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ECONOMICS OF LOCAL COW MILK PRODUCTS MARKETING IN KWARA STATE, NIGERIA

Fakayode S.B.*, Olorunsanya, E. O*, Nwauwa L.O.E, Yusuf, T.M** and Oyeleye O.O***
*Department of Agricultural Economics and Farm Management, P.M.B 1515, University of Ilorin, Ilorin. Nigeria. **Department of Agricultural Economics, University of Ibadan, Nigeria
***Kwara State College of Education, Oro e-mail : segun_fakayode@yahoo.com GSM No : **+2348060236283**

ABSTRACT

This study examined the local cow milk products marketing in Nigeria, using Kwara as a case study. Specifically, the study appraised socio-economic characteristics of local cow milk products marketers, the marketing profile and identified problems limiting marketing activities for local cow milk products. For the study 75 respondents were surveyed across the study area while data gathered were analysed using marketing margin and marketing efficiency analyses. Results show that only women were marketers of local cow milk products. The marketing chain for the commodity is simple and crude. It starts from the raw cow milk processors through retailers to the consumer. Local cow milk products include cheese: fried and raw, 'nono' (sour-milk), 'mai sanu'(local butter) and 'ori-amo'. However these products were poorly packaged. Estimated average marketing margin was 90.6 per kg of processed milk while the estimated marketing efficiency is 115.5%. Most respondents sourced their marketing funds solely from their meager personal savings. Problems militating against the local milk products marketing were lack of efficient storage facilities and the seasonal supply/availability of cow milk. Considering the study findings, there is the need for stake-holders in the milk market to work out necessary improvements in the quality of local cow milk products. Researches and relevant efforts aimed at increasing cow milk yields in the study area should be stepped up so as to facilitate raw milk availability. Better processing equipment for the local milk processing activities should also be researched into. There is also the need to provide credit facilities to local cow milk processors and traders alike as this will go a long way to supplement marketer's personal savings.

Key words: *retailers, consumers, marketing margin, marketing efficiency, personal savings*
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INTRODUCTION

Nigeria has a population of about 150 Million that is growing at an estimated 3 percent rate annually. About 70 percent of this population is employed in subsistence agriculture. The agriculture sector contributes 35 percent share of the nation's Gross Domestic Product (GDP) (The Economist, 2005). In recent years, the agricultural sector has grown. The sector increased by 4.6 percent, 5.6 percent and 6.2 percent in 2002, 2004 respectively. Domestic food products such as corn, sorghum, tubers, cocoa, vegetable oil, rice, maize, millet palm produce, dairy products, soybeans poultry and sea foods are the major traditional food stuffs

consumed in the country. However, basic bulk food needs such as wheat, rice, sugar cane and milk powder are imported. Nigeria's total agricultural import amounted to $2 billion while agricultural export reached $400 million in 2003. United State agricultural export to Nigeria increased to approximately $554 million in 2005, up from about $444 million in 2004. A breakdown of U.S agricultural exports to Nigeria in 2005 shows' bulk agricultural products ($6523 million), intermediate foods including dairy products ($9 million), exports of sea food, forestry and dairy products were also significant. Nigeria will likely continue to import wheat, rice, and dairy products as families demand more convenience and nutrition foods (FMARM 1999).

Of greater concern is the import bills that accrue to sustaining the nations dairy needs. Nigeria's market for imported dairy products is estimated at 240,000 metric tons, valued about $600 million in 2005. Whole milk powder, evaporated and condensed milk from suppliers in New Zealand, Australia, South America and EU countries are dominant. The U.S. market share is insignificant. However, the U.S. has advantage over third-country suppliers for higher quality, value-added dairy products such as skimmed and low-fat milk powder, butter, cheese, and milk ingredients for which demand is increasing. Nigeria's recent phased-in adoption of the ECOWAS Common External Tariff (CET) could reduce import tariffs; thereby expand opportunities for U.S. dairy products. This scenario has far reaching consequences on the nation's foreign exchange reserves.

