Competitive Performance of Formal and Informal Milk Marketing Channels in Northern Tanzania: The Case of Hai District

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Introduction

Despite constraints on production, efforts to promote smallholder dairying in Northern Tanzania have had a positive impact especially in highland areas where tsetse flies are absent, heat stress is low, and ample rainfall give the potential for abundant fodder production. One such area is the highlands of Hai District in Tanzania where dairying has been expanding and intensifying over the last ten years or so, resulting in milk production above the amount that can be consumed locally in dairy producing villages.

According to Mdoe (1993), 87 percent of 120 dairy producing households interviewed in Hai District in 1990 reported milk surpluses above household requirements. The opportunity of selling the surplus milk directly to consumers in the dairy producing villages has been declining over time due to increase in the number of households keeping dairy cattle. Only 11 percent of the households interviewed District in 1990 were able to sell their milk directly to ultimate consumers (Mdoe 1993). Most of these households disposed off their milk through market intermediaries for sale to distant markets outside the dairy producing villages.

The main intermediaries in the milk marketing system in Northern Tanzania are Tanzania Dairies Limited (TDL), dairy cooperative and small milk traders. Since milk is one of the most perishable products, an efficient milk marketing system is necessary to dispose off the surplus milk to distant markets. This paper compares the performance of the various milk marketing channels in Hai District using survey and secondary data collected in 1990.

Formal and Informal Marketing Channels in the Marketing System for Milk in Hai District

Kaynak (1986) defines a marketing system as "the sequence of transactions and commodity movements between the producer and the ultimate consumer". Such a sequence includes bulking (or assembly) and distribution. Alternatively, the marketing system may be defined as the process of creating form, time and space utility (Kohls and Uhl, 1985).

In this paper, a marketing system for milk involved all elements that influence, directly or indirectly, the movement, transformation and price of fresh milk once it leaves the point of production. These include: (a) collection of milk from dairy producers (b) the transformation system, if any, which processes and/or packages milk products for final consumption (c)the transportation system that moves milk and milk products between functions (a) and (b).

The marketing functions mentioned above were performed by market intermediaries. Three major market intermediaries can be distinguished in the marketing system for milk in Northern Tanzania: Tanzania Dairies Limited (TDL), dairy cooperative and small milk traders. The common feature among these marketing agents was that they all purchased fresh milk from dairy producers and the major product which they distribute to consumers was liquid milk.

Depending on the involvement of the market intermediaries in the marketing of milk from the producer to the consumer, the following marketing channels were observed:

- i) Producer--->Consumer
- ii) Producer--->Small Milk Trader--->Consumer
- iii) Producer--->Small Milk Trader--->Retailer--->Consumer
- iv) Producer--->Dairy Cooperative--->Consumer
- v) Producer--->Dairy Cooperative--->Retailer--->Consumer
- vi) Producer--->Tanzania Dairies--->Consumer

The pattern of the milk marketing channels and parts played by each marketing intermediary are shown in Figure 1.

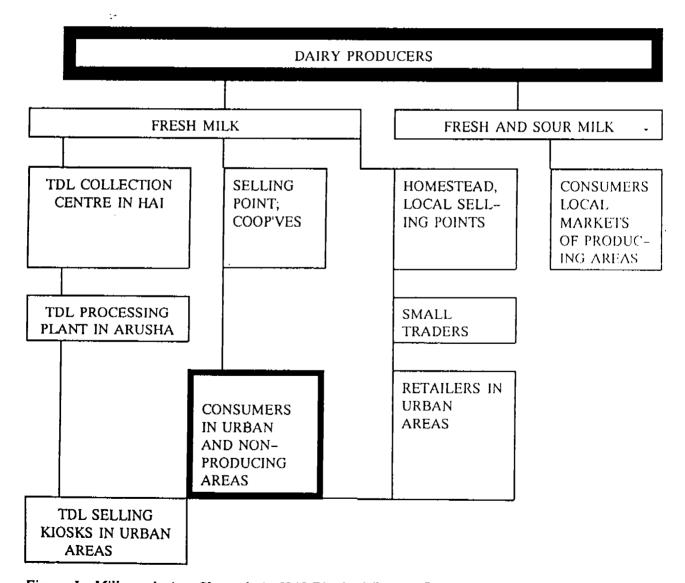


Figure 1.: Milk marketing Channels in HAI District. (Source: Survey, 1990.)

