PHYSICAL DISTRIBUTION AND SALES PERFORMANCE: A CASE OF DAIRY PROCESSING FIRMS IN NAIROBI.

BY

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DECLARATION

This Project is my original work and has not been submitted for a degree in any other University.

Signed .....

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This Project has been submitted for examination with my approval as the University Supervisor

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DEDICATION

To My:

Dear husband, Dr. H.O. Opere, who has given me all the support.

Children Collins, Sarah, Grace, Loise and Moses.

Parents Mr. and Mrs Shem Lugado who paved the academic way for me.

ACKNOWLEDGEMENTS

I wish to extend my heartfelt appreciation to the following for their vital contribution to the realization of this project:

To the Lord God Jesus Christ, Whose grace has been and is still sufficient for me in all things and by Whom I live.

To my husband, Dr. H.O. Opere, who saw to it that I lacked nothing throughout the course sessions.

To my supervisor, Dr. R.M. Musyoka, who stood by me and gave guidance throughout the research project.

ABSTRACT

This study has two main objectives:

(i) To identify physical distribution strategies employed by the dairy processing firms, and

(ii) To find out if there is a relationship between physical distribution strategies and the firms' sales and market share performance.

The strategies were based along physical distribution functions of order processing, storage/warehousing, inventory decision making and transportation. The focus was on all the dairy firms that distribute their products within the Nairobi market.

The rationale behind this study is that presently dairy processing has become one of the most important agro-based industries in Kenya, with a contribution of upto 10% of the Gross Domestic Product. Since its liberalization in 1992, the industry has continued to attract attention from both the public and private sectors. Nairobi provides the largest market in the country.

Both primary data (using questionnaires) and secondary data (from the Kenya Dairy Board) were collected. These data were analyzed using descriptive statistics, especially percentages. It also made use of figures and tables.

The analysis revealed the following:

(i) That the physical distribution strategies utilized by the dairy processors are more or less the same, with a few variations caused by extraneous factors

(ii) The physical distribution strategies do affect the sales and market share performance of the dairy processors.

ABBREVIATIONS

AMA	American Marketing Association
CBS	Central Bureau of Statistics
CIM	Chartered Institute of Marketing
ILRI	International Livestock Research Institute
KCC	Kenya Co-operative Creameries
KNTC	Kenya National Trading Corporation

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CHAPTER 1: INTRODUCTION

1.1 BACKGROUND

Dairy processing was first officially adopted in Kenya on 22nd August 1925, upon the incorporation of Kenya Co-operative Creameries (KCC) as a public limited company by shares, under the Companies Ordinance of 1921 and 1923. On 8th February 1932, the company was again registered under the Co-operative Societies Ordinance of 1931, thereby giving it a dual nature. Over the years the dairy industry has been run through the co-operative movement (KCC Articles of Association, 1984).

The Dairy Industry Act, Chapter 336, was introduced and passed in Parliament in 1958, and thereafter revised in 1961, 1963, 1964, 1967, 1969 and lastly in 1984. (The Kenya Gazette, 1984). The purpose for the Act was to provide for improvement and control of the dairy industry and its products. It also established the Kenya Dairy Board and expressed the mode and composition of the Board members. The functions, powers and duties of the Board, according to the Act, include:

(a) to organize, regulate and develop the efficient production, marketing, distribution and supply of dairy produce, having regard to various types of dairy produce;

(b) to improve the quality of dairy produce;

(c) to secure reasonable and stable prices to producers of dairy produce;

(d) to promote market research in relation to dairy produce;

(e) to permit the greatest possible degree of private enterprise in the production, processing and sale of dairy produce, consistent with the efficiency of the produce and the interests of other producers and consumers; and

(f) generally to ensure, either by itself or in association with any Government department or Local Authority, the adoption of measures and practices designed to promote greater efficiency in the dairy industry.

In view of the above functions, powers and duties, the Kenya Dairy Board has set a number of regulations, some of which include:

(a) Setting grades for any form of dairy produce, and minimum standards to which dairy produce shall conform.

(b) Prescribing the manner of handling, transporting and storing of dairy produce intended for the use of consumption by any person other than the producer thereof.

(c) Regulating and controlling the manufacture of any form of dairy produce.