From the estimates for meat and milk production, live animal imports and milk/milk product imports in Table 1(FAO, 2006), it is noted that large numbers of live cattle, sheep and goats are imported as well as various milk products (to a value of US$ 250 M in 2003). The case is more so for the milk sector. The central Bank of Nigeria (CBN, 2004) alarmed that the country's milk supplies in the country has been falling far below domestic consumption. Tables 2 shows that domestic supply of dairy products has consistently failed to catch up with its demand over the last decade. Nigeria's dairy market is estimated at 247,000 MT worth about $370 million in 2005. Imported milk powder is the dominant input in the sub-sector. Imported milk powder is also the principal input for local ice cream production in Nigeria (Nzeka, 2006a)

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Table 1: Nigeria statistics for meat and milk production, live animal and milk imports for the period 1996-2005

Period	1996	1997	1998	1999	2000	2001	2002	2003	2004*	2005
Beef and veal prod. (,000 mt.)	280.0	294.0	297.0	298.0	279.0	279.0	279.5	279.5	280.0	280.0
Sheep meat prod. (,000 mt)	62.4	87.0	89.2	91.4	94.6	94.3	96.8	99.0	100.7	100.7
Goat meat prod. (,000 mt.)	127.0	133.4	133.4	137.2	139.5	139.7	142.2	142.2	147.1	147.1
Game meat prod. (,000 mt)	100.0	100.0	100.0	100.0	120.0	120.0	120.0	120.0	120.0	120.0
Total milk prod. (,000 mt.)	***380.0***	***350.0***	***367.5***	***385.9***	***408.0***	***432.0***	***432.0***	***432.0***	***432.0***	***432.0***
Live cattle imports nos. (,000)	340.0	350.0	300.0	280.0	320.0	380.0	465.0	425.0	420.0	n.r.
Live sheep imports nos. (,000)	300.0	300.0	270.0	230.0	350.0	426.5	347.0	200.0	200.0	n.r.
Live goat imports nos. (,000)	350.0	372.2	330.0	260.0	420.0	684.7	515.9	300.0	350.0	n.r.
Milk equiv. imports (,000 mt)	***100.9***	***127.5***	***183.5***	***211.3***	***427.8***	***464.8***	***482.3***	***671.9***	***739.1***	***n.r.***

Source: FAOSTAT 2006; n.r. no record

*Other meat production in 2004: chicken meat 211,000 tonnes.

Table 2: Estimate annual demand and supply of milk from the national herd, 2000-2005.

Year	Demand (Tonnes)	Supply (Tonnes)
2000	990,000	495,479
2001	1014,750	515,291
2002	104,004	535,911
2003	1066,050	557,347
2004	1092,780	579,641
2005	1120,005	606,827

Source: Livestock Sub-sector Review Report No. 102/92 CP-NIR 49 SR 5/8/92

A major problem along this vein is that the dairy milk industry which is a very prominent means of sustaining livelihoods in the country is still at its infantry state. Its activities are unorganized, except for the relatively few milk processing firms. The activities of the

Nigerian dairy industry are centred on milk production, importation, processing, marketing and consumption and these have been going on for over 60 years. These activities are, however, unorganized except for the relatively few processing firms that produce and market reconstituted milk products from imported powdered milk, yet industry represents an important component of the agricultural sector of the economy with great economic, nutritional and social implications (FAO, 1991; FAOSTAT 2005:Yahuza, 2001).