All milk that is sold through TDL (channel vi) is said to pass through a formal market. The informal market consists of direct sales to ultimate consumers (channel i), milk sales through small milk traders (channels ii and iii) and milk sales through dairy cooperative (channels iv and v).

Tanzania Dairies Limited is a parastatal organization, which according to the 1983 Livestock Policy is charged with the responsibility of (i) collecting fresh milk from dairy producers especially those in rural areas far from dairy processing plants, (ii) processing fresh milk into standardized milk and milk products, and selling and distribution of high quality milk and milk products to consumers in urban areas. TDL owns and operates seven milk processing plants located in Arusha, Dar es Salaam, Mbeya, Musoma, Tabora, Tanga and Utegi. The Arusha TDL milk processing plant which processes milk collected from Hai and other areas in Northern Tanzania is the relevant plant for the study. In Hai District, TDL has four milk collection centres located at Sanya Juu, Boma Ng'ombe, Kialia – Foo and Rongai.

Cooperatives in dairy production in Hai District emerged after the re-institution of cooperative societies in 1982. They emerged as organizations affiliated to the primary cooperative societies but membership to the dairy cooperatives is voluntary. Nronga, Ng'uni and Losaa cooperative societies were the only existing dairy cooperative societies in Hai District during the time of the field survey in 1990. The major activity of these dairy cooperatives was milk marketing. Only Nronga and Ng'uni dairy cooperatives were studied.

Small milk traders are those individuals who purchase relatively small quantities of milk from smallholder farmers and distribute them in markets elsewhere. Three different types of small milk traders were identified during the field survey in 1990. They were categorized on the basis of the type of transport used in milk collection and distribution as those: (i) using bicycles (ii) using own vehicle, and (iii) using hired transport. The means of transport used determined the volume of milk that could be handled by the small milk traders.

Framework for Analysis and Methodology

Framework for Analysis

Economists have had difficulty in defining an aggregate norm for evaluating performance of marketing systems. No single criterion of performance seems to exist.

The marketing system for dairy products in Northern Tanzania is complex. The complexity stems from the mixed nature and differing objectives of the market intermediaries involved. The objectives of private small milk traders may be purely commercial i.e. maximize returns. In the case of TDL which is public organization, the objective of maximizing returns may be shared with a set of social and other non – commercial objectives. One of the objectives of TDL was to run the organization as a profit—earning entity but this objective has often been shared with social and non – economic objectives like providing employment.

When public marketing institutions are used to meet broader economic, social and other non - commercial objectives, it is unlikely that they can be required to operate according to market criteria without sacrificing some commercial objectives for non - commercial ones (Due, 1987). For the marketing system for milk in Northern Tanzania, these sacrifices affect not only the milk market intermediaries but also producers and consumers who are also participants in the milk marketing system (Figure 1). Each set of participants has expectations of objectives and these objectives may be conflicting. Whilst consumers frequently complain about high and fluctuating food prices, producers complain about low and fluctuating prices for farm products. Therefore, it is not sufficient to compare the operational efficiency of the market intermediaries in assessing performance of the marketing system. It is necessary to use a framework that takes into account all the market participants.

pants and their objectives or expectations. Furthermore, many of the issues that relate to changing the structure and conduct of the marketing system for dairy products are public policy issues as stated in the 1983 Livestock Policy document. The Tanzania dairy policy aims at stimulating development in the dairy industry in order to increase the incomes of dairy producers and attain self sufficiency in dairy production. It also aims at distributing high quality milk products to consumers at economical prices.

Given the foregoing, the framework for comparing the performance of the milk marketing channels consists of: (i) specifying general objectives which combines the expectations of objectives of the market participants and the aims of the Tanzania dairy policy; (ii) defining a set of performance indicators that represent the various general objectives specified in (i); and (iii) specifying a set of quantifiable measures that represent each of the indicators and provides the basis for the analysis.

The following are the specified overall objectives, indicators of performance and their quantifiable measures:

Objective 1: To stimulate and facilitate the efficient production, collection and distribution of high quality dairy products to consumers.