(d) Imposing a levy or less payable to the Board.

(e) Controlling the sale, purchase and delivery by any person of dairy produce in such areas as may be prescribed.

(f) Requiring the registration and licensing, in such manner and upon payment of such fees as may be prescribed of distributors and retailers of dairy produce.

Such is the environment within which the dairy industry in Kenya operates. The Act does not empower the government to directly regulate the industry but rather it does so through the Kenya Dairy Board, which has appointed inspectors to ensure the above laid down regulations are adhered to by all players – the milk processors, hawkers and farmers.

The existence of the Dairy Industry Act depicts the importance attached to this sector of the economy. The dairy industry has a great potential for

creating employment in the milk production, processing and marketing sub-sectors. It contributes upto 10% of the Gross Domestic Product and continues to receive attention from both public and private sectors (Kenya Dairy Board, 1999).

According to Sessional Paper No.1 (1986) milk production alone accounts for 47% of the 5.2 million hectares devoted to farming in Kenya. Most of the milk is produced by about 350,000 small scale dairy farmers who rely on intensive and semi-intensive production methods. There is potential to produce upto 4 billion litres annually.

Dairy processing is one of the most important agro-based industries in Kenya. For many years, this was a monopoly of Kenya Co-operative Creameries (KCC) until 1992 when the government liberalized the industry. Since then, the Kenya Dairy Board has licensed 45 dairy processors and over 300 milk bars (Kenya Dairy Board, 1999). This has evidently encouraged competition in the dairy industry.

The dairy processing firms process dairy products which are broadly categorized into two: milk (like homogenized, ultra-heat treated, cultured

and flavoured), and milk products (butter, ghee, cheese, yorghurt, cream and powder). These products are distributed in most of the country's urban centers.

Market demand for these products continues to increase, especially in the urban areas (ILRI, 1995). However, according to this report, the pattern of the overall demand is unknown because informal sales in the rural sector account for a substantial proportion of the milk sold.

Despite this increase in demand the dairy industry continues to post a decline in the production and marketing of its products. Statistics indicate that the total milk produced and marketed declined by 23.9% from 180 million litres in 1999 to 137 million litres in 2000. Butter and ghee production declined by 57.8% from 268 tonnes to 113 tonnes during the same period, while cheese production declined from 464 tonnes in 1997 to 315 tonnes in 2000 (Economic Survey, 2000, and Budget speech, 2001/2002). This decline is attributed to several factors, especially:

- Poor infrastructure
- Insufficient rainfall (drought)
- Expensive breeding services

- Lack of access to credit
- Poor quality dairy feeds
- Cheap imports and increased informal milk marketing
- Poor enabling environment for the private sector, and
- Insecurity and corruption (Economic Outlook, 2001).

These factors weigh down heavily on the marketing functions of the dairy processing firms. One key area of concern within the marketing functions is the physical distribution aspect.

Physical distribution refers to a broad range of business activities concerned with the efficient movement of finished products from the end of the production line to the consumer. These activities involve a series of inter-related functions that include transport, stockholding, storage, goods handling and order processing (McKinnon, 1989). This implies that physical distribution is principally concerned with the storage and physical transfer of finished goods from producer to consumer, directly or via intermediaries, with the sole purpose of having goods at the right place at the right time. Physical distribution is a major cost center, an important marketing tool and a critical determinant of profitability.

Many of the dairy processing firms in the country are faced with high operational costs. For a long time, Kenya Co-operative Creameries has had to operate under heavy losses, with major costs being incurred in areas like storage, refrigeration, insurance and the general logistics (Murioga, 1987). The firms have to make decisions on how to cover, for example, the large Nairobi Market more economically. According to the named researcher, the key question is: How are the ever increasing distribution costs going to be reduced in proportion to total sales?

Apparently, very little research work has been carried out on the dairy industry in Kenya. Among the available literature, none has focused on the industry's physical distribution aspect, especially in relation to its sales performance. Kidane (1978) concentrated on the pricing of milk within Kiambu District; Murioga (1987) and Bett (1995) devoted their studies on the general marketing of dairy products in Kenya, with the former focusing on Kenya Co-operative Creameries. They both recommended the need for the firms to address the physical distribution issues they are facing. Chepkoit (1992) studied the distribution of sugar by the Kenya National Trading Corporation. He found out there is an imbalance in the way sugar is

being distributed within the rural and urban areas. Lusaka (1991) centred on dealer perceptions of supplier power and influence strategies within a marketing channel.