Because of the necessity to improve the living standard of Nigerians has been the major focus in various development plans in Nigeria, successive governments established dairy farms stocked with local and improved breeds of cattle. Milk collection centers including mobile collection points were also established. Before independence in 1960, dairying was influenced by the colonial experience, which placed complete reliance on large government farms to meet growing agricultural demands of the nation's citizenry. During early post-colonial period, as part of government's strategy to encourage dairy production, state governments established several dairy processing plants throughout the country. Among these plants was the Lagos Dairy Development and Processing Unit (NLPD, 2001). Perhaps, the major achievement of these interventions has been that of creating awareness on the need for dairy development as part of overall effort to improve performance in the live stock subsector. The awareness in-turn has led to the establishment of milk processing plants by both the private and public sectors, as a means of catalyzing domestic production. However, the availability of cheap imported milk powder in particular and other dairy products in general has created a disincentive for the development of the nation's domestic dairy industry (NLPD 2001).

Nigeria's dairy market is estimated at 247,000 MT worth about $370 million in 2005, yet imported milk powder is the dominant input in the sub-sector. Imported milk powder is also the principal input for her massive local ice cream production. (Nzeka, 2006a). Nigeria is a potential market for 1,3 million tons of milk valued at about US$3 billion USDA (Foreign Agricultural Services Grain Report. The report said that of the country's estimated 1,3 billion litres of total domestic fluid milk Production in 2006, only about 600 000 litres worth about US$1,5 million entered the formal marketing channels. Even at this, the imports of processed dairy products will continue to increase as rising income boosts demand and domestic supplies continues to be insufficient,"

Milk product market segregation usually results due to difference in taste and relative scarcity of locally produced milk. The implication is that local milk producers have no control over milk products demand in the urban areas. This is more so as the effect of improvement in milk marketing activities in the local production systems is not known. The effect of reliable sales channels, better prices and improved input supply and production support system need therefore to be studied.

This study therefore sought to provide answer to the following research questions.

* What are the marketing channels available for the prevalent cow milk products in the country?
* How profitable and efficient is the market for milk products
*What are the constraint limiting efficiency in the market?

This study is timely and of paramount importance. This is due to the fact that most research in agricultural is geared towards increasing productivity, while very little attention is paid to reducing wastes, lowering cost of marketing and minimizing incidence of glut and scarcity in different parts of the country. A probable reason for this is the fact that production problems seem to be better understood than marketing problems in the country.

THE MILK PRODUCTS MARKETS IN NIGERIA

According to Yahuza (2001) the activities for making milk and milk products available to end-users involves large number of individuals, including pastoralist, processors, milk product distributors and retailers. This marketing system follows pattern which distinguishes between traditional producers operating mainly in the rural and semi–urban areas and the reconstituted milk product processors who operate in the urban markets. The traditional cow milk market is dominated by the Fulani women and girls who are directly engaged in the collection, processing and sales of cow milk products. The milk produced by the cows is for both household consumption and direct sales to local consumers as fresh milk, ghee or other forms of traditional dairy products (Ali and Uche 2006). Traditional milk products include 'madara' (fresh milk), 'nono' (Sour milk), 'kindimo' (Yoghurt), 'maishanu' (local butter) and 'warankasi' (Cheese). The urban milk product markets are the concern of the distributors, wholesaler depots, bicycle boys, retailers and other market outlets. Milk products in this case include evaporated milk, powdered baby formula, packaged liquid milk, yogurt, butter, ice cream and cheese (Ali and Uche, 2006).

In their own study, Idaters and Bayer (2001) found that the local milk is sold in the rural areas in the north and middle belt states of the country. The imported milk is sold in the urban areas in the north and middle belt states and rural and urban areas of the southern states. Fresh milk is sold either as whole milk or after traditional processing to rural villages and shops, work places, neighborhoods, farms and homes in the rural areas. Sometimes, the milk is sold in exchanges for grains and occasionally to government processing plants in milk collection centers. Imported milk is sold in kilogram or gramme tins as powdered, butter cheese, or in the form of local recombined products including milk, yogurt and ice–cream.