Indicator 1: Level and stability of producer prices. measures: Level, trend, variation in producer prices.

Indicator 2: Price spreads and marketing costs.

Measures: Price spreads, marketing costs and margins.

Indicator 3: Quality of dairy products sold to consumers.

Measures: Number and type of product forms and grades and buyer preferences compared to available grades or forms of dairy products.

Objective 2: To ensure adequate supply of dairy products to consumers at economical prices.

Indicator 1: Market share

Measure: Volume of milk passing through channels.

Indicator 2: Level and stability of prices of dairy products paid by consumers.

Measures: Level, trend and variation in prices of dairy products paid by consumers.

The first objective contains three concepts. The first, emanating from the desire to stimulate production, relates to the level, stability and adequacy of producer returns. Although time series data on prices received by producers from TDL were available, no price trend analysis was carried out because similar information was lacking for dairy cooperatives and small milk traders. The second, price spreads and marketing costs is concerned with the operational and pricing efficiency of the marketing intermediaries. The third, high quality dairy products to consumers is concerned with consumers' preferences compared to the available product forms and quality standards.

The second objective concerns consumers of dairy products in Nothern Tanzania. Again, no trend analysis was carried out because of unavailability of time series data on milk prices paid by consumers.

In addition to the above indicators, the timeliness in effecting payments to producers was also used in comparing the relative performance of the market intermediaries. This variable is influenced by the activities of the market intermediary concerned, where lags and delays in effecting payments may exist on account of bureaucratic and administrative procedures. Delayed payments after selling milk

was one of the marketing problems reported by the sample dairy producing households.

Methodology

The flow of milk from dairy producers to ultimate consumers in the various milk marketing channels shown in Figure 1 was studied in detail through collection of both secondary and primary data. Secondary data were gathered from Tanzania Dairies Limited and dairy cooperatives. Primary data were collected through wide scale sample surveys conducted in 1990. A total of 120 dairy producers, 340 milk consumers, 17 small milk traders, TDL management and members of two well established dairy cooperatives: Nronga and Ng'uni dairy cooperatives.

Results and Discussion

The results of the study are presented and discussed in this section according to the performance indicators presented in the framework for analysis. The description of the individual indicators is followed by an overall rating of the market intermediaries on the basis of these indicators.

Market share

Table 1 presents the estimated quantities of Hai milk that passed through the different market outlets in 1990. The volume of milk marketed through dairy cooperatives and small milk traders also represents the volume of milk distributed by each of these market intermediaries to retail markets and/or directly to consumers. For the TDL milk processing plant in Arusha, the fresh milk collected from Hai District represents only a fraction of its total output of dairy products. The other fraction is produced using fresh milk from other areas and skimmed milk powder and butter oil.

Table 1: Type of Information gathered From Secondary and Primary Sources				
Source	Information Gathered			
Secondary:				
Tanzania Dairies Limited (TDL)	Quantity of fresh milk from local sources, quantity of skimmed milk powder and butter oil, types of dairy products, total production, capital, processing and marketing costs, total sales and milk prices			
Dairy Cooperatives	Volume of milk collected and marketed, marketing and other costs, milk prices.			
Primary				
Dairy producers	Cattle numbers and performance, milk produced, consumed at home and marketed, points of sales, prices received.			
Small milk traders	Marketing activities, dairy products traded; equipment, means of transport, capital and marketin costs, marketed output and milk prices.			
TDL staff	Activities, problems and prospects of TDL			
Leaders and members of				
Dairy cooperatives	Cooperative activities, benefits to members and problems faced.			

Table 2: Hai District: Estimated volume of Milk by Market Outlet in 1990 (Thousand litres)

Market outlet	Volume of Milk
Tanzania Dairies Dairy Cooperatives Small Milk Traders Direct Sales to Consumers	1,971 470 6,583 999
Total	10,123

Source: Survey Data 1990.

• The informal market share which refers to the volume of milk marketed by Hai District producers through channels i to v is important, accounting for about 81% of the milk marketed in 1990. Of the informal market share, small milk trades handled the largest volume marketed in Hai District in 1990 (Table 2), implying that small milk traders were more effective in marketing milk from smallholder dairy producers in Hai District.

