the value of dairy products exports had been \$99,400,000 compared with \$124,090,000 in 1966/67.

The dairy industry also supplied the home market with all these products plus whole milk, yoghurt and other products. Total value of all whole milk produced in Australia in 1967/68 was more than \$376,000,000.

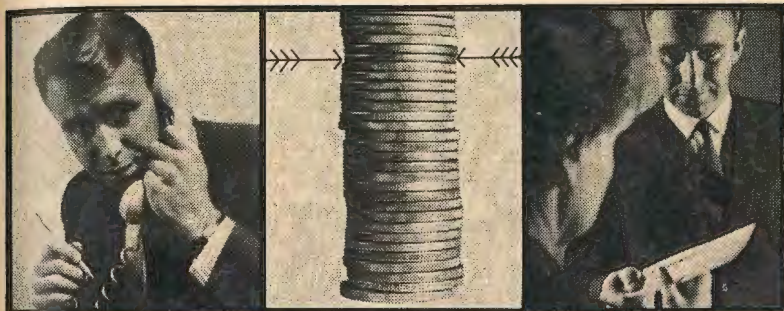
MORE FARM MILK TANKS APPROVED

Since we published the previous list of approved refrigerator farm milk tank units (May-June, 1968) the following additional units have been tested by the State Electricity Commission of Victoria and certified as complying with ASN 46.

Supplier	Compressor Motor h.p.	Condensing Unit Supplier	Certificate Number
200 Gallon Nominal —			
Frigrite	5	Kelvinator	CP68 C20
Marshall	5	Ellis & Judge	CP68 C18
Milkwell	5	Tecumseh	CP68 C22
250 Gallon Nominal —			
Alfa Laval	5	Amat-Ice	CP68 C12
300 Gallon Nominal —			
Frigrite	7.5	Kelvinator	CP68 C9
350 Gallon Nominal —			
Alfa Laval	7.5	Amat-Ice	CP68 C14
400 Gallon Nominal —			
Nizer	2x3	Tecumseh	CP68 C8
Way	7.5	Terry	CP68 C24
600 Gallon Nominal —			
Frigrite	15	Kelvinator	CP68 C25
Marshall	12.5	Tecumseh	CP68 C7
700 Gallon Nominal —			
Marshall	12.5	Tecumseh	CP68 C17
720 Gallon Nominal —			
Marshall	12.5	Tecumseh	CP68 C17/1

Your helpful Federation man says you can

fully be insured and save up to \$1 in every \$5 on premiums!



guidance from your helpful Federation man

save \$1 in every \$5 on premiums

quick and full claim payment

There's real security in knowing you're safely insured with The Federation Insurance Limited. Federation offer a complete service on all forms of insurance. Their unique premium saving plan will safeguard your profits and reduce risk of loss once and for all. Your helpful Federation man offers expert, no obligation advice on all insurance matters. He will advise

you concerning a sound insurance plan reflecting the growth of your business, and serve you promptly in the event of any claim.

FEDERATION
ONE-STOP INSURANCE
one plan - one renewal date - one payment



The Federation Insurance Limited,
342 Flinders St., Melbourne, 3000. Tel. 62 0101
168 George St., Sydney, 2000. Tel. 27 2266
376 Queen St., Brisbane, 4000. Tel. 2 2386
Cnr. King William St. & Sth. Tce.
Adelaide, 5000. Tel. 8 4541
206 Adelaide Tce., Perth, 6000. Tel. 23 1931
71 St. John St., Launceston, 7250. Tel. 2 4085

To The Manager,
The Federation Insurance Limited.
Please send me details of your
One-Stop insurance premium saving plan.

Name

Address

Association 182791

Statistics

ADELAIDE METROPOLITAN MILK SUPPLY AREA PRODUCTION (000 gallons)

	For Month		Total since July 1		Total since Jan. 1	
	1968	1969	1967/68	1968/69	1968	1969
Jan.	4,177	4,448	31,642	34,559	4,177	4,448
Feb.	3,419*	3,523	35,066	38,082	7,596	7,971

	SALES (000 gallons)				QUOTA		C.M.B.	
	For month		Total since July 1		per cent		cents	
	1968	1969	1967/68	1968/69	1968	1969	1968	1969
Jan.	1,776	1,780	12,558	12,483	42.5	40.0	26.60	24.46
Feb.	1,899*	1,745	14,457	14,228	55.6	49.5	33.82	29.90

Moving average ratio for 12 months ended 31/1/69, 43.15%;
28/2/69, 42.76%.

INTERIM PRICES TO LICENSED SUPPLIERS

(All prices are interim only and subject to adjustment by retrospective payment)

1969	Basic	C.M.B.	Total	3.5%	4%	4.5%	5%
	(cents per lb. butterfat)			(cents per gallon)			
Jan.	37.95	24.46	62.38	22.53	25.75	28.97	32.19
Feb.	37.95	29.90	67.85	24.51	28.01	31.51	35.01

* 29 days

LONDON PROVISION EXCHANGE QUOTATIONS

(Sterling Currency per cwt.)

	December		January	
	1967	1968	1968	1969
Butter—Choicest Australian	300/—	300/—	300/—	300/—
Cheese—Rindless Australian	270/—	225/—	270/—	225/—

SUPPLIES AVAILABLE FROM

CONNOLLY & CO.
21-27 MAIN ST., HAHNDORF
SOUTH AUSTRALIA. 5245
and all branches, 'phone 66 7193

W188



NOW AVAILABLE FROM ALL
STOCKISTS OF FARM SUPPLIES
Your best investment... the new
MAINS OPERATED SOLID STATE

WAIKATO
ELECTRIC FENCE CONTROLLER

The Waikato Electric
Fence Controller is an electrical
achievement which by the absence of moving
parts ensures prolonged, trouble free life
under the most arduous conditions.

• Makes permanent electric fencing an immediate
reality • Can save nearly \$1000 per mile all year
fencing costs • Completely safe — conforms to
Australian standards • Being made up of solid
state devices, there are no moving parts to
break down • Practically unshrinkable — certainly
more so than any other make • Feeds charge into
fence faster than it can leak away — functions
efficiently over distances of 15 miles — more
• Works over short distances without insulation
(for best results use Waikato Electric Fence
Insulators).

Farmers vote the **WAIKATO** Electric Fence
Controller the best on the market

GROW BETTER GRASS

SOW SUDAX NOW



★ End feed worries by ensuring ample greenfeed when it's most needed—from Summer to early Winter. Fodder crops sown now will benefit from late rains, and give you a rich Fodder Crop reserve like the farmer above. His 400 acres of irrigated Sudax carried 6,000 sheep from mid-November to the end of March. With Hodge's Sudax, Chou Moellier, Swedes, Turnips, Rape, Lucerne or Jap. Millet, you can end feed worries. Act now! Ask Hodge's to advise you on the best choice for your district.

ALWAYS
ORDER ALL
YOUR SEEDS
FROM

M.F. HODGE & SONS Pty. Ltd.

128 - 134 GILBERT ST., ADELAIDE. 5000
Phone 51 5571

THE SOUTH AUSTRALIAN

DAIRYMEN'S . . .

Journal



Official Publication of the

Published Bi-monthly

Vol. 8, No. 5.

Adelaide, MARCH-APRIL, 1969



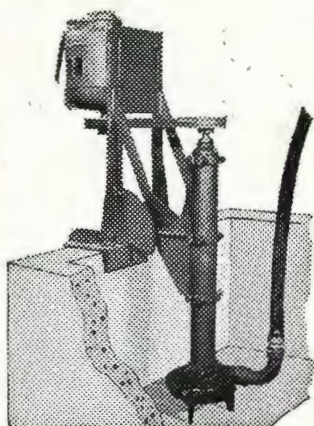
DEMONSTRATION THEATRETTE
DAIRY FOODS INFORMATION CENTRE
20 LEIGH STREET, ADELAIDE

PRICE

20c

G.P.O., Adelaide
sent by post as a periodical.

\$1.20 per Year, Post-Paid



Easy to instal --
efficient operation

The **IBC** DUMAC filter cut liquid manure pump

**Designed for dairies
and piggeries this versatile
pump saves you money.**

Simply mount the pumps (as illustrated) over the edge of a small pit, e.g., a round or rectangular pit 2—6 feet deep. There's no priming required as the pump is immersed in the liquid.

**BY COUPLING THE IBC-DUMAC
FILTER CUT PUMP WITH THE
"DISPERSA" LIQUID MANURE**

**SPRINKLER, EVEN DISTRIBUTION
OF EFFLUENT IS ASSURED
OVER LARGE AREAS OF
PASTURE.**

Spare parts are inexpensive —
easy to get — easy to instal.

Get more details on the
IBC-Dumac Filter — Cut Liquid
Manure pump now!

Post this coupon today.

Please send me further
details on the IBC-
Dumac Filter-Cut pump
without obligation.

INTERCOLONIAL BORING CO. LTD.

"Water House", 98 Churchill Rd., Prospect,
S.A. 5082. Phone 65 6944.

Head Office: 450 Ann St., Brisbane, Qld.
Branches all States.

MT. GAMBIER: Stuart Richardson, 5 Rotary
Ave. 5290. Phone 2 3482.

NAME.....

ADDRESS.....

POSTCODE.....

THE SOUTH AUSTRALIAN DAIRYMEN'S JOURNAL



Published by
**THE SOUTH AUSTRALIAN DAIRYMEN'S ASSOCIATION
 INCORPORATED**

Aston House, 13 Leigh Street, Adelaide. 51 3034

President: General Secretary:
 N. M. GREEN DAVID J. HIGBED

Advertising Rates on application

AUSTRALIAN BUTTER IS FOURTH CHEAPEST IN THE WORLD

Despite the recent increase, butter is cheaper in Australia than in any country in the world except the United Kingdom, New Zealand and Eire, and cheese prices in Australia also occupy the same position.

Wholesale prices in the major dairying countries are shown in the following table compiled by the New Zealand Dairy Board, with Australian prices supplied by the Australian Dairy Produce Board added:—

BUTTER

(Converted to
 £ sterling per
 ton, June 1968)*

Belgium (Market Commission price)	824
France (wholesale)	771
Netherlands (ex-factory)	708
West Germany (dairy to wholesaler)	695
United States (wholesale)	630
Denmark (ex-dairy)	571
Canada (ex-dairy to wholesaler)	544
Australia (wholesale)	504*
Irish Republic (ex-creamery)	497
United Kingdom (ex-store)	300
New Zealand (dairy to wholesaler)	274

CHEESE

France (Emmenthal) (wholesale)	548
West Germany (Emmenthal) (wholesale buying price)	511
United States (Cheddar) (Cheese exchange)	424
Canada (Cheddar) (ex-factory)	380
Netherlands (Gouda) (ex-factory)	362
Australia (based on wholesale \$A33.04 a cwt.)	310
Irish Republic (Cheddar) (dairy to wholesaler)	286
United Kingdom (Cheddar) (ex-store)	226
New Zealand (Cheddar) (ex-factory)	210

DAIRY FOODS INFORMATION CENTRE

This demonstration theatrette is used for lectures, motion pictures and cooking demonstrations. The services of the Centre are in steady demand from groups interested in cooking, dietetics, and dairy produce manufacture.

FURTHER LIFT IN A.I. NON-RETURN RATES

In its recently issued Annual Report for 1967-68, the Artificial Breeding Board revealed an average in the non-return rates, on a 30-60 day basis, for all first insemination of 68.5 per cent, compared with 67.1 per cent for the previous year, and 66.3 per cent in 1965-66.

Highest average rate was 69 per cent for interstate deep frozen semen, with chilled semen yielding 68.5 per cent and Northfield deep frozen semen 66.5 per cent (largely experimental to determine efficiency and freezability of semen of various bulls).

The continued improvement in non-return rate of deep frozen semen has coincided with total storage in liquid nitrogen here and elsewhere, and the Board states that it looks forward to a further lowering of costs due to this improvement.

Non-return rates for each sub-centre show less variation than in past years, ranging from a low of 56.9 to a high of 77.2 on the Government Farms at Northfield.

	Per cent
Northfield (Government Farms)	77.2
Myponga	70.4
Mount Barker	70.0
Murray Bridge	69.8
Meningie	67.9
Mount Gambier	64.0
Eden Valley	62.9
Strathalbyn	56.9

(The improvement in the case of Murray Bridge from 63.3 to 69.8 is noteworthy. Apart from the Northfield figure, Myponga and Strathalbyn continue to be the highest and lowest respectively.)

DROUGHT CONDITIONS CAUSE FALL

The main breeding season showed an appreciable drop in cow numbers due to severe drought conditions in all areas, but recovery to some extent took place in the latter half of the season.

First inseminations totalled 22,136, a drop of 640 from the previous year, which could be expected in view of the great reduction in numbers of dairy cattle.

DISTRICT STATISTICS

Area	First Inseminations	Active Farms	Cows Per Farm	Miles Per First Insemination
Mount Barker	7,451	539	13.8	9.7
Myponga	4,869	230	21.2	12.0
Murray Bridge	4,522	147	30.8	8.6
Mount Gambier	1,454	111	13.1	14.5
Strathalbyn	1,298	99	13.1	13.2
Meningie	1,287	40	32.2	22.5
Eden Valley	1,153	151	7.6	16.0
Northfield	101	—	—	—

The total mileage travelled in working from sub-centres was 255,202 miles.

BREED DEMAND

The demand for semen from Friesian bulls continues to lead, whilst Jerseys fall, although still holding second place.

	Per Cent	Per Cent Fluctuation)
Friesian	58.7	(+0.7)
Jersey	32.7	(-0.6)
Hereford	5.1	(+0.3)
Guernsey	1.9	(-0.3)
A.I.S.	1.2	—
Ayrshire	0.3	(-0.2)
Brahman and 7/8-Brahman	0.1	—

DEEP-FREEZING STEPPED UP

Deep freezing of semen was stepped up to ensure that, in the event of the death of a bull that later proved by its progeny to be of high quality, supplies would be available to produce another sire from a selection of top cows. Semen of all bulls was found to be freezable, though of varying quality.

CHANGES IN BULL TEAM

A Jersey bull, Garford Royal Banner, died from a toxæmia of uncertain origin in a matter of five hours on 6th May, 1968. The Friesian bull Yodnarie Echo Captain was slaughtered on account of contraction of the flexor tendons of the hind legs.

The bull team at present stands at 18 bulls, which are:—

- Friesians
- Vynette Fondhope King
- Anama Mars Jasper
- Vynette Tulip Paxton
- Strathaven Serenade Mitch
- Glenjoy Sylvia Serenade
- Hemaford Caddie Supreme
- Jaylea Maple Elijah
- Pine Brae Kingpin Joker
- Clover Glen Royal Prince
- Yadnarie Korndyke Supreme

- Jerseys
- Francliff Rapturous 2nd
- Roslyn Vale Fifth Milestone
- Randers Echo
- Mannanarie Prims Pride
- Gumrella Petals Count
- Bradwell Spots Gunner
- Spring Glen Gold Spot
- Heatherville Ideal Dreamer

At the financial year-end insufficient progeny had been discovered under test for the purpose of proving satisfactorily any of these bulls.

FEEES TO REMAIN, DESPITE DEFICIT

The reduced number of cows for insemination coupled with ever increasing costs outside the Board's control produced the undesirable result of a deficit of \$13,233 on the year's working.

However, the Board believes it would be a wrong step to increase the charge to the farmer, as there would be a marked falling off in customers and the small man most in need of our services would be the first to leave. The dairyman has an alternative to taking our service by rearing his own bull calf.

The Board does not think the time is proper to withdraw from our most un-economic centres, but obviously we cannot continue indefinitely to incur deficits without some remedial measures.

DAIRY RESEARCH SHOULD TOWN MILK BE LEVIED?

The Australian Dairy Produce Board Research Fund is financed by a levy on all butterfat used in the manufacture of butter and cheese, and the contribution to the Fund by town-milk suppliers extends only to that portion of their milk used for manufacture.

In the changing dairy scene, whether on farm, in factory, or in the marketplace, the need for research into improved techniques of production, processing and marketing is self-evident. The only question remaining is: "Is money the sole bar to research?"

The possibility of extending the levy to town-milk has been examined by the Association on several occasions, but the result has been to answer one question with several. "If funds are provided, will there be qualified research scientists available to use them to advantage?" "What are the research needs in the town-milk industry?" and, most important, "Of the research that has been carried out with the finance provided by the Fund, how much has had a demonstrable result, and how much has been put into effect?"

Some of the answers are provided in the following paper, by Mr. Oliver Cassar, of the Australian Dairy Produce Board. The answer to the third question is still awaited, and some information may be forthcoming within a month or so.

In the meantime the Annual Conference of the Milk Producers' Association of Australia and New Zealand, of which this Association is a member, has agreed to support the proposal that town-milk supplies should contribute to the research levy, provided that the town-milk industry is represented on the administering body, and with the emphasis on research directed towards the consuming sector rather than the processing or producing sector.

The need for the town-milk industry, as it may be for the dairy industry as a whole, is to devise new dairy products, and new forms of old products, to study the ways in which our products, new or old, may be used to increase the health, longevity and enjoyment of the consumer. There are many places for milk and milk products in the diets of consumers of all types as a staple part of the diet, as a gourmet's delight or a garnish, as a treatment in sickness, as a protective food in health. But many of these uses are not at present obvious, or even guessed at. Properly applied research may discover them.



THE DAIRY INDUSTRY RESEARCH PROGRAMME AND THE CASE FOR EXTENDING THE BASE OF THE RESEARCH LEVY

THE PURPOSE OF RESEARCH

The principal objective of dairy research is to discover and develop ways of assisting the industry to maintain and improve its place in the Australian economy and to compete effectively in the world's dairy markets. To achieve this the industry must at least keep abreast technologically with the other productive sectors of the economy and train its people to the level of the latest and most complex techniques. The growing complexity of the industry's technology and the specialization and diversification of its products to meet the continuing adverse overseas marketing situation further emphasize the importance of research.

NEED FOR FUNDS

For this to be achieved, it is necessary that the levy for research be extended to all milk produced in Australia, including that sold as town-milk.

Your helpful Federation man says you can

fully
**be insured and save
 up to \$1 in every \$5
 on premiums!**



guidance from your helpful Federation man



save \$1 in every \$5 on premiums



quick and full claim payment

There's real security in knowing you're safely insured with The Federation Insurance Limited. Federation offer a complete service on all forms of insurance. Their unique premium saving plan will safeguard your profits and reduce risk of loss once and for all. Your helpful Federation man offers expert, no obligation advice on all insurance matters. He will advise

you concerning a sound insurance plan reflecting the growth of your business, and serve you promptly in the event of any claim.

FEDERATION
ONE-STOP INSURANCE
 one plan-one renewal date-one payment



The Federation Insurance Limited,
 342 Flinders St., Melbourne, 3000. Tel. 62 0101
 168 George St., Sydney, 2000. Tel. 27 2266
 376 Queen St., Brisbane, 4000. Tel. 2 2386
 Cnr. King William St. & Sth. Tce.
 Adelaide, 5000. Tel. 8 4541
 206 Adelaide Tce., Perth, 6000. Tel. 23 1931
 71 St. John St., Launceston, 7250. Tel. 2 4085

To The Manager,
 The Federation Insurance Limited.
 Please send me details of your
 One-Stop insurance premium saving plan.

Name

Address

Association 188771

The industry's research funds are becoming less and less able to properly finance research on all the industry's pressing problems. Each year, assistance from research funds is denied to work designed to solve important problems in favour of other projects dealing with even more urgent ones.

The levy for research was increased in July, 1966, when costs had outstripped annual revenue and effective reserves were in danger of being rapidly depleted. Effective reserves in the Research Fund have since been restored to their original level and the research programme has been kept within workable limits. But some research work had to be curtailed and expenditure in education was drastically reduced.

THE NEED FOR EXTENSION

The limitation of the research levy to fat from butter and cheese has always been regarded as anomalous. The urgency of the situation in 1966 did not leave room for choice but the solution which was adopted aggravated this anomaly.

The present levy provides for 10c per cwt. of butter fat in butter and cheese to be appropriated to research funds. The limitation to this source is understood to have arisen largely from historical circumstances such as the convenience of collecting funds from the equalized products.

FARM RESEARCH

In using the funds, however, the Research Committee has not restricted the support to research work applicable to butter and cheese only. Emphasis in farm research is placed on pasture investigations and cattle diseases. This category of expenditure also includes work on infertility, farm management and some assistance to animal breeding and progeny testing.

MANUFACTURE AND PROCESS RESEARCH

The next largest research category is in dairy manufacturing and processing. Grants for this work represented 38.1% of total allocations in 1967/68. The programme of work embraced basic work on milk proteins; studies on heat treatment of milk and cream, and on recombining milk and milk products. Through this category support was also provided, in previous years, for anti-biotic tests on milk and work on dye marking of anti-biotics, rapid methods of analysis for total solids and protein, and research on effects of light on milk, effect of lipase activity in relation to seasonal difficulties with milk frothing, general flavour studies and research on dairy factory effluent problems. It is estimated that at least 33% of the manufacturing research programme bears strongly upon problems of liquid and processed milk products. Although it is generally recognised that the findings of farm research are of material benefit to all dairy farmers the fact that such a large proportion of manufacturing research is also of benefit to other industry sectors might not be so readily obvious.

TRAINING PERSONNEL

The growing need for well-trained personnel in every sector of the industry was mentioned above.

Notwithstanding the declining availability of funds for this purpose support from industry research funds has not been confined to butter and cheese factories. In fact there appears to be an even stronger demand for adequately trained personnel in the field of liquid milk, cream and processed milk products than in the sectors from which the research levy is derived.

THE FINANCIAL SITUATION IN DAIRY RESEARCH

Details of income from levy with matching Commonwealth contributions and expenditure from the Dairy Produce Research Trust Account from inception of the industry's research programme are provided for comparison.

INCOME AND EXPENDITURE FROM DAIRY RESEARCH TRUST ACCOUNT

Financial Year	Income: Levy & Subsidy	Expenditure	Variance
1958/59	\$301,788	\$31,946	\$269,842
1959/60	506,076	107,854	398,222
1960/61	466,364	388,154	78,210
1961/62	520,000	549,424	D 29,424
1962/63	525,360	521,042	4,318
1963/64	523,228	587,770	D 64,542
1964/65	525,540	563,008	D 37,468
1965/66	620,338	802,675	D 182,337
1966/67	812,188	699,098	113,090
1967/68 E	727,362	802,283	D 74,921

D—Deficit

E—Estimated

The net result of research transactions since 1958/59 is a surplus of approximately \$475,000, substantial surpluses having been made in the first two years of the programme. Following this period of establishment and consolidation of dairy research groups the gap between income and expenditure starts to close rapidly. The rise in expenditure during 1963/64 is largely attributable to greater than usual allocations made in the previous year towards non-recurring items and once again the sharp rise in disbursements for 1965/66 was occasioned by a real expansion of the research programme. The programme was drastically curtailed in the following year. Other than these abnormalities the continually rising expenditure is largely explained by rising costs, for example, the average salary of a typical research group has risen by 39% since 1964/65. Income from levy has not yet achieved an increase of 30% since as far back as 1959/60.

RESEARCH LEVY ON ALL MILK PRODUCED IN AUSTRALIA

Approximately 29% of the total volume of milk produced in Australia is utilised as fluid milk for domestic consumption, preserved milks and other purposes. If it were possible to impose a research levy (at some analogous rate equivalent to the present 10c/cwt. butter fat content) on all milk, the additional amount which would become available for research, including matching Commonwealth contributions, would be nearly \$300,000.

An increase of this magnitude would permit the allocation of additional research funds to problems in the liquid milk, cream and milk product areas. Extension of the base of the research levy will not solve all the financial problems of the industry's research and education programme. The cost squeeze will not be overcome as long as salaries and prices continue to rise at faster rates than the rate of growth in milk production. It appears then that the best way to meet this situation would be to operate a sinking fund, appropriating funds to reserves to meet rising costs in the future and seeking appropriate increments to research income by raising the levy rate say once every decade. The additional levy could provide the finance for such a sinking fund.

WHAT COULD BE DONE

Some examples of the type of research which could be introduced or further emphasised for the benefit of the market, and processed milk sectors will be outlined briefly.

In the Farm research category since losses through mastitis still represent some 9—10 per cent of the farmer's gross income some further work on the control of this disease could be supported from additional funds which would become available. In a world deficient in proteins increasing importance is being given to milk proteins so that research into factors influencing milk composition could be expanded. Some adverse publicity in connection with pesticides in dairy products has already occurred. Further research on alternative pest protection and control would be of benefit if it could secure reduction in pesticide residues

anderson

REFRIGERATED

FARM MILK

TANK

UNITS

The **first** and **only** manufacturer to have a **complete** range of units in Victoria (appointed as testing authority for farm milk and found to comply with

CERTIFICATES OF T

MODEL:	R150	R200	RH250
CERT. No.:	C.P.65C9	C.P.66C3	C.P.66C

National Standards Commission Pattern approval Certificate of Agriculture rec

- 7 models to choose from 150-500 gallons capacity
- stainless steel construction
- Rigid polyurethane insulation



anders

ADELAIDE: 179 Gilles Street

'Phone 23 4917

SYDNEY: V

MELBOURNE

BRISBANE:

(A Unit of DAIRY FA



gank units tested by the State Electricity Commission of
 the Australian Standing Committee on Agriculture)
 Australian Standard N46-1963.

OF PERFORMANCE

R250	R300	R400	R500
T.P.66C10	C.P.66C8	C.P.66C13	C.P.66C9

SC No. 8/4 Complies with Milk Board and Department
 standards in every State.

ound design for minimum space requirements • All
 arm insulation • Low height for easy cleaning.

for information contact

equipment

co-operative Ltd.

le & Egerton Sts., Lidcombe, N.S.W. 648-1084.

Charles St., North Coburg, Victoria. 35-2347.

Stanley St., South Brisbane, Qld. 4-5452.

CO-OPERATIVE LTD.)

in milk products and forestall further and more adverse publicity which is very likely to lead to a reduction in consumption of liquid milk and all forms of processed dairy products.

Work on *Pseudomonas* in relation to low temperature spoilage of milk and methods for determining bacteriological quality of refrigerated milks is of interest to all sectors of the industry. This research is being carried out in one laboratory on very limited funds and further financial support could provide findings valuable to all. Similarly further emphasis could be made on the development of new food forms.

The development of new dairy foods can be exploited by all industry sectors. More and more the industry is looking to diversification and the creation of new products to expand its markets in Australia and overseas which generally also provide somewhat bigger margins for profit on dairy produce.

There are other areas of research which need to be examined seriously. There has never been sufficient moneys to adequately support nutrition and medical research on problems which could have considerable effect on the consumption of all forms of milk products. The work on Lactose intolerance in Asians is one example where industry funds in conjunction with condensery products organisations have combined to initiate such work. Numerous requests have been received for support for research proposals ranging from "Studies on Apparent Reduction in the Risk of the Development of Concens among daily Drinkers of Milk compared to Non-Milk Drinkers" to the "Influence of Minerals in Milk on the Development of Arteriosclerosis."

WHAT CHANGES WOULD BE NEEDED?

It is understood that the Dairy Produce Research and Sales Promotion Act and the Butter Fat Levy Act would need to be amended to achieve the proposed extension of the levy for research and education to all milk produced in Australia. Preliminary enquiries have revealed that the possibility of this extension had been foreseen by the Department of Primary Industry at the time when the Dairy Produce Research and Sales Promotion Act was being drafted and it is believed that there will be no legal objections to such an amendment.

The Butter Fat Levy Act would need to be extended to include condensed milk products, table cream and all milk sold under the jurisdiction of State Milk Boards. The prescribed levy rates are cited in the Butter Fat Levy regulations, hence the relevant rates as applicable to additional products would need to be included in the Butter Fat Levy Regulations.

Factories of processed milk products are known to keep statistics of milk intake and butter fat content, so adherence to a levy rate based on fat content would place no difficulties in this sector.

In the case of the Milk Boards it is understood that average content of milk fat is normally higher than the statutory minimal requirements of each State. Since Milk Board records of milk intake are kept in gallons, it is envisaged that the Butter Fat Levy Regulations would need to provide for each State a levy rate per gallon of milk purchased by these Boards which is based on an acceptable formula such as the average butter fat content of milk handled through each Board during the previous year, or a composite formula taking account of the above average and the statutory minimal requirements. Alternatively, a national average could be computed. The latter alternative appears to be the most equitable for producers in the liquid milk zones. Otherwise producers in different States would be levied varied amounts for equivalent gallonage in respect of which they receive roughly equal returns on account of the diverse minimum fat requirements in each State.

WIDENING THE ADMINISTRATION

It follows that the decision-making body deliberating on research for the whole industry would need to represent all contributory industry sectors. Hence the Dairy Produce Research Committee itself might need to undergo some changes in the number of its members to ensure appropriate representation of all industry sectors contributory and beneficiary to the proposed enlarged dairy industry research and education scheme.

COMMON MARKET FARM PLAN

The European Common Market Commission has outlined a new, radical 10-year-plan which could revolutionize farming in its six member states, and bring welcome relief to countries such as Australia and New Zealand whose export trade in primary products has been all but wrecked by the surpluses generated by the Commission's farm income stabilization plans.

Dr. Mansholt, Dutch Vice-President of the Commission, made the plan public at a press conference after presenting it to a joint session of the Community's Foreign and Agriculture Ministers. The plan is designed to ensure a standard of living for Community farmers comparable to the urban population, end the soaring costs of price support for surplus production, and provide cheaper food for the consumer.

Dr. Mansholt did not give the overall cost of the reform of farming structures in the Community, but it is expected to come to thousands of millions of dollars over the ten-year period from 1970 to 1980. The plan must be approved by the Common Market's Ministers before going into effect. It may well undergo considerable modification in the discussions, which are expected to be long drawn out.

It calls for larger farming units, reducing the number of Community farm workers from ten million to five million, and turning over about five million hectares of marginal land to other purposes such as national parks, green belts or re-afforestation programmes. This would reduce the Community's total agricultural land from 31.8 to 29.5 million hectares.

The plan is coupled with new agricultural prices which would encourage farmers to switch from butter to beef production and increase butter consumption by making it cheaper. This is designed to end the soaring cost of price support, which increased from A\$450 million in 1960 to A\$1,350 million this year and will be 1,780 million in next year's budget. Much of this is earmarked for butter surpluses, expected to reach 300,000 tons by next April.

Dr. Mansholt said that if the plan were followed, price support paid by the Community's farm fund would not exceed A\$670 million in 1980.

The Commission laid down what it considered should be the minimum size of farm production units—36 to 45 hectares for cereals, 40 to 60 cows for dairy farms, 150 to 200 head of cattle for beef, 100,000 chickens a year for chicken farms, 10,000 hens for egg farms and between 450 and 600 pigs for pig farms. Units of this size were needed for profitable and efficient farming, and could be obtained by expansion or voluntary amalgamation, Dr. Mansholt said. There should be financial assistance and the removal of legal and tax barriers to encourage this trend.

The Commission proposed measures which would cut the intervention price for butter by about one-third next year—from A\$78.75 per cwt. to A\$50.5. To offset an estimated A\$660 million loss to butter producers, it proposed a sharp increase in the intervention price of powdered skimmed milk from 18.75 dollars per cwt. to 32.00 dollars and an increase in subsidies from the Community farm fund to producers.

It hopes to reduce the Community's dairy herd from 21 million to 18 million by 1976. Gratuities of A\$268 per animal would be offered in 1969 and 1970 to farmers who slaughtered all their milk-producing cows. At the same time, the Commission would like to introduce a special fattening gratuity of 4.50 dollars per 100 lbs. of beef.