Ikpi (2004) stressed that the market for the milk products was restricted to few top civil servants and expatriates due to low quality of output, difficulties of produce preservation and processing. Generally buyers apply to milk plants for allocation, expecting deliveries to their homes at specified days or the customers pick up his allocation from the factory site. There were therefore two sets of retail prices i.e. the factory gate price and the price for home delivery, the difference being the cost of delivery. Cow milk importers sell to wholesalers

who in turn sell to retailers. Urban retailers also sell to rural retailers within the same urban areas. There are neighbourhood retailers who buy milk from central market retailers or from departmental stores. Because of this chain of retailing, the general price level for milk is high in the neighbourhood stores, village markets and among central market milk hawkers. Inflation and unfulfilled demands have driven up the price of imported dairy products in Nigeria. Changes in price over time are attributable to some main sources which include general inflation in the country of origin of Nigeria's dairy imports, relative changes between the prices of dairy exports and other goods in these countries of origin, changes in the level of import duties and similar taxes on dairy commodities entering Nigeria as well as general inflation in Nigeria relative to countries of origin for dairy imports. Other factors include the relative unavailability of foreign exchange and license for the imports of dairy commodities compared to other goods as well as changes in domestic supply and demand for dairy products relative to other goods in general (FAO, 2003).

METHODOLOGY

Area of Study

The study was carried out in Kwara State, Nigeria. Kwara State shares boundary with Ondo, Oyo, Osun, Niger and Kogi State and an international border with the republic of Benin along its northwestern part on Baruteen local government area. The state also has a land area of about 32, 500 square kilometers and a population of over 1.5 million which is made up of three main ethnic groups namely Yoruba, Nupe and Baruba. More than 90% (percent) of the rural populations who form the bulk of the state total population are engaged in farming. The main stay of the state's economy is agriculture (Kwara State diary 2004).

Kwara State has two main climates seasons the dry and wet seasons. The natural vegetation consists broadly of rainforest and wooded Savannah while the land forms consist of undulating hills, valleys and plains which are transverse by the Niger River and its tributaries. Annual rainfall ranges from 1000-1500mm, while maximum average temperature ranges, between 30^0C. The vegetation which is namely the wooded Savannah is well suited for the cultivation of a wide variety of food crops. These crops include yam, cassava, maize, cowpea, rice, sugar cane, fruit and vegetables. Livestock are also reared in different parts of Kwara State.

Data Collection

Two sets of data, primary and secondary were collected for the purpose of this study. The primary data were obtained with the aid of a well-structured questionnaire while the secondary data were source from published materials including journals, magazine, bulletin, the textbook and the international network. 'INTERNET' Communication

Sampling Technique

The target population for the study is the traditional product marketers in Kwara State. The sampling technique used for the study comprises a two stage sampling procedure. The first

stage comprised the random selection of 10 communities in the 3 local government areas of the state. The local government areas LGAs selected was those ones where milk product marketing activities were found to be popular. These areas selected in these LGAs include Lasoju, Ganmo, Idofian, Otte, Ilorin-metropolis: Oja –Oba and Oloje, Ipata, Bode–Saadu, Molete, Shao and Oloje (Solagberu, 2009). Respondents were selected at various markets in these locality/community areas. The second stage comprised random selection of 75 cow milk product households from the selected communities. The respondents were then administered with structured questionnaire augmented with personal interview where necessary.

Data Analysis

Descriptive statistics, marketing margin and marketing efficiency analyses were used in analysing the study data. The descriptive statistics were used to analyze the study data on the socio – economic variables of cow milk marketers. Gross marketing margin analysis was used to estimate the marketing margin obtained by cow milk marketers.

According to Kohls (1980).:

Marketing Margin = Selling price – cost price ……...……. (1)

Gross marketing margin = Selling Price–Cost price … . ….……..(2)

Net Marketing Margin =Marketing Margin – Marketing Cost……(3)

The prices used in the computation were those provided by the marketers.