Producer Prices

The dimensions of prices received by producers as an indicator of relative performance of the market intermediaries include absolute price levels and price stability. Because of lack of time series data on producer prices for analyzing price variation over time, average milk prices received by producers from the alternative marketing channels during the rainy and dry season in 1990 were used in the analysis.

Table 3 shows that the highest price was received by producers who sold their milk through Ng'uni dairy cooperative. The lowest price was received by producers who sold their milk through TDL. Price offered by TDL varied according to grade of milk delivered by the producer. In 1990, the prices were T.shs. 55.00 for grade I, Tshs. 50.00 for grade II and Tshs. 49.00 for grade III. These prices were announced annually at the beginning of July in each year and all producers receive the same price for a given grade regardless of the time of the year. Table 3 shows that prices received from small milk traders and direct sales to end consumers in 1990 were different between rainy and dry season. The prices were higher in the dry than rainy season because of relatively low milk supply during the dry season.

Table 3: Average Milk Prices Received by Smallholder Farmers From each Market Outlet by season in 1990 (T.sh/litre)

Market Outlet	Rainy season	Dry season	Mean
Tanzania Dairies Dairy Cooperative	51.33	51.33	51.33
Nronga	67.00	67.00	67.00
Ng'uni	7.00	7().()()	7().()()
Small Milk Traders	63.70	65.90	64.80
Director Sale to Consumer	58.90	63.65	61.07

Source: Survey Data, 1990.

Farmers also were concerned about price stability. It is apparent from table 2 that households which sold their milk through dairy cooperatives experienced stable milk prices throughout the year. It is also clear from the table and TDL pricing system that dairy producers selling milk through TDL would experience stable prices for a given grade within a given year despite the relative lower prices offered by TDL.

Considering both the level of prices and their stability, dairy cooperatives appear to be more effective than TDL and small milk traders in terms of their ability to provide incentives to smallholder farmers by offering high and stable producer prices.

Timeliness in Effecting Payments to Producers

Tanzania Dairies Limited and dairy cooperatives followed a similar procedure of monthly payment to dairy producers but producers who sold their milk through TDL complained delayed payment. All the interviewed households which sold their milk through TDL indicated delayed payment as one of the major problems they faced. This was certainly not the case for dairy cooperatives and small milk traders. Although dairy cooperatives followed the same monthly payment procedures as TDL,

farmers received their payments promptly. None of the sample household which sold milk through dairy cooperatives and small milk traders complained about delayed payment. Small milk traders effected payments immediately at the time of collecting milk, implying that small milk traders were more effective than TDL and dairy cooperatives in exercising timeliness in effecting payment to producers.

Consumer Prices

Unlike producers whose objective was high prices for their products, consumers were concerned about paying low and stable prices. It is the intention of this section to compare the relative performance of the milk market intermediaries from the view point of the level and stability of prices paid by consumers who purchased milk from their retail outlets in urban areas.

Table 4, presents a comparison of average prices paid by milk consuming households in Moshi town¹ during the rainy and dry season in 1990. The information was obtained from sample milk consuming households which purchased milk directly from the market intermediaries. As can be seen from Table 4 consumers who purchased milk from TDL milk selling points paid significantly (p<0.-05) more money than those who purchased milk directly from dairy cooperatives and small milk traders. The lowest milk price was paid by consumers who purchased milk from Nronga dairy cooperative. It is also apparent from Table 4 that prices charged by cooperatives and small milk traders varied in 1990, consumers were charged high prices in the dry season when milk supply was low. Although prices charged by dairy cooperatives and small milk traders varied according to season, these prices were near identical in each season, indicating perhaps a competitive milk market. For TDL, the same pricing procedure of announcing producer prices in July each year was used for consumer prices. Thus, the same price was paid by all consumers who purchased milk from TDL irrespective of the time of the year.

Table 4: Liquid Milk: Average Consumer Prices in Moshi by Market Intermediary and Season, 1990 (Tshs/Litre)

Market Outlet	Rainy season	Dry season	Mean
Tanzania Dairies Dairy Cooperative	105.00	1()5.00	105.00
Nronga	86.70	89.30	88.00
Ng'uni	87.00	93.00	9().()()
Small Milk Traders	86.20	92.00	89.10

Source: Survey Data, 1990.