Dr. Mansholt, who recently visited Australia, spoke as the A.B.C.'s "Guest of Honour", and explained some of the reasons which underlined the new Plan. He said: "We have too many farmers. We have at this moment 10 million farmers but they are all very small. The farms are on an average 25 acres: or 10 dairy cows, 20 pigs or 800 to 1,000 hens for production. And compared with

THE HYDROPULSE SYSTEM

The Hydropulse System is a balanced combination of milking machine components which will provide optimum milking results. The basic components are:—

THE HYDROPULSATOR

Provides constant balanced pulsation at a factory set speed and with wide ratio. It is unaffected by moisture, dust or temperature changes.

THE MILK CLAW

Stainless Steel construction of the correct balance incorporating a specially built-in cut-off valve and controlled air bleed.

THE VACUUM CONTROLLER

Ensures a constant vacuum of 15 Hg free from fluctuations and oscillations.

THE INFLATIONS

Complete range specially developed to suit every type of cow and are manufactured from long-life Swedish synthetic rubber.

The new system can be used with all types of Alfa-Laval milker installations and can also be adapted to fit all types of competitors' machines.

FOUR YEARS' RESEARCH, 2,000,000 TEST MILKINGS

The fact that there is only a relatively short time in which the cow's milk let-down hormone, oxytocin, exerts maximum influence has long been known. So an intensive search was begun for a way to utilize this limited time to the fullest—to evacuate the udder more completely. This would stimulate the cow to keep its milk output at a higher level during each lactation period. At the same time, laborious machine stripping would be reduced and total machine-on time minimized.

The idea was right, as the early research work indicated, but it took four years of development to come up with a practical piece of equipment. In widespread field trials from Sweden in the north to Australia and New Zealand in the south, over 7,000 cows were milked under scientific control—the most exhaustive test programme any milk system has ever received, involving more than two million milkings.



"Good bloke, my boss! Now I'm the original contented cow — he bought me Hydropulse!"

The world's most experienced manufacturer of Dairy Equipment has done it again! An entirely new system of milking which adds up to profit for the dairy farmer.

- **Up to 15% faster milking time**
- **Up to 5% greater milk yield**
- **Less machine stripping**
- **Improved udder health**

This is not idle talk. Alfa-Laval made over 2,000,000 test milkings on 7,000 cows of all breeds to prove the Hydropulse system.

You'll change eventually to Hydropulse, anyway, so write for full particulars to:

**ALFA-LAVAL PTY. LTD., 338 KING WILLIAM ST., ADELAIDE.
5000**

ALFA-LAVAL

Hydropulse **SYSTEM**

Australia, that of course is very small. Even for us it is too small too. Most of these farms have to mechanise, but they can't because investment costs are high and they cannot use the machinery as they should. And for that reason we have to increase the size of our farms and that's only possible by reducing the number of farms because we don't have more land available. You can say that all land capable of cultivation is under cultivation at this very moment. And beside that we have other surpluses. We have great surpluses of dairy products. **Almost 20% of our production** is surplus in dairy products. We have even in sugar surpluses, and we have to sell them. And of course we do great harm by doing this to other normal exporters like New Zealand, in dairy products, or Australia, in the field of sugar or beef or cereals and it's for that reason we try to develop a policy to balance our market that means that we don't produce more than the demand. And then of course I very often hear a question: but there is such a shortage of food in the world why don't you give away this food to populations where they lack the nutrition. Well, I can tell you we do, we have a programme for cereals and we want to do so for certain dairy products but even in these schemes we have to consider that we can do great harm to the normal commercial exporters so that we have to be very careful, and anyhow it doesn't give us a solution in the long run. Because we are of an opinion that we should help those people to produce the food themselves. So the real solution is to produce less now in Western Europe and it is for that reason that we have developed an agriculture programme of reducing the number of our farmers, taking out of production almost 5 million hectares, that means almost 12½ million acres of cultivated soil, mostly of course marginal soils; partly reforestation; reducing the **cattle herd by 20%** to balance between production and demand. That means too, a social problem because most of the farms are so small that they can't diminish their cattle.

INDONESIAN MILK PLANT OPENS IN JULY

A joint Australian-Indonesian milk plant will open in Djakarta on July 1st, 1969.

The plant will be operated by P.T. Australia Indonesian Milk Industries Limited, a joint venture company.

At this stage, the Dairy Board has the majority shareholding in the company through its subsidiary—Asia Dairy Industries (H.K.) Limited—but there is provision for the Indonesian partners to acquire up to 50 per cent interest.

The new factory is on the outskirts of Djakarta. Progress is well ahead of schedule and trial runs with new equipment will begin in a few weeks.

Directors of Asia Dairy Industries visited Djakarta earlier this month to inspect the new factory's progress and to finalise marketing plans. The first product will be condensed milk.

Recombined liquid milk will also be marketed from the plant, and this is the first time Asia Dairy Industries have made this product.

Initially, the Indonesian plant will require 2,200 tons of Australian skimmed milk powder and 800 tons of butteroil a year.

The economy of Indonesia has improved tremendously over the last few years and the country's political situation and its currency has been stabilised while inflation has been controlled. As a result of this new capital is flowing into Indonesia at a greater rate.

"We are particularly proud of the fact," said Mr. Norton, Deputy Chairman of the Australia Dairy Produce Board, "that our new plant near Djakarta is the first to be approved and constructed under Indonesia's new foreign investment law."

"So far, the Australian dairy industry is the only one to demonstrate its faith in the future of Indonesia by investing in a partnership arrangement with Indonesian businessmen. It is expected that any other dairy companies that wished to follow would now be considerably behind the Indonesian-Australian joint venture."



Use the
new simple
formula for successful
cattle raising

+ add **BOVIZOLE***
- subtract **WORMS**
X multiply **PROFITS**

See your THIBENZOLE*
supplier for details

BOVIZOLE Trademark
FEED WORMER OR LIQUID
The Wormer with a Warranty



MERCK SHARP & DOHME (Australia) Pty. Limited, Granville, N.S.W.

*Trademark

MSDB 21 VcAu80.68

Prices and Statistics

ADELAIDE METROPOLITAN MILK SUPPLY AREA PRODUCTION (000 gallons)

	For Month		Total since July 1		Total since Jan. 1	
	1968	1969	1967/68	1968/69	1968	1969
Mar.	3,186	3,948	39,252	42,030	10,782	11,919
Apr.	2,985	3,632	41,237	45,662	13,767	15,551

MILK SALES (000 gallons)

	For month		Total since July 1		RATIO		C.M.B.	
	1968	1969	1967/68	1968/69	per cent	per cent	cents	
Mar.	1,991	1,935	16,448	16,163	62.5	49.0	36.74	28.51
Apr.	1,860	1,823	18,308	17,986	62.3	50.2	36.08	29.37

Moving average ratio for 12 months ended 31/3/69, 42.02%;
30/4/69, 41.43%

INTERIM PRICES TO LICENSED SUPPLIERS

(All prices are interim only and subject to adjustment by retrospective payment)

1969	Basic C.M.B. Total			RATIO			
	(cents per lb. butterfat)			3.5%	4%	4.5%	5%
Mar.	37.95	28.51	66.46	24.00	27.43	30.86	34.29
Apr.	37.95	29.37	67.32	24.32	27.79	31.26	34.73

LONDON PROVISION EXCHANGE QUOTATIONS

(Sterling Currency per cwt.)

	February		March	
	1968	1968	1968	1969
Butter—Choicest Australian	300/—	300/—	300/—	300/—
Cheese—Rindless Australian	270/—	225/—	255/—	225/—

SUPPLIES AVAILABLE FROM

CONNOLLY & CO.
21-27 MAIN ST., HAHNDORF
SOUTH AUSTRALIA. 5245
and all branches, 'phone 88 7183



NOW AVAILABLE FROM ALL
STOCKISTS OF FARM SUPPLIES
Your best investment... the new
MAINS OPERATED SOLID STATE

WAIKATO ELECTRIC FENCE CONTROLLER

- Makes permanent electric fencing an immediate reality • Can save many, 3100s per mile on your fencing costs • Completely safe — conforms to Australian standards • Being made up of solid state devices, there are no moving parts to break down • Practically unshrinkable — certainly more so than any other make • Feeds charge into fence faster than it can leak away — functions efficiently over distances of 15 miles or more • Works over short distances without insulation (for best results use WaiKato Electric Fence Insulators)

Farmers vote the WAIKATO Electric Fence Controller the best on the market

The WaiKato Electric Fence Controller is an electrical achievement which by the absence of moving parts ensures prolonged, trouble free life under the most arduous conditions.

Bumper Season



brings best values ever

in Medics & Sub Clovers



Supplies of leguminous seeds to suit all soil conditions are now available at keen values from Hodges. This is your chance to restore soil fertility the sure way, by under-sowing all feed crops with either medics or sub clover.

HODGE'S, backed by 40 years' experience in seed growing, cleaning and selecting, will advise on the most suitable variety for your district.

ALWAYS
ORDER ALL
YOUR SEEDS
FROM

M.F. HODGE & SONS Pty. Ltd.

128-134 GILBERT STREET, ADELAIDE. 51 5571

THE SOUTH AUSTRALIAN

AIRYMEN'S . . .

Journal

Official Publication of the



Published Bi-monthly

Vol. 8, No. 6.

Adelaide, MAY-JUNE, 1969



GRAHAM PROSSER (left) AND HIS BROTHER ADRIAN, OF MOUNT BARKER, DEMONSTRATE THE CAMBRIDGE HOT WATER SPRAY SYSTEM DURING MILKING TO PYROX SALES ENGINEER, MR. ROY HARRIS (centre).

PRICE

20c

Registered at G.P.O., Adelaide
for transmission by post as a periodical.

\$1.20 per Year, Post-Paid

COMBINE

BETTER HYGIENE
 UDDER STIMULATION
 MASTITIS CONTROL

IN ONE EASY OPERATION

with the

CAMBRIDGE

STERILIZATION SYSTEM

. AND GET

FASTER MILKING
 MORE PRODUCTION
 QUALITY MILK

using instantaneous water heating by



and



INSTALLATIONS MAY BE SEEN AT

★ MOUNT BARKER (A. Prosser), OAKBANK (M. Gilman), FLAXLEY
 (P. Schultz)

E. H. CAMBRIDGE

MOUNT BARKER -- STRATHALBYN -- McLAREN VALE

Telephones: Mt. Barker 570, Strathalbyn 165, 54 9666

★ COVER PICTURE

THE SOUTH AUSTRALIAN DAIRYMEN'S JOURNAL



Published by
**THE SOUTH AUSTRALIAN DAIRYMEN'S ASSOCIATION
INCORPORATED**

Aston House, 13 Leigh Street, Adelaide. 51 3034

President:
N. M. GREEN

General Secretary:
DAVID J. HIGBED

Advertising Rates on application

A NOTE OF ENCOURAGEMENT

Mr. G. Loftus Hills, Chief of the C.S.I.R.O. Division of Dairy Research at Highett, in Victoria, is not only an outstanding scientist. He is also a man with a very great faith in the Australian dairy industry, a faith which is not based on optimism or pious hopes but on an intimate knowledge of the industry in this country and on the world scene.

He is not a politician, a lobbyist, or a spokesman for sectional interests; his views are those of an independent, intelligent observer, and, for that reason, must command respect.

In view of the dire forebodings that are expressed about the industry's future, or the absence of a future, it is heartening to learn Mr. Loftus Hill's opinions. But he sees the industry's future as one for our making, not for our taking. It must be worked for, not hoped for.

I commend this transcript of an address given to the members of the Wont-haggi (Vic.) Rotary Club to the study of all members of the Association.

—EDITOR.

THE FUTURE OF THE DAIRY INDUSTRY

G. LOFTUS HILLS

**C.S.I.R.O. Division of Dairy Research, Highett, Victoria
HAS THE DAIRY INDUSTRY A FUTURE?**

The first question we might ask ourselves is whether the dairy industry has any long-term future at all. Not everyone believes it has. Some of my scientific friends are fond of sneering, however gently, at the "inefficiency" of dairy production. They are usually the laboratory and drawing-board types who know little about agriculture, but they are also often enough, people who greatly enjoy their yoghurt and their Stilton cheese.

COVER PICTURE

An instantaneous hot water service, fueled by bottled gas, has resulted in a high standard of cleanliness and an improvement in the health of the herd of 80 Jerseys and Friesian crosses on "Urealla", Mount Barker, property of A. C. Prosser & Sons.

In scientific and technical journals from the U.S.A. one sees the occasional questioning item with such headings as "is the dairy cow going the way of the horse?" Top level food technologists coming out here recently from the United States speak of the big future for proteins from plant sources, and they play down the role of milk proteins. In that country too, filled and imitation milks have recently made considerable inroads into markets for the natural product, taking up to 10% of the sales in some western areas. In general the filled milks are of good flavour and the imitation milks less so, and are also nutritionally weak, but one must expect them to improve. One estimate is that in the U.S.A. substitute milk will replace 20% of cows milk in five years' time.

There are already larger sales of margarine than of butter in the United States, and coffee whiteners, more easily prepared in dried form, have quite extensively replaced coffee cream.

These non-dairy products are of course cheaper, but one may well ask why in an affluent country the substitute product should so readily replace the traditional one. The answer must have many facets, but two very likely elements in the explanation are firstly that the Americans, being more susceptible than Australians to commercial propaganda, and perhaps having an even higher proportion of health cranks, have swallowed the over-simplified and ill-balanced view that dairy foods are linked with heart disease. It is worth commenting that there is probably considerable greater risk in the use of foods, particularly for infant feeding, which have only recently been introduced and have not been well and truly tried throughout much of recorded history, as milk and its products have been. The second is that while dairy production in the U.S.A. operates at high cost, soya beans can be grown very cheaply and efficiently.

The situation in Australia is precisely the opposite. While we have not yet found in any State varieties of soya beans that do well in our climates, we have the second most efficient dairy industry in the world. Second to New Zealand, that is. I make this statement with due awareness that measurement of one national dairy industry against another is difficult because wage rates and exchange values and levels of industrial protection and so on cloud the picture. I base the statement on the undeniable facts that in several major respects the Australian and New Zealand industries have tremendous economic advantages. Firstly there is size of herd and output per farm, the major determinant in the cost of producing milk, and here we head the world. Secondly there is the fact that our cows graze throughout the year and have neither to be fed with expensive foodstuffs brought into the farm, nor put up in expensive housing during the winter. And in the rest of our industry—good sheds, machine milking, bulk milk collection, large factories, and so on, we are on the level of the best of other countries.

So it could be that long after affluent America has learnt to put up with substitutes we will still be enjoying our cream on the apple pie and our Camembert cheese.

It is interesting to note that while some people in the U.S.A. may have uncertainties about dairying, these are not shared by Japan where the increase in milk production was 70% over the five years 1960-65, or by many of the developing countries which, watching the increase of 2 or 3 inches in average height of Japanese boys and girls since the war, wish to share in foodstuffs which have brought this about. Nor do they appear to be shared by Russia which is spending very large sums on installing large automated butter and cheesemaking plants.

THE MARGARINE PROBLEM

In spite of this generally optimistic view, I believe that we must accept the fact that margarine will in the long term increasingly replace butter. Margarine has improved with technical advances in manufacture, so that in the particular aspect of spreadability the low-melting-fat margarines have an advantage, just

as, for use in industrial cake and biscuit manufacture, the manufactured short-enings, which have largely taken the market from butter, have physical qualities tailor-made to suit the particular end use. In general the margarines still lack, for most consumers, the flavour appeal of the best butter, nor is their feeling on the tongue as satisfying. Also on the side of butter, the consumer seems often enough to have a fondness for the traditional and natural product, and has at least some awareness of the rough nature of many of the fats used in making margarines and the rather severe heating and other processing treatments to which they are subjected in manufacture.

Of the factors favouring margarines, the most powerful is lower price. There is little we can do about this, since even our lowest cost producers cannot produce butterfat as cheaply as the animal fats can be supplied, or oil produced from oil-seed crops grown in Australia. Almost as powerful appears to be the heart disease complex. This has been built into the consumer's mind, to an extent quite unjustified by the facts, by clever advertising by some margarine manufacturers, by a failure of most medical practitioners to know enough about foods to distinguish between the various types of margarines, and perhaps as well by the bad general image of the dairy industry and the wish of some consumers to act against it.

The salient facts in the situation are that a high ratio of polyunsaturated fats in the diet have been shown under conditions of controlled feeding experiments with both animals and human beings to lower blood cholesterol levels. On the other hand, large-scale experiments with many patients over recent years have failed to show that such change as may practically be made in the ratio of polyunsaturated fats to saturated fats in human diets has any significant effect on the incidence of heart disease. The fact seems to be that other factors such as level of exercise, body weight, smoking, etc. control the incidence of heart disease far more than the nature of the diet. But people like to think of food as a cure for many ills and it is going to be a slow and difficult job to change the now well-implanted thinking on this matter. Even some of my scientific colleagues in the C.S.I.R.O. seem to have swallowed the story.

One can only hope that the tendency for thinking to go in cycles in the medical fraternity—what is the nostrum today is anathema tomorrow—may be suitably reinforced by the results of dairy-industry-supported research so that this heart-disease complex, which by the way works against all dairy products as well as butter, may generally diminish in intensity.

RELIEF MILKING SERVICE

GO ANYWHERE --- ANY SIZE HERD

For Charges, Conditions, Bookings, telephone . . .

S.A. DAIRYMEN'S ASSOCIATION - 51 3034

EMERGENCY (after hours) - - - 61 4508

VACANCIES (subject to prior booking) from

OCTOBER

THE PRODUCER'S VIEWPOINT

If we accept the fact that an increasing number of consumers are going to go on wanting dairy products, we are still left with the question of whether dairy farmers want to keep on at their present occupation or to do something else.

The major disadvantage of dairy farming as a way of life is the insistence of its demand for the milking of the cows twice a day and usually 365 days of the year. If this sort of thing has to be done for little financial reward, the young people are not likely to make their careers on the farm.

But if the farm income becomes really large, the task not only becomes much more rewarding but it may become possible to avoid it for a few weeks each year. Skilled farm relieving services could rapidly develop in response to a demand of this sort. They would necessarily be expensive but not beyond the resources of a dairyman with even 100 high yielding cows if the price for his milk is fixed at a reasonable level in relation to prices generally.

I don't need to tell you about the positive attractions of dairy farming or you would not be in the game. There goes with it the open-air life and the relative freedom to come and go which are shared by all forms of farming. There is in addition what Professor Ewers, formerly Professor of Veterinary Science at University of Queensland, has described in the following words:

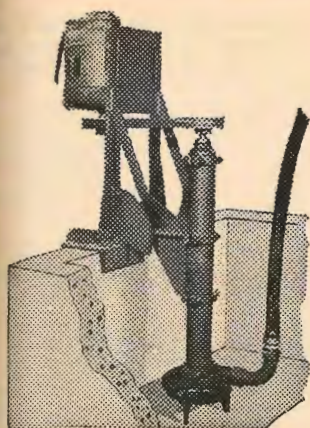
"It seems to me that the attitude of the dairyman to his work is the same as that of any other man: it is a compound of affection and dislike, of love and hate. For some, it is so distasteful that one wonders why they stay in the game, but perhaps they do so because they are afraid to try another way of life. But most are in it because they have become experts in the job, they like cows, they are their own bosses and can, even in hard times, be sure of a home and some sort of an income, even if it is altogether too small.

There is, for I've felt this myself, a real and deep satisfaction in close association with a herd of good milking cows. It is quite different from the sheepman or the man who fattens cattle, or even for the commercial egg producer and others such: They look after large numbers of animals and can hardly get to know any of them closely. But the dairyman, brought willy-nilly into close contact with the same individuals twice a day, seven days a week, does get to know a great deal about each of them, gets to understand their individual ways and, although he may profoundly dislike the natures of many of them, he is as closely involved in their lives as they are in his. So the dairy farmer's thinking is preoccupied with his animals' welfare.

He goes on to make the point that too much of such preoccupation can be a danger, but I think he has put rather well some of the positive attraction of dairy farming to the producer.

The role that dairying has played in land settlement in Australia, in providing early cash income as the land is cleared, even in wheat-growing and other non-dairying districts, and in the clearing of most of our heavily-timbered agricultural land, is not likely to continue in any important way into the future. But dairying for the farmer remains one of the best means of making a living from many available farms, and this in turn is linked with its fundamental efficiency as a form of land utilization.

Let us look then in a more technical way at the dairy cow as a producer of human food.



**Easy to instal --
efficient operation**

The **IBC** **DUMAC** filter cut liquid manure pump

Designed for dairies and piggeries this versatile pump saves you money.

Simply mount the pumps (as illustrated) over the edge of a small pit, e.g., a round or rectangular pit 2—6 feet deep. There's no priming required as the pump is immersed in the liquid.

BY COUPLING THE IBC-DUMAC FILTER CUT PUMP WITH THE "DISPERSA" LIQUID MANURE

SPRINKLER, EVEN DISTRIBUTION OF EFFLUENT IS ASSURED OVER LARGE AREAS OF PASTURE.

Spare parts are inexpensive — easy to get — easy to instal.

Get more details on the IBC-Dumac Filter — Cut Liquid Manure pump now!

Post this coupon today.

Please send me further details on the IBC-Dumac Filter-Cut pump without obligation.

INTERCOLONIAL BORING CO. LTD.

"Water House", 98 Churchill Rd., Prospect, S.A. 5082. Phone 65 6944.

Head Office: 450 Ann St., Brisbane, Qld. Branches all States.

MT. GAMBIER: Stuart Richardson, 5 Rotary Ave. 5290. Phone 2 3482.

NAME.....

ADDRESS.....

POSTCODE.....

THE TECHNICAL VIEWPOINT

In quantitative terms the dairy cow cannot compete with the oil seed crops as a producer of fat or oil per acre, or per unit of farm cost. If she goes up to 500 lb./acre, the oil seeds go up to 1000 or so. In fat production therefore she must rely on quality to justify her existence.

It is in animal protein production however that the cow scores best. In comparison with beef production which gives a little over 1 lb. of protein per 100 lbs. of total digestible nutrients in the pasture, the cow gives more like 5 or 6 lb. If the cow is later used for beef the score is better still. These figures compare more than favourably with those for egg or pig in protein production.

It remains true that the cow converts only 20% of the pasture protein to milk protein. Why not, as Mr. Pirie of Rothamsted has been urging for many years, extract the protein from the pasture and use it direct? Mr. Pirie has devised a process for doing this, and there are a number of experimental plants in the world, including one in New Guinea. But the product still leaves a lot to be desired in appearance and flavour, and by the time it is purified and presented in bland and attractive-looking form, its estimated cost is about 35 cents per lb. Milk protein sells for a little over 20 cents per lb. Even soya protein does not sell for much less, so it seems clear that as long as we can keep on finding a reasonable market for butter, milk protein is going to be greatly in demand. Increasingly of course its uses are for edible instead of industrial purposes.

The world requirement for protein is such that besides leaf protein many other novel sources are being suggested. These include the growth of algae, and the fermentation of petroleum by yeasts. All such methods require a source of nitrogen, such as ammonium salts or urea, and these are of course obtained at fairly low cost these days by fixation of atmospheric nitrogen. But the cow is also capable of converting urea into protein, as Prof. Virtanen working in Finland has shown. He has obtained yields of up to 1000 gal. a year from cows fed urea as the only source of nitrogen. One may picture, particularly in tropical areas, where crops to give roughage may be grown rapidly with high yields per acre, or where there may be a cheap cellulose residue after the extraction of leaf protein, the dairy cow being fed these as well as urea and acting to all intents and purposes as a protein factory. We should keep in mind however, in thinking of this use of the cow as a protein factory, that one of the efficiencies of our own form of dairying is the ability of the cow to collect her own feed, and under our temperate conditions this seems likely to be the most economic method for many years ahead.

The relative costs of the various other methods of producing protein which are coming forward can only be established when the detailed methods of commercial operation have been worked out, but the cow may well hold her own against them. The biological quality of milk protein supplements so well the amino acid deficiencies of many other proteins that there is in any case likely to be a continuing call for its use in conjunction with whatever new proteins may come forward. And the total future requirement for protein in world nutrition is such that, flat to the boards, the dairy industry of the world could supply only a very small part of it.

There is another aspect of dairy farming which the scientist concerned with agriculture cannot overlook. This is the role of the grazing animal in building up the fertility of the soil—at the other extreme one has cash cropping which depletes the soil. Again, in many of our higher rainfall areas to put the soil under good pasture is the best protection against erosion. And pasture grows as well or better than any other "crop" in many of these areas. So, when checked against the soundest tenets of agricultural practice, there is much to be said for the retention of dairying in many, though certainly by no means in all, of the areas where it is at present carried out in Australia.



Use the
new simple
formula for successful
cattle raising

+ add **BOVIZOLE***
- subtract **WORMS**
X multiply **PROFITS**

See your THIBENZOLE*
supplier for details

BOVIZOLE Trademark
FEED WORMER OR LIQUID
The Wormer with a Warranty

MSD MERCK SHARP & DOHME (Australia) Pty. Limited, Granville, N.S.W.

*Trademark

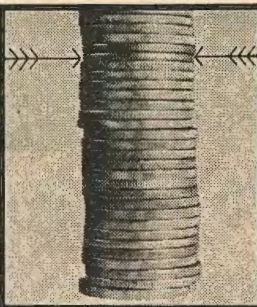
MSDB 21 VcAu80.68

Your helpful Federation man says you can

fully
 be \uparrow insured and save
 up to \$1 in every \$5
 on premiums!



guidance from your
 helpful Federation man



save \$1 in every
 \$5 on premiums



quick and full claim
 payment

There's real security in knowing you're safely insured with The Federation Insurance Limited. Federation offer a complete service on all forms of Insurance. Their unique premium saving plan will safeguard your profits and reduce risk of loss once and for all. Your helpful Federation man offers expert, no obligation advice on all insurance matters. He will advise

you concerning a sound insurance plan reflecting the growth of your business, and serve you promptly in the event of any claim.

FEDERATION
ONE-STOP INSURANCE
 one plan-one renewal date-one payment



The Federation Insurance Limited,
 342 Flinders St., Melbourne, 3000. Tel. 62 0101
 168 George St., Sydney, 2000. Tel. 27 2266
 376 Queen St., Brisbane, 4000. Tel. 2 2386
 Cnr. King William St. & Sth. Tce.
 Adelaide, 5000. Tel. 8 4541
 206 Adelaide Tce., Perth, 6000. Tel. 23 1931
 71 St. John St., Launceston, 7250. Tel. 2 4085

To The Manager,
 The Federation Insurance Limited.
 Please send me details of your
 One-Stop insurance premium saving plan.

Name
 Address
 Association

So from the viewpoints of the consumer and of the producer and of the objective agricultural scientist, there seems no doubt that dairying must continue into the foreseeable future. But will it expand or decrease in Australia? And what sort of industry will it be? What will be its size and what will be its shape?

SIZE OF THE FUTURE INDUSTRY

It is a brave man who forecasts the future, and I can make no claim to see into it more clearly than anyone else. But I do strongly believe our industry has failed quite seriously in the past to try to look ahead and to plan and to think into the future. It has grown without looking at its goals in terms of the size and shape of a dairy industry which best suits out national economic needs, to say nothing of international economic needs.

We have already named some of the forces and counter forces, trends and counter trends, the moving equilibrium of which will largely determine the future of the industry. But the industry can play a positive role in determining its own future, largely by creating and/or seizing opportunities for its own organizational, technical and economic betterment. So we must take account of these potentials, as well as the factors we have already listed, in looking into the future.

Firstly there is an important forking of the possible pathway ahead. There is at least the possibility of concerted international action to do something about the appalling malnutrition which at present exists in the world and must inevitably become much more severe over the next 30 years even if world population is stabilized by the year 2000. As most of you probably know, the Australian Society of Dairy Technology has made the suggestion that a World Food Corporation should be set up under the United Nations. This would make full use of the capabilities of the big international food and fertilizer companies. Such large scale and radical thinking is easily dismissed as idealistic, but there are already elements of this sort of thinking appearing in the World Food Programmes of the United Nations, and with a little common sense in high places, we could well see some move along these lines within the next five years.

Now if there is effective international action on world food, the size of the world's dairy industry will be much larger than it is today. Such an effective source of high quality protein will be utilized to the full. The total amount of land well suited to dairy production is not great, and one cannot look to perhaps more than one or two-fold increase, but in countries like Australia and New Zealand where dairying is so efficient, we would certainly push production to the maximum.

Present Australian policy seems to favour limited unilateral aid rather than massive international action of this kind. But I imagine you as dairy farmers will have your own viewpoint as to which is the approach which will help you most.

It is this factor, and let me state it again, whether or not there is or is not concerted international action to correct present and impending world malnutrition, which far more than any other will determine the future size of the dairy industry in Australia.

SHAPE OF THE FUTURE INDUSTRY

Now as to the shape, what can we see as to the likely internal forms and structures which will go to make up the industry?

Firstly the present trend to larger herds and fewer dairy farms, arising from higher stocking rates and better pastures as well as farm amalgamation, will obviously continue. It is the major factor in reducing costs of production. The small dairy farm, like the small dairy factory, is likely to disappear both for this reason and because quality is, on the evidence, more readily achieved and maintained with large scale production. Is there a limit to this—is there a maximum

THE HYDROPULSE SYSTEM

The Hydropulse System is a balanced combination of milking machine components which will provide optimum milking results. The basic components are:—

THE HYDROPULSATOR

Provides constant balanced pulsation at a factory set speed and with wide ratio. It is unaffected by moisture, dust or temperature changes.

THE MILK CLAW

Stainless Steel construction of the correct balance incorporating a specially built-in cut-off valve and controlled air bleed.

THE VACUUM CONTROLLER

Ensures a constant vacuum of 15 Hg free from fluctuations and oscillations.

THE INFLATIONS

Complete range specially developed to suit every type of cow and are manufactured from long-life Swedish synthetic rubber.

The new system can be used with all types of Alfa-Laval milker installations and can also be adapted to fit all types of competitors' machines.

FOUR YEARS' RESEARCH, 2,000,000 TEST MILKINGS

The fact that there is only a relatively short time in which the cow's milk let-down hormone, oxytocin, exerts maximum influence has long been known. So an intensive search was begun for a way to utilize this limited time to the fullest—to evacuate the udder more completely. This would stimulate the cow to keep its milk output at a higher level during each lactation period. At the same time, laborious machine stripping would be reduced and total machine-on time minimized.

The idea was right, as the early research work indicated, but it took four years of development to come up with a practical piece of equipment. In widespread field trials from Sweden in the north to Australia and New Zealand in the south, over 7,000 cows were milked under scientific control—the most exhaustive test programme any milk system has ever received, involving more than two million milkings.



"Good bloke, my boss! Now I'm the original contented cow — he bought me Hydropulse!"

The world's most experienced manufacturer of Dairy Equipment has done it again! An entirely new system of milking which adds up to profit for the dairy farmer.

- Up to 15% faster milking time
- Up to 5% greater milk yield
- Less machine stripping
- Improved udder health

This is not idle talk. Alfa-Laval made over 2,000,000 test milkings on 7,000 cows of all breeds to prove the Hydropulse system.

You'll change eventually to Hydropulse, anyway, so write for full particulars to:

**ALFA-LAVAL PTY. LTD., 338 KING WILLIAM ST., ADELAIDE.
5000**

ALFA-LAVAL

Hydropulse **SYSTEM**

size of herd beyond which efficiency falls off? There probably is, and the effective husbandry of too many animals may be the first factor to fail, but the only other thing I want to say about this tonight is that this question is amongst the many which will be discussed at the international Dairy Congress in Sydney next year.