Marketing efficiency

$$\text{Marketing efficiency} = \frac{\text{Value Added by marketing activities}}{\text{Marketing Cost}} X\ 100 \quad \text{…….……..(4)}$$

Value added by marketing activities = Selling price – Cost price

This equation (4) also equals Gross Marketing Margin, therefore

$$\text{Marketing efficiency} = \frac{\text{Gross Marketing margin X 100}}{\text{marketing cost}} \quad \text{……..…….(5)}$$

RESULTS AND DISCUSSION

Socio-economic Characteristics of Respondents

The age distribution is presented in Table 1. Majority of cow milk product marketers were agile youths between ages 21 and 40 years. This age range is the active or working population of any economy. Most of the marketers were the female folks. These were solely the ‘nomadic Fulani’ women who trade the product across the state. No single male/man was found to be involved in the cow milk product trade. The marital status of the respondents showed that about three-quarters (69.3%) of the respondents were married.

The women traders were also found to belong to large sized households, which makes it possible for them to avail themselves of cheap family labour. These family labours could therefore be harnessed for use in their cow milk trade activities. Families with larger households were better engaged in milk trading activities than those with smaller households.

The educational status of cow milk product marketers is a necessary pre–requisite to innovation adoption of marketing activities. Over three quarters (93.3%) of the respondents have had Arabic education, few (9.3%, 2.7% and 4.0%) of them have had primary, secondary and tertiary education respectively. The implication is that a total of 16% of the women folks have had attained the basic formal primary school. On the overall, the educational attainment of the respondents in the study area was generally tilted towards Arabic education which is almost equivalent to traditional education. This could limit their rate of adoption and use of innovation and modern methods of carrying out their milk processing and trading activities.

The study further revealed that almost all the respondents (94.7%) undertake cow milk product trade as a major occupation. Those who engaged in part time work do so to supplement their income. Respondents were also found to be involved in the processing of the raw cow milk used in the production of their milk products. It is therefore expected that respondents will access raw milk easily. More so that respondents belonged to the nomadic Fulani households who are primarily involved in livestock rearing activities

In the table it is shows that few (7.7%) of the respondents were involved in the sale of mainly cheese only, while the remaining (92.3%) combined the sales of cheese with other cow milk products including nono and oriamo.

Experience in any marketing activity will definitely stimulate effective cow milk product marketing activities. The more the experience, the more coordinated, accurate and matured are the marketing decisions taken. Table 3 shows that sizable proportion (80.1%) of the respondents has been involved in cow milk products trade for over 10 years implying that respondents were veteran local cow milk products marketers

Respondents also reported reasons why they were engaged in cow milk trading activities. These reasons are very important as it will determine to which respondent will be focused in their cow milk products marketing activities. From the study, it was gathered most (85.3%) of the respondents ventured into cow milk product marketing because they have the ambition to do so. Others were involved, because they lacked formal education/trainings that could enable them engage in other jobs like the white collar ones. Other reasons reported were respondents had no other occupation option that they could undertake.

The different sources of funds that cow milk marketers could avail themselves of, for their cow milk trading activities were also investigated. Majority of the respondent (90.7%) had their personal savings as their main source of fund. Few of the respondents (9.3%) were able

to source their trading funds from their friends and relatives. Funds from other likely sources like banks, cooperatives and associations were not reported. In instances where funds were secured, the sums obtained were found to be very meager: about □8000:00 on average. This sum is far below that that could enhance any meaningful development in the respondents' cow milk products activities.

Table 3: Socio-economic Characteristics of Respondents

Characteristics	Frequency	Percentage %
Age (years)		
< 20	9	12.0
21-30	26	34.0
31 – 40	24	22.0
41 – 50	9	12.0
> 51	7	10.0
Total	**75**	**100.0**
Gender		
Male	0	0.0
Female	75	100.0
Total	**75**	**100.0**
Marital Status		
Single	16	21.3
Married	52	69.5
Divorced	2	2.7
Widowed	5	6.7
Total	**75**	**100.0**
Household Size		
1 - 5	10	13.3
6 – 10	54	72.0
10^{+}	11	12.0
Total	**75**	**100.0**
Level of Education		
Arabic	70	93.3
Primary	7	9.3
Secondary	2	2.7
Tertiary	3	4.0
Total	**75**	**100.0**
Trade occupation		
Full time	71	94.7
Part time	4	5.3
Total	**75**	**100.0**