It is clear from Table 4 that Nronga dairy cooperative was more effective in terms of its ability to create satisfaction among consumers by charging relatively lower prices than TDL and small milk traders. TDL, on the other hand, was more effective than small traders and dairy cooperatives in terms of charging stable retail milk prices despite the relatively high prices paid by consumer.

Most of the surplus milk from the Hai District was sold to consumers in Moshi town.

Marketing costs and Margins

Table 5 summarizes the marketing costs and margins to milk marketing intermediaries in 1990. As can be seen from Table 5 small milk traders incured the lowest cost per litre of milk marketed in 1990. The highest costs per litre of milk were incurred by TDL. Figure 2 shows the various cost components in milk marketing as a percent of the total milk marketing costs. As can be seen from Figure 2 expenses on transport formed the largest percentage of the total milk marketing costs for dairy cooperatives and the small milk traders who transported their milk using hired vehicles. For TDL, transport costs formed about 30 per cent of the total milk marketing costs, compared to miscellaneous costs which formed the largest percentage (46 per cent) of total milk marketing costs incurred by TDL. The higher percentage of miscellaneous costs incurred by TDL compared to the other market intermediaries was that TDL undertakes milk processing and packaging which explains the high miscellaneous cost incurred by TDL. A large proportion of the miscellaneous costs incurred by TDL was cost of materials for milk processing and packaging.

In addition to high miscellaneous costs, poor transport management, excessive administration costs and processing capacity under-utilization were among the factors which led to high marketing costs per litre of milk. In 1990, for example, the Arusha milk processing plant utilized only about 8 per cent of it installed capacity of 25.6 million litres per year (MALD, 1990).

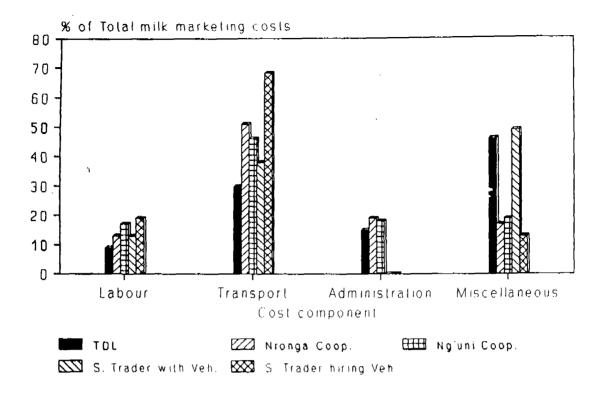
Estimated margins over capital deployed as a measure of profit in milk trading indicate milk trading to be more profitable to small milk traders mainly due low capital investment compared to the other market intermediaries. Because of the high market costs and capital investment, TDL had the lowest margin over capital despite high and low milk prices charged and paid by TDL to consumers and producers, respectively.

Table 5: Marketing Costs and Margins by Market Intermediary (T.Shs./Litre)

Item		Dairy Cooper- atives		Small Milk Traders		
·	Tanzania Dairies	Nronga	Ng'uni	1	2	3
Volume Marketed ('000 litres)	212.5	223.97	191.23	42.41	3.7	17.3
Retail Price	105	88	90	89.5	88.2	89.1
Costs and Margins:						
Labour	4.43	1.13	1.63	1.46	0.46	1.18
Transport	14.12	4.46	4.54	4.28	0	4.28
Administration	6.83	1.62	1.79	0	0	0
Miscellaneous	21.93	1.47	1.86	5.55	3.7	0.86
Total Cost	47.31	8.68	9.82	11.29	4.61	6.32
Producer Price	51.33	67	70	64.35	64.2	64.8
Margin to Agent	6.36	12.32	10.18	13.86	19.39	17.98
Producers' Share (%)	48.9	76.1	77.8	71.9	72.8	72.7
Margin Over Capital	7	15	11	12	23	26

Note:

- Small milk traders using own vehicle
- Small milk traders using bicycles
- 2 -3 -Small milk traders using hired vehicle



Source: Survey Data, 1990.

Fig. 2: Cost components in milk marketing by Market intermediariies, 1990.