How far will beef production be combined with dairying is another question to be discussed in Sydney next year. The answer is probably increasingly in many districts. One factor which must affect this, for the supplier of milk for manufacture into butter or cheese, is the method of price equalization. At present the dairy farmer must base his judgment on whether to raise some beef or produce more butterfat on the present equalized price. But if other dairy farmers decide at the same time to go for butterfat, they all find that because of the increased export they have created at low world prices, the equalized price on which they based their judgment has now dropped. The present price equalization thus forces the dairyfarmer to base his judgment about beef on a false and shifting value for butterfat. This is the reason why suggestions have been made in the past, and will no doubt continue to be made in the future, that equalization should be replaced by the allocation of a local butterfat quota to each supplier. The fat he produced above this would be paid for at the return from export. He would thus have a true measure, not susceptible to change by the action of other suppliers, of the value of any extra milk fat he produces. Such a change in method of payment would favour beef production.

One may add that if all the possible factors affecting the size of our export markets, such as whether there is international action on malnutrition, and whether Great Britain joins E.E.C. on terms adverse to Australia, go in the wrong direction and our export markets do in fact decrease, a switch to beef production would probably be the most effective method of decreasing output of milk.

EQUALIZATION OF MARKET MILK

What of the equalization of market milk against milk for manufactured products? Let us say at once that any such equalization must be partial, since the market milk producer does almost always incur extra costs, and gradual, since land values and so on must be given time to adjust.

But is even gradual and partial equalization likely? Many say no because the man with the city milk quota will never give up his favoured position. But there are counter forces to this too. The threat of UHT milk to the present market control of the milk boards is, because of Section 92 of the constitution, a very real one. State milk boards cannot control UHT milk coming from another State. Nor indeed, as the Victorian Milk Board is finding around Albury, can they control pasteurized milk coming over the border.

In Western Australia recently I found that some of those in the Perth milk zone with substantial contracts were taking the forward-looking view that some equalization of market with manufacturing milk was inevitable and would be in the best interests of the industry.

Another straw in the wind is the recent inquiry into the dairy industry in New South Wales, set up, it appears, under the insistent pressure from the North Coast farmers for some share of the lucrative city milk markets. They reported, *inter alia*,

"The matter of equalising returns for some or all dairy products in New South Wales has been closely examined by Council, including a scheme operating in South Australia on a limited basis covering liquid milk and cheese. This latter scheme however is not applicable to over-all State-wide pooling of realisations, while other proposals made, fail because of contravention of certain sections of the Commonwealth Constitution.

"Presently, no satisfactory scheme for equalising market realisations of all dairy products appears to be possible except on a Commonwealth basis.

"However, rapidly changing industry conditions within Australia and the development of the liquid milk trade on a State wide basis, could force a review of the position.

"Council is of opinion that the question of equalising returns for milk and other dairy products should be the subject of an examination by the Authority."

I think it is fair comment to say that the present division in controlling authorities and in sectional interests between the market milk and the manufacturing sections is one which our Australian dairy industry can ill-afford in view of the difficulties which lie ahead of it.

One may therefore expect, perhaps in the not-too-distant future, moves to integrate to some extent not only the returns but the organization of these two sections of the industry, and on a national as well as on a State basis. Such new organizational structures when they come must be very carefully considered, so that they serve the best interests of the industry. Some brains-trust somewhere in the industry should already be studying these difficult organizational problems, but if such studies are going on I have not heard of them. This is an instance of the sort of creative looking ahead which I believe we should be doing.

FACTORIES AND PRODUCTS

What of dairy factories, and dairy products? The trend to larger factories, producing, individually or collectively, a wider range of products will continue. A possible future development in this State at least is a centralized plant for whey products, supplied with concentrated whey from many factories, the water content possibly being reduced by reverse osmosis.

The method of payment for milk is already under review by Agricultural Council, and the alternatives appear to be a butterfat basis or a butterfat and protein basis. If the latter is introduced with any significant difference in return for protein, the supplier will find that while if he tries to breed for protein it will be a long drawn out process, taking thirty or forty years to make much difference, he can use a ready-made change in protein-fat ratio by switching over from Jersey to Friesian stock. I believe we should now be doing work on the relatively overall efficiency of these, and other, breeds for producing milk constituents. Such a study should also no doubt take account of beef potential. We should also know much more about the relative response of the milk from these breeds to the various processes in dairy manufacture.

We have already learnt a lot about the effect of differences in milk proteins, genetically determined, on the behaviour of milk in various forms of manufacture and storage. With further advance in this understanding it may well prove possible for the dairy manufacturer to seek from the supplier, with the aid of the animal geneticists and the controllers of A.I., the supply of milk with closely controlled chemical characteristics. This is looking a little ahead, perhaps ten or fifteen years before there is practical action.

We can certainly expect a continuation of the trend to fermented milk products, yoghurt and sour cream, etc. which continue to gain ground in the United States where they already have a large market.

Cheese of all types, but particularly cottage cheese, the market for which is so far little developed in Australia, will certainly sell in ever-increasing quantities.

The milk biscuit, designed originally for use in developing countries overseas, may well prove to have a useful local market, particularly to supply sound nutrition to those many elderly people whose powers of food preparation often reach to a cup of tea and a biscuit but not beyond it. Two other products of the C.S.I.R.O. Division of Dairy Research, butter powder and butter fat shortening should have limited local markets even if their particular purpose, disposal of otherwise difficultly saleable butterfat, does not have to be brought into play.

For overseas markets, particularly those in the developing countries which certainly have the greatest growth potential, the milk (or high-protein) biscuit should have an important future. Moves are already under way to supply a plant from Australia to Zambia to make these biscuits from Australian and local ingredients.

You already know about the enterprises of the Australian Dairy Produce Board in setting up recombining plants for dairy products in South-East Asia. Not only are more such factories likely to be erected, but they will produce an increasing number of different milk products.

But as my colleague Dr. Norman Snow has pointed out, the concept of establishing food processing plants in these countries is one which Australian food industries as a whole could benefit greatly from. If for instance the Wheat Board could join with the Dairy Board a wide range of additional products using Australian wheat and dairy ingredients, as well as locally supplied foods, could be manufactured. Dr. Snow has further suggested the setting up in Australia for the sponsoring of such developments a consortium of product boards (perhaps Dried Fruits and Wines as well as Wheat and Dairy Products) together with the major food companies in Australia. This is I believe one more area where creative opportunism on the part of the Australian dairy industry may do much to determine its own future. The industry needs to be well and solidly organized if it is to effectively undertake activities of this sort. We need not I think, look to the monolithic marketing structure such as exists in New Zealand, but amongst the more independent activities there must be enough central strength to allow concerted action wherever it is necessary to get results.

CONCLUSION

I have ranged far and wide in this talk this evening because I believe that the factors which have to be taken into account in assessing the future of the industry are very numerous and very complicated and interwoven.

Some of these factors are within the industry, some are outside, but nearly all of them are susceptible to influence from the industry, and some, perhaps most, only the industry can do anything about. So the last thing I want to say about the future of the industry is that it depends very much on wise, creative and constantly advancing thinking by the industry, followed by appropriate energetic action.

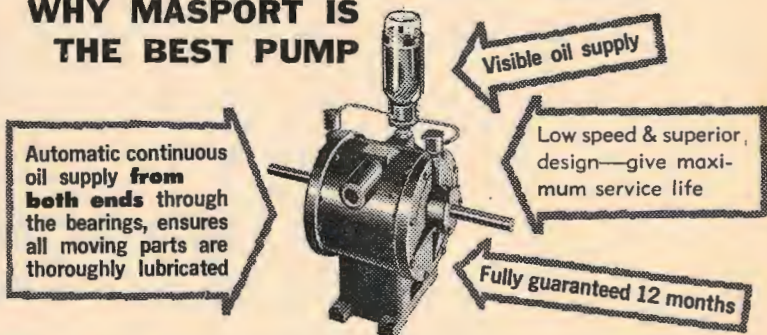


**YOU CAN GET 10 YEARS OR MORE
QUIET TROUBLE-FREE SERVICE**

MASPORT

the quiet **VACUUM PUMP**
from New Zealand

**WHY MASPORT IS
THE BEST PUMP**



Avoid costly breakdowns — see your local dealer or

A.H. McDONALD (SALES) PTY. LTD.

299 Prospect Road, Blair Athol, S.A. Phone 65 6117

Service readily available throughout Australia

anderson

REFRIGERATED FARM MILK TANK UNITS

The **first** and **only** manufacturer to have a complete range of units in Victoria (appointed as testing authority for farm milk units) and found to comply with Australian Standards

CERTIFICATES OF TESTING

MODEL:	R150	R200	RH250
CERT. No.:	C.P.65C9	C.P.66C3	C.P.66C1

National Standards Commission Pattern approval Certificate of Agriculture required

- 7 models to choose from 150-500 gallons capacity
- stainless steel construction
- Rigid polyurethane insulation



anderson

ADELAIDE: 179 Gilles Street

'Phone 23 4917

SYDNEY: W

MELBOURNE

BRISBANE: -

(A Unit of DAIRY FARMERS ASSOCIATION OF AUSTRALIA)



...ng tank units tested by the State Electricity Commission of
 ...k up by the Australian Standing Committee on Agriculture)
 ...h Australian Standard N46-1963.

TE OF PERFORMANCE

R250	R300	R400	R500
C.P.66C10	C.P.66C8	C.P.66C13	C.P.66C9

...tifi NSC No. 8/4 Complies with Milk Board and Department
 ...equirements in every State.

- Sound design for minimum space requirements
- All thermal insulation
- Low height for easy cleaning.

For further information contact

Anderson equipment

Anderson co-operative Ltd.

Will & Egerton Sts., Lidcombe, N.S.W. 648-1084.

RN Charles St., North Coburg, Victoria. 35-2347.

E: Stanley St., South Brisbane, Qld. 4-5452.

FAR CO-OPERATIVE LTD.)

COBALT — THE ANSWER TO ACETONAEMIA?

A mineral supplement developed on an S.A. dairy farm now on the market for nearly ten years has recently changed its formula to include cobalt.

In the past some farmers have found that the calcium in this mineral supplement not only helps production but the cow also produces a better calf, while some have had marked improvement with infertility problems in their herd by overcoming phosphate deficiency with its use.

The decision to add cobalt follows representations made to the manufacturers by dairy-farmers, many of whom have become firmly convinced of the overall value of the product. After investigations lasting several months, and consultations with officers of the Department of Agriculture, the mineral supplement has now been registered with the Stock Medicines Board with a new formula which includes cobalt.

Farmers who have had practical experience with the use of cobalt have reported a dramatic drop in the incidence of acetonæmia. One dairyman in the Southern Hills area reported that, at one stage last year, 13 out of 20 freshly calved cows had had acetonæmia, but since using cobalt has, this year, had only three cases out of 40 cows.

It is encouraging that there is now some practical and easily applied method of dealing with this aggravating problem in the dairying industry. Other welcome news is that because of the relatively small amount of cobalt required, and because of concern at the spiralling costs in primary production, there is no increase in the price of the marketed product.

"Triple M" now with Cobalt to prevent Acetonaemia . . .



Triple M with Cobalt added enables the cow to make effective use of the flora in the rumen, thus helping to prevent Acetonaemia.

"C.T.", WILLUNGA, writes:—

Being one of the farmers that requested that you investigate the possibility of including cobalt in your TRIPLE M mineral mixture, I feel that I must write to you in appreciation. In June, 1968, I was having a considerable amount of trouble with acetonæmia, at one stage 13 out of 20 freshly calved cows had had acetonæmia and the effect on production and on the condition of the cows was very apparent. A veterinary surgeon suggested that I may be able to help the situation by adding cobalt to the feed. I started this but found difficulty in feeding the small amount necessary to the health and production of my cattle. To July, 1969, I have had over 40 cows calve and have had only two cases of acetonæmia that required vet. treatment (both were severe cases last year) and a mild case that has readily responded to treatment with glycerine. I have been using your mixture for over eight years now, and needless to say am very satisfied, even more satisfied since you added the cobalt.

Yours sincerely, "C.T.", Willunga.

CHANGE IN AGRICULTURE

It is ironic that Australia, a country where large acreages, large herds, large flocks and hard work have combined to build a primary producing sector second to none in economic efficiency, with the ability to absorb the high cost of shipping to the world's markets and still sell at competitive prices, should now be placed at such a disadvantage by the attempts of other countries to overcome the results of economic inefficiency in their own rural industries.

It is even more ironic that these attempts have generally failed to achieve their aim, which was the raising of farm income to levels comparable with those in other sectors, and have brought to other countries less afflicted, because of the scale of operations, with the problem of subsistence farming, a situation which has placed in jeopardy the survival of their own primary industries.

The solutions, or apparent solutions, have been ineffective and disruptive.

The financial support provided to lift farm incomes has added only to the surplus; domestic prices have not been reduced and home consumption has consequently not risen. And, although the schemes have been designed to assist the low-income producer, they have, naturally, assisted the large-scale producer even more.

So the countries involved are now engaged in re-thinking the problems, and their solutions, and the problems themselves are being recognised, as can be seen from the words of the Secretary-General of the O.E.C.D. (Organisation for Economic Co-operation and Development) which comprises Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States.

● ● ● ●

"Why has the situation in agriculture been so difficult for many years?"

There are three main reasons for that, the first being that agriculture is a relatively declining sector in all modern economies. With a rise in incomes, the part of our money spent on food becomes smaller and smaller and therefore the total demand for food rises more slowly than the demand for many other things. Furthermore, only part of the food budget represents incomes that go to farmers; another part of our food expenditure goes to the means of production in agriculture, such as fertilisers, machinery and so on. A third part of the budget for food is represented by transportation and processing of the food products after they have left the farm. In fact, **that part of the food budget which is represented by the farmers' own contribution is on the whole declining.** Therefore, it is not astonishing that farming as such represents a declining part of the economy as a whole.

In the first stages, this only means that the agricultural population grows more slowly than the rest of the population. However, we have now reached a stage where the number of people working in agriculture goes down rapidly in all highly industrialised countries and also the number of farm enterprises is being reduced. This, of course, is not easily accepted by those who belong to the agricultural sector, which is the oldest part of all our societies.

There is a second reason for the present difficulties. Paradoxically enough, rapid technical progress has led to a lack of harmony. Big farm enterprises which can apply the most modern techniques and use expensive equipment have a great advantage over the small farms, particularly in mountainous or other difficult areas. Therefore, **prices that would be high enough for the big modernised farms would not give the small farmers a decent living.** This is why the price policy for agriculture has represented not only an economic but also a social problem.

There is a third difficulty which stems from the fact that agriculture is a sector with many producers living in many different countries. Therefore, none of them is big enough to influence the market situation or determine their own prices, which is the privilege of many big enterprises in industry and other lines of production. **To the extent that the market situation is influenced by government policies, the difficulties are increased by the fact that the policies of various governments often counteract one another.**

There are other sectors that have known one or other of the difficulties I have mentioned.

However, agriculture has known all of them; and for quite a long period. This is why it has been a matter for concern and governments have felt forced to take many measures that may have been helpful when they were introduced, but which **have gradually brought us to a point where the situation is becoming very complicated and very dangerous.**

The present situation can briefly be described as follows. In the last few years, a number of measures have been taken which will contribute to an improvement of the structure of agriculture in most countries. This is to be welcomed, but at the same time, the main element in agricultural policies in virtually all O.E.C.D. countries has remained price support in one way or another. Prices of agricultural products in the national markets have been guaranteed at often very high levels and this is why production has been encouraged often very strongly. Therefore, we are getting the surpluses that I have mentioned.

There is in these policies a tragic paradox. The big farms with modernised equipment do not need these high prices. They are maintained in order to help the small farmers who often have very disappointing incomes. However, the paradox is that the big farmers are helped much more by high prices than are the small farmers. If a big farmer produces ten times as much as a small farmer, he will obviously gain ten times as much from a certain increase in the guaranteed prices, and that is what has happened in so many countries in the post-war period.

I do not think it is sufficiently realised by the public to what extent the existing price support policies favour the big farmers, who often do not need them compared with the small farmers whose situation is not improved substantially by price increases because their production is so small.

This means that not only have the existing price support policies induced farmers, and in particular, the big farmers, to produce too much, **they have also been a failure socially because we are helping the wrong people.** It is therefore high time to reconsider these policies.

POSSIBILITIES FOR ACTION

Now what can be done? In fact, we need to have a new look at nearly all the measures taken to help agriculture.

First, there is a need to pursue energetically the policies for structural change. In order to increase production per man in agriculture so that incomes can become higher, the number of people working in this sector has to be further reduced. The average size of farm enterprises has to be increased, often very much.

Though it must be added that in some cases a specialised production on a large scale can take place on a farm that is small in area. The production of chicken is a case in point.

However, as I have already mentioned, we cannot expect that these structural improvements can be accomplished so quickly that they can by this bring the markets into equilibrium. In fact, if small farms are replaced by bigger ones which are more efficient, production may even increase in some cases if the prices remain as they are. Other changes in policy are therefore required to bring the markets back to equilibrium.

The first question to ask in this respect is whether it is possible to increase demand for agricultural products. Here a distinction should be made between demand at home and demand abroad, in particular in the developing countries.

Concerning demand at home, there is no doubt that the consumption of a number of high quality food products in many member countries would be bigger if prices were lower. I know that in some countries government support is given in order to give consumers or some groups of consumers food at prices that are lower than they would normally be in view of the prices paid to farmers. In a more general way, it is an important consideration that lower prices will not only influence production but also consumption. In fact, what would happen in a relatively free market if there were a surplus is that prices would fall and this would both increase consumption and reduce production so as to bring about a more equilibrated situation.

Concerning food consumption in developing countries, we all know that it is often very insufficient both in quantity and in quality. The prospects are that demand in developing countries as a whole will increase faster than supply in the foreseeable future and this would in particular be so if the poor countries did not suffer from the shortage of foreign exchange that so often hampers their economic growth.

This is why food aid has come to play a substantial role over the last ten to fifteen years. We in the O.E.C.D. are examining the question of rational food aid policies. According to F.A.O. projections, the market in these countries not only for cereals but also for dairy products could expand rather rapidly if certain conditions were fulfilled, and one of these conditions would be that foreign exchange were available. We should examine in a more systematic way in collaboration with FAO and the World Food Programme, how this important question can best be handled. I do think that it is possible to provide a somewhat larger flow of aid to the poor nations and at the same time improve to some extent the market situation for some agricultural products.

However, the possibilities in this field are limited. We must not, of course, spoil the market in the developing countries for their own farmers who are as a rule very poor. Therefore, we cannot escape the question of how to adjust our own production of a number of agricultural products to demand better than we have done in the past. This is not an easy task but it is becoming more and more urgent.

Production can be influenced through price policies and through direct regulation in one way or another. Concerning prices, it is obvious that they are now too high in many countries to bring about market equilibrium. We all know that it is politically and socially a delicate question to discuss, but we cannot escape it. In this respect, may I recall what I have said about the difference between small and big farmers. It is, of course, not true that (current) incomes are bad for all farmers. There is no doubt that many big farmers with modern equipment have excellent incomes and they could very well go on with lower prices. The problem is how could we make prices more realistic without doing harm to the small farmers.

There are in principle two possibilities: one is to reduce prices, but only for farms bigger than a certain minimum size. The small farmers would then go on having fairly high prices, maybe however with certain limitations on the quantities for which these high prices would be paid and may be with a time limit.

The other possibility would be to reduce prices for all farmers but then give the small farmers compensation through other means. As is well known, there are various means that could be considered in this connection, for example, old age pensions obtained earlier than usual if you retired from a farm, retraining people for non-agricultural activities and so on. I need not go into detail.

To adjust production through more realistic prices is, of course, not the only way out. Another possibility is direct regulation of production in one way or another. The most well known measure taken in this field is the limitation of areas under certain crops, but there can of course be others. Again, it is not necessary for me to go into details. Whether prices or direct regulations are used, the question of compensation should not automatically be treated in the same way for the big farmers and for the small ones.

NEED FOR CO-OPERATION

There is another consideration that I would like to make and it is a very important one. It is that what we need in this field is concerted action by as many governments as possible. Not only can we learn from one another's experiences, particularly in the field of measures to improve structures in agriculture, it will also be necessary to bring supply and demand into better equilibrium.

It is evident that, if one country alone took measures to reduce the growth of its production, it would thereby give up some of its position in the market for the products in question if other countries are not taking similar action at the same time. Therefore, **one cannot expect individual countries to take courageous steps in this direction unless they have a certain guarantee that others will do the same.**

We had a similar experience during the liberalisation of European trade after the war. It would be dangerous for one country to liberalise in isolation because then its imports would increase and there might be a balance of payments difficulty. However, as it was decided in the OEEC that liberalisation would go on in all Member countries at the same time, this danger was reduced because not only would imports increase, but exports of the individual countries would also increase because of the liberalisation of other countries' imports.

It is something similar that we now need in agriculture. It will be much easier for the individual country to take measures that bring us closer to market equilibrium if other countries do it at the same time and it should be the main purpose of the work in the OECD in the near future to bring such co-ordinated action into being through our consultations.

It can be a question of harmonisation of policies concerning production and prices and of those concerning structural change. It can also be a question of international agreement concerning the conditions of trade as we have seen it in a few cases such as the International Wheat Agreement, the agreement concerning milk powder and the agreement between the United Kingdom and the exporters of bacon to the British market.

I will therefore strongly suggest that the Committee for Agriculture of the OECD should be asked to initiate a serious discussion of the policy implications of the present prospects. I would hope that Ministers can give some guidance to the Committee with a view to discussions to come, and I hope that representatives of the various countries in the Committee will be given such support by their governments that we can now begin to tackle these very important problems in a realistic way."

SUBMISSION ON THE ECONOMY

Each year the National Farmers' Union of Australia (NFU) is invited by the Federal Government to present a submission of its views on the Australian economy, as a guide (so we believe) to the Government, in preparing the Budget and drawing up its legislative programme.

There has been some positive results—the superphosphate bounty comes to mind—but generally each year's submission is a darker shadow of the one preceding it.

The latest, presented by the President, Mr. F. J. McAvoy, C.B.E. to the Prime Minister recently, is no exception.

Submission to Economic Sub-Committee of Commonwealth Government

Mr. Prime Minister,

The National Farmers' Union of Australia wishes to record its pleasure that you have again afforded the representative national organizations an opportunity to discuss the economy with you and your senior Ministers. We are happy to acknowledge the increase in the Commonwealth Budget's assistance to primary industry. Our rural sectors are appreciative of the continuing recognition by the Commonwealth Government of the need to offset the effects of the decision not to devalue the Australian currency in sympathy with sterling. It does appear reasonable that the Australian community compensate these industries on a continuing basis.

There must have been satisfaction in many places over the recent statement by the Bureau of Agricultural Economics that the volume of rural output is expected to rise by about 23% in 1968-69 compared with the drought-ridden year of 1967-68.

	1965-66	1966-67	1967-68	1968-69 *
Wheat, million bushels	259.7	466.6	277.3	530.0
Barley, million bushels	41.8	61.6	35.2(*)	75.0
Oats, million bushels	60.7	107.1	38.5(*)	82.0
Sugar (94 net titre) '000 tons	1,953	2,343	2,335(*)	2,719
Wool, million lbs.	1,663	1,762	1,774	1,886
Beef & Veal, '000 tons	931	865	890	960
Mutton & Lamb, '000 tons	599	587	654	615
Pigmeat, '000 tons	133	140	149	160
Wholemilk, million gallons	1,522	1,605	1,501	1,540

(*) Estimated by the Bureau of Agricultural Economics.

Recently available statistics on livestock numbers as at March 31st, 1968, suggest that, by now, our flocks and herds would be at or about the numerical size which they had reached by March, 1965, before the drought began its worst assault.

LIVESTOCK NUMBERS ('000s)

	1965	1966	1967	1968
Sheep	170,622	157,561	164,237	166,912
All Cattle	18,816	17,936	18,270	19,218

Source: Commonwealth Bureau of Census & Statistics; January 22, 1969.

Some operating costs on farms have continued to rise but of probably greater significance is the greater rural indebtedness as indicated by the level of advances by the major trading banks and pastoral finance companies.

GROSS RURAL INDEBTEDNESS \$million

	Major Trading Banks	Pastoral Finance Companies
June 1966		249.9
July 1966	650.4	+14%
June 1967	+15%	285.5
July 1967	750.5	+10%
June 1968	+22%	314.4
July 1968	981.1	
September 1968		327.2

Source: Statistical Bulletin, Reserve Bank of Australia.

As one commentator* has said:

"Although the demand for finance for the rural export industries has already assumed such unprecedented proportions, it is still unsatisfied. One is compelled to wonder just where a continuance of this trend towards heavier indebtedness is leading our producers and what is necessary to assist them."

Without doubt, several years of profitable operations would help many farmers to liquidate the debts which have built up over recent years and the forecast increase in rural output will help many, provided that market prices are at a remunerative level.

There is little which the Commonwealth or the farm groups can do to extract better prices from their markets, but we would take this opportunity of recording our appreciation of the strenuous and successful efforts made by Ministers and officials of the Commonwealth and Queensland Governments and industry officials, in achieving the new International Sugar Agreement, which promises real benefits to our sugar industry and cane growers. This followed closely on the success of the International Grains Agreement. We strongly support all possible further efforts to achieve international commodity agreements for export products dependent on fluctuating world market prices.

The viability of the rural sector is important for our nation in these years, and we appreciate the acknowledgments which Government leaders make of this fact from time to time. Producers recognize the Government's efforts to assist in overcoming the cost problems of rural industries, by payment of subsidies on fertilizers and taxation concessions for various improvements, together with the specialized industry schemes aimed at stabilizing returns.

It is disturbing to note, however, that farm costs continue to increase and Government action to treat the symptoms of declining profitability appears inadequate to go beyond a certain point.

It is relevant to note that the Index of Prices Received by Farmers for all products remained at the same level in June 1968 as for a year earlier. On the average, prices received did not rise overall, but costs of production rose by over 4%. Productivity has, we know, increased. But it is the lower extent of productivity growth in some of our rural industries, which are unable to keep pace with costs, which causes such hardship to our members.

* Mr. H. N. Giles, O.B.E., Chairman of Elder Smith Goldsbrough Mort Ltd., November 5, 1968.

INDEXES OF PRICES PAID BY FARMERS—AUSTRALIA

	1966-67	1967-68	Increase
Seeds, fertilizers, fodder, fuel and electricity, containers, chemicals, machinery, sundries, plant, motor vehicles, building & fencing material	\$236	\$246	4.2%
Wages	319	332	4%
Rates & Land Taxes, insurance, interest, rent, freight inwards	285	299	4.9%
Handling & Commission charges, and freight outwards	283	289	2.1%
Total Production & Marketing Expenses			4.1%
Living Expenses	246	254	3.2%
Total Expenditure			3.8%

Source: Quarterly Review of Agricultural Economics, Vol. XXI, p. 231.

In looking at this uninspiring economic basis for operating a farm business, one cannot but recall some recent words by our Federal Treasurer, Rt. Hon. William McMahon, who, on February 3rd, in addressing the Perth Chamber of Commerce, said:

"Turning to a different matter, trends in costs and prices remain a matter of considerable concern to me. Average weekly earnings increased in the year to the September quarter at the fairly modest rate of 4.6 per cent. However, this was largely because of the timing of the national wage case decisions, and the increase in the year to the December quarter is likely to be substantially larger. Indeed, the best estimate we can now make for the year 1968-69 as a whole is that average weekly earnings are likely to increase by 6 per cent or more—a lift on our Budget time assumption of an increase of 5½ per cent. **This is an uncomfortably high rate of increase and one far above any conceivable improvement in productivity, even in a year in which rural recovery and the surge of output from the highly productive mineral developments is likely to increase national productivity by more than the long-term average. The inevitable consequence must be further pressures on prices.**

The problem of increasing costs and prices is one for action by many institutions and segments of the community, not least the business world. For its part, the Commonwealth Government is determined to do all in its power to keep these pressures to a minimum."

We commend this approach which the Treasurer has taken on this subject. He went on to explain the action taken by the Commonwealth through its monetary policy to offset the pressures which have flowed from the decision of the Commonwealth Arbitration Commission. We can only expect to find that even greater efforts will become necessary to shore up the structure of the rural industries which are the ones principally exposed to rising costs.

We recognise that all growing economies suffer to some extent from cost inflation and that our overseas customers for wool, meat and wheat might be prepared to pay more for their requirements of produce with the passing years. But we cannot really take comfort from the fact that others of our trading partners also have cost problems. As the Commonwealth itself, told the Conciliation and Arbitration Commission last August, in the four years to 1967, average export prices moved thus:

Exports from

United States	up 10%
United Kingdom	up 10%
Industrial Europe	up 5%
Japan	up 1%
Australia	down 7%

Australia's export sector, because of its bulk produce content, is peculiarly vulnerable to rising costs.

We urge the Government to not only preserve, but also create additional conditions where primary industry production and incomes will survive and enjoy the possibility of development and expansion, in helping with the consistently rising standard of living in Australia.

The 1968 Annual Conference of National Farmers' Union of Australia was indebted to the Federal Treasurer, Rt. Hon. William McMahon for his clear enunciation of the achievements and problems still facing the rural industry, and noted that in his concluding remarks he said:

"It will now be apparent that I have nothing to pull out of the hat that will do away with the problems facing your industry."

Such a conclusion poses questions:—

1. "Are not current conditions conducive to the elimination of the family farm system in favour of estates, plantations or international enterprises, in rural industries?"
2. "Will export promotion ever be able to match the insatiable appetite for greater and greater imports, which are now being financed by capital inflow and/or external borrowing?"

We believe that some of the problems of maintaining viability in primary industry stem from

- (a) the application of formulas which do not appear to adequately reward the farmer for his personal involvement as primary industry has developed its productivity and changed economies of scale. Serious consideration could be given to the components of costing formulas. It seems reasonable to look for higher assessment of value to be placed on managerial skill and involvement;
- (b) because of the wide variation from the average in any rural industry due to soil fertility, farm structure, transport costs in relation to farm location, etc. there will always be a substantial portion of an industry which is seriously below average. Such a system imposes a great burden on the below average group, and to rectify this situation consideration could be given to—
 1. a price requirement somewhat above that indicated on the average system.
 2. provision of special assistance to the more necessitous group
 3. a combination of 1. and 2. above.

Undoubtedly the system of average cost for rural industry is desirable in that it is productive of continually increasing efficiency. It is equally desirable that we guard against the loss of efficient and well-established farmers because of the adverse aspects of the system.

As the major component in rural assets is land, which is a non-depreciable item, the farmer is at a disadvantage by the application of the accepted costing system to his business.

RURAL EDUCATION

In keeping with State Government policies as implemented by Departments of Primary Industry to raise productivity by means of better husbandry and business management, we believe special Commonwealth finance should be made available for rural education.

RURAL SAFETY

Loss of productivity and profits on account of rural accidents, is of major importance. Whilst we appreciate that the first responsibility lies with the States we believe the Commonwealth can play a valuable and leading role in the encouragement of research and study of rural safety problems.

PROBLEMS OF DROUGHT

We are again being reminded of the ever recurring problem of drought. We are aware that the Commonwealth Government has already embarked on a finance-providing programme for States' water conservation works. We would ask that the rate of distribution of these funds be increased. We commend the arrangements by which the Commonwealth finances the States to enable them to make special purpose loans available for drought relief.

The Queensland Council of Agriculture notes . . . that drought conditions in Queensland have become sufficiently serious for the State Government to formulate action, in face of disappearing water reserves and fodder. Day by day reports to affiliated National Farmers' Union organisations indicate growing concern among producers. The Commonwealth Government has been requested to accept a participating role in operating relief schemes by letter, within the last four weeks and an early decision is awaited with understandable concern.