Products Marketed		
Cheese only	6	7.7
Cheese, nono, mai-sanu and ori-amo	69	92.7
Total	**75**	**100.0**
Years of Experience	0	0.0
≤ 5	15	20.0
6 – 10	14	18.7
11 – 15	17	22.7
16 - 20	12	16.0
21 – 25	17	22.7
> 25	**75**	**100.0**
Total		
Reasons for Trading		
Ambition/interest	64	85.3
No other option	1	1.3
No formal Education	10	13.3
Total	**75**	**100.0**
Source of trading funds		
Personal Savings	68	90.7
Relatives and friends	7	9.3
Money Lenders	0	0.0
Bank	0	0.0
Cooperative Society and other associations	0	0.0
Total	**75**	**100.0**

Source: Field Survey Data (2009)

MARKETING CHANNEL FOR LOCAL COW MILK PRODUCTS

Figure 1 depicts the marketing channel/chain identified for the local cow milk product in the study area, Kwara State. At the village level, the local Fulani women usually milk their cow for the raw milk materials. This is thereafter processed into cow milk products including cheese, 'nono' and 'ori-amo'. These products are transported to road side and markets. At these markets, the women hawk and sell their products to consumers. A times the women fry their cheese before they sell to consumers.

On the other hand, urban food sellers buy the cow milk product especially cheese and fry before they sell to urban food consumers. These food canteen owners therefore serve as retailers for the processed cheese products. In these instances, frying the cheese is usually necessary because of the perishable nature of cow milk products.

Another distinctly modern route for cow milk trade was also found in the study area, unpopular though. This involves the direct sales of raw cow milk to industries processing cow milk to modern milk products especially yoghurts and powdered milk. These industries' products are sold to wholesalers who in turn sell and distribute to retailers. At the retail end, the products are finally sold to end users.