Rating the Market Intermediaries According to the Performance Indicators

Table 6 summarises the overall rating of the different market intermediaries according to the performance indicators discussed in the preceding sections. It is clear from the table that dairy cooperatives showed better performance than the other market intermediaries from the viewpoint of the following indicators: (i) prices made available to smallholder dairy producers, and (ii) producers' share in the consumer's shilling spent on milk. From the viewpoint of marketing costs per litre of milk marketed, dairy cooperatives and small milk traders showed better performance than TDL.

Table 6: Rating of Market Intermediaries According to Performance Indicator

		Market Intermediaries		
Performance Indicator	TDL	Dairy Cooperatives	Small Milk Traders	
	111			
Level of producer price	'low'	'high'	'average'	
Stability of producer price Level of consumer price	'stable' 'high'	'stan;e' 'low'	'low' 'low'	
Stability of consume price	'stable'	'fluctuate'	'fluctuate'	
Marketing Costs/Litre	'high'	'low'	'low'	
Margin over capital	'low'	'average'	'high'	
Producer share	'low'	'high'	'average'	
Timeliness in paying		0	1-6-	
producer	'late'	'promptly'	'promptly'	
Market share	'low'	'low'	'low'	

It is apparent from Table 6 that TDL is a poor marketeer from many points of view. Its higher marketing costs per litre and lower margin over capital deployed compared to other market intermediaries are associated with its over-sized processing facilities, built to reconstitute cheap milk from SMP and BO which apparently no longer comes as it used to in the past. Although TDL tended to be more effective from the viewpoint of milk quality aspects, the idea about producing premium milk and packaging of milk does not seem to be shared by many consumers because few people would only drink milk processed and packed to TDL standards. The TDL facilities seem to have been designed without considering local circumstances. Furthermore, TDL tended to be more effective in maintenance of stable producer and consumer prices throughout the year than the other market intermediaries but it is not popular among smallholder farmers. This is because of not only offering low producer prices but also its delays in effecting payment of producers.

Competition Strategy and Extent of Collusion Among Market Intermediaries

The survey of the marketing system for dairy products in Hai District suggests the absence of collusive practices by the marketing agents. The presence of a large number of small milk traders suggests that the market for dairy products in Hai District and nearby areas is competitive and not in the hands of few operators. As mentioned earlier, cooperatives are increasingly becoming involved in marketing of dairy products. In joining together to form more cooperatives to undertake milk marketing functions, dairy producers are setting up alternative marketing channels to those already available and thus raising the level of competition. These cooperatives are contributing effectively to market efficiency, by providing competition needed to prevent other market intermediaries from paying the farmers too little.

Table 7: Strategies for Attracting Milk Supplies and Selling Milk by market Intermediary

Market Intermediary	Strategies of Attracting Sup- plies	Selling Strategies
TDL	None	Contractual Arrangements with hotels and institutions
Dairy Cooperatives	Provision of services other than milk marketing to members	(i) Contractual arrangements with hotels, retails shops and institutions; and (ii) decreasing price.
Small Traders	(i) Collect milk from home- steads; (ii) offering attractive prices	(i) Contractual arrangements with hotels, shops and institutions; (ii) home delivery; and (iii) decreasing price.

Source: Field Survey, 1990.

Table 7 presents various strategies used by the market intermediaries in attracting supplies and in selling their milk. It was noted during the field survey in 1990 that the strategies to attract milk supplies were more important during the dry than rainy season because of relatively low milk supply. Selling strategies, on the other hand, were more important during the rainy season when milk supply is generally higher than during the dry season. As can be seen from Table 7, TDL did not seem to have a strategy rom attracting milk supplies. Dairy cooperatives provide services like supply of dairy inputs as an incentive to members. Offering prices higher than what the next market intermediary or trader offers is a strategy mainly used by small traders to attract milk supplies during the dry season. Most of the selling strategies shown in Table 7 are common among market intermediaries.

Contractual arrangements with hotels, retails shops and institutions which provide food (i.e. hospitals and schools) was a common selling strategy among all the market intermediaries. Charging consumers a price lower than the next market intermediary or retailer was a strategy used by small traders and cooperatives during flush times. Home delivery to individual consumers was practised by small milk traders using bicycles for transporting their milk.