A number of organisations including the Central Queensland Grain Sorghum Marketing Board and the N.S.W. Oil Seed Growers' Association have urged that we propose, as one of the several means of reducing costs, a scheme of subsidisation of freights on farm inputs, such as fertilizer and on farm produce, in natural or partly processed form, when transported from the farm to the nearest seaboard market or port. A comparison of rail freights on an input such as fertilizer, for example, shows that some comparable overseas countries have a distinct advantage over some Australian States, and, even within Australia, surprising variations occur, viz:

- for all mileages, the South Australian and South African railways charge less than half the Queensland rate;
- the Queensland rate for 200 miles per ton of fertilizer is \$7 but in another State, the same load can be hauled another 300 miles for a mere additional five cents.

In marketing produce, there are cases where rail freights absorb up to thirty per cent of the gross return on grain. We have been attracted by the scheme effective in New Zealand which, since August 1968, meets three quarters of the cost of transport (of fertilizer) in excess of \$2 per ton. The far greater distances over which Australian supplies must be hauled, puts the costs of such inputs at the farm gate at a high level. Such a subsidy would have a most helpful effect, particularly in the more distant areas.

We note that pressures are being exerted in some quarters for an adjustment to the flow of public funds for road construction and repair, when the new Commonwealth Aid Roads Act is drawn up shortly. The Commonwealth's role over the years has been a tremendous help in raising the quality and number of country roads. We strongly urge the Government to continue its support for rural road construction, which, more than most governmental measures makes accessible the Australia behind the seaboard cities.

The Australian Canning Fruitgrowers' Association notes

. . . that, although the Commonwealth's undertaking to pay devaluation compensation in 1969 is well-justified and appreciated, (the present scheme is to pay an amount so as to bring total returns up to the pre-devaluation level) it proposes

. . . there might be value in instituting an incentive scheme for appropriate industries, to encourage test marketing to determine how far it is possible to raise Australian export prices without seriously reducing sales. Such a scheme might be helpful for those industries where marketing is under proprietary control and not grower operated Boards.

The Australian Citrus Growers' Federation notes

- . . . that current schemes which make possible the processing of fruit to a production costs and shrinking returns per unit;
- . . . that new plantings are likely to increase the industry's difficulties over the next four to five years;
- . . . that currency devaluations have affected its share of overseas markets; requests—
- . . . that current schemes which make possible the processing of fruit to a volume of four million bushels annually, be continued. These schemes include
 - sales tax exemptions
 - tariff protection
 - price determining function of Fruit Industry Sugar Concession Committee
 - sugar rebates for products using Australian juices.

The Australian Dairy Farmers' Federation notes

- . . . that the dairying industry is confronted by a number of reasons why it cannot recover costs by way of price. Since 1952, average weekly earnings in Australia have risen by 127% but butter prices have risen by only 25%.
- An infusion of finance is needed by the industry, but until overseas values rise sufficiently to cover costs, there is no prospect of this. In view of the need for procedures under the Price Equalization Scheme to be operated satisfactorily the Australian Dairy Farmers' Federation requests
- . . . that the Commonwealth make the earliest possible announcement regarding Devaluation Compensation in 1970;
- . . . that cheese imports be minimized as far as possible.

The Australian Canning Fruitgrowers' Association notes

- . . . that over the last three years, wage costs for fruit pickers (basic rate) have increased by 14% from \$34.20 per week to \$38.95—or an average rise of at least 3½% per annum. At the same time, returns to growers have been unchanged or have, in some cases, decreased, urges
- . . . that, if we are obliged to accept these increases as being necessary for the overall good, some method of compensation should be instituted for those groups who must market overseas against competitors from lower cost economies.

The Queensland Council of Agriculture notes

- . . . that, while there will continue to be a place for large-scale public irrigation and power generation schemes, only a minor proportion of producers are and can be serviced by such investments, and a greater impact on the survival and maintenance of livestock and crops can be achieved by encouraging individual farmers to establish their own farm water conservation schemes. Requests to State Departments for technical assistance and finance have been numerous enough to create a backlog, and the Council requests
- . . . that the Commonwealth offer financial assistance to the States for the expansion of Farm Water Supplies Aid, by
 1. Annual grants of amounts actually expended by States for provision of additional staff and operating expenses,
 2. special assistance to increase financial advances for new and improved schemes.

BANGKOK MILK PLANT HAS RECORD SALES

A milk plant in Thailand, using Australian raw materials, is experiencing record sales.

Mr. J. P. Norton, Deputy Chairman of the Australian Dairy Produce Board, reported this to the quarterly meeting of the Board, in Melbourne.

He said the Board's joint venture company, the Thai Dairy Industry Co. Ltd., now had a much larger monthly production of sweetened condensed milk than it had in 1967-68.

Three shifts a day were now being worked and the plant was closed only two days a month.

Sweetened condensed milk made from Australian milk powder and butteroil now constituted more than 50 per cent of the total sold in Thailand, Mr. Norton said.

Before the Thai Dairy Industry Company began operations, Australia's share of the Thai market was less than three per cent.

Mr. Norton said that one of the major reasons for the Australian success in this highly competitive market was the "hybrid vigour" of a joint venture arrangement.

The Australian Dairy Produce Board had, through its subsidiary, Asia Dairy Industries (H.K.) Ltd., entered into an extremely viable partnership with Thai businessmen.

Another major reason was the high standard of quality of Australian dairy products.

Research and development work by the C.S.I.R.O.'s Division of Dairy Research had greatly assisted in maintaining high quality standards. Selection and training of highly competent production and marketing staff had been another reason for success.

"All these factors have given us a competitive edge in the Thai market, and earned Australia many millions in export income," Mr. Norton said.

Mr. Norton said that Asia Dairy Industries was becoming a large business venture which was already benefiting the Australian dairy industry and would be vital for the future, particularly as a result of recent developments in Europe.

Another benefit of the operation, he added, was the local prestige it generated for Australia throughout Asia. It was positive proof to Asian businessmen that Australia was really interested in Asian development.

POSITION WANTED

live in, with understanding family, for 17 year old youth, with some dairying experience and a desire to learn the job properly. Please enquire further details from Mr. F. Neilson; telephone 76 7041.

FOOD AID IN MILK PRODUCTS

In a review on milk products as food aid, the Food and Agriculture Organization has applied lessons of the past for future policies.

Seven points delineated by FAO are as follows:

- (a) The main objective of food aid in milk products so far had been the nutritional improvement of vulnerable and low income groups, apart from some quantities used for emergency relief. Recently, increasing emphasis has been placed on the use of food aid for economic and social development and it would appear desirable that this orientation be strengthened in the future.
- (b) At present food aid in milk products plays a rather modest role in the over-all consumption of milk and milk products in developing countries, but it is of great importance to the vulnerable and low income groups for whom commercial supplies are beyond reach. Getting these groups accustomed to milk products also paves the way for later commercial demand.
- (c) Difficulties in acceptance which have occasionally been noticed can be overcome by the introduction of types of products adapted to local preference. **Food aid in milk products should be associated with other foods**, so as to provide for a balance food basket.
- (d) Difficulties in distribution and packaging have been experienced in the past, especially in tropical countries, but can be overcome by further technical and organizational improvements.
- (e) Difficulties have also been experienced with control and supervision and expanded aid should, therefore, be made dependent upon adequate arrangements with local authorities.
- (f) Owing to the relatively small scale of food aid in milk products at present, little difficulty is experienced in safeguarding local dairy industries and milk production. In an expanded aid programme, especially where aid material is supplied through milk plants, the protection and promotion of local production has to receive due attention.
- (g) The rapid decline in food aid in milk products during recent years from the much higher level reached in the early sixties has caused a waste of operational resources, the discontinuation of welfare schemes and considerable discontent on the part of beneficiaries. Future schemes, in order to avoid these harmful effects, should provide for well defined supply levels over specified periods of time, depending on the nature of the projects.

Australian Skim Milk to India

Australia will supply India with 13.4 million pounds of skim milk powder during 1968/69.

This represents a dramatic increase over the 2.9 million pounds provided to India in the previous season. Under the agreement between the two countries, India will purchase 6.7 million pounds and the Australian Government and the skim milk powder industry will donate a similar amount. Australian authorities believe the agreement will stimulate Indian authorities to buy additional quantities of skim milk powder from Australia.

YOUR LIABILITY FOR FARM LIVESTOCK

(Submitted by the Federation Insurance Limited)

We handle a great volume of Public Liability Insurance for dairymen and feel that it is of prime importance that you have a working knowledge of the law involving livestock.

Most farm livestock come under the legal term "cattle" which includes cows, bulls, goats, swine, sheep, horses, asses, domestic fowls, geese, ducks, turkeys and peacocks. Farm dogs do not come under this term and are subject to a different law.

COMMON LAW

There are many ways in which cattle can cause injury to the public or damage to other persons' property and generally speaking you, as the owner, can be affected as follows:

- Straying Cattle on a highway—**Usually** the owner is not held liable even though the animals may have escaped from his land through poor or non-existent fences.
- Droving Cattle on a highway—If the owner or drover does not have sufficient control over the stock or fails to give adequate warning to road users he **could** be responsible for any damage caused.
- Cattle trespassing from the owner's property direct to a neighbour's. The owner is, **in most cases**, held responsible for damage even if he was not responsible for the escape.
- Cattle trespassing from a highway: (i) If animals are lawfully using the highway and escape from the person in charge he is **usually** not liable unless proved negligent.
- Cattle trespassing from a highway: (ii) If animals are straying on a highway and leave it and stray on another person's land the owner may be responsible for damage caused even if he did not negligently allow them to escape.

These are general rules and should be used as a guide. It must be remembered that Law involving animals is wide and varied. Each case must be considered separately.

(A Statute Law, the Impounding Act, makes it an offence for animals to stray onto a highway and the owner can be fined for breaking this law. This Law does NOT concern itself with injury or damage caused.)

Play safe, protect yourself with a Federation Farmer's Public Liability policy which will look after claims made on you by the public for injury or damage caused not only by your livestock but also by your other farming activities.

No-Colour Margarine Law Hits Sales

Marrackville Margarine Ltd.'s Victorian manager, Mr. W. McCabe, has admitted that the Victorian Margarine (Amendment) Act has already achieved its intention in a considerable reduction in margarine sales, according to "Retail World", official newspaper for retail grocers.

He said sales of "Marville" and "Tta" were down, but not as much as expected.

Unused to the off-white colour required by the new legislation, some consumers had returned the product under the impression that a fault had occurred in processing, he said.

"I think margarine will make a slow recovery, but it will never regain its place on the table," Mr. McCabe said.

Rosella's "Stork" brand manager, Mr. M. Nash, agreed that sales were down but claimed they were still above the original estimate.

Prices and Statistics

ADELAIDE METROPOLITAN MILK SUPPLY AREA

PRODUCTION (000 gallons)

	For Month		Total since July 1		Total since Jan. 1	
	1968	1969	1967/68	1968/69	1968	1969
May	3,352	3,801	44,589	49,463	17,119	19,325

MILK SALES (000 gallons)

	For month				Ratio		C.M.B. cents	
	1968	1969	1967/68	1968/69	1968	1969	1968	1969
May	1,873	1,848	20,181	19,834	55.9	48.6	31.94	28.91
Moving average ratio for 12 months ended 31/5/69, 41.03%								

INTERIM PRICES TO LICENSED SUPPLIERS

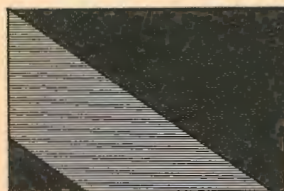
(All prices are interim only and subject to adjustment by retrospective payment)

	Basic	C.M.B.	Total	3.5%	4%	4.5%	5%
1969	(cents per lb. butterfat)			(cents per gallon)			
May	37.63	28.91	66.54	24.03	27.47	30.90	34.33

LONDON PROVISION EXCHANGE QUOTATIONS

(Sterling Currency per cwt.)

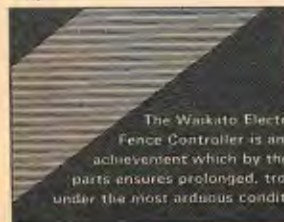
	April	
	1968	1968
Butter—Choicest Australian	300/-	300/-
Cheese—Rindless Australian	255/-	225/-



SUPPLIES AVAILABLE FROM

CONNOLLY & CO.
21-27 MAIN ST., HAHNDORF
SOUTH AUSTRALIA. 5245
and all branches, phone 88 7193

WIRE



The Waiikato Electric Fence Controller is an electrical achievement which by the absence of moving parts ensures prolonged, trouble free life under the most arduous conditions.

NOW AVAILABLE FROM ALL
STOCKISTS OF FARM SUPPLIES
Your best investment... the new
MAINS OPERATED SOLID STATE

WAIKATO ELECTRIC FENCE CONTROLLER

• Makes permanent electric fence systems of unlimited quality • Can save money 5000/- per mile on fencing costs • Completely safe — conforms to Australian standards • Being made up of solid state devices, there are no moving parts to break down • Practically indestructible — certainly more so than any other make • Freely controls wet fence faster than it can leak away • Functions efficiently over distances of 15 miles or more • Works over short distances without insulation (for best results use Waiikato Electric Fence Insulators)

Farmers vote the WAIKATO Electric Fence Controller the best on the market

HODGE'S SEEDS

MEAN

BETTER PASTURES

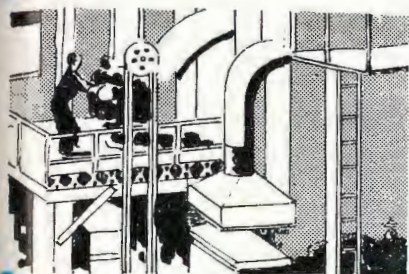
BECAUSE . . .



They're Triple - Cleaned

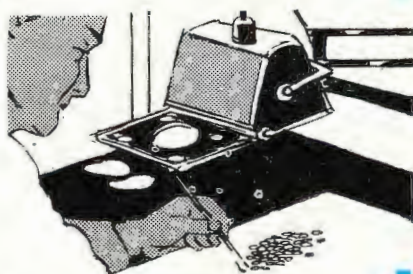
Elaborate modern plant sifts out all dirt, grit, husks and other debris from Hodge seeds.

You buy only viable seed.



. . . Laboratory Tested

Careful laboratory checks ensure that Hodge seeds have maximum germination potential, and are free of weed seeds.



ORDER NOW

FOR

PROMPT DELIVERY



M. F. HODGE & SONS PTY. LTD.

128 - 134 GILBERT STREET, ADELAIDE

Phone: 51 5571

THE SOUTH AUSTRALIAN

DAIRYMEN'S . . .

Journal



Official Publication of the

Published Bi-monthly

Vol. 9, No. 1.

Adelaide, JULY-AUGUST, 1969



THEME OF CREAM PROMOTION CAMPAIGN
"FRESH AS THE MORNING —
SOUTH AUSTRALIAN CREAM"

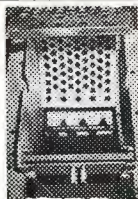
PRICE

20c

G.P.O., Adelaide
Registered by post as a periodical.

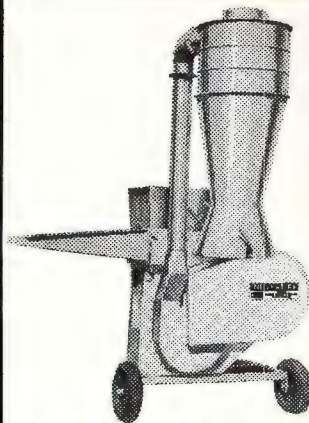
\$1.20 per Year, Post-Paid

SLICING IS BEST FOR FEED WITH THE NEW NEVERTIRE FEEDMILL



NON-CLOG NEVERTIRE AUGER

The auger delivers the material to the fan duct. The fan is only required to draw the prepared feed through the duct and not from the mill chamber. This eliminates the possibility of clogging and reduces the workload on the fan.



THE NEVERTIRE FEEDMILL FEATURES:

- Self Sharpening spring steel blades cut cleaner, faster — less wastage of feed
- Belt driven auger delivers feed to the fan, without clogging
- Rotor blades are keyed (not welded) to the stronger 2" shaft
- Easy control of blending of feed
- Large one-piece feed tray. **ASK FOR A DEMONSTRATION!**



Frigrite
RURAL COMPANY

10 Deacon Avenue, Richmond,
South Australia. 5033. Telephone: 57 7333



Send for your copy of the booklet
'The value of a feed mill in supplementary feeding'.

Name.....

Address.....

State.....

Postcode.....

FRC4/S S.A.D.

THE SOUTH AUSTRALIAN DAIRYMEN'S JOURNAL



Published by
**THE SOUTH AUSTRALIAN DAIRYMEN'S ASSOCIATION
INCORPORATED**

Aston House, 13 Leigh Street, Adelaide. 51 3034

President:
N. M. GREEN

General Secretary:
DAVID J. HIGBED

Advertising Rates on application

FRESH AS THE MORNING: SOUTH AUSTRALIAN CREAM

This slogan, and the accompanying symbol shown on the front cover, is the theme of a campaign to be launched in September to promote the sale of South Australian cream.

The campaign will be conducted through television, radio and newspapers; will be preceded by a dinner attended by the Premier, the Minister of Agriculture, the Leader of the Opposition; and top executives of the major food selling organizations, chain stores and department stores, as well as the sales management of the dairy companies and representatives of other bodies connected with the food industry.

It is hoped that by the use of extensive publicity and media advertizing, locally produced cream may take up a larger portion of the South Australian cream market which has, for many years, been increasingly supplied by cream from Victoria.

The early gains made by interstate cream, when the use of thickeners was prohibited to local processors, have not been reduced despite the success of South Australian factories in producing a product that has met popular demand for a thickened cream. Now it is proposed to market all grades of cream with the slogan and symbol and to make an all-out effort to convince South Australian housewives of the superiority of cream produced on local dairy farms and processed through local factories.

The campaign has been planned to coincide with the introduction of the new packaging regulations, which require cream to be sold by the pint, or by fractions of a pint instead of in pounds or ounces, and emphasis will be on the new one-half pint and one-third pint cartons which replace the old eight-ounce container.

Co-operative advertizing will be carried out in conjunction with the nationally famous brands—Kelloggs, Golden Circle and Maxwell House, and the campaign will be featured in all chain stores, department stores, grocery shops and delicatessens.

Milk vendors will also participate by distributing forms for regular orders, and by ensuring that the new milk bottles, which will carry the slogan and symbol, and the reminder to "order today", are distributed as widely as possible.

GENERAL PRESIDENT'S ANNUAL REPORT FOR 1968/69

as presented to the Central Council on
27th August, 1969

INCREASING PRODUCTIVITY:

Dairyfarmers in the Adelaide Milk Supply area have once more demonstrated their belief in greater efficiency as a counter to rising costs, by increasing the average productivity per cow and per farm to the unprecedented levels of 675 gallons and 26,500 gallons respectively, despite the failure of good rains to follow the early opening, with an assessed production cost fractionally lower than that for the preceding year.

The total production of 53,229,000 gallons was also a record, although the total sales of 21,638,000 gallons of milk and cream fell slightly below those of 1967/68 because of a reduced volume of purchases by Golden North Dairies Limited.

PRICES AND RETURNS:

The Federal Government continued to underwrite the initial values for butter and cheese values at the previous figure, and consequently the interim basic price to licensed producers commenced at 37.95 cents per pound butterfat, continuing at this rate until being reduced in May and June, owing to a rise in general cartage costs, to 37.63 cents, a figure that will shortly be increased by a step-up of \$1.00 per cwt. cheese and a final bounty payment of 55 cents cwt. butterfat, to 40.40 cents, with a further step-up raising the estimated final price to just over 41 cents.

Although not unexpected, a basic price of this order is disappointing, and compares unfavourably with the levels prevailing in recent years, which reached a maximum of 45.60 cents in 1964/65. Nevertheless, however disappointing last year may have been, the season into which we have just entered promises to be even less satisfactory. The condition of the United Kingdom cheese market is such that production quotas have been applied to cheese factories, and although the Federal Government's continued underwriting has enabled the payment of an opening interim price of 37.35 cents per pound butterfat, the position beyond the next few months is quite obscure.

MILK PRICES:

The decline in the basic price during the last five years has, however, been offset by the Association's successful applications for increases in the prices paid for city milk, the effect of these applications being seen in equalized prices which have risen steadily, to reach a peak of 65.6 cents per pound butterfat in 1967/68 due to the granting, in December, 1967, of the Association's request for a drought loading of 4 cents per gallon.

Following the disallowance, in August, 1968, of the milk price regulations intended to increase the margins of processors and vendors at the expense of the producers, the Milk Board, in April, 1969, increased milk prices by 4 cents per gallon, raising the price of bottled milk to 10 cents per pint. Out of this amount the processors gained 1 cent per gallon, and the vendors 2 cents, with the residual 1 cent passing to the producers, and this increase, although small in comparison with those granted to the other two sectors, has maintained the equalized price for the year under review at a little over 64 cents per pound butterfat.

DIVERSIFICATION AND MARKETING:

It is, however, doubtful whether we can, in the near future, look to further increases in the price of the liquid milk portion of our output to counter the cost rises that apply to the whole of our production. The price of bottled milk is now 10 cents per pint in each capital city except Sydney, and although milk prices have risen less than those of most other foodstuffs, very earnest consideration must be given to the subject before we again make an application for a price increase. Rather we should examine the extent to which the equalized price can be raised by increasing the total sales of milk through promotion and diversification, and in this context we applaud the recent introduction of homogenized milk in quart cartons. This has provided the consumer with a choice of types and a choice of packs, and we would welcome further action of this nature, particularly the provision of high-fat and low-fat milks, attractively presented, and sold at premium prices. The marketing, by local and interstate processors, of a very wide range of dairy products other than the traditional milk, cream, butter, and cheese has demonstrated the falseness of the argument that the Adelaide market is too small for diversification, and as none of the more exotic products now being widely promoted returns as much to the dairyfarmer as the sale of milk and cream, we must ensure that at least some of this new-found enterprise is directed towards more profitable ends.

Regulations are now in operation which allow the marketing of four types of cream and although no processor is at present marketing a low-fat cream, the present position is at least an improvement, and we are hopeful that the promotion of cream during the next few months will be successful, as it can be if all processors are determined in their efforts to sell cream.

THE BUTTER POSITION:

We must be less hopeful concerning the prospects for the sales of butter and cheese. Butter sales in Australia are declining in total and per head, and the provision, by the dairyfarmers, of a butter-marketing incentive allowance of $\frac{3}{4}$ cent per pound butter for brand advertizing and point-of-sale promotion, in addition to the farmer-financed promotional activities of the Australian Dairy Produce Board, has failed to halt the decline. But what to us is even more distressing is that, not only is the consumption per head in South Australia lower than in any other State, it is falling at a faster rate than in any other State, and contrasts most unfavourably with Queensland where butter sales are increasing at a rate in excess of 4 per cent annually.

It is inevitable that the producer associations will be forced to look at the desirability of continuing to provide the processors with the quite substantial funds (only slightly less than \$2 million per year) represented by the Butter Marketing Incentive Fund, particularly when one State has so effectively demonstrated how well the funds can be applied, and the future of the Fund will undoubtedly depend on the marketing performance of the trade after the adoption, by all States, of legislation, modelled on the Victorian Act, controlling the labelling and colouring of cooking margarine, and designed to suppress the factor which the butter marketers are now offering as the chief excuse for their poor performance.

THE CHEESE POSITION:

The position regarding cheese sales is only a little less unsatisfactory than that of butter. The growth of the cheese market during the early years of this decade, in which the sales of Australian cheese on the domestic market, between 1961 and 1966, grew from 70 million to 90 million pounds, with the rise in consumption per head from 6.6 lbs. to 7.9 lbs., has been replaced by a static situation, whilst cheese imports continue to increase at an annual rate of almost 20 per cent and now total one eighth of all domestic sales.

There is no doubt that Australia, and particularly South Australia, can produce cheese that matches world standards for excellence, but there is equally no doubt that, however skilled the manufacturers may be in making cheese, the marketing of cheese is far less satisfactory, and the recent rejection, by the Australian Dairy Farmers' Federation, of a request from the cheese manufacturers for a cheese sales marketing allowance, similar to the fund for butter marketing, indicates that producer organizations believe the responsibility for the proper marketing of cheese lies with the manufacturers, and that there is no wish to duplicate the fiasco of the butter marketing allowance.

We know, and we appreciate, that sales of cheese to Japan continue to increase, but we know also that the volume of these sales is small in comparison with sales on the domestic market and the returns to the producer from these or any export sales fall far short of returns from local sales, and the attention of the manufacturers must increasingly be drawn to the promotion and exploitation of the tremendous potential, as shown by the consumption per head in other countries with a similar standard of living, of the local market rather than allowing it to rank in second place after the less rewarding, unpredictable, export market, and to be increasingly supplied by imported cheese.

The quality of the imported cheese is no better than the best of our own production, and we deplore the fact that the Federal Government appears disinclined to apply to these imports the degree of restriction through tariffs that is applied without hesitation to external competition to other industries, preferring to speak in glowing terms of the important part played by primary producers than to take action to assist them.

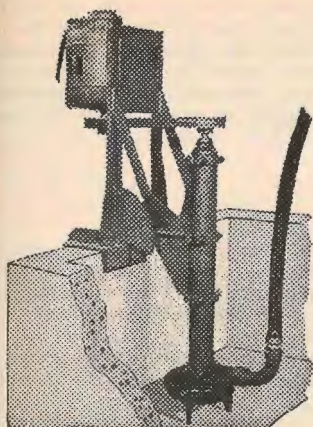
DAIRY PRODUCE PROMOTION:

The Association, at least, has not been inactive in promotion, and we are pleased to report the appointment, late in 1968, of Mr. David Leicester as Regional Officer of the Australian Dairy Produce Board, an appointment for which the Association vigorously campaigned, and which, we believe, will be far more effective in increasing sales and in improving the status and image of the industry than the expenditure of much larger amounts on other forms of promotion. Nevertheless other forms of promotion are necessary, not only media advertising, but also better packaging, merchandising and display, and the Association, recognizing the need to take the initiative in this field, opposed the rejection of the cheese marketing allowance. It may still be worthwhile considering a local fund for this purpose with a large degree of Association control.

MARKETING POLICIES:

With so many problems facing the dairying industry, and the dairyfarmers in particular, it is unfortunate that, during the year, we have had to dissipate so much of our energies in defending the Association's policy in relation to milk marketing.

Except, during a period following the flooding of the Lower Murray Swamps, when the Premier, fearing a milk shortage, suggested the adoption of a quota system, and the Association spent much time searching for some plan which retained as much as possible of the existing scheme and avoiding the shortcomings of the systems in other States, the Association's policy has been firmly in support of milk equalization, and this support has been affirmed on many occasions by the Central Council and at numerous District meetings. We were consequently gratified when, at a series of public meetings called by the United Farmers' and Graziers' Association to discuss alternative proposals for milk marketing, members of the Association supported the continuation of the present system. At these meetings it was obvious that there was a difference of opinion between our Association and the executive of the Dairy Section of the U.F.G.A. concerning marketing schemes, and it is understandable that the ability of one organization



Easy to instal --
efficient operation

The **IBC** DUMAC filter cut liquid manure pump

**Designed for dairies
and piggeries this versatile
pump saves you money.**

Simply mount the pumps (as illustrated) over the edge of a small pit, e.g., a round or rectangular pit 2—6 feet deep. There's no priming required as the pump is immersed in the liquid.

BY COUPLING THE IBC-DUMAC
FILTER CUT PUMP WITH THE
"DISPERSA" LIQUID MANURE

SPRINKLER, EVEN DISTRIBUTION OF EFFLUENT IS ASSURED OVER LARGE AREAS OF PASTURE.

Spore parts are inexpensive — easy to get — easy to instal.

Get more details on the IBC-Dumac Filter — Cut Liquid Manure pump now!

Post this coupon today.
Please send me further
details on the IBC-
Dumac Filter-Cut pump
without obligation.

INTERCOLONIAL BORING CO. LTD.
"Water House", 98 Churchill Rd., Prospect,
S.A. 5082. Phone 65 6944.
Head Office: 450 Ann St., Brisbane, Qld.
Branches all States.
MT. GAMBIER: Stuart Richardson, 5 Rotary
Ave. 5290. Phone 2 3482.

NAME.....

ADDRESS.....

POSTCODE.....

to influence authority is inhibited by the known existence of an opposing policy held by the other organization. But on other matters the attitudes of the two Associations are often identical and it is unfortunate that this dissension on one subject may be used by authorities either as a genuine reason or as an excuse for not acceding to a request for action from one organization. Thus the existence of two voices, regardless of the strength of the combined memberships, tends to lessen our ability to act and there are occasions when the present position contrasts unfavourably with the period before the emergence of the second voice.

UNITY:

For this reason the Association has for several years been discussing with the U.F.G.A. and its predecessor, the Australian Primary Producers' Union, the possibility of some form of affiliation. Until now there has been very little progress as the other party to the negotiations has not seen our Association's desire to retain the form of organization which has served the dairyfarmers so well as acceptable to the Constitution of an all-commodity body. Now a set of proposals, endorsed by the Central Council, outlining acceptable terms of affiliation has been submitted to the U.F.G.A., and preliminary discussions held. From these preliminary discussions it appears that the basic principle of our proposals, our desire to remain a separate, identifiable organization, having a direct, personal relationship with our members is not yet acceptable to the U.F.G.A. and unless this principle is accepted, the negotiations may suffer the same fate as those between our fellow organization, the Victorian Dairyfarmers' Association, and the Victorian Farmers' Union, which foundered on this single, vital issue.

If, on the other hand, discussions can continue, and agreement be reached on this point, there is a definite possibility that we may reach an even greater degree of unity, involving also the South Eastern Dairymen's Association, which has long been our colleague in the Australian Dairy Farmers' Federation, and with which, if the negotiations with the U.F.G.A. are unfruitful, we should consider some formal arrangement of affiliation or amalgamation.

THE ASSOCIATION'S CONTRIBUTION:

But unity within the industry, although important, is not all-important. Whilst we negotiate we must not neglect the welfare of our members and the present and future of the industry, and these matters have been constantly before our attention during the year.

The industry is at this moment in a state of flux. On the one hand production is increasing, although the numbers of producers throughout Australia is decreasing. The Federal Government has submitted a proposal for assisting the small producer out of the industry whilst sociologists, politicians and economists deplore the passing of the family farm. These factors in the national dairy scene are reflected in this State and in the Adelaide milk supply area, and for our part we have endeavoured to provide the means whereby, despite declining returns and increasing factor costs, dairyfarmers' net income may at least be stabilized, and perhaps increased, whilst they weather the present crisis until the processing and marketing sectors can come to grips with the real solution to the industry's problems.

MILK REFRIGERATION AND TRANSPORT:

Symptomatic of the fuilid position is the subject of milk refrigeration and bulk transport. On the one hand there are economies in bulk transport that are now being demonstrated to the companies concerned; on the other hand the necessity to duplicate cartage arrangements, so that both bulk milk and can milk can be picked up along the same route and delivered to the same depot, must at least dissipate these gains and more probably increase total cartage costs. At the same time producers are becoming increasingly convinced of the advantages of

SELLING YOUR FARM?

FOR FRIENDLY, EXPERIENCED ADVICE

Consult

HAROLD STEELE PTY. LTD.

Estate Agents, Valuers, Auctioneers

"We know that YOU, as an owner want to obtain the highest reasonable price for your property. The price at which you sell represents your final reward for years of hard work and capital investment."

WANTED

Dairies, mixed farms, grazing, orchards, undeveloped land, small and large acres.

ALL DISTRICTS.

To **HAROLD STEELE PTY. LTD.**

Please list my property for sale

NAME.....

ADDRESS.....