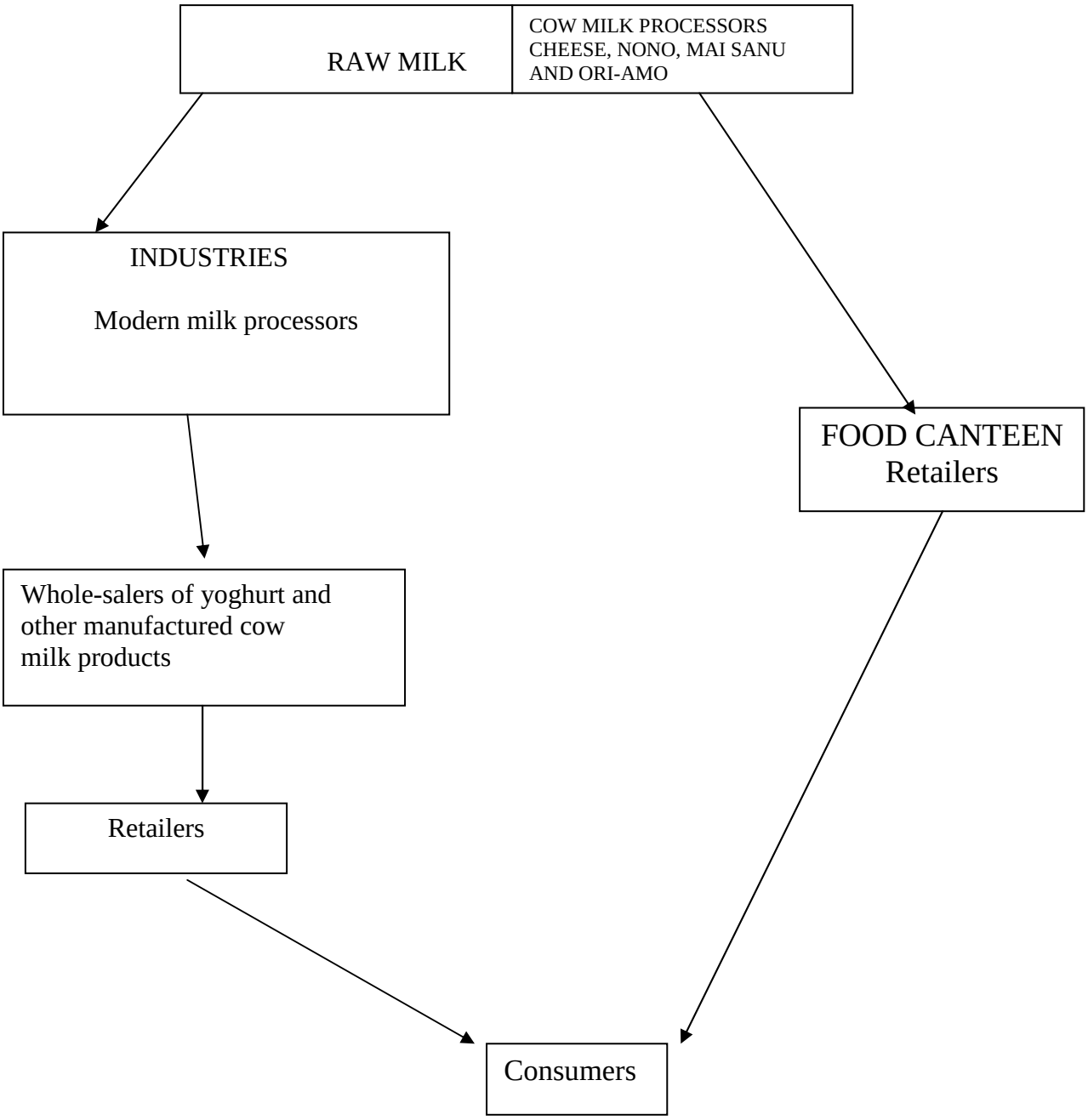

Fig. 1: Marketing Chain for Cow Milk Product in Kwara State
Source: Field Survey, (2009)

Marketing Margin

The marketing margin for any commodity marketing is indicative of the level of profit for that commodity (Fakayode et al, 2010). Respondents were found to obtain very meager net margins from their local cow milk products business. They got on average, ₦90.3 per kilogram of cow milk products across the study area (Table 4). The Table further shows the net marketing margin obtained by respondents from the sales of local cow milk products across selected communities in the study area. Otte recorded the highest net marketing margin of ₦160 per kilogram of cow milk marketed while Shao recorded the least of ₦44 per kilogram. Areas that recorded more than ₦100 per kilogram of net marketing margin were Idofian, Otte, Oja-Oba and Ipata. These areas were found to house several large concentrations of periodical markets. These markets facilitate efficient and favourable cow milk product markets in their locations. As regards, the marketing costs incurred by respondents in the processing of cow milk products. Oja-Oba and Ipata locations recorded the highest marketing cost per kilogram of cow milk products traded. This was because the areas were more urban than the other ones. Local cow milk production activities were not reported in Ipata and oja-Oba. As such, marketers of cow milk products in these areas were found to travel to interior villages to purchase the cow milk products for sale at the urban areas. The long distance and the necessity to preserve the milk products before sales in the city added market costs. This explains the higher cost for marketing the commodity in urban areas than in the rural areas.