Further, Muiruri (1989) looked at the physical distribution problems facing the Nairobi City Centre vegetable and fruit sellers. He found out that the key problems entailed warehousing/storage, transportation, inadequate funds to run the business and harassment by the City Council Authorities. Kenduiwo (1988) surveyed on the interfactory transfer of bulk whole milk at the KCC. Some of the problems noted involved raw milk handling and storage, which have spillover effects on the quality of the final dairy products. The Economic Survey (2000) and the Statistical Abstract (1999) dealt with the milk volume flow changes during specific periods. The purpose of this study therefore is to establish whether the manner in which the dairy processing firms organize their product distribution functions does influence their level of performance.

1.2 STATEMENT OF THE PROBLEM

The dairy industry contributes upto 10% of Kenya's Gross Domestic Product (Sessional Paper No.1, 1986). Being at the core of many Kenyans' livelihood, the industry continues to receive much attention from both the public and private sectors and as such it has become one of the most important agro-based industries in Kenya (Kenya Dairy Board, 1999).

Two key factors have led to the establishment of several dairy processing firms:

- The government's liberalization of the industry
- The increase in demand for the dairy products.

In view of these opportunities, the dairy processing firms are employing different strategies to enhance their performance especially in terms of sales volume, profitability, market share and market growth. They employ the 4P's (product, price, place and promotion) within the marketing concept, with the aim of tailoring and balancing their activities to maximize their positive impact in the market. Of concern here is the physical distribution aspect.

- Dairy products are basically the same among the processors
- Dairy products are perishables yet highly demanded daily by most consumers (ILRI, 1995). Thus being perishable, their mode of distribution becomes crucial.
- For most consumers/users (like other business firms, hotels, supermarkets), storage of dairy products is quite costly as it requires an ample room with refrigeration facilities (cold stores). Such consumers/users require daily deliveries of the products by the processors.
- The dairy products' customers value quality services especially in terms of:
  - prompt delivery schedules (time factor)
  - reliability in supply: assurance of regular product availability at their premises.
  - goods in 'fresh' quality form. This has an implication not only on product storage but also on their state during transportation – type of vans.
- Appropriate distribution strategies play a key role in ensuring customer satisfaction and attainment of the firms' stipulated objectives.

- The effects of the success or failure of the dairy industry's physical distribution activities can easily be felt in other sectors of the economy, like:
  - Firms that use dairy products as raw materials e.g. ice-cream producers, chocolate products, bakeries and baby food processors.
  - Airline industry highly values the time factor.
  - Learning and health institutions.
  - The hotel industry.

All these factors indicate the possibility that the success of the dairy processors is highly pegged to how effective and efficient their distribution strategies are. Despite the high demand for the products, the processing firms appear not to be adequately meeting this demand (ILRI, 1995; and Economic Survey, 2000). Indeed, some of the firms have had their business bought by their competitors, while others have folded up. This study therefore seeks to establish if there is a relationship between the dairy firms' sales performance level and their physical distribution strategies.

1.3 OBJECTIVES OF THE STUDY

The study has the following as its main objectives:

(a) To identify physical distribution strategies employed by the dairy processing firms.

(b) To find out if there is a relationship between physical distribution strategies and the firms' sales and market share performance

1.4 IMPORTANCE OF THE STUDY

The findings of the study are expected to benefit the following groups of people:

(a) **Management**: The findings are expected to benefit the dairy industry's management in designing effective and efficient physical distribution strategies for their products.

(b) **Policy Makers**: The study is expected to create a deeper understanding on the need and importance of:

- Enhancing the dairy firms' realization of full benefits of the sector's liberalization, via promptly instituting appropriate policy changes.
- Building and maintaining a suitable infrastructure to help boost physical distribution activities in all industries. A well

maintained infrastructure, amongst other factors appeals to foreign investors. All these go a long way in promoting economic growth.

(c) **Academicians**: The study is a good groundwork upon which further research into other issues related to physical distribution can be studied.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents a review of