PHONE.....

PHONE OR WRITE FOR PROMPT INSPECTIONS

'Phone:
8 5258



AUCTIONEERS

SUBDIVISIONAL
CONSULTANTS

VALUERS

FARM, HOUSE,
LAND AND
BUSINESS
SALESMEN

HAROLD STEELE

(Managing Director)
15 years' Real Estate
experience

After Hours: 31 2461

MALCOLM McCRACKEN

Hills Specialist
(Retired farmer)

After Hours: 96 9736

DOUG. HUNT

Late of Mt. Barker
(Retired farmer)

After Hours: 39 1809

DAIRYMASTER MILKING MACHINES Pty. Ltd.

Preliminary

Announcement

This Company is now able to give preliminary information regarding the NEW Dairymaster Milking Machine. Tooling has not kept pace as anticipated and this precludes both illustration and general advertisement.

Brochures on this machine are now in print

DAIRYMASTER AUSTRALIA PTY LTD.
28 Furness Avenue, Edwardstown, S.A. 5039
'Phone: 76 6193

SEE IT ON OUR STAND

MAIN FEATURES

The following is not a sales "gimmick" but genuine information on an **ADVANCED** and wholly patented machine with refinements and features **NEW** to the industry. Advance orders are already held by the Company from farmers who have made direct and personal investigation.

- 1 A new pneumatic pulsator employing an entirely new principle which is in process of being patented in all countries. It is without equivocation: a tremendous advance in pneumatic pulsators both for leakproof, effective and unalterable pulsator operation together with its simplicity of construction and longevity of its component parts. One of the two valves in this pulsator has a movement of only 10/1000ths of an inch. Its system of internal air control is definitely unique.
 - 2 New assembly of pipe line brackets, hygienic couplings, pipe line sizes and their connections to releaser, milk receiver or vacuum tank, enhances and keeps in step with the operational efficiency of the new pulsator.
 - 3 A new high performance but simple master pulsator of exceptionally long life which is entirely removed from former control.
 - 4 A new "no-air" pump for all machines exceeding 3 double or at the farmers choice. This unit pumps milk out of vacuum operated by a pulsator, which is **exactly** the same as that used for pulsation. Unlike any other pump it will only pump solid milk. In other words, unless there is a full head of milk available the pump will not operate. It obsoletes on Dairymaster machines the use of ponderous belt or motor driven diaphragm pumps with which the farmer is familiar.
 - 5 A new cluster claw of a unique design and new heavy or medium weight teat cups.
 - 6 Because of its certified efficiency both in indication and its ability to prevent milk from the milk line entering its droppers the same sight glass will be used. However, it is of a more simplified construction and the new synthetic rubber separator ensures a new hygienic standard.
 - 7 Couplings: These are absolutely hygienic and foolproof. Expensive to produce they are a far cry from the elementary couplings in use.
 - 8 Automatic Washing: This will not be fitted immediately. A new automatic valve will be available and can be added later.
- NOTE:** It is interesting how farmers when purchasing a machine give little consideration to that machine's component parts.
- 9 Air Regulator: The same world patented unit will continue. Its air handling capacity combined with its ability to immediately inform the farmer as to the condition of his vacuum pump makes it an indispensable regulator for all machines, but unfortunately its cost precludes its sale for this purpose.

BROCHURES ON THIS MACHINE ARE NOW IN PRINT

refrigeration, both in regard to milk quality and to peace of mind,—it is probably only the capital and running costs of refrigeration that delay its installation on almost every dairyfarm—and may, for a number of quite good reasons, instal can refrigerating equipment. If such action were widespread it would delay, perhaps remove, the possibility of exploiting the full economies of bulk transport and tend to perpetuate the extravagance of dual cartage. The Association has conferred with the merchants on the setting-up of a representative committee to examine the ways by which the introduction of refrigeration may be guided to gain the maximum economic and technical advantages for both sectors.

CATTLE IMPROVEMENT:

Reference has already been made to the present record level of productivity per cow in the milk supply area. Part of this is due to improved husbandry and feeding, part to improvements in the dairy cattle. In the latter factor the herd recording scheme plays an important role, and the Association has for many years sought improvements in the administering of the scheme. We are pleased that many of our recommendations have now been adopted and that a system of regional and State conferences, for which we have campaigned, has now been introduced. Artificial breeding, the introduction of which owes much to this Association, and for which we held high hopes, has in some respects proved disappointing, but we are confident that changes in the near future, including a revision of the Bull Subsidy Scheme, will restore this technique to its pre-eminent position as a productivity-increasing, cost-decreasing influence.

MILK CONSUMPTION:

But the production of milk is not an end in itself. It must also be consumed, and we are fortunate that we produce a commodity that is of incalculable value to the human race, in the sale of which we do not have to play upon the cupidity of the consumer, nor to seek to cultivate possibly health-hazarding habits. We can be proud of the role played by milk and dairy products in building the health of the community, and need no searching of our conscience in promoting the greater use of our produce as vigorously as we can. The Milk Producers' Association of Australia and New Zealand, the Annual Conference of which was held in this Conference Room in March, recognized this when it agreed that the Australian Dairy Produce Board's levy for research be extended to whole milk, adding the condition that the funds should be spent on research into the utilization of milk as a food.

SCHOOL MILK:

Particularly is this true in the case of the young, and we are pleased to be able to announce that great progress has been made toward the refrigerating of milk supplied to schools under the Free Milk Scheme, and early implementation can be expected. Refrigerated milk, being more hygienically handled, and more palatable, will play a greater part in the nutrition of school children and lead to the forming of better dietary habits in later life.

THE SMALL FARM PROBLEM:

It would be pleasing to be able to say that these and the many other activities undertaken would solve the dairyfarmers' problems, but they will not. There are a number of farmers on small holdings who are finding their task increasingly hard, and, although the number of such farmers in the city milk area is far less than in other regions, the Association applauds the thought behind the Federal plan to assist small-holders out of the industry, and has submitted to the Minister of Agriculture proposals for inclusion in the South Australian legislation necessary to put the plan into effect.

Until the plan is put into effect we can do no more than guess at its results, but we can be certain that the problems of the industry will be far from solved, and the Association has a greater task in the years ahead than ever before.

VALE JOCK GORMLIE

It is with regret that we announce the death on 12th August, 1969, of Jock Gormlie, of Pompoota, a foundation member of the Association, of which he was Vice-President for 28 years, and a Director of the Metropolitan Milk Equalization Committee, on which he had been a dairyfarmers' representative since 1946.

Although Mr. Gormlie stepped down from senior office in 1967, he continued as a delegate from the River Murray District, and as a dairy-farmer representative on the South Australian Dairy Produce Board until his illness in November, 1968.

APPRECIATION:

It is fortunate that we can be assured, in those years, of the loyalty of the members of the Association and the assistance of the Central Council and the Executive Committee. We will have the co-operation also of the Minister of Agriculture, the Honorable C. R. Story, the members and staff of the Metropolitan Milk Board, to whose new Chairman, Mr. Brian Hannaford, we offer our congratulations, and the officers of the Department of Agriculture. To all of these, and to the staff of the Association, I express my thanks.

In closing, I refer to the passing of Jock Gormlie, one of the most stout-hearted battlers the industry will ever know. Of the connection between Jock Gormlie and this Association I can say no more than "If you wish to see his monument, look about you."

—N. M. GREEN, President.

OCTOBER WILL BE AUSTRALIAN CHEESE MONTH

October, 1969 will be Australian Cheese month.

The Australian Dairy Produce Board will, in conjunction with progressive Australian cheese companies and retailers, conduct its second special national promotion of locally-made cheeses.

Mr. G. W. Woye, the board's manager, advertising and publicity, said the promotion was called "The Australian Cheese Carnival" and it would bring public attention on the 40 or more varieties of cheese now made in Australia.

"From our own public opinion surveys we know that consumer interest in Australian cheese is just beginning to increase, in the same way as it began to increase in Australian wine about 10 years ago."

Mr. Woye also explained that the Australian public was only just beginning to realise that locally-made cheeses were often of superior quality to imported cheeses.

He said public reaction to a similar "Cheese Carnival" promotion last year had been impressive. National cheese sales had risen 25.8 per cent in the promotional period.

Mr. Woye said individual cheese manufacturers and retailers increased sales by up to 60% as a result of the 1968 Cheese Carnival promotion. Because of this the Dairy Board expected the 1969 Cheese Carnival to attract the strong participation of all progressive cheese manufacturers and retailers in Australia.

THE HYDROPULSE SYSTEM

The Hydropulse System is a balanced combination of milking machine components which will provide optimum milking results. The basic components are:—

THE HYDROPULSATOR

Provides constant balanced pulsation at a factory set speed and with wide ratio. It is unaffected by moisture, dust or temperature changes.

THE MILK CLAW

Stainless Steel construction of the correct balance incorporating a specially built-in cut-off valve and controlled air bleed.

THE VACUUM CONTROLLER

Ensures a constant vacuum of 15 Hg free from fluctuations and oscillations.

THE INFLATIONS

Complete range specially developed to suit every type of cow and are manufactured from long-life Swedish synthetic rubber.

The new system can be used with all types of Alfa-Laval milker installations and can also be adapted to fit all types of competitors' machines.

FOUR YEARS' RESEARCH, 2,000,000 TEST MILKINGS

The fact that there is only a relatively short time in which the cow's milk let-down hormone, oxytocin, exerts maximum influence has long been known. So an intensive search was begun for a way to utilize this limited time to the fullest—to evacuate the udder more completely. This would stimulate the cow to keep its milk output at a higher level during each lactation period. At the same time, laborious machine stripping would be reduced and total machine-on time minimized.

The idea was right, as the early research work indicated, but it took four years of development to come up with a practical piece of equipment. In widespread field trials from Sweden in the north to Australia and New Zealand in the south, over 7,000 cows were milked under scientific control—the most exhaustive test programme any milk system has ever received, involving more than two million milkings.



"Good bloke, my boss! Now I'm the original contented cow — he bought me Hydropulse!"

The world's most experienced manufacturer of Dairy Equipment has done it again! An entirely new system of milking which adds up to profit for the dairy farmer.

- Up to 15% faster milking time
- Up to 5% greater milk yield
- Less machine stripping
- Improved udder health

This is not idle talk. Alfa-Laval made over 2,000,000 test milkings on 7,000 cows of all breeds to prove the Hydropulse system.

You'll change eventually to Hydropulse, anyway, so write for full particulars to:

**ALFA-LAVAL PTY. LTD., 338 KING WILLIAM ST., ADELAIDE.
5000**

ALFA-LAVAL

Hydropulse **SYSTEM**

PROGRESS ON UNITY

In his Annual Report the General President (Mr. N. M. Green) referred to negotiations that had been taking place with the Dairy Section Executive of the United Farmers and Graziers' Association. In one sense these negotiations can be considered as having taken place during at least the last six years, as considerable investigation was undertaken in 1964 into the possibility of affiliation with the S.A. Division of the APPU, and conferences were held between the two General Secretaries at that time.

But the Constitution of the APPU was much more flexible in that, unlike the Constitution of the UFGA, it contained provisions for the affiliation of existing commodity organizations.

When considering unity with the UFGA it must be realized, whatever may be the tone of pious hopes to the contrary, that under the UFGA Constitution as it exists, the SADA could not survive as an identifiable body, or would it be possible for its policy to be formed and its administration to be carried out, as at present, through the three tier structure of **Branch and District Members—Central Council—Executive Committee**, with the Central Council being the governing body, directly in touch with the rank-and-file members which its delegates represent.

If the continued existence of the SADA is desired (and opinions on both sides seem to indicate this), special provision must be made through an amendment to the UFGA Constitution.

Proposals based on this principle have been submitted to the Dairy Section Executive of the UFGA, and some measure of agreement achieved on items other than those affecting the UFGA Constitution. On this subject the Dairy Section Executive is powerless to speak on behalf of the UFGA; protracted indirect negotiation with the UFGA Governing Council through the Executive would be time consuming and possibly fruitless, and the Myponga District submitted to the Annual Meeting of the Central Council a motion "that no further negotiation concerning unity take place with the Executive of the Dairy Committee of UFGA, and that instead a special negotiating committee be set up comprising:

From the UFGA—President, General Secretary, Vice President and one other.

From the SADA—General President General Secretary, Senior Vice President and one other."

This motion was passed by the Central Council, and the UFGA has now been advised accordingly.

In considering the motion from the Myponga District, the delegates were guided by the following report from the General Secretary . . .

General Secretary's Report on Unity

Personal observation of 20 Branch and District Meetings in the last four months has indicated considerable support for some formal connection between the SADA and the UFGA. There is little outspoken opposition to such a connection even though much of the support is based on the negative theme of "shutting them up."

It is possible that the apparently increased support for unity has resulted from the belief that the two organizations may be able to achieve a degree of union less than full amalgamation, permitting the continued existence of the SADA as a separate identity affiliated with the UFGA.

On the other hand there is a measure of support, varying from District to District, for amalgamation with the UFGA in the fullest degree, as possibly the most effective form of unity. Support for this course of action may be coming from members who are members of the UFGA also, because of diversified activities which are not catered for by the SADA, and **generally these members see unity as being rather more easily achieved than will actually be the case.**

It is necessary for the supporters of both forms of unity to be fully informed with the procedures necessary to bring about unity and the differing results of each of the two forms if they are to make reasoned judgements to guide the Executive Committee. There are, furthermore, other aspects of dairy industry organization which, as well as the form of unity, must be carefully considered before decisions are made.

From my own observation and participation in State and Federal primary producer affairs I consider **the constitutional structure of the SADA, with direct connection, through the district delegate system, between members and the policy-making Central Council, as more effective and more acceptable than any other form,** and I believe that **this system should be retained in any affiliation or amalgamation.**

I believe also that the dairy organization must be sufficiently separate in identity that it can be nominated as a party in any legal or commercial arrangement such as the Milk Equalisation Scheme.

If these provisions are accepted the remaining conditions in drafting proposals for a unified organization should be designed only to provide the greatest effectiveness in action, and the most efficient form of administration.

But on all these aspects the members must be fully informed if any further guidelines are to be given to the Executive Committee.

AFFILIATION: which is the essence of the proposals endorsed by the Central Council and submitted to the UFGA for negotiation. (Appendix.) In this scheme it is proposed that the SADA continue as a separate organization with its own constitution, finance, and staff, and handling all **dairy** matters, but passing on all **non-dairy** matters to the UFGA for action. All members of the UFGA engaged in dairying would become members of the SADA if they wished to participate in dairy matters, and all members of the SADA who were not already members of the UFGA would be encouraged to join the UFGA. Because the SADA would be relieved of the work of putting its decisions on non-dairy matters into effect, and because the chances of success in these matters would be greatly increased by the actions of the larger organization the SADA would pay a substantial affiliation fee to the UFGA.

Finance need be no problem to members if the UFGA widened the eligibility of "associate members" to include members of "affiliated organizations." By this means a UFGA member paying \$10 could pay \$5 to the SADA and \$5 as an "associate member" to the UFGA, with no extra cast to himself, and if the affiliation fee were based initially on the number of members gained by the SADA from the UFGA, possibly the whole of the increase in revenue could be paid back to the UFGA, leaving its financial position unaltered, perhaps even increased by the inclusion of members of the SADA choosing to become "associate members" at \$5.

Under this scheme the Constitution of the UFGA would need only slight revision, to recognize the existence of "affiliated organizations" undertaking the work of commodity sections, to provide for "associate membership" for members of affiliated organizations, and to provide for some representation of the affiliated organizations on the Governing Council. The suggestion is for the President of the SADA to have the status of a Zone President.

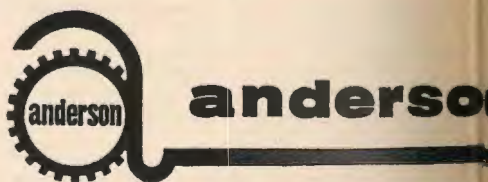
anderson

REFRIGERATED

FARM MILK TANKS

will this year be displayed on the
at the 1969 ROYAL ADELAIDE SH
You are invited to visit Stand No.

See the most advanced refrigerat
working with a new advancement



179 GILLES STR

'Phone 23 4155 -- 23 4917



RYMASTER stand

Sixth Avenue West

farm milk tank

milking machines

equipment

cc-operative ltd.

ADELAIDE

After Hours 31 2613

The Constitution of the SADA would need revision to permit the payment of an affiliation fee, and it might also be desirable for a clause to be included preventing the SADA from withdrawing from affiliation without 12 months' (or some other period) notice being given.

To the onlooker the SADA would function just as it does now, with the exception of the handling of non-dairy matters; constitution, administration, finance, staffing, publicity, would be apparently unchanged, but the ability to co-operate with the UFGA in many matters may after some years, lead to a greater degree of integration if such is then considered desirable.

AMALGAMATION: By this can be meant nothing less than absorption into the UFGA, with the UFGA Constitution only slightly amended (it would be necessary for instance, to make provisions for a commodity section to have a separate name, to have a three level structure in place of the present member—executive organization, and to employ full-time staff) and **the SADA Constitution completely dissolved.**

Members of the UFGA engaged in dairying would change their attachment from the Dairy Section to the SADA with possibly only the proviso that they then become attached to a Section Commodity Sub-Committee. **At present probably only a minority of dairyfarmers belong to a Section Commodity Sub-Committee.** The District and Branch organization of the SADA would be dissolved and reformed as Section Sub-Committees, considerably fewer in number, with much greater membership, and covering much greater area, than the present Districts.

Members of the SADA would become full members of the UFGA, with \$10 subscription, and be reallocated from the present Districts to Section Sub-Committees.

Although all subscriptions would be collected by the UFGA, the financing of the new organization (called "the SADA") would break new ground. Because of the extent of its activities the new organization would need to draw very heavily on the UFGA funds, as it would no longer be in receipt of F.I.L. commissions, Journal profit, and interest on investments (investments would be put into UFGA funds) and yet would be employing a full time staff, and presumably holding a greater number of meetings of members than other commodity groups, and also holding meetings of the 2nd tier (equivalent to Central Council) not applicable to other commodities.

Insofar as the secretariat would be relieved of the necessity to be concerned about finance, expenses, rent, and the publication of a Journal, the work load would be less but could be channelled into worthwhile areas at present unexplored. (But see *** following.)

The present stage of negotiation is that the AFFILIATION proposal shown in the Appendix has been submitted as a basis, but the extent of agreement is obscure. Initially (as revealed by the Minutes of its meeting held on the morning of the unity meeting) the UFGA Executive required all dairyfarmers to pay a \$10 subscription to the UFGA. This attitude was modified at the unity meeting, and the decision is minuted as: "no member shall pay more than \$10 except where a levy was considered necessary" (by an SADA District) and that "it would be preferable if all members retained membership with the SADA and the UFGA." It is not clear whether "retained" in this minute implies membership of the UFGA for all members of the SADA.

Unless the "associate membership" proposal is accepted it will not be possible for members to pay \$10 only unless membership is of the UFGA with the SADA in a subordinate, dependent role (i.e. AMALGAMATION).

Clause 12 (dealing with autonomy) was agreed to by the UFGA Executive only if it did not directly conflict with the UFGA Constitution (which it does; the Constitution must be revised if this Clause is accepted), but at the unity meeting clauses 8 to 12 were agreed to in principle.

Despite the apparent agreement at the unity meeting I believe there are still differences in interpretation which are permitting each party to accept "in principle" what they may quite probably reject "in practice", and in any case the acceptance by the Dairy Executive of the UFGA is conditional on acceptance by their Governing Council.

The SADA Executive has already decided that the negotiating body is too big, and has recommended a negotiating body of 16 (eight from each organization) instead of 20 (eight from the SADA, 12 from the UFGA) for easier working.

The motion from the Myponga District proposing a negotiating committee of eight persons, comprising the President, Secretary, Vice President, and one other person from each Association, has much to commend it. It would reduce the size of the body, increase its effectiveness, and enable the UFGA representatives to speak with direct authority.

Apart from the issues dealt with above and included in the proposals, there are two important questions to be answered concerning the role of the SADA as a "Milk Zone Association" and the role of the South Eastern Dairying Association (the SEDA) in negotiation and in the final form of unity.

Clause 13 of the proposals suggested a similar form of affiliation between the SEDA and the UFGA for the eastern section of the State. During negotiations the meeting agreed that it would be advisable to have only one Dairy Organization to cover all South Australia. Such a proposal would require a major change in the role and form of the SADA, and would need the substantial support of all members (in the absence of which the emergence of a "Milk Zone Union" would be quite possible).

Members must ask whether they want the activities and the administration of the SADA (affiliated or amalgamated) to extend over the whole of the State. The nature of our work will change considerably, as will our representation and our attention to some aspects of the work at present undertaken.***

The SEDA, which has been kept informed of all proceedings, has endorsed the proposals and its Central Council has stated that it would accept them (if unchanged) as the basis for affiliation. The SEDA has also indicated its willingness to become part of a State-wide organization, but with a degree of rational autonomy. It would be undesirable for the SADA to reach agreement with the UFGA in any proposal for a State wide organization that did not include the SEDA, as the SEDA is a fellow member of the ADFF and must be treated with loyalty.

Proposals for Affiliation with U.F.G.A.

At the meeting of the Executive Committee held on 1/7/69 it was resolved that the basis for negotiation with the Dairy Commodity Committee of the United Farmers' and Graziers' Association concerning affiliation between the two organizations be as set out in the Agenda Notes and the memorandum entitled "Unity Basis for Affiliation with UFGA", tabled at the meeting on 1/7/69 and that a copy of the consolidated proposition also be sent to the South Eastern Dairymen's Association.

The proposals set out in the Agenda Notes have been consolidated as follows:

1. The SADA to proceed with the proposal to increase its subscription from the present figure of \$2.10 plus District levy to a uniform subscription of \$5.00, with the proviso that any District so wishing may continue to levy its members above this amount for local purposes, other than the normal District expenses, for which funds shall be provided from Head Office.
2. The Constitution of the UFGA to be amended to provide that "associate membership" be available to "members of affiliated organizations". "Associate Membership" at a subscription rate of \$5.00 is at present available to the family of a member of UFGA, and to retired primary producers.
3. All dairy farmer members of the UFGA who wish to participate in dairy industry matters to become members of the SADA (\$5) either retaining their present full membership of the UFGA (\$10) or changing to associate membership (\$5) at their option.
4. All members of the SADA not already members of the UFGA to be encouraged to become associate members of the UFGA. It is possible that the ability to participate in the UFGA buying scheme should prove sufficiently attractive. Nevertheless an existing member of the SADA would be permitted to remain a member of the SADA only, if he did not wish to join the UFGA as an associate member.
5. The Dairy Commodity Committee and the Dairy Commodity Sub-Sections of the UFGA Branches to be dissolved.
6. The SADA to pay to the UFGA an affiliation fee, of an amount to be decided, to the UFGA. The amount of the affiliation fee, and whether it shall be expressed in terms of a lump sum, or so much per member, to be negotiated.
 It is suggested that initially the amount could be based on the increased revenue obtained by the SADA from the gain in membership from the dairying members of the UFGA. In this way the UFGA would lose no income from the transfer of some of its dairying members to SADA and their taking up associate membership.
 It will be necessary to examine whether a lump sum, either on this or some other basis, should continue to be paid annually, and if so, what provision should be made to enable it to be varied, or whether a sum, either on this or some other basis, should be divided by the number of members of the SADA who were not, at the time of affiliation, or who did not soon after affiliation, become members of the UFGA, the result being an "affiliation fee per head for SADA members retaining single membership", to be applied each year to the total of such members of the SADA.
7. From the date of affiliation, no dairyfarmer to be permitted to become a member of the SADA unless he is also a member or associate member of UFGA, or becomes one at the same time.
 All recruiting to be carried out by the UFGA field officers, who will point out to dairyfarmers that if they wish to participate in dairy industry matters they must join the SADA as well as the UFGA. The portion of the commission to be paid to the UFGA field officer by the SADA for each new member shall be related to or perhaps slightly higher than the amount now paid for enrolling a new member of the UFGA.

8. The General President of the SADA to become a member of the UFGA Governing Council with status equivalent to a Zone delegate, the Constitution of the UFGA being amended accordingly.
9. From the date of affiliation the SADA, after debate and decision, other than a decision disposing of a motion, to refer all matters not related solely to the dairying industry to the UFGA for either discussion and decision, or for action. It will be competent for Branches and Districts of the SADA to raise matters not applicable solely to the dairying industry, and to submit such matters to the Central Council or to the Executive Committee for further discussion, but the only action to be taken by the Central Council or the Executive Committee to be either rejection or referral to the UFGA with a proposal for action.
10. From the date of affiliation all matters relating solely to the dairying industry raised within any Branch, Zone, Governing Council or State Conference of the UFGA to be referred to the SADA for further discussion, and subsequent action by the SADA if the decision of the SADA supports such action.
- (11. From the date of affiliation no matters relating directly but not solely to the dairying industry to be proceeded with by either organization after discussion and decision until referred to the other organization for discussion and decision. In the event of the other organization not supporting the proposal, the originating organization to have the right to continue with the proposal.)
12. The SADA to be completely autonomous concerning its constitution, policy, administration, finance (collection and expenditure), location, and publicity, reserving the right to act independently or with or through the UFGA as it sees fit on all matters.
13. These proposals to be submitted to the SEDA with the suggestion that they be considered by the SEDA for the purpose of bringing about a similar affiliation between the SEDA and the UFGA, and that the areas of operation of the SADA and the SEDA be west and east respectively of longitude 140°E or some similar precise boundary.
14. Federal affiliations to be decided.



. . . . AND SOME DISUNITY IN THE WEST

The W.A. Farmers' Union has often been held up to the single commodity organizations as an example to be followed.

Like the State Divisions of the Australian Primary Producers Union and the new merged organizations, the South Australian United Farmers' and Graziers' Association and the Victorian Farmers Union it is an all-embracing, multi-commodity body. Indeed, it is so much the very model of what many claim to be the ideal primary producers' organization that one could wonder what more the West could want.

Well, it appears that some people are not satisfied with having only one multi-commodity body in the State and are forming a new farmers' organization, to be known as the United Farmers and Graziers' Association of W.A.

FEDERATION'S SUPPORT FOR WHOLE MILK

The Australian Dairymen's Federation agreed at its last meeting to support in principle the formation of a whole milk section within the framework of the Federation's Constitution.

The federation's executive has been empowered to draw up a draft constitution for consideration by the constituent organisations, with a timetable for action at the federation's annual meeting.

Another suggestion is for a conference of wholemilk representatives from constituent organisations to be held following the Federation's annual meeting.

OTHER DECISIONS

In other decisions the Federation decided:

- Not to support the introduction of a cheese sales marketing allowance along similar lines to the butter sales marketing allowance. The cheese marketing allowance was proposed by the Australian Cheese Manufacturers' Association.
- Agreed to the principle of the appointment of a secretary of the Australian Dairy Industry Council and the Australian Dairy Farmers' Federation on a full time basis.
- Recommended to the Australian Dairy Produce Board that arrangements be made for the president of the Federation and a technical officer to attend the 17th general conference of I.F.A.P. in Tokyo from October 24 to November 1.
- Agreed to become foundation member of the Australian Farmers' Federation when it is formed.
- In view of the ever-increasing costs and reduced returns of the dairy farmer, the Federal Government be urged to render assistance to the dairy industry in such a manner as will restore to the dairy farmer a return commensurate with the present cost of production.

NO INCREASE

- Advise the Federal Government that dairymen producing milk for manufacture into butter and cheese have not received any increase in returns for at least 10 years during which period there have been substantial increases in costs of production and that their economic position (accentuated by drought conditions in some States) has become desperate.
- Objects to any form of collective farming as a solution to the problems of rising costs and marketing. The Federation's views be presented to the Federal Government with a view to the implementation of saner economic policies.
- Prior to the 1969 Federal election, the Federal Government be requested to make a clear announcement of its intention in relation to future devaluation payments and that devaluation payments on dairy products be continued at a similar rate as at present.
- Expressed serious concern at the fact that 5,000 tons of cheese are being imported into Australia at a time when Australian cheese manufacturers are being asked to reduce production.

SUPERPHOSPHATE

- Recommend to the National Farmers' Union of Australia that representations be made for a Royal Commission (or Senate Committee Inquiry) into the superphosphate industry and agricultural fertilizers generally.
- Make every endeavour towards the commercial development and usage of the milk biscuit in all markets.
- Obtain information as to whether the Commonwealth Government has funds available for the re-forestation of uneconomical farms, and whether owners would be engaged to carry out the work.

It is expected that the annual meeting of the Federation will be held in Sydney on November 3 and 4.



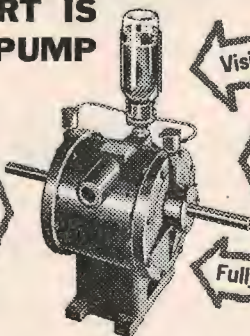
**YOU CAN GET 10 YEARS OR MORE
QUIET TROUBLE-FREE SERVICE**

MASPORT

the quiet **VACUUM PUMP**

from New Zealand

**WHY MASPORT IS
THE BEST PUMP**



Visible oil supply

Automatic continuous oil supply from both ends through the bearings, ensures all moving parts are thoroughly lubricated

Low speed & superior design—give maximum service life

Fully guaranteed 12 months

Avoid costly breakdowns — see your local dealer or

A.H. McDONALD (SALES) PTY. LTD.

299 Prospect Road, Blair Athol, S.A. Phone 65 6117

Service readily available throughout Australia

a package deal to cover all your insurance problems...

Now you can have all your insurance commitments handled by the one company — The Federation Insurance Limited. With Federation's one stop premium saving plan you save money, time and trouble. Your helpful Federation man will tailor a complete plan to cover all your insurance requirements, business and personal.

...and
members
save up to
**\$1 in every
\$5 on
premiums!**



Your helpful Federation man will offer you expert advice on all insurance matters and serve you promptly in making any claim.

FEDERATION

ONE-STOP INSURANCE

one plan-one renewal date-one payment

The Federation Insurance Limited

342 Flinders St., Melbourne, 3000. Tel. 62 0101
168 George St., Sydney, 2000. Tel. 27 2266
376 Queen St., Brisbane, 4000. Tel. 2 2386
Cnr. King William St. & Sth. Tce.,
Adelaide, 5000. Tel. 8 4541
206 Adelaide Tce., Perth, 6000. Tel. 23 1931
71 St. John St., Launceston, 7250. Tel. 2 4085



To The Manager,
The Federation Insurance Limited.
Please send me details of your
One-Stop insurance premium saving plan.

Name

Address

Association 1246F1

SENATOR CRITICAL OF SOME MARGARINE FIRMS

The actions of some margarine companies were criticised in the Senate (Aug. 20th) during the Budget Debate.

Senator J. J. Webster (Country Party, Victoria) said he had fears about a campaign that was expected to be mounted by the Australian Margarine Manufacturers Association, against the dairy industry. "It was no schoolboy move. Money was its motivation," he said.

He said he was opposed to the aims of any person or power which attempted to harm Australian industry.

Senator Webster urged State Governments to follow the Victorian Government's lead in legislation aimed at protecting consumers. He itemised labelling, dubious advertising and additives to colour and flavour cooking margarine made from tallow (beef and mutton fat).

EXTRACT FROM SPEECH BY SENATOR J. J. WEBSTER (COUNTRY PARTY, VICTORIA) DURING THE BUDGET DEBATE IN THE SENATE, PARLIAMENT HOUSE, CANBERRA, AUGUST 20th, 1969.

I have been prompted on several occasions to alert the Australian public to the manner in which certain sections of the Margarine Industry have sought over a number of years to break the Australian Dairy Industry.