Conclusions

The presence of a large number of small milk traders who purchase milk from producers and sell milk to ultimate consumers indicates competitiveness at both the producer and retail end of the milk marketing system in Hai District and nearby urban centres. Apart from competition among themselves, small milk traders compete with TDL and dairy cooperatives, and the nearly identical consumer prices charged by small milk traders and dairy cooperatives in each season in 1990 (Table 4) further suggests competitiveness in the milk marketing system in Hai District and nearby urban areas.

TDL apparently was a higher cost marketer than small milk traders and the two dairy cooperatives studied largely owing to diseconomies of scale. TDL's high marketing costs per litre of milk marketed were associated with under – utilization of its processing facilities. Whilst most of these facilities are geared to the production of pasteurized milk to reduce the danger of disease spread, consumers are traditionally boiling milk before using it. Production of high value products such as butter and ghee is only undertaken when milk surplus to pasteurized requirements exists, which, according to TDL reports, is not common.

The implication is that investments in expensive processing facilities for pasteurization are unnecessary since it can be achieved at a lower cost by boiling. Widespread boiling of milk by consumers can further be encouraged through an education programme.

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DISCUSSION

Q. A.A. OKWENYE

Small traders are often accused of adulteration of milk quality. What quality standards were used?

Response: Nyange

Quality was not considered in the study.

Q. W.G. MTETI

- a) Is it sustainable for the cooperatives to continue selling milk particularly for those which got assistance from outside when the assistance is withdrawn.
- b) The cooperatives marketing has some external assistance in marketing milk. If the donors withdraw, are the Operations going to be sustainable?

Response:

- a) With good management a good number of them are sustainable, for example the Nnroga Women cooperative Society, have bought their own vehicle after the assistance was withdrawn.
- It is hoped that they are going to be sustainable because some of them have shown their move to be stable and sustainable.

Alternatives to a Parastatal Marketing Monopoly

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Abstract

Monopoly in milk marketing through TDL has been on for the last twenty years. However due to inefficiency on the side of TDL together with trade liberalization taking place in Tanzania other milk marketing systems have developed alongside with TDL.

The policy of the country now is for the government to get detached from activities well managed by the private sector including milk marketing. Alternative milk marketing systems are recommended together with role of the government role in ensuring the development and success of their systems.

1. Introduction

Smallholder fairy farming was emphasized following the failure of the large scale farms. Since the middle of 1980s. The interest is raising dairy cattle among smallholder farmers in both urban and rural areas rose after noticing remarkable improvement in milk production of the exotic dairy cattle and their crosses. This group of dairy farmers is increasing quite steadily and there are indications that the bulk of future milk production will come from this sector.

Total milk produced in 1994 is estimated at 555 million litres. The traditional sector contributed about 70 percent of the total production, while 25 percent come from the smallholder dairy sector and the remaining 5 percent from the large scale dairy farms.

In donors funded dairy project areas of Tanga, Kagera, Iringa, and Mbeya the problem of surplus milk is relatively pronounced, this follows that there will be a marketing problem in future. Surplus milk in this context is defined as milk which cannot be sold within the area of production because or either low purchasing power or low demand caused by eating/food habits of the inhabitants. Milk marketing is an important component in sustaining dairy development. With an organized marketing channel farmers will be encouraged to invest more into their animals and subsequently increase milk production.

This paper will analyze different available options in milk marketing in Tanzania and recommend those which can be adapted taking into account the Level of infrastructure development in Tanzania.

2.0. History of the Dairy industry in Tanzania

Before the year 1961, the dairy sector including dairy farms and processing plants were dominated by large estate owner. Between 1961 and 1965 the sector was under three Zonal Dairy Boards. Namely Northern Dairies for Kilimanjaro and Arusha, Coastal Dairies for Dar es Salaam and Coast and Mara Creameries for Mara Region. These Boards were charged with among other duties, the task of collecting milk and milk products from farmers, producing processing and marketing milk and its products, opening and running dairy farms and milk processing plants and grading milk and its products. In 1965 through a parliament Act No. 32 (Cap.590) the National Dairy Board was enacted, which scrapped off Act No. 61 of 1961 (Cap 456). This new Board had wider objectives and responsibilities than the former ones. For example, it became the advisor to the government on all issues related to the diary sector. It had the authority to resister milk producer, processors, importers and vendors and to license their activities and to set regional milk prices. Moreover, it