Table 4: Average Gross Marketing Margin for Local Cow Milk Products Markets

Location	Average Marketing Cost (□/Kg)	Average Gross Marketing Margin (□/Kg)	Net Marketing Margin (□ Kg)
Lasoju	670	740	70
Ganmo	430	500	70
Idofian	600	710	110
Otte	480	640	160
Oja Oba	1254	1360	106
Ipata	1280	1390	110
Bode – Saadu	350	443	93
Molete	400	450	50
Shao	480	527	44
Oloje	1050	1140	90
Mean	**699.4**	**790.0**	**90.6**

US $ Equals 150 naira **(□)**
Source: Field Survey Data, 2009

Marketing Efficiency

Table 5: Marketing Efficiency for Local Cow Milk Products

Village	Average Marketing Cost (□/Kg)	Average Gross Marketing Margin (□/ Kg)	Marketing Efficiency (%)
Lasoju	670	740	110.4
Ganmo	430	500	116.3
Idofian	600	710	118.3
Otte	480	640	133.3
Oja Oba	1254	1360	108.4
Ipata	1280	1390	108.5
Bode – Saadu	350	443	126.6
Molete	400	450	112.5
Shao	480	527	109.8
Oloje	1050	1140	108.6
Mean	**699.4**	**790.0**	**115.2**

US $ Equals 150 naira **(□)**

Source: Field survey Data, 2009

Table 5 presents the marketing efficiency for the local milk products trade in the study area. It is evident from the Table that the marketing efficiency for the local milk products is very high, even over 100% for respondents across all the locations in the state. Respondents in Otte and Bode-Saadu had the highest marketing efficiency of 133.3% and 126.6% respectively. In these areas: otte and Bode-saadu, respondents incurred least marketing cost relative to their respective marketing margin for the local cow milk products. Otte performed better than the other locations, making the highest net margins/profits and marketing efficiency. Although respondents at Idofian, Oja-Oba and Ipata made higher net margins than those of the remaining areas (apart from Otte), they could not maintain the lead in marketing efficiency due to the high marketing cost they incurred. These marketing efficiencies outcomes agree with the findings of studies by Tewe and Boganga(2001) and Irol (2005) that the economic feasibility (efficiency) of milk marketing will only improve at higher level of production and lower over head cost per liter of milk marketed.

Further enquiry revealed that respondents encountered problems in carrying out their local cow milk marketing activities. The various constraints limiting efficient cow milk trading activities as reported by respondents were mostly that of poor and unavailable storage facilities, poor supply of raw cow milk, inability of respondents to access formal credit facilities for their local cow milk business and poor market for local cow milk products. Most of the respondents reportedly lost a lot of cheese, nono and ori-amo products stock due to the poor storage conditions under these products. The inadequate storage constraint is a serious

one. For instance, in cases where the cow milk marketer fries his cheese in order to preserve the cheese, the fried cheese if unsold over some period deteriorates.

CONCLUSION AND RECOMMENDATIONS

A critical appraisal of the existing local cow milk product trade in Kwara state revealed that it is characterized by large number of small scale traders: retailers, crude marketing functions, high marketing cost. The local cow milk product traders are mainly women, who have had only a handful of formal education. They also belonged to large households. The marketing margin and marketing efficiency estimates derived also indicates that local cow milk trade is efficient; it nonetheless results in very meager returns despite the high cost of marketing activities involved. Also cow milk products marketers were found to lack relevant technologies to stored and process their products to meet competing market standards in order to break market barriers. This imposed limitations to the viability of the business.

Considering the study findings, there is the need for stake-holders in the milk market to work out necessary improvements in the quality of local cow milk products being traded in the country. This is more so necessary as products that are of crude and low quality are usually regarded as inferior and traded low. Contemporary food processing are tended towards finding profitable niche in meeting the tastes of the discerning, high-income and more inelastic consumers through improved product quality and varieties. Non-fat, low-fat milk, milk cubes and milk-based energy drinks are becoming more popular among these consumer segments. The nation's dairy need be fine tuned in this respect. With better packaged cow milk products, it is expected that there will be wider market for the product. Researches and relevant efforts aimed at increasing cow milk yields in the study area should be stepped up so as to facilitate raw milk supply. Better local processing equipment for the cow milk processing activities should also be researched into There is also need to provide credit facilities to local cow milk processors and traders alike. This will go a long way to supplement marketer's personal savings thereby enabling marketers to capitalize their cow milk processing activities.

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