I mention this today because I believe there are millions of dollars poised to be spent in an attempt to put a story to the public which is full of doubt, to support some sections of the Margarine industry, and at the same time in attempting to decry the Australian Dairy Industry. I said "some" sections of the Margarine industry. It is very notable that all sections of that industry are not involved. Indeed, some respected companies and business organisations have sought to make clear they abhor the efforts of what today runs under the label of the Australian Margarine Manufacturers' Association.

Honorable Senators may recall the widespread activities of the Mrs. Jones campaign—that was the initial conspiracy. It would not be unfair to call it such and did so for a number of years. Whilst breaking the law that Company, because the Company, Marrickville Holdings Limited conspired to break the law, through its spokesman broke most considerations of decency in its attack on those who had built the Australian Dairy industry. It was when the truth about the edible oilseed industry was handled so lightly by Marrickville, and Company, Meggitt Limited found it necessary to pay advertising space in daily papers to disassociate themselves from Mr. Crebbin and Marrickville.

Well, the Dairy industry survived that attack.

It was an untruthful and unfair campaign, but the some forces have been reassembling and the first thrusts have been made. The Victorian Government took action before the unlimited money available to cheat the public took significant effect.

I plead with all State Governments to follow the Victorian State lead before the parasite leeches the Australian industry. I plead that they legislate—

1. That cooking margarine which contains 90% or more of beef fat and/or mutton fat be not sold as a table spread.
2. That customers be not misled by dubious advertising and presentation, but will know exactly what they are buying.
3. That additives which attempted to make this dripping look like, taste similar to and have an aroma of butter—in short, misleading packaging and advertising—be not tolerated.

This second campaign commenced firstly with advertising for, amongst other things, a political lobbyist at a salary of \$25,000 per year. It was this appointment which finally placed a man named Dawson at the head of the Australian Margarine Manufacturers' Association. Mr. B. G. Dawson had previously been a well-respected Australian citizen who held Government appointments and had demonstrated himself to be a sound business man.

But the "hip pocket" does talk, and Mr. Dawson says that this is what makes him speak for the A.M.M.A.

In the A.M.M.A. are three major companies.

Let me say quickly that in this country people and businesses must be free to pursue their affairs as they see fit, provided they act within due bounds of fair play, and within the law.

They must be given freedom so that profits are maximised.

Overseas funds and overseas knowledge of business techniques are welcomed here—provided those who control those funds act within due bounds of fair play and within the law—should they perform beyond these bounds there can be no cry if public attention is focussed on their activities.

A.M.M.A. consists of the Australian Company, Provincial Traders—the big cogs in the wheel are, I believe, Unilever Limited. Marrickville apparently have agreements with Proctor & Gamble Ltd., which is an American based worldwide company of great strength.

Unilever's appearance in the direct confrontation follows the attempt it made to edge into the "spread" market. It was this attempt, made through a subsidiary, which resulted in the Victorian Government passing an amended Bill preventing the subterfuges involved in misrepresenting a cheap, tallow-based product as the equivalent of butter.

Before this Bill was passed, Unilever ran an expensive campaign against the legislation. This involved full-page advertisements to persuade people to register protests. Unilever culminated the campaign by letters to all Parliamentarians claiming a significant number of protests had come from the individual member's own electorate.

This was described in the Victorian Parliament, by one member, as "political blackmail" and I warn Senators that similar attempts may be made to influence them during the campaign.

After the Victorian Government had passed its legislation and fearing this lead would be followed in other States, Unilever came out as an active and major partner in A.M.M.A.

And A.M.M.A.'s major objective, as announced by Mr. Dawson, is the removal of all restrictions on the manufacture and marketing of margarine. Dawson has also been freely quoted as saying, in the same context—"If the dairy industry gets killed as a result then that's not my worry."

Now let me express my own deeply held view, and it is a view held by most Australians.

I oppose the aims of any person or power which attempts to harm our Australian Industry.

It is important to look at the senior partners in A.M.M.A., their overseas affiliations and their commercial operating methods. Unilever (Aust.) is a wholly owned subsidiary of Unilever Ltd., a great Anglo-Dutch combine with major interests in soap, margarine and detergents.

Marrickville markets some Proctor & Gamble soaps and detergents in Australia. Proctor & Gamble is a huge U.S. based, but internationally oriented organisation in similar fields to Unilever.

In the United Kingdom both Unilever and Proctor & Gamble have close working arrangements. They may have elsewhere in the world. These two giants have been the subject of inquiry by the U.K. Monopolies Commission as to the extent of their agreements and the methods by which they gained and hold 90% of the U.K. detergent market. The Commission Report presented pursuant to Section 9 of the Monopolies and Restrictive Practices (Inquiry and Control) Act 1948, was ordered to be printed on August 3, 1966. The Report should be read as a document of commercial importance. The Report is contained in over one hundred pages. It criticises the high nett profit margin on certain products, the market of which these large companies have now in their control. It pointed up a profit on an Historic Cost basis on Capital employed in one case of between 46.8% and 23.4% during the first five years of the 60's. The other Company, Proctor & Gamble's profits on the same basis were between 60.2% and a low of 41.6%. Proctor & Gamble being percentage-wise the highest percentage profit earner. This was in relation to household detergents business. To quote one conclusion in this Report—

Page 43—paragraph 121 says—"We have criticised the policies of both Companies and found that they operate against the public interest in certain respects."

Mr. President, I plead with the Management and Directors of those companies—"Please do not bring those management practices into this country."

Whether advice is heeded is yet to be experienced.

Unilever Chairman's address to the last meeting of shareholders in London and the Hague was most interesting. I refer Honorable Senators to its contents. The report refers to the accusations of deception in advertising.

To this extent, Mr. President, I have some fear of the A.M.M.A. campaign. It is no schoolboy move. Money is its motivation. To Hell with the Australian Dairy industry.

What can happen if the A.M.M.A. campaign should gain any mileage?

If the butter/margarine market were busted wide open by removal of all restrictions on margarine, there is little doubt that the two main overseas contenders for this market would soon gain control.

In line with efforts overseas they could and would promote in such a manner (as has been demonstrated already in Victoria), the Australian Companies could not match. They could cut prices to an extent where they would control the market. Once effective opposition is eliminated, prices would quickly rise and another sector of our food industry would be in overseas' hands. The consumers would have to repay the brief benefits they obtained from cut prices.

The Dairy industry would have lost a substantial part of the local butter market and would be grievously affected.

If all the profits did not go to the overseas grants, then a company that was at variance with the law for so long would unfairly gain benefit.

What is the Dairy Industry claim to efficiency in the public interest—and by that I mean, directly to the consumer? The public have been well and faithfully served. Is there any other industry which puts containers of fresh food on the doorstep every morning to most homes in the cities and major towns?

Is there any other industry in Australia which in its major product—MILK—can call a rise of about 25% in sixteen years, whilst the Consumer Price Index has risen by 48%, and average weekly earnings by above 120%?

The Dairy industry in an Australian industry of which we should be and can be justly proud.

The A.M.M.A. through Mr. Dawson says—"Look at the price of New Zealand Butter—it's cheaper than Australian—the Australian Dairy Industry should compete."

Mr. Dawson acts the role of an advocate who hides the facts in his hip pocket.

He should know that New Zealand very properly restricts the manufacture and sale of cooking margarine. Perhaps New Zealand is more business-like or efficient. Its Government issues licences for the manufacture of cooking margarine and has legislation to restrict its packaging, colouring and flavouring so that the consumer is not deceived.

The A.M.M.A. try to sell their product by referring a health quality to Margarine. There is much talk but no proof. The National Heart Foundation in an article released on March 23, 1969, said—when referring to saturated fats and the possible link with blood cholesterol levels, *inter alia*—

"These facts, however, do not conclusively demonstrate that a diet rich in animal fats will cause coronary heart disease."

I noted in a newspaper article on July 9 this year that the A.M.M.A. through Mr. Dawson said that the Japanese outlive Australians—the suggestion being that Australians eat more butter. I believe that New Zealanders outlive Australians, and that country places great restrictions on Margarine. I would think it a little untruthful to attempt to follow Mr. Dawson's references in reverse.

Let me refer quickly to the publicity given by the A.M.M.A. to the idea that the Australian vegetable oilseeds industry is being repressed, or is "shackled", as Mr. Dawson has put it.

This is utter and untruthful nonsense. Of the edible vegetable oils involved in the issue, Australia in 1968/69 produced 16,459 tons against a market of 47,704 tons.

The only locally produced oil not absorbed by the market is some cotton seed oil, a by-product of that industry, but priced way above that of imported oil, after duty has been paid.

Marrickville once pegged its "remove the quota" to the alleged limitless potential of safflower growing.

It even got the "independent report" of W. D. Scott to back its claim.

The result was a lot of disillusioned Queensland farmers who disregarded the warnings of agricultural experts about the risk aspects of the crop.

Farmers in Australia must increasingly take into account world factors in the supply of products which they may commence as a new endeavour. That the Australian product should be given access to the Australian market is unquestioned.

My question is—how long would it be, if all restrictions were lifted, before the big overseas companies controlled the trade? Purchase price of the basic stock would soon be the factor. I doubt if Mr. Dawson's or any other person's cotton seed would bring a fair return on the local market for this by-product.

I congratulate the State Government which have taken action to stop untruthful and unfair disruption of the Australian Dairy Industry.

I ask all Senators to encourage their respective Governments to follow that lead.

IS THE LOW-LINE MILKER A STEP FORWARD?

In South Australia we have watched the development of the "low-line" milking machine with considerable interest, and have waited for the results of experience in the field to show whether it represents a major step forward or a nine-days' wonder.

That there is a difference of opinion concerning the technical aspects of the low-line machine is shown in the following statement of a leading milking machine manufacturer.

In our opinion many farmers have incurred the expense of converting to Low Line machines purely because it was the latest trend or on the advice of a second person, without having any knowledge of either the mechanics involved or any clear cut idea of the real advantages of the system. Neither have they the same clear cut idea of any disadvantages.

This Company has not been an advocate for Low Line milking under present current practise of merely placing a machine designed as a High Line unit into a Low Line position and has no hesitation in commending to any farmer the installation of a conventional High Line machine. More particularly is this so in view of the research and development now accomplished by this Company to again drastically improve the High Line machine. It is not easy to give comprehensive coverage in a letter of all the factors for and against Low Line milking but the following should at least present a lucid picture.

Firstly, we as milking machine developers and designers of some substance have been against Low Line because:—

1. No machine as such has been specifically developed for Low Line installation nor has sufficient consideration been given to the vacuum variation factors inherent in the more often than not, complicated systems of piping between milk receiver, pump and vacuum tank.
2. The machine is basically unhygienic. In these days when hygiene is lauded as essential, we find the milk receiver in surely the most contaminated part of the dairy—the pit. The pipe lines are generally installed along the concrete pit wall under the pit ledge and these are in a position where they are—together with pulsators, sight glasses and connections—externally contaminated by water, dung and urine. The position and Low Level placing of these lines also present difficulties in both aligning and adequate cleaning, and being as stated, below the pit edge they are not readily accessible and are thus rarely cleaned efficiently. This means that any minute leak in the already contaminated seals makes the entry of bacteria to the machine inevitable. Draining of the pipe line system also presents problems in Low Level installation, especially where the milk receiver and pump are mounted in the pit. This is in direct contrast to the High Line mounting which is more suited for not only adequate cleaning, both inside and out, but for the successful operation of pulsators and other equipment—not forgetting the diaphragm pump, which is very decidedly a weak link in the Low Level installation.
3. Efficiency: The only fixed idea the farmer has is that because milk runs downhill it must mean faster milking and be easier on the cow. This is only partly true. Milk evacuation is faster at full milking, but only because the teat is subject to full vacuum as against the screening effect in the High Line of milk present in the droppers. This dubious advantage is as milk flow decreases, offset by crawling cups—caused by the same unrestricted vacuum, necessitating increased attention and stripping. This apart from (a) that crawling cups are associated with udder damage and cow discomfort and (b) if cups are not immediately removed from the

cow on the finish of milking then the teat and udder are subject to machine vacuum without any screening effect whatever. The practise of lowering vacuum to 13" mercury in the plant to reduce this cup crawling is surely anomalous as the screening effect of milk flow in the droppers of a High Line plant means substantially the same milking vacuum at the cups.

4. Mastitis: The incidence of Mastitis comparative to the two machines has yet to be clearly evaluated. This may prove to be of much more than mere academic interest.
5. Cost: The substantial increased cost of the Low Line machine must be compared economically in terms of convenience, hygiene, increased production (if any), time saved (if any), with the lower cost of the High Line machine.
6. Vacuum Stability: That the Low Line system has greater vacuum stability, is, on analysis, a most debatable point. The complex system of piping with its multiplicity of bends, etc., in most sheds converted to Low Line is in itself conducive to vacuum variation. However vacuum stability is not guaranteed because a machine is at a Low—or High—position, because common to both machines vacuum variation is dependent briefly, on the efficiency of its installation (slope of lines and freedom from leaks, sags, etc.), pulsator efficiency, size and positioning of lines and connections, the efficiency of its milk removal system particularly . . . and positive vacuum control. Undoubtedly the two main factors effecting vacuum stability are inefficient pulsators and taken broadly, all releaser systems. Compared to the known disabilities of the common releaser inherent in the High Line machine it seems apparent that any claim to superior vacuum stability in a Low Level machine is, in essence, due mainly to the method of milk removal—pumping from vacuum. This simply means that milk flows into and is pumped from a comparatively stable vacuum source, which in turn, has a stabilising effect on the operational vacuum at the pulsators. In a High Line machine pumping out of vacuum would have the same if not greater effect on air stability.
7. Research: Since this Company's public expression of its opinion, enquiry on possible authentic research into the matter was made to New Zealand and the following information has just been obtained:—
 - (1) Because of its importance to New Zealand dairyfarmers, research has been carried out under carefully controlled conditions by Mr. D. S. M. Phillips at Ruakura Research Station into the validity or otherwise of claims made for Low Line milking machines. This report has been clearly documented and shows that actually from time/milk-weight factors there is little difference between High and Low Line milking, and that comparison of the mechanics of both systems indicates the advantages of the High Line machine.
 - (2) The New Zealand Milk Board, too, carried out an independent field investigation of well over 100 machines of both systems. They found little if any difference in milking efficiency.

All in all this report was very illuminating and—so is the following:

. . . . On page 158 of "Mechanical Milking", by Dr. Whittlestone—where he states:—**LOW LINE Versus HIGH LINE.** "The effect of milk pipe height on vacuum has caused many inventors to consider putting the milk pipe below the cow. In this position the milk flows downhill and so, instead of a fall in vacuum at the cups during milk flows, there is a slight rise. This means that a Low Level milk pipe produces the same effect at the cups as a bucket plant, the action of which explains why many farmers have experienced better milking with

a bucket plant, than with a releaser machine. While this is sound in theory, there are so many practical problems to solve in the design of a Low Line machine that at present there is no Low Line system available which is as satisfactory as a conventional High Line"

Taking the foregoing into some consideration the farmer has to decide for himself whether to install a machine with its known convenience in installation, design and hygiene or to adopt an inconvenient, basically unhygienic machine to gain some apparently theoretical advantage. Cost too should not be ignored.

In regard to the Low Line, and as an expression of opinion, we trust the foregoing will be of interest. The farmer will of course form his own opinion and make his own decision.

BREAKTHROUGH HOPES ON MASTITIS CONTROL

A University of Sydney team is reported to believe it has found a way of stopping cows from getting mastitis, which is estimated to cost the Australian dairying industry anything from \$38 million to \$58 million a year.

The method involves immunisation, in much the same way as humans are immunised against disease.

Paradoxically, much of the experimental work has been done on sheep.

Some forms of mastitis, when well advanced, are extremely difficult or impossible to cure.

BASIC STUDIES GAVE THE CLUE

The team, which is working mainly at the university's dairy husbandry research unit, at Camden, N.S.W., has been delving into aspects of the problem for the past six years.

"The preventive measures will probably involve immunising heifers as they are coming into lactation," the Professor of Dairying (Professor Alexander Lascelles) said recently.

"This should give the heifer adequate protection for her first lactation, although some sort of booster shot may be needed for late lactations.

"We think that this will ultimately lead to a practical mastitis control programme", he said.

The work has been supported by the Australian Research Grants Committee, the Rural Credits Development Fund, the Australian Dairy Produce Board and the University of Sydney Dairy Husbandry Research Foundation.

The application arose from basic research into the mechanism of the transfer of blood serum proteins from blood to regional tissue and then into milk.

It was concentrated on antibody or "defensive" proteins or immunoglobulins.

The unit found that during most of lactation, the milk's antibody content was normally only a fraction of that of the blood.

In a sense, Professor Lascelles said, the udder was "more or less isolated from the rest of the body."

The unit then started investigating the "local" immunity of the udder.

It had shown beyond doubt that slowly injecting killed bacteria into the udder about a month before the end of pregnancy caused a persisting local immune response, Professor Lascelles said.

Results of tests involving injecting animals thus immunised and untreated animals with virulent organisms had been encouraging, Professor Lascelles added.

Prices and Statistics

ADELAIDE METROPOLITAN MILK SUPPLY AREA

PRODUCTION (000 gallons)

	For Month		Total since July 1		Total since Jan. 1	
	1968	1969	1967/68	1968/69	1968	1969
June	3,505	3,766	48,094	53,229	20,624	23,118
July	3,948	4,367			24,572	27,485

MILK SALES (000 gallons)

RATIO

C.M.B.

	For month		Total since July 1		per cent		cents	
	1968	1969	1967/68	1968/69	1968	1969	1968	1969
June	1,793	1,804	21,974	21,638	51.2	47.9	29.64	28.47
July	1,861	1,844			47.1	42.2	27.80	25.65

Moving average ratio for 12 months ended 31/5/69, 41.03%

INTERIM PRICES TO LICENSED SUPPLIERS

(All prices are interim only and subject to adjustment by retrospective payment)

1969	Basic	C.M.B.	Total	3.5%	4%	4.5%	5%
	(cents per lb. butterfat)			(cents per gallon)			
June	37.63	28.47	66.10	23.88	27.29	30.70	34.11
July	37.35	25.65	63.00	22.76	26.01	29.26	32.51

LONDON PROVISION EXCHANGE QUOTATIONS

(Sterling Currency per cwt.)

		May		June	
		1968	1969	1968	1969
Butter—Choicest	Australian	300/-	300/-	300/-	300/-
Cheese—Rindless	Australian	255/-	225/-	225/-	225/-

"MEALS FOR MILK" MACHINE WINS TOP FARM SHOW AWARD

A machine which automatically controls a cow's food according to the amount of milk she gives has won the best new implement award at Britain's Royal Farm Show at Stoneleigh.

According to the makers, Gascoign, of Reading, the cow quickly learns that feed is available only when her milk begins to flow.

Once the machine is switched on the animal is psychologically and physically "keen to give milk in return for food."

Milk from the cow goes into a glass container which is suspended from a sensitive electronic controller.

Every time 2 lb. of milk flows into the container the weight causes an electric impulse to start the motor in the food dispenser.

A set amount of food is then delivered to the feed trough.

A spokesman for the Gascoign company said recently: "With the cow controlling her own reaction the operator is released from this operation and can concentrate on efficient and economic milking.

"The machine also eliminates overfeeding or underfeeding," he said.

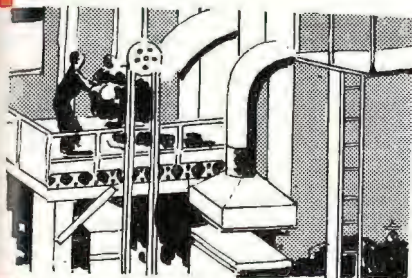
Another advantage of the unit is that it allows easier recording of yields of individual cows.

HODGE'S SEEDS

MEAN

BETTER PASTURES

BECAUSE . . .



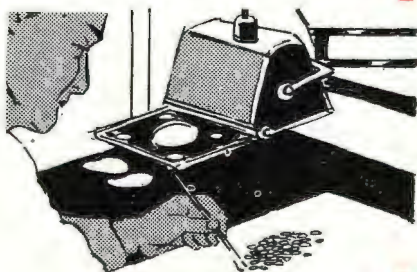
They're Triple - Cleaned

Elaborate modern plant sifts out all dirt, grit, husks and other debris from Hodge seeds.

You buy only viable seed.

. . . Laboratory Tested

Careful laboratory checks ensure that Hodge seeds have maximum germination potential, and are free of weed seeds,



ORDER NOW

FOR

**PROMPT
DELIVERY**

M. F. HODGE & SONS PTY. LTD.

128 - 134 GILBERT STREET, ADELAIDE

Phone: 51 5571

THE SOUTH AUSTRALIAN

DAIRYMEN'S . . .

Journal

The Official Publication of the



Published Bi-monthly

Vol. 9, No. 2

Adelaide, SEPTEMBER-OCTOBER, 1969



Mr. B. D. HANNAFORD, R.D.A.
CHAIRMAN OF THE
METROPOLITAN MILK BOARD

PRICE

20c

Printed at G.P.O., Adelaide
Transmission by post as a periodical.

\$1.20 per Year, Post-Paid

COMBINE

BETTER HYGIENE
 UDDER STIMULATION
 MASTITIS CONTROL

IN ONE EASY OPERATION

with the

CAMBRIDGE

STERILIZATION SYSTEM

. AND GET

FASTER MILKING
 MORE PRODUCTION
 QUALITY MILK

using instantaneous water heating by



and



E. H. CAMBRIDGE

INSTALLATIONS MAY BE SEEN AT

★ MOUNT BARKER (A. Prosser), OAKBANK (M. Gilman), FLAXLEY
 (P. Schultz)

MOUNT BARKER -- STRATHALBYN -- McLAREN VALE

Telephones: Mt. Barker 570, Strathalbyn 165, 54 9666

★ COVER PICTURE

THE SOUTH AUSTRALIAN DAIRYMEN'S JOURNAL



Published by

**THE SOUTH AUSTRALIAN DAIRYMEN'S ASSOCIATION
INCORPORATED**

Aston House, 13 Leigh Street, Adelaide. 51 3034

President:
N. M. GREEN

General Secretary:
DAVID J. HIGBED

Advertising Rates on application

NEW CHAIRMAN

In May Mr. B. D. Hannaford was appointed Chairman of the Metropolitan Milk Board in succession to Mr. S. A. Gale. A graduate from Roseworthy Agricultural College, Mr. Hannaford has had experience in the cheese, city milk, butter and ice cream industries.

Prior to this appointment he has worked in two States in three separate Government departments associated with the Dairy Industry: the Commonwealth Department of Primary Industry as a Dairy Exports Standards Officer, the Victorian Department of Agriculture as Cheese Instructor, and the South Australian Department of Agriculture as Milk Products Officer.

Mr. Hannaford has been prominent in the affairs of the Australian Society of Dairy Technology in recent years, being Secretary of the South Australian Division from 1963 to 1969 and is currently Vice-President.

The Present Outlook

We have not, in the past, done more than to publish extracts from the Annual Reports of the President of the Australian Dairy Farmers' Federation but the position of the dairying industry is such now that a full appraisal of the whole dairy situation will assist every producer in preparing his own plans, in casting his vote intelligently at Association meetings, and in talking to Members of Parliament and dairy industry officials.

There is no better way of gaining this acquaintance than in the following Report, which was presented to the Federation at its Annual Meeting on November 3rd, by the President, Mr. H. A. Stone, O.B.E., The Report covers in detail the present dairy situation, stating the problem areas, revealing the avenues for optimism.

There has never been a time when full appreciation of the position was more necessary, and we know of no other statement which permits this appreciation more readily.

* * * * *

Although, as I said in my annual report last year, problems exist in every section of the industry, perhaps the greatest problem the dairy industry—in fact, many primary industries—will have to face in the future is the threat of imitation and synthetic products.

There is no doubt in my mind that cooking margarine, coloured and flavoured to look and taste like butter, will seriously affect Australian butter sales. This was shown quite clearly in Victoria prior to the introduction of legislation in that State prohibiting the colouring and flavouring of cooking margarine. The Victorian Minister of Agriculture, Mr. G. L. Chandler, stated in Parliament that, following the intensive advertising campaign by cooking margarine manufacturers, butter sales fell by 10% in five weeks and he estimated a 20% reduction in sales over the full year if action was not taken.

Following representations made by the Federation to the Australian Agricultural Council and by the V.D.A. and other dairy organisations in Victoria, the Victorian Government took immediate action in the interests of consumers, dairy farmers and the national economy. The Tasmanian Government is taking similar action. Unfortunately, in Queensland, the proposed legislation became a major political issue and legislative action has been deferred.

Although I understand that legislation has been drafted in South Australia, no definite action has been taken in that State or in the other two States.

Imitation milk is another serious threat. Already one Dairy Association in Queensland has been offered imitation milk concentrate from the United States. The offer stated that all the association required was a pasteurisation plant and local water supply and it could be in production in one week. Following representations by the Federation to the Australian Agricultural Council, the Victorian Government again took the initiative and introduced legislation banning the production and sale of imitation milk in that State. So far, no other State has taken similar action.

These issues are not a matter of protection for the dairy industry alone. They are of much greater significance. The policy adopted on imitation butter and imitation milk could indicate the policy which will be adopted on any other imitation food product which might be introduced in the future. These could include products which are already available overseas, such as imitation and synthetic beef, lamb, pork, bacon and poultry. The introduction of imitation food products inevitably must weaken the economy of Australian exporting primary industries and lessen their ability to maintain overseas earnings at existing levels.

In spite of the publicity and glamour associated with the production and export of minerals, Australian primary industries still earn about 60% of the Australian export income and most of these earnings come back to Australia, while a substantial proportion of the income from minerals goes to overseas investors.

The Australian Dairy Industry Council has been actively associated with the industry's campaigns to have legislation introduced in each State prohibiting the manufacture and sale of cooking margarine coloured and flavoured to resemble butter, and to ban the manufacture and sale of imitation milk. However, the issues are of such significance that they cannot be left to one organisation alone. I believe that failure to protect exporting primary industries against imitation and synthetic foods could have such far-reaching effects upon our country cities and towns and, in fact, upon the community generally and on Australian wage levels and living standards, that we must enlist the support of primary producer organisations at all levels in an effort to convince our Parliamentary representatives and the public that legislative action is necessary and urgent in the interests of Australia.

The Australian economy is not yet ready for imitation and synthetic foods. It will be time enough to consider the need for such products when our population has doubled or trebled, and our secondary industries are earning sufficient overseas income to maintain a stable economy within Australia.

Dairy Production — 1968-69

Although severe drought conditions existed in Queensland and parts of New South Wales during 1968-69, the improved seasonal conditions in the other states resulted in an increase in whole milk production from 1497 million gallons in 1967-68 to 1,522 million gallons for the twelve months ended June 30, 1969.

Butter production in 1968-69 totalled 196,080 tons, compared with 192,997 tons in the previous year. Cheese production increased by over 3,000 tons from 69,368 tons to 72,868 tons for 1968-69.

The production of skim milk powder, at 70,260 tons, compared with 87,513 tons in 1967-68 and 28,485 tons of casein were produced, an increase of 8,400 tons.

Butter:

At its meeting in February, 1969, the Federation Council, by a majority decision, recommended to the Australian Dairy Industry Council that the wholesale price of butter be increased by \$2.80 per cwt., to include 28 cents per cwt. as a provision for an increase in the patting margin.

After considering the Federation's recommendation, the Council decided to increase the wholesale price of butter by \$2.52 per cwt. (2¼ cents per lb.) as from March 31, 1969.

	Cwt.	Per lb.
Increase to Producers through factories	\$2.24	2 cents
Increased Local Selling Allowance	0.28	¼ cent
	<hr/>	<hr/>
Increase in Bulk Wholesale Price	\$2.52	2¼ cents
Provision for an Increase in Patting Margin	0.28	¼ cent
	<hr/>	<hr/>
	\$2.80	2½ cents

Butter sales during the year for consumption within Australia, as shown by the Commonwealth Dairy Produce Equalisation Committee's figures, were 114,011 tons, compared with 115,218 tons in 1967-68.

Although it is difficult to gauge the actual effect of the additional point-of-sale advertising and promotion being financed through the .75 a lb. butter sales marketing allowance because of many factors, such as competition with substitutes and the price increase, I am of the opinion that the allowance is proving worthwhile.

The Australian butter quota in the United Kingdom for 1969-70 was fixed at 65,100 tons (72,200 for 1968-69). Out of the initial total of 397,000 tons (462,000 in 1968-69), actual exports of Australian butter to the U.K. in 1968-69 were 60,400 tons.

The official price for Australian butter on the London market remained unchanged at 300/- Sterling per cwt.

The weekly average sales of "Kangaroo" butter in 1968-69 amounted to almost 370 tons (277 tons 1967-68). The increase was due largely to an extensive promotion campaign.

Cheese:

The increase in cheese production from 69,368 tons to 72,868 tons, in association with a retrospective imposition of cheese import quotas by the United Kingdom, caused a surplus in cheese stocks.

The cheese market in the U.K. was heavily supplied during 1968-69. Following protracted negotiations by the U.K. Government and an application by representatives of British milk and cheese interests for the imposition of anti-dumping and counter-vailing duties, agreement on cheese import quotas was reached covering a two-year period ending on March 31, 1970. Australia's quota for this period was 27,000 tons, which was the quantity agreed upon with New Zealand under a joint allocation of 177,100 tons for the two countries.

The price of Australian first grade rindless cheese remained unchanged at 225/- sterling per cwt. during the year, but has since risen to 230/-.

After a careful review of the cheese stock, production and disposal positions, and the U.K. import quotas, by some members of the Australian Dairy Produce Board, representatives of the Australian Cheese Manufacturers' Federation and the Commonwealth Dairy Produce Equalisation Committee, an allocation was made of quantities of cheese for each manufacturer beyond which the Board would not be prepared to purchase. Cheese production in 1969-70 has been estimated at 75,000 tons, but a continuous review of the position will be maintained and the matter re-examined by the Board at each meeting.

We now have the most unsatisfactory position of having to restrict Australian cheese manufacture because of a surplus on available markets and, at the same time, we allow almost unlimited quantities of cheese to be imported into Australia.

In the twelve months to June 30, 1969, 5,414 tons of cheese were imported into Australia, valued at \$4,437,100—an increase over the previous year of about about 25% in quantity and 20% in value.

Following discussion of the cheese position with the Ministers for Trade and Industry and Primary Industry in September last, Mr. Anthony announced the establishment of a Cheese Panel of Industry representatives and departmental officers to examine the question of cheese imports and all aspects of Australian fancy cheese production and consumption.

The Industry representatives on the Panel are Messrs. A. P. Beatty and T. W. Easton with Messrs. M. F. Treney and A. Baird as advisers.

Asian Milk Plants

The milk plants in South-East Asia established by the Australian Dairy Produce Board through Asia Dairy Industries, are continuing to operate at a very satisfactory and profitable level.

The Plant in Indonesia, which is thought to be Australia's largest single investment in that country, was opened by President Suharto on July 3rd. An opening address was given by Indonesia's Minister for Light Industries, Major-General M. Jusef. Australia's Minister for Primary Industry, Mr. Anthony, attended the opening and gave a very fine address to the large assembly.

The Dairy Board is the major shareholder in this plant, which cost nearly \$2 million.

Products to be marketed are recombined, canned condensed milk and recombined liquid milk.

There is a tremendous potential in this country with a population of approximately 110 million as Indonesians, until now, have had very little access to dairy foods, their present average milk consumption being about one gallon per person a year.

The initial runs at the factory produced an excellent product which, when put on show at the Djakarta Fair, was eagerly sought after.

The factory located an Gandaria, near Djakarta, is a very fine building with first-class plant and, according to latest estimates, initial yearly usage of Australian milk products would be about 3,000 tons of skimmed milk powder and about 1,000 tons of anhydrous milk fat.

a package deal to cover all your insurance problems...

Now you can have all your insurance commitments handled by the one company — The Federation Insurance Limited. With Federation's one stop premium saving plan you save money, time and trouble. Your helpful Federation man will tailor a complete plan to cover all your insurance requirements, business and personal.

...and members save up to \$1 in every \$5 on premiums!



Your helpful Federation man will offer you expert advice on all insurance matters and serve you promptly in making any claim.

FEDERATION ONE-STOP INSURANCE

one plan - one renewal date - one payment

The Federation Insurance Limited

342 Flinders St., Melbourne, 3000. Tel. 62 0101
 168 George St., Sydney, 2000. Tel. 27 2266
 376 Queen St., Brisbane, 4000. Tel. 2 2386
 Cnr. King William St. & Sth. Tce.,
 Adelaide, 5000. Tel. 8 4541
 206 Adelaide Tce., Perth, 6000. Tel. 23 1931
 71 St. John St., Launceston, 7250. Tel. 2 4085



To The Manager,
 The Federation Insurance Limited.
 Please send me details of your
 One-Stop insurance premium saving plan.

Name _____
 Address _____
 Association _____ 1246FI

The Thai Dairy Industries factory at Bangkok continues to operate at full capacity, despite the establishment of several other milk factories in Thailand. The production for the present year has been considerably greater than that of the previous year. Consideration is being given to some extension of this undertaking, which has proved to be such an outstanding success.

Marikina Dairy Industries in Manila is continuing to hold its position, despite intense competition. This plant is also operating efficiently and profitably.

The milk plant at present under construction in Cambodia is proceeding satisfactorily, with plant and machinery now being installed. It is anticipated that commercial operation will commence early in 1970.

Australian raw materials are continuing to be supplied to Malaysia Dairy Industries in Singapore, despite the fact that the Dairy Board disposed of its shareholding in that Company.

Australian manufacturers of spray dried skim milk powder are being invited to supply about 20,000 tons of this product to Asian milk plants for the 1969-70 season.

During the 1968-69 season, shipments to the above-mentioned organisations amounted to 14,254 tons of dried skimmed milk and 3,465 tons of anhydrous milk fat.

Skim Milk Powder Equalisation

In my report last year, I drew attention to the fact that dairy farmers would be disappointed at the failure of manufacturers to agree to establish a satisfactory plan to stabilise local prices for skim milk powder. I mentioned that quite apart from the effect of open "cut throat" competition on the local market on dairy farmers' returns, the absence of an agreement could make it much more difficult for manufacturers to finance initial payments to producers.

I am now pleased to report that considerable progress has been made in the past 12 months towards the setting-up of an equalisation plan for skim milk powder.

The Directors of the Commonwealth Dairy Produce Equalisation Committee agreed in principle to the proposal, and, after protracted negotiations, manufacturers in Victoria and New South Wales have reached agreement on the terms and conditions of a plan.

Agreement forms are being printed and, as soon as available, will be distributed to manufacturers in all States for approval and signature.

Research

Research activities financed by dairy farmers and the Commonwealth Government and administered by the Dairy Board, continued to be directed towards increasing efficiency in production, manufacture and marketing.

Promotion

Butter's natural origin and flavour was the main theme in the Australian Dairy Produce Boards' advertising and promotion campaign during the year.

Expenditure on promotion amounted to about \$800,000 of which about 75% was directed towards butter promotion.

Following the success of the Dairy Foods Information Centre in Queensland, similar centres were opened in Adelaide and Sydney and consideration is being given to opening centres in West Australia and Tasmania during 1969-70.

Japanese Market

Australia maintained its position as the leading supplier of cheese to Japan and sales of cheese increased from 6,897 tons in 1967-68 to 8,729 tons in 1968-69.

Because of the cool summer conditions the Japanese consumption of ice-cream and fluid milk was lower with a consequent lower demand for milk powder and unsalted butter.

Dairy cow numbers and milk production have increased in Japan during recent years.

International Situation

Discussions at the G.A.T.T. consultations held in February, 1969, centred around a suggestion for the establishment of International minimum prices for butter, butterfat and dried skim milk.

No agreement was reached mainly because of the demand by the E.C.C. for increased access to the U.K. butter market as compensation to agreement for minimum prices on other markets.

The International market for dairy products is under strong pressure from surplus stocks, particularly in the E.E.C. Total West-European butter stocks were more than 500,000 tons in May, 1969, with E.E.C. stocks at about 364,000 tons.

In March, 1969, 230,000 tons of dried skim milk were held in the E.E.C. Dairy cow numbers in the E.E.C. countries continue to increase and the Common Agricultural Policy could cost the equivalent of about \$1,138 million in 1969-70.

Canada applied restrictions on imports of cheese for processing during the year and an extension of import quotas on dairy products into the U.S.A. is being pressed.

Australia agreed to supply 6,000 tons of dried skim milk to India on the basis of 3,000 tons for commercial sale at an agreed price and 3,000 tons donated by the industry and the Commonwealth Government.

Devaluation

In December, 1968, the Minister for Primary Industry, Mr. J. D. Anthony, announced the Commonwealth Government's decision to pay devaluation compensation for 1968-69 on the same basis as in 1967-68, namely, the difference between F.O.B. returns immediately prior to devaluation and the F.O.B. returns from sales after devaluation.

At June 30, 1969, devaluation claims for 1966-67, 1967-68 and 1968-69 totalled \$15,241,839, with total payments received amounting to \$13,773,932.

In September, 1969, the Dairy Industry Council asked for an announcement of the Government's policy on devaluation for future years, to be made prior to the Federal election. In his policy speech, the Prime Minister announced a continuation of devaluation compensation in 1969-70 along similar lines to the previous years.

anderson

REFRIGERATED FARM MILK TANK UNITS

The **first** and **only** manufacturer to have a **complete range** of units in South Australia, Victoria (appointed as testing authority for farm milk by the Victorian Government) and found to comply with the requirements of the Milk Act 1958.

CERTIFICATES OF TESTING

MODEL:	R150	R200	RH250
CERT. No.:	C.P.65C9	C.P.66C3	C.P.66C9

National Standards Commission Pattern approval Certificate of Agriculture registered

- 7 models to choose from 150-500 gallons capacity
- stainless steel construction
- Rigid polyurethane insulation



anderson

ADELAIDE: 179 Gilles Street
'Phone 23 4917

SYDNEY: W
MELBOURNE: C
BRISBANE: 4

(A Unit of DAIRY FARMS)



Units tested by the State Electricity Commission of
the Australian Standing Committee on Agriculture)
to Australian Standard N46-1963.

PERFORMANCE

R250	R300	R400	R500
C.P.66C10	C.P.66C8	C.P.66C13	C.P.66C9

**Model No. 8/4 Complies with Milk Board and Department
Requirements in every State.**

• All round design for minimum space requirements • All
• Low height for easy cleaning.

For information contact

equipment

Anderson cc-operative Ltd.

100 Egerton Sts., Lidcombe, N.S.W. 648-1084.

100 Charles St., North Coburg, Victoria. 35-2347.

100 Stanley St., South Brisbane, Qld. 4-5452.

(ANDERSON CO-OPERATIVE LTD.)

Returns

Interim Equalisation Values and Interim Bounty Rates for butter and cheese for 1969-70, were determined by the Commonwealth Dairy Produce Equalisation Committee at its July, 1969 meeting as set out below:—

Interim—

	As from July, 1969	
	per cwt.	
	Butter	Cheese
Equalisation Value	\$38.00	\$23.10
Bounty Rate	5.55	2.65
Overall Return	\$43.55	\$25.75
Manufacturing Allowance	5.50	5.50
Available to pay Producers at the Factory door per cwt.	\$38.05	\$20.25
Per lb. commercial butter	34 cents	
Per lb. butterfat	41.38 c	46.1 c

Summary of 1969-70 Returns

Briefly the position in relation to returns for 1969-70 is:—

- (1) The average butter manufacturing cost is \$5.50 per cwt.
- (2) Total Bounty is \$27,000,000.
- (3) The ex-factory prices of butter and cheese are \$54.60 per cwt. (48.75c per lb.) for butter and \$33.04 per cwt. (29.5c per lb.) cheese.
- (4) The retail price of butter is now completely variable and appears to be selling anywhere within the range of 48c to 57c.
- (5) The amount available to factories to pay to dairy farmers for cream or milk delivered to the factory door is 41.35c per lb. butterfat for butter and approximately 46.1c per lb. butterfat for cheese.
- (6) A final return of at least 34c per lb. commercial butter (41.35c per lb. butterfat) has been guaranteed by the Commonwealth Government.

With the interim adjustments made by the Committee during the year to returns for previous years, the basis of payment to producers for milk and cream delivered to the factory door would amount to:—

1967-68	Butter	44.049 cents per lb. bf.
	Cheese	51.105 cents per lb. bf.
1968-69	Butter	42.433 cents per lb. bf.
	Cheese	48.942 cents per lb. bf.

Underwriting

On June 26, 1969, the Minister for Primary Industry, Mr. J. D. Anthony, announced that the Commonwealth Government would continue to underwrite butter and cheese equalisation values for 1969-70 at levels which would enable factories, with average manufacturing costs, to make initial payments to producers of 34 cents per pound commercial butter.

Mr. Anthony said that the Government's decision to maintain the level of underwriting at 34 cents per pound for 1969-70 was again conditional on any devaluation compensation that might be decided upon for the production year (1969-70), being counted towards the final return.

Following a resolution carried at the July, 1969 meeting of the Federation Council, in a written submission to Mr. Anthony in September, the Executive asked that the underwriting guarantee be increased to a figure which would ensure for dairy farmers a return commensurate with the present cost of production.

Basis of Payment for Milk

Last year, I reported that the Standing Committee on Agriculture had decided to set up a committee to investigate the basis of payment for milk for manufacture and that Mr. K. W. Thorne had been nominated as the representative of the Australian Dairy Industry Council on this Committee.

Mr. Thorne has reported that this Committee held five meetings since its inception and a further meeting is planned for November 20, 1969.

One of its terms of reference was to consider a submission of the Milk Producers' Association of Australia and New Zealand concerning the solids-not-fat standard for milk for liquid consumption. The Association did not request an alteration to the standard but stated that, as there appeared to be a need for research into the means by which improvements could be achieved within the economic framework of the industry, it considered that the preferred action would be to suspend penalties for a period to enable research to be carried out and, when effective advice could be given to producers for remedial action, the standard could be renewed in the light of the knowledge then available. The Committee reported to the Standing Committee on Agriculture that it was the view of the Committee that there was adequate information already available on how a low solids-not-fat test could be overcome and that it would not be in the best interests of the dairy industry to suspend penalties.

The Committee also expressed the view that, because of the heavy demands on research funds in Australia at the present time, it would not appear desirable to undertake further research on this problem.

The Committee closely examined a New Zealand report on the basis of payment for milk for manufacture and sought the advice of the B.A.E. as to whether its conclusions are valid for Australian conditions. Efforts are being made to relate this report to Australian conditions through State Departments of Agriculture.

The Committee is also examining literature received from overseas countries and information received from the industry and the various Departments of agriculture in Australia. In addition, submissions have been made to the Committee by the Australian Society of Dairy Technology, the Australian Dairy Produce Board and the Australian Institute of Dairy Factory Managers and Secretaries. The Friesian Cattle Club of Australia has also indicated its interest in making a submission.

XVIII International Dairy Congress

Preparations for the holding of the 18th International Dairy Congress in Australia are now well advanced. Working drawings, plans and specifications for the preparation of pavilions at the Royal Agricultural Society Showground for the Congress have been completed and this work is ready to commence next year. The firm which will be doing it does extensive structural work overseas for the Department of Trade and an impressive Congress venue is assured.

Two large pavilions have already been let for the International Exhibition of Dairy Equipment and space in other pavilions is now being sold. An impressive equipment display of the largest farm processing and scientific material in the dairy world will be on show at the Congress venue.

Farmers wishing to visit the Congress venue for the purpose of seeing this Exhibition and also for the purpose of attending the International Display of Dairy Films, which will be held at the Rothman's Theatre at the Showground, can gain admission for a daily fee of \$2.00.

Farm Amalgamation Scheme

I am disappointed in having to report that very little progress appears to have been made in relation to the Commonwealth Government's Farm Amalgamation Scheme. Two years of the current five-year Stabilisation Plan have passed and, so far as I am aware, the West Australian Government is the only State Government to have accepted the terms offered by the Commonwealth.

As you know, the Federation considered that the scheme, as outlined by Mr. Anthony, was too limited as a dairy farm reconstruction scheme. However, when we met Mr. Anthony in September last, we asked for its immediate implementation as a farm amalgamation scheme.

In addition, Federation representatives asked for the provision of finance on reasonable terms for individual dairy farm reconstruction and development.

Milk Matters

At its July, 1969 meeting, the Federation Council decided to recommend to Constituent Organisations that the Constitution should be amended to provide for the establishment of a Milk Section within the Federation.

The Executive was requested to draw up a draft constitution for a milk section for submission to Constituent Organisations as an amendment to the Constitution for consideration and adoption, if considered desirable, at the Annual Meeting. This was done and the draft will be discussed at this meeting.

Arrangement have been made for a Milk Conference, or if the constitutional amendment is adopted, for the first annual meeting of the Milk Section to be held on Friday, November 7, 1969.

The Federation made representations to the Australian Agricultural Council requesting agreement by State Ministers of Agriculture on legislation covering imitation milk and on the basis of payment for U.H.T. milk.

Conclusion

The importance of the Australian Dairy Industry to Australia is clearly indicated by recent estimates made by the Australian Dairy Produce Board's Market Research Section, based upon Commonwealth Bureau of Census and Statistics information, which showed that there are 482,000 Australians directly and indirectly supported by the industry.

Although this figure is about 100,000 less than the estimate of 600,000 made some years ago by the then Minister for Primary Industry, Mr. C. F. Adermann (undoubtedly because of a drift from the industry), it clearly shows the importance of the industry in the Australian economy.

All of these people—men, women and children—have a very vital interest in the economic level of dairy production in Australia and, despite the local and overseas competitive marketing problems we face at the present time. I believe that, with their support in the promotion of dairy products and of the interests of the industry, the Australian dairy industry has a very definite and important place in the future Australian economy.

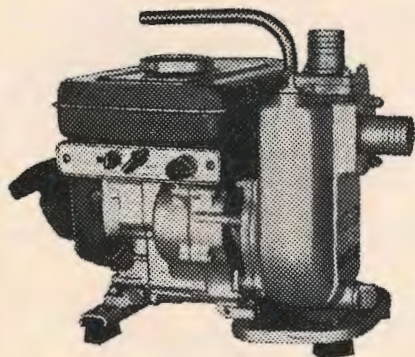
In conclusion, on behalf of the Federation, I express appreciation to Commonwealth and State Ministers, Departmental Officers and officers of industry organisations and others for the courtesy and consideration shown to the Federation throughout the year. I also record my thanks to the two Vice-Presidents and all members of the Federation Council for their assistance to me in our work on behalf of the dairy farmers of Australia.



WORLD'S LARGEST MOTORCYCLE MANUFACTURER

HONDA WATER PUMPS

HONDA MOTOR CO., LTD. TOKYO, JAPAN



W15

W20

2" pump, 4.5 h.p., 4 cycle petrol.
8,500 g.p.h. 79 ft. Head.

BIG WATER APPETITE

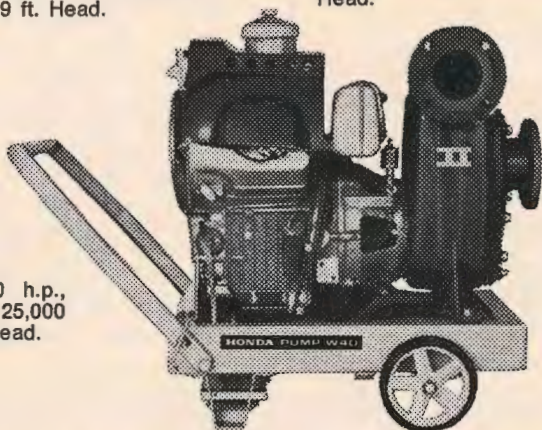
LOW FUEL COST

W15

1½" pump, 2.5 h.p., 4
cycle petrol. 3,500 g.p.h.
69 ft. Head.

W30

3" pump, 4.5 h.p., 4 cycle
petrol. 13,500 g.p.h. 92 ft.
Head.



W40

4" pump, 10 h.p.,
twin diesel. 25,000
g.p.h. 90 ft. Head.

Wm. HAUGHTON & CO. LTD.

S.A. & N.T. DISTRIBUTORS, 10 KINGSTON AV., RICHMOND, S.A. 5033

Telephone 52 1666

COST OF PRODUCTION SURVEY

by V. J. B. MARCEAU, A.A.S.A., *Investigating Officer, Metropolitan Milk Board*

The collection and processing of data from ninety-one dairy farms situated throughout the various regions in the metropolitan milk producing area in 1968-69 revealed that high output as a general rule assisted in lowering unit costs. The River Murray districts again showed the lowest cost per gallon and the Adelaide Hills the highest.

In a climate of extremely competitive markets, rising costs and high capital outlay there appears to be certain minimum information necessary for the informed producer to control costs. Recognising the need for external comparative analysis, which will indicate relative progress or decline the Metropolitan Milk Board has provided a comparison of efficiency factors for each producer in the survey. This is in addition to the usual provision of regional comparative data showing costs per gallon and per acre. The schedules provide dairy farmers with certain standards and comparisons against which he can gauge his own performance.

One of the most important efficiency factors calculated is the gross return expenses ratio, which gives an indication of efficient cost control.

DISTRICTS

	GENERAL SURVEY AVERAGE	Meadows Macclesfield Kuitpo	Goolwa Angas Plains Langhorne Creek	Myponga Yankalilla Victor Harbor	River Murray	Birdwood Mount Pleasant Springton	Meningie Narrung	Lobethal Woodside Mount Barker
	\$	\$	\$	\$	\$	\$	\$	\$
Gross Income per \$100 farm expenses	192	181	195	188	217	187	201	182

In the table above farm expenses represent cash costs plus depreciation but do not include farm labour costs actually paid or the calculated allowance.

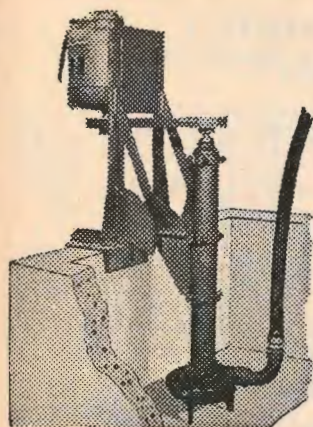
An examination of some aspects of the survey revealed that in several instances producers with a lower production per cow and per acre earned more gross income per \$100 spent than many producers with higher figures in the same district. This indicates that some farmers may spend too much money in maintaining high production per cow and per acre. One of the most significant factors appears to be fodder and concentrates, e.g. Several farmers with approximately 250 lbs. butterfat per cow earned a gross income exceeding \$300 for each \$100 of farm expenses. Several others with cows exceeding 350 lbs. butterfat earned a gross income of approximately \$150 for each \$100 of farm expenses.

It is known that conclusions can be misleading if drawn on comparison alone and without recognising other circumstances which may contribute to differences.

It must be realised, however, that the provision of regional comparative data and comparative analysis is not intended to indicate what should be done to solve a problem. It suggests where to look. It is for the farmer to decide the path to be followed to obtain a solution.

Licensed Producers wishing to participate in the yearly survey are invited to contact the Board's Investigating Officer.

The recording for the Licensed Producer is simply laid out and should not take more than half an hour per month.



Easy to instal --
efficient operation

The **IBC** DUMAC filter cut liquid manure pump

**Designed for dairies
and piggeries this versatile
pump saves you money.**

Simply mount the pumps (as illustrated) over the edge of a small pit, e.g., a round or rectangular pit 2—6 feet deep. There's no priming required as the pump is immersed in the liquid.

BY COUPLING THE IBC-DUMAC
FILTER CUT PUMP WITH THE
"DISPERSA" LIQUID MANURE

SPRINKLER, EVEN DISTRIBUTION OF EFFLUENT IS ASSURED OVER LARGE AREAS OF PASTURE.

Spare parts are inexpensive — easy to get — easy to instal.

Get more details on the IBC-Dumac Filter — Cut Liquid Manure pump now!

Post this coupon today. Please send me further details on the IBC-Dumac Filter-Cut pump without obligation.

INTERCOLONIAL BORING CO. LTD.

"Water House", 98 Churchill Rd., Prospect, S.A. 5082. Phone 65 6944.

Head Office: 450 Ann St., Brisbane, Qld. Branches all States.

MT. GAMBIER: Stuart Richardson, 5 Rotary Ave. 5290. Phone 2 3482.

NAME.....

ADDRESS.....

POSTCODE.....

Prices and Statistics

ADELAIDE METROPOLITAN MILK SUPPLY AREA

PRODUCTION (000 gallons)

	For Month		Total since July 1		Total since Jan. 1	
	1968	1969	1968/69	1969/70	1968	1969
Aug.	4,402	5,158	8,350	9,525	28,974	32,643
Sept.	5,148	5,787	13,498	15,312	34,122	38,430

MILK SALES (000 gallons)

	For month		Total since July 1		RATIO		C.M.B.	
	1968	1969	1968/69	1969/70	per cent	per cent	1968	1969
Aug.	1,815	1,822	3,676	3,666	41.2	35.3	24.16	22.56
Sept.	1,701	1,730	5,377	5,396	33.1	29.9	20.54	19.64

Moving average ratio for 12 months ended 31/8/69, 39.76%;
30/9/69, 39.35%.

INTERIM PRICES TO LICENSED SUPPLIERS

(All prices are interim only and subject to adjustment by retrospective payment)

1969	Basic	C.M.B.	Total	3.5%	4%	4.5%	5%
	(cents per lb. butterfat)			(cents per gallon)			
Aug.	37.35	22.56	59.91	21.6	24.7	27.8	30.9
Sept.	37.19	19.64	56.83	20.5	23.5	26.4	29.3

LONDON PROVISION EXCHANGE QUOTATIONS

(Sterling Currency per cwt.)

	August		September	
	1968	1969	1968	1969
Butter—Choicest Australian	300/—	300/—	300/—	300/—
Cheese—Rindless Australian	225/—	225/—	225/—	230/—

CANADA'S DAIRY SUBSIDIES

—makes Australia's look like peanuts.

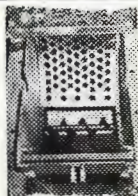
Nothing is more sickening than the continued harping, by critics of the Australian dairy industry, and the extent of the subsidy which we receive as partial compensation for what must be the most viciously protective tariff structure in any developed country (the rate of duty on caustic soda has just been increased from 25 per cent general, 15 per cent preferential to 55 per cent general, 45 per cent preferential—another straw to all to the load that will eventually break the back of the primary producing camel).

We have previously published reports relating to subsidies granted by their Governments to dairyfarmers in other countries whose surplus production competes with ours on the world's export markets, but the latest figures issued by the Canadian Department of Industry reveal a level of subsidy that must be unmatched by any other country.

In that country the Federal subsidies paid directly to farmers for manufacturing milk have increased from 2 cents per gallon in 1965 to 13.5 cents per gallon in 1967, or approximately 37 cents per pound butterfat.

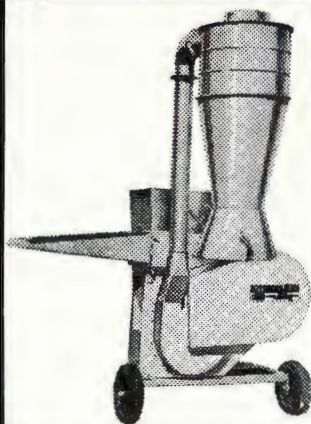
When compared with the Australian subsidy of about 5 cents per pound butterfat, it is no wonder that the Report states that the Canadian subsidy represents 33 per cent of the gross receipts of milk producers and 58 per cent of the gross receipts of cream suppliers. As a result of this action the return to dairyfarmers for milk for manufacturers has been lifted, in five years, from 27.7 cents to 45.5 cents per gallon, whilst for town milk, on which there is no subsidy, the return to producers is 66 cents per gallon.

SLICING IS BEST FOR FEED WITH THE NEW NEVERTIRE FEEDMILL



NON-CLOG NEVERTIRE AUGER

The auger delivers the material to the fan duct. The fan is only required to draw the prepared feed through the duct and not from the mill chamber. This eliminates the possibility of clogging and reduces the workload on the fan.



THE NEVERTIRE FEEDMILL FEATURES:

- Self Sharpening spring steel blades cut cleaner, faster — less wastage of feed
 - Belt driven auger delivers feed to the fan, without clogging
 - Rotor blades are keyed (not welded) to the stronger 2" shaft
 - Easy control of blending of feed
 - Large one-piece feed tray.
- ASK FOR A DEMONSTRATION!**



Frigrite
RURAL COMPANY

10 Deacon Avenue, Richmond,
South Australia. 5033. Telephone: 57 7333



Send for your copy of the booklet
'The value of a feed mill in supplementary feeding'.

Name.....
Address.....
.....State.....
.....Postcode.....

FRC4/S S.A.D.

THE SOUTH AUSTRALIAN

FAIRMEN'S . . .

Journal



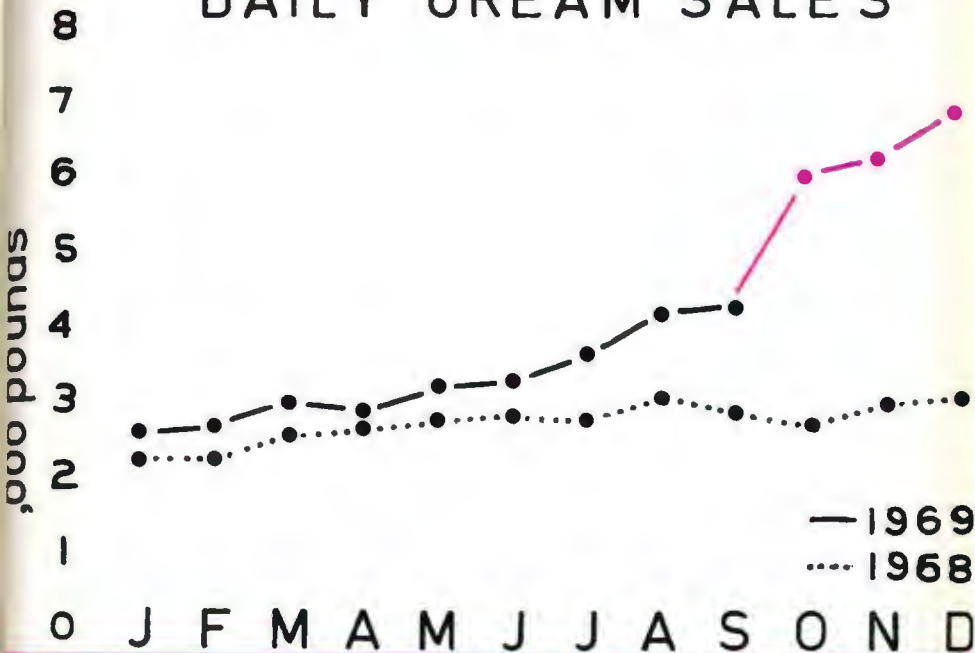
Official Publication of the

Published Bi-monthly

Vol. 9, No. 3

Adelaide, NOVEMBER-DECEMBER, 1969

DAILY CREAM SALES



AVERAGE DAILY SALES OF CREAM
IN THE METROPOLITAN AREA
since the launching of the Cream Campaign

PRICE
20c

Printed at G.P.O., Adelaide
Transmission by post as a periodical

\$1.20 per Year, Post-Paid



your
helpful
Federation
man says

fire protection is just one-stop away!

with Federation's one-stop insurance plan

Let Federation safeguard your assets. High winds, summer heat and good growth form a dangerous combination. Federation counter this with fire insurance, covering hay, livestock, fencing, machinery and buildings. Federation's inspectors will assess your insurance requirements and recommend a cover tailored to your needs. Be it the immediate need of fire



insurance or just a review of your present insurance commitments the Federation



one stop insurance plan will save you money, up to \$1 in every \$5 on premiums.

as a member you
save up to \$1 in every
\$5 on premiums

FEDERATION ONE-STOP INSURANCE



The Federation Insurance Limited,
342 Flinders St., Melbourne, 3000. Tel. 62 0101
168 George St., Sydney, 2000. Tel. 27 2266
376 Queen St., Brisbane, 4000. Tel. 2 2386
Cnr. King William St. & Sth. Tcc.
Adelaide, 5000. Tel. 8 4541
206 Adelaide Tce., Perth, 6000. Tel. 23 1931
71 St. John St., Launceston, 7250. Tel. 2 4085

To The Manager,
The Federation Insurance Limited.
Please send me details of your
One-Stop Insurance premium saving plan.

Name

Address

Association 1244P1



THE SOUTH AUSTRALIAN DAIRYMEN'S JOURNAL

Published by
THE SOUTH AUSTRALIAN DAIRYMEN'S ASSOCIATION
INCORPORATED

Aston House, 13 Leigh Street, Adelaide. 51 3034

President:
N. M. GREEN

General Secretary:
DAVID J. HIGBED

Advertising Rates on application

THE CREAM CAMPAIGN

The July-August issue of this Journal announced the planning of a Cream Promotion Campaign, designed to wrest a larger portion of the South Australian cream market from the Victorian suppliers who have during the last 10 years captured the major part of this business from the South Australian producers to whom, but for Section 92 of the Commonwealth Constitution, it legally belongs.

The Campaign was launched at the end of September, and attracted a great deal of interest, support and commendation. But there were many factors to be overcome, particularly the difficulty of co-ordinating the activities and policies of half-a-dozen cream distributing companies to ensure that retail outlets were adequately supplied without causing one South Australian company to compete with another South Australian company instead of both of them competing with the interlopers.

The aid of the Master Retail Milk Vendors' Association was freely offered and accepted, and one of the most pleasing aspects of the campaign was the increase in sales by vendors.

The Housewives' Association also gave the campaign its support, and endorsed our advertising, a fact that, we hope, will help to sway the buying judgements of that Association's many members.

Initially the Campaign was slow to get off the ground, but the graph shown on the front cover indicates that sales, since the Campaign began, have increased steadily, and are now running at more than twice the volume of a year ago.

This does not mean that we can now sit back. The Campaign has been, and will continue to be expensive, and most of the cost is being met by the producers. If the gains are going to be worthwhile and permanent sales volume must increase even further. We have learned a lot; perhaps the most important lesson has been the strength of the opposition.

Having got this far we can now look to ways of refining our methods. Vendors' sales reached a high level and then steadied down — we must find ways to increase them even further. We now know what the food stores want and what their buying and selling strategies are. The graph must be kept climbing.

HOW WELL DO YOU KNOW YOUR INDUSTRY?

There are many features of the dairying industry in the Adelaide Milk Supply Area that are unique—the milk prices equalisation scheme,—the function of the milk board,—the continuing production-cost survey,—the method of payment for milk,—the transport arrangements—these and others, some attracting praise, some attracting criticism, have always proved of great interest to our colleagues in other States. At the first meeting of the Australian Dairy-farmers' Federation's newly-formed Milk Council, held in November, a report of the South Australian system was given keen attention, and was later reprinted by the Victorian Dairymen's Association.

But although the members of interstate organizations learn, by this means, a great deal about how we operate in this State, we find that our own members very often are not clear about some of the details. Although we publish from time to time information on changes in prices, regulations or other factors influencing the industry, it often happens that there is uncertainty on the part of some of our members concerning the position before the change.

The following article is intended to demonstrate the present position in the Adelaide Milk Supply Area so that future changes may be seen in their proper context.

HISTORICAL:

The administration of city milk marketing in the Adelaide Metropolitan Area, which has a number of features not found in other States is appreciated more readily if the history of the city milk trade in South Australia is understood.

In the early years of this century Adelaide and its suburbs was supplied with milk from herds maintained on farmlets within the suburbs and on the extensive parklands surrounding the City of Adelaide. These parklands cover 1700 acres and at the time referred to were largely devoted to the pasturing of cattle for city milk supplies, and even as late as 1960 some dairy cattle were pastured on undeveloped portions of the parklands.

The milk was distributed generally by the farmers who vended their own milk, or by vendors reselling warm milk purchased directly from dairy farms, and control of hygiene and quality standards was carried out by the Local Boards of Health which formed part of each Local Government body.

The internal administration of the "industry" insofar as pricing and other policies was concerned was carried out through the Adelaide and Suburban Dairymen's Association, the precursor of the South Australian Dairymen's Association.

The city milk trade continued in this fashion until the early 1920's, when several companies, either formed for the purpose by the vendors, or already engaged in wholesale primary industry, began collecting milk from dairyfarms, pasteurizing, and either reselling to vendors for suburban delivery or delivering on their own account.

The change was induced by the growing inability of the dairy farms within the suburban area to supply the metropolitan population and the consequent necessity to obtain additional supply from the surrounding rural areas, but within a very few years the number of companies engaged in the trade had increased to such an extent as to threaten grave instability both to the newly developed processing-wholesaling section and to the surviving producer-vendors.

The wholesaling companies then moved further into the rural areas in search of cheaper and more reliable supplies, and the producers in those areas found it necessary to form regional associations to negotiate prices, on behalf of their members, with the wholesaling companies.

However, the prices obtainable for milk and cream for manufacturing were so low that the wholesalers had no difficulty in playing-off the regional associations against each other, and in the late 1920's the Amalgamated Dairy Council (later the Affiliated Dairymen's Association) was formed, comprising all the regional associations, with the Adelaide and Suburban Dairymen's Association as the senior member.

The move was not entirely effective, and the tenuous loyalty to an "Association of Associations" was often no match for the differential offers made by the wholesalers.

Eventually, in 1935, the South Australian Dairymen's Association was formed for the purpose of introducing, in the Adelaide Milk Market, a system of orderly marketing.

The methods employed proved ineffective, and, in February, 1936, with an unprecedented (and probably unrepeatable) show of solidarity, the members of the South Australian Dairymen's Association staged a "milk strike", by withholding supplies from the processing companies.

The "strike" continued for almost a week before the State Government intervened by calling a conference, under the chairmanship of the Auditor-General, from which emerged proposals for a "milk prices equalization scheme", the scheme which has now operated (with such amendments from time to time as are made necessary by changing circumstances) for 33 years with a large measure of success and a degree of efficiency and economy in administration that has attracted widespread approval.

The general satisfaction with the system did not, however, prevent some groups from making sectional gains by avoiding their obligations under a voluntary scheme, and several attempts were made by the Association to obtain legislative support to prevent such action.

Eventually in 1947, after three unsuccessful moves, the Metropolitan Milk Supply Act, which incorporated support for milk price equalization, was passed, and the Metropolitan Milk Board was established, the Board's function being primarily to co-ordinate, under one authority, the functions of the setting of standards and the supervision of premises, carried out by the Department of Agriculture, the fixing of prices, carried out by the Prices Commissioner, and the licensing of producers and treatment plants (and, since 1967, milk vendors) carried out by Local Boards of Health, and, in addition, to support the operation of the equalization scheme.

PRODUCTION:

Milk is supplied to the processing plants by producers licensed by the Metropolitan Milk Board. The area from which milk is drawn at present covers about 4,000 square miles, extending approximately 25 miles north, 40 miles east, and 80 miles south east, being bounded by the coast on the west and south.

The area was extended by about 500 square miles (but including only about 70 dairy farms) in 1961.

During the 22 years of Milk Board operation the number of producers has declined from about 3,200 in 1948, producing about 30 million gallons annually, to 1,969 at 1st July, 1969, with a total production during 1968-69 of 53¼ million gallons, and an estimated production for the current financial year of 60 million gallons.

Dairy cattle numbers total about 120,000 (including heifers) with an average annual production per cow of 675 gallons.

Milk from licensed producers is picked up by eight processing companies, each of which is a signatory to the Milk Prices Equalisation Agreement, namely, Adelaide Milk Supply Co-op. Ltd., Dairyvale Co-op. Ltd., Harrison Bros., Jacobs Dairy Produce Co.; Jervois Co-op. Ltd., Lakeside Co-op. Ltd., Myponga Co-op. Ltd., Southern Farmers Co-op. Ltd.

SALES:

Milk picked up by processing companies is delivered either direct to city bottling plants or to country cheese factories for chilling and dispatch to city bottling plants. Surplus milk is processed, by the company concerned, into cheese or milk powder or casein.

After bottling the milk is dispatched on the treatment plant's transport to lock-up distribution centres, where it is picked up by retail vendors, generally self-employed, for delivery to households and shops within the "metropolitan area as defined under the Metropolitan Milk Supply Act."

Sales are declining in terms of units per head but are increasing very slightly in total, and stand at present at just under 20 million gallons, or about .58 pints per head per day.

STANDARDS:

Standards for milk and cream are set by the Metropolitan Milk Board, and are:

Milk

Total solids 12.0% minimum
SNF 8.5% minimum

The average milk fat test is about 3.80%, and solids-not-fat 8.70%. Methylene blue reductase test is currently 4+ hours, but is to be increased on 1/7/71 to 5½+ hours.

Cream

Provision is made for 4 types of cream: —
Scolded (52% fat minimum)
Rich (45% fat minimum)
Standard (35% fat minimum) which may be thickened
Reduced (25% fat minimum).

PACKAGING:

Milk is currently being sold as loose (5% of total), bottled (91%) and cartoned (4%, generally homogenized, including quart pure-paks).

Cream is sold retail only in cartons.

The retail sale of loose cream is prohibited.

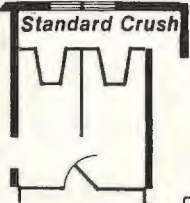
PRICES:

The prices to be paid to producers, and the margins available to processors and retail vendors are fixed by the Milk Board, but the actual return received by the producer is derived from the equalization scheme, and the figures shown below in respect to the producers' prices do not represent the actual realization.


Milk—

The price to the producer is **44 cents per gallon** (but subject to equalization) at farm gate, no charge being made for cartage. Cans are supplied by the processor.

Dairy Equipment and Accessories by *Steriline*

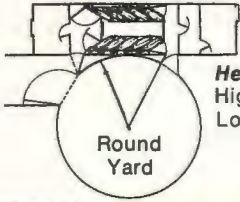


Standard Crush



4 rail yard with Entrance Gate, Built-in Veterinary Bail and Elevating Race.

BAILS



Herringbone
High Level
Low Level

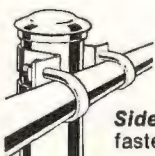
Round Yard

YARDS

Continuous Rail to suit your requirements

- Pre-curved rails to radius required.
- Prefabricated Veterinary Bails, Elevating Races, etc.
- Heavy duty galvanized gates.


Section of Round Yard with Truss type backing-up Gate-Hinges allow gate to follow floor. Rubber-tyred wheel can be motor driven.




FITTINGS


Side-Rail Clamps—stronger, faster, cheaper construction

Clamp-on galvanized Purlin Cleats for $\frac{3}{4}$ " , 1" $1\frac{1}{4}$ " , $1\frac{1}{2}$ " pipe.






Joint Clamps—no threading




Weld-on Purlin Cleats (Black or Galvanized).

SHEDS

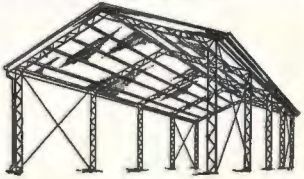
Complete or Frames only for Hay and Implements.



IMPLEMENT



FRAME



HAY

For further information, prices and quotes, contact your local supplier or **Steriline Distributors Pty. Ltd.** Mannum Road, Murray Bridge, S.A. P.O. Box 434. Telephone 32 2033. A.H. 32 1851

Retail Prices to consumers (cents per unit)

Loose	½ pint	5.	1 pint	10.	2 pints	19.
Bottle:	½ pint	6.	1 pint	10.		
Carton:	½ pint	6.	1 pint	11.		

Cream—

The price to the producer is **22.5 cents per gallon for milk used for cream** (but subject to equalization)

Retail Prices (Maximum) to consumers (cents per unit)

	Scalded	Rich	Standard	Reduced
¼ pint	—	17.0	15.0	—
½ pint	—	23.0	20.0	—
¾ pint	39.0	33.0	28.0	25.0

ADMINISTRATION:

METROPOLITAN MILK BOARD: consists of one full-time Chairman, two part-time ordinary members, full-time secretary, and staff.

Neither the Chairman nor the two ordinary members of the Board may have any connection with the production, processing, or selling of milk.

The Board is responsible for—

Licensing of milk producers, treatment plants, retail vendors.

Setting and policing of standards for farms, premises, equipment, quality of milk and cream.

Inspection and supervision of farms, treatment plants, vendors' premises and vehicles.

Price fixing.

Zoning of retail delivery areas.

The Board was given, by an amendment to the Act in 1967, power to engage in the promotion of milk and cream.

MILK PRICES EQUALIZATION:

The first step in carrying out the milk price equalization scheme is the setting of a Basic Price, which is the price paid for milk for manufacture (into cheese) and is determined monthly by agreement between the South Australian Dairymen's Association and the Wholesale Milk Buyers and Distributors Association. The Basic Price is based on the current Commonwealth Equalization Committee's interim value for cheese, less allowances for cartage and processing, and is expressed in terms of a rate per pound milk fat, at the farm gate.

The Basic Price is paid for all milk received during the month.

Milk processing companies then pay into the Equalization pool a "levy", equal to the difference between the Basic Price and the price fixed by the Milk Board for city milk, on all milk sold as city milk during the month. At the end of the month the total amount of the levies paid into the Equalization pool is divided by the total output (in pounds milk fat) of all licensed producers, and paid out to producers as a "city milk bonus". Thus in any month each licensed producer will receive for the whole of his output exactly the same equalized price per pound of milk fat as every other licensed producer, regardless of the proportion (if any) of his output sold as city milk.

PRICE SETTING:**Producers—**

The city milk price paid to the producer is based on a continuing Production Cost Survey carried out by the Investigating Officer of the Milk Board on a stratified sample of approximately 100 farms having more than 26 dairy cows and producing more than 5,700 lbs. milk fat annually.

The Assessed Production Cost is calculated from—

- (i) The actual expenditure (cash costs) on the following items—
 - (a) Rates and Taxes
 - (b) Fertilizers and seeds
 - (c) Fodder and Concentrates
 - (d) General Repairs and Maintenance
 - (e) Insurance
 - (f) Tractor and Vehicle Expenses
 - (g) Other Expenses.
- (ii) A calculated amount for—
 - (a) Depreciation (based on Income Tax rates)
 - (b) Interest on Capital (based on overdraft rates)
- (iii) A calculated allowance for labour.

Capital Valuation is assessed by the Investigating Officer and the farmer on a basis of State Land Tax Department's unimproved valuation plus estimated value of improvements, plant and stock, but without the value of the homestead.

Labour Allowance is not related to the number of persons working on the farm, but is calculated as follows—

- (i) A Working Proprietor's Allowance (WPA) based on the Victorian Dairy Farm Workers' Award rate for a Leading Hand, adjusted to the difference between Total Wage Rates for Victoria and South Australia, extended to a 7 day week totalling 56 hours, plus payment at the hourly rate to compensate for 3 weeks annual leave and 10 days statutory Public Holidays.
- (ii) a Managerial Allowance (MA) equal to 20% of the W.P.A.
- (iii) an allowance for other labour, based on the VDFWA rate for a General Hand working a 48 hour week, on the following scale—

The latest cost survey (12 months to 31/1/69) showed the following average production cost:—

Cash Costs	13.49 cents per gallon
Depreciation Allowance ..	2.82
Interest	5.90
Calculated Labour Allowance ..	16.30
	38.51 cents per gallon

In equating this cost to the price to be paid for milk, allowance must be made for—

- (i) the necessity to maintain production at a level substantially above the whole milk market requirement in order to provide a safety margin which is not taken directly into account when assessing the base cost;

anderson

REFRIGERATED FARM MILK TANK UNITS

The **first** and **only** manufacturer to have a **complete range** of units in Victoria (appointed as testing authority for farm milk by the State Government) and found to comply with all requirements.

CERTIFICATES OF TESTING

MODEL:	R150	R200	RH250 RL
CERT. No.:	C.P.65C9	C.P.66C3	C.P.66C1

National Standards Commission Pattern approval Certificate of Agriculture Research

- 7 models to choose from 150-500 gallons capacity • rigid stainless steel construction • Rigid polyurethane insulation



anderson

ADELAIDE: 179 Gilles Street
'Phone 23 4917

SYDNEY: WILLIAMS STREET
MELBOURNE: COLLINGWOOD STREET
BRISBANE: ST. GEORGE'S ROAD

(A Unit of DAIRY FARMERS ASSOCIATION)



units tested by the State Electricity Commission of
the Australian Standing Committee on Agriculture)
Standard N46-1963.

OF PERFORMANCE

R250	R300	R400	R500
C.P.66C10	C.P.66C8	C.P.66C13	C.P.66C9

**SC No. 8/4 Complies with Milk Board and Department
standards in every State.**

• Round design for minimum space requirements • All
• Insulation • Low height for easy cleaning.

For information contact

equipment

cc-operative Ltd.

100 & Egerton Sts., Lidcombe, N.S.W. 648-1084.

100 Charles St., North Coburg, Victoria. 35-2347.

100 Stanley St., South Brisbane, Qld. 4-5452.

(CC-OPERATIVE LTD.)

- (ii) The fact that interest on capital is calculated on an estimated capital value which is based on a quinquennial land valuation and does not provide for increases in land value over the 5 year period;
- (iii) the fact that depreciation is based on historical cost and not on replacement cost;
- (iv) the fact that no allowance can be provided for inflationary trends during the period of the survey.

Statistics relating to the sample of 100 farms in the Production Cost Survey are:—

Average Production	37,132	gallons
	16,839	lbs. milk fat
Average Area	178	acres
Average no. of cows	53	
Production per cow	697	gallons
	316	lbs. milk fat
Production per acre	208	gallons
	94	lbs. milk fat

CONSUMPTION:

It is not possible to calculate whole milk consumption per head with any great degree of accuracy, as the area in which the sale of whole milk comes under the Metropolitan Milk Supply Act does not always coincide with local government boundaries, and the area is increased from time to time in line with urban expansion. However the Board's estimates of consumption per head are—

1958/59	0.62	pints per day
1968/69	0.58	pints per day

PROMOTION:

No promotion of whole milk is undertaken in South Australia. In 1967 the Metropolitan Milk Supply Act was amended and amongst the amendments was a provision permitting the Milk Board to provide funds for promotion by means of a levy on whole milk sales, and to engage in promotion.

A cream promotion campaign is now being conducted but the funds are being provided by producers and administered by a Committee of producers' and processors' representatives with no Milk Board representation.

The success of this campaign will provide a lead for the possible promotion of milk with finance and administration provided in a similar manner.

REFRIGERATION:

The Regulations under the Metropolitan Milk Supply Act require only that after milking, milk shall be cooled by water, or where running water is not available, by some other efficient method approved by the Board.

However, despite the absence of compulsion to do so, there has been a strong movement towards mechanical refrigeration, and at present—

26.6% of farms are equipped with shock cooling and/or refrigerated can storage equipment;

33.4% of farms are equipped with refrigerated bulk milk tanks complying with ASN 46.

In addition 3.4% of farms are equipped with unrefrigerated bulk milk tanks.

THE DUTIES OF A METROPOLITAN MILK BOARD DISTRICT SUPERVISOR

By L. M. Gee, F.A.I.H.S., Diploma in Public Health Inspection:
District Supervisor Southern Hills

It was on the 13th July, 1951, that I received a letter from the Secretary of the Metropolitan Milk Board informing me that my application for the position of Dairy Adviser had been accepted.

The list of duties given then were as follows:—

Inspection of dairy premises, plant, equipment and stock.

Inspection of milk treatment plants and premises.

Examination of milk delivery vehicles.

Advising licencees re improvements or alterations to premises, plant and equipment.

Obtaining samples of milk or fresh cream as directed.

Generally carrying out the provisions of the Metropolitan Milk Supply Act and the Regulations thereunder.

Since my appointment to the Milk Board staff a little more than 18 years ago I have carried out my duties as a District Supervisor in two of the five districts which are within the Metropolitan milk producing area; namely—the Lower Murray Irrigation and Lakes district for a period of 16 years and more recently the near Southern Hills district for a period of two years.

During this time I have visited approximately one thousand individual dairy farms and this has given me the opportunity to interview and to assist dairymen in many different ways.

The District Supervisor in addition to giving his individual attention to approximately four hundred licensed dairy farmers also finds it essential to work in close contact with a variety of other people. Some of these people include the following:—

Personnel from the Department of Agriculture.

Personnel from the District Councils.

Personnel from the Public Health Department.

Personnel from the Engineering and Water Supply Department.

Dairy Factory Managers and their senior staff.

Dairy Factory Field Officers.

Veterinary Officers.

The Representatives employed by the manufacturers of milking machines, refrigerated farm milk tanks, etc.

Builders, Electricians, persons engaged in the installation of refrigerated farm milk tanks and milking machines, etc.

Very early in his career the District Supervisor soon becomes aware of the importance of good public relations. In the first issue of the Australian Health Surveyor Journal which was published in July of this year there is an excellent article written on Public Relations and their application to the Health Inspector. It was written by Michael C. Moore, M.A.I.H.S., Competition Winner, 1967, New South Wales Division. The article has been very ably written and it explains fully what every Milk Board Supervisor has been striving to put into practice for many years. Because the understanding of human nature is so vital in the District Supervisor's field of work I would like to quote a few paragraphs.

"In dealing with people it is seldom possible or essential to understand fully the causes of their actions. It is essential, however, to realise that their behaviour is motivated. Its source may lie in the depths of their personalities. The recognition that much human motivation is unconscious will

enable the interviewer to be more tolerant, less condemnatory and thus better able to achieve his object.

In seeking to help people, elicit information from them, or give instructions or directions to them, we need to listen not only to what they say but also to the undertones which reveal their feelings and give us clues as to more involved and more passionate feelings not overtly revealed.

Although a mile may seem short to you, to tell a woman who has laboriously walked that distance that she shouldn't feel tired is useless, to say the least. To tell an emotionally upset person that he should be calm may succeed only in erecting a barrier against further discussion of the matter causing the upset. Far better to first establish some sort of rapport, such as respect, confidence in ultimate just treatment, or some other common ground. Even the most trivial of subjects can be discussed at this stage. The purpose is to give tempers time to cool (sometimes on both sides), and brains time to work — so careful thought can bring full realisation of the situation and its implications. Then the subject of the interview can be discussed rationally and the most satisfactory results arrived at."

The District Supervisor when carrying out his many duties is deeply conscious of the fact that he has at least two major responsibilities which I believe he also regards as a challenge. Firstly, at farm level he has the job of ensuring that all city milk whether it be used as liquid milk or for manufacturing purposes is of a consistently higher quality than the minimum standards which are laid down by the Regulations. Secondly, it is his responsibility to ensure that all city milk is at all times being produced in clean dairies and in accordance with the conditions which are also laid down by the Regulations.

In order to assist the District Supervisor with his work the results of the methylene blue tests which are carried out on the milk received from licensed producers at the Milk Receiving Plants are posted from the Milk Board office to each District Supervisor after the completion of four consecutive tests. This applies to the milk which is received in cans.

In the case of farm refrigerated bulk milk which is picked up at the farm by road tanker the results of the pre-incubation methylene blue tests which are carried out on this milk are posted to each District Supervisor after the completion of three consecutive tests.

When the District Supervisor receives these results he immediately examines them and underlines the names of those producers who are located in his district and need special attention.

For the purpose of gaining a more frequent knowledge of the methylene blue results it is customary for the District Supervisor to make a regular visit to each of the Milk Receiving Plants which are situated in his district. These visits also enable the District Supervisor to keep in close contact with the Dairy Factory Managers and their Field Officers all of whom pass on information which is helpful to the Supervisor in his field of work.

When the District Supervisor learns that the quality of the milk being produced on a licensed dairy farm does not comply with the standards which are laid down by the Regulations he will endeavour to visit the producer concerned as quickly as possible.

Considering the heavy financial loss which a city milk producer incurs when his milk licence is suspended by the Board I find it difficult to understand why more producers do not seek advice from their District Supervisor immediately they experience problems with milk quality.

Those who have a wealth of experience in the dairying industry have asserted that if they had to choose between the laboratory and well trained Supervisors to operate a quality control programme at farm level they would be much better off with the Supervisor. Other experts say the opposite.

However, many years of experience has shown me that in order to effectively carry out a quality control programme, farm inspection work and laboratory testing are very much dependant on each other. I feel that other Supervisors would agree with this statement.

Over the years licensed producers in this State have become very conscious of these dairy hygiene inspections which are carried out by the District Supervisors without any prior notice being given to the producer.

These regular inspections also provide the District Supervisor with the opportunity to exercise his skill in trying to stimulate and influence the producer to attain a higher standard of efficiency in the production of high quality milk. The vastly improved conditions under which milk is now being produced on most licensed dairy farms in South Australia is sufficient evidence to show the good influence which the Milk Board Supervisor has had upon the dairy farmer in this State.

Before a District Supervisor proceeds to inspect a dairy or the equipment therein he should make every effort to contact either the licensee, the share dairyman or the person in charge. In order to gain the maximum benefits from an inspection it is most essential to have one of these persons with him when the inspection is being carried out. The energy used and the time spent in driving or walking about farm property trying to find the dairyman concerned is in most cases well worth the effort.

I have found the practice of leaving verbal messages or written instructions in the dairy for the dairyman to find to be of little value for seldom does this method of communication achieve the desired result. If the dairyman cannot be found and the seriousness of the complaint warrants it, it is essential for the District Supervisor to contact the dairyman in question preferably by telephone and arrange to see him at the farm the next day.

Faulty cleaning methods within the dairy premises can be quickly detected by the critical eye of the keen and experienced Supervisor. The careful inspection of all milk handling equipment together with some questioning by the Supervisor will in most cases give a clear picture of the cleaning and sanitising procedure which is being carried out by the producer. Inspection after the evening milking is most enlightening as few producers do as thorough a job of washing the milking equipment then as after the morning milking. Inspection at milking time also frequently proves to be an eye-opener.

The aim of the District Supervisor is to seek the co-operation of the producer and encourage him to do a better job whenever this is found to be necessary.

If after two or possibly three routine visits to a farm the Supervisor finds that the producer is disregarding his advice by refusing to properly clean his dairy premises or milk handling equipment the Supervisor will then give a verbal warning together with instructions to the producer to carry out certain work within a specified time. The time allowed depends on the seriousness of the complaint.

When the re-inspection is made by the District Supervisor after a verbal warning has been given he more often than not finds that the producer has reacted favourably by carrying out his instructions.

In these cases where instructions have been completely ignored the District Supervisor will then recommend to the Board that warning letter be forwarded to the producer concerned.

If further inspections reveal that the producer is still failing to maintain his dairy premises or milk handling equipment in a clean condition the District Supervisor will then recommend to the Board that the producer's licence be suspended.

Whenever the Board deems it necessary to use this form of disciplinary action towards a careless producer he will nearly always respond by promptly carrying out the work which the Supervisor had instructed him to do.

Every endeavour is made by the District Supervisor to treat each individual producer with the utmost fairness at all times and this is perhaps the reason why the producer very seldom displays any resentment towards the Milk Board or the District Supervisor when the Board decides to suspend his milk licence for reasons of poor dairy hygiene.

During the period of twenty-two years since the establishment of the Metropolitan Milk Board in August, 1947, licensed producers in this State have spent according to my reckoning almost ten million dollars on new dairy buildings, dairy renovations and milk handling equipment.

In most instances the modern dairy buildings of today have been built by skilled tradesmen and when properly equipped these buildings could cost the producer somewhere between nine thousand dollars and fourteen thousand dollars.

The cost of building and equipping the larger and more elaborate dairies which often include feed storage space and automatic bail feeding facilities is much higher than fourteen thousand dollars.

In recent years some of the producers with the larger herds have shown increasing interest in the construction of Herringbone dairies which can be equipped with lowline milking machines.

The Herringbone dairy lends itself to many different changes in design and for this reason producers tend to become confused when trying to make a decision on the type of dairy premises they wish to build.

It is even more confusing to the builder of a new Herringbone dairy when he has not been supplied with proper dairy plans and specifications. I have seen many costly mistakes made during the construction of these dairy buildings just because sufficient detail has not been shown on the dairy plan.

The layout of concrete yards, stock races and liquid manure disposal systems should also be included with the dairy plan.

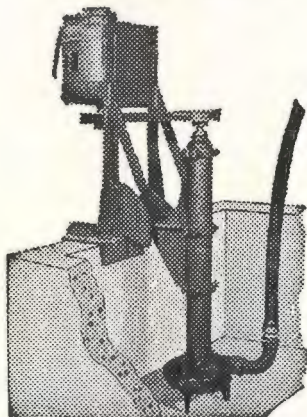
This would not only assist in helping to minimise the risk of mistakes being made but it would also impress upon the producer that he is required to provide all of these facilities.

The District Supervisor is always most concerned when he detects faults in a new dairy building or yard layout because when they are found it is quite often too late to have them rectified properly.

Firstly because it is his duty and secondly because of the large capital expenditure required to build new dairy premises the District Supervisor devotes much of his time and places a lot of importance on seeing that both the producer and the builder receive the best possible advice on all aspects of dairy construction.

While the District Supervisor may take pride in his achievements he is not unmindful of the tremendous amount of work which still remains to be done in order to further improve the standard of milk quality and dairy buildings in this State of South Australia.

In conclusion it can be said that important changes and improvements are occurring in the dairying industry almost continually and in order to impart the best available knowledge to the producer the District Supervisor must continue to up date himself and keep abreast with the changes.



DUMAC FILTER-CUT LIQUID MANURE PUMP

Designed for efficient Liquid Manure and Waste disposal in Dairy, Piggery or Poultry Farm. Versatile and efficient —saves you money.

**"DISPERSA" LIQUID
MANURE SPRINKLER,**
coupled to your IBC-
DUMAC Filter-Cut pump
gives you even distribu-
tion of effluent over large
areas of pasture.

Simple installation—just mount the pump (as illust.) over the edge of a small pit, round or rectangular, 2 to 6 feet deep. No priming required as the pump is immersed in the liquid. Easy maintenance—"tip up" for inspection. 1½ in. and 2 in. models, Heads to 110 feet, capacities to 275 GPM. Electric Motor, Petrol Engine or Tractor Drive.

POST COUPON TODAY!

Send now for more details
of the IBC-Dumac Filter
Cut Liquid Manure Pump.
No obligation!

IBC/ESCA LTD.

"Water House" 98 Churchill Road,
Prospect, S.A. 5082
Phone 65 6944

MT. GAMBIER: Stuart Richardson,
5 Rotary Ave., S.A. 5290
Phone 2 3482

NAME.....

ADDRESS.....

.....POSTCODE.....

Prices and Statistics

ADELAIDE METROPOLITAN MILK SUPPLY AREA

PRODUCTION (000 gallons)

	For Month		Total since July 1		Total since Jan. 1	
	1968	1969	1968/69	1969/70	1968	1969
Oct.	5,834	6,512	19,332	21,824	39,956	44,942
Nov.	5,609	6,028	24,941	27,852	45,565	50,970

MILK SALES (000 gallons)

	For month		Total since July 1		RATIO		C.M.B.	
	1968	1969	1968/69	1969/70	per cent	per cent	1968	1969
Oct.	1,813	1,845	7,190	7,241	31.1	28.3	19.08	18.65
Nov.	1,766	1,802	8,956	9,043	31.5	29.9	19.41	19.56

Moving average ratio for 12 months ended 31/10/69, 38.92%;
30/11/69, 38.70%.

INTERIM PRICES TO LICENSED SUPPLIERS

(All prices are interim only and subject to adjustment by retrospective payment)

1969	Basic C.M.B. Total			3.5%	4%	4.5%	5%
	(cents per lb. butterfat)						
Oct.	36.89	18.65	55.54	20.1	23.0	25.8	28.7
Nov.	36.89	19.56	56.45	20.4	23.3	26.2	29.1

LONDON PROVISION EXCHANGE QUOTATIONS

(Sterling Currency per cwt.)

	October		November	
	1968	1969	1968	1969
Butter—Choicest Australian	300/-	300/-	300/-	300/-
Cheese—Rindless Australian	225/-	225/-	225/-	230/-

CHEESE VALUES

RETROSPECTIVE PAYMENT FOR 1968/69

The Commonwealth Dairy Produce Equalisation Committee Limited, at its meeting on February 3rd, 1970, reported that final details of cheese values for 1967/68 period were not expected to be available until later in the quarter, but as previously advised, it did not expect that the final value would be much in excess of the current average value for the period, and the final payout would be very small.

A retrospective adjustment has been made for the 1968/69 period, increasing the cheese value by \$0.76 per cwt. cheese, equivalent to 1.73 cents lb. butterfat. Licensed producers in the Adelaide Milk Supply Area will receive a retrospective payment of 0.92 cents lb. butterfat (equalized) on all production during that season. There is the possibility of a small final payment for the season later in the year.

Although the position for the current (1969/70) season is better than was earlier feared, due mainly to the response by manufacturers to a request for reduced output, there is no sign at the present time for any increase in the values now being paid.



WORLD'S LARGEST MOTORCYCLE MANUFACTURER

HONDA

HONDA MOTOR CO., LTD. TOKYO, JAPAN

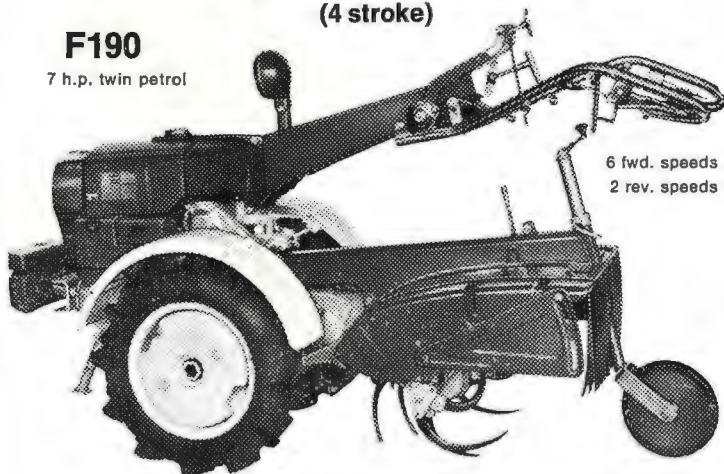
TILLERS

NO TASK TOO HARD

for this mighty HONDA 7 HP twin cylinder
(4 stroke)

F190

7 h.p. twin petrol



6 fwd. speeds
2 rev. speeds

Designed and Built for the
Contractor or Market Gardener
with loads of work — even
at night (headlight standard equipment)

OTHER MODELS AVAILABLE: F28, F40, F100 (DIESEL)
AND A FULL RANGE OF IMPLEMENTS FOR ALL JOBS

Wm. HAUGHTON & CO. LTD.

S.A. & N.T. DISTRIBUTORS, 10 KINGSTON AV., RICHMOND, S.A. 5033

Telephone 52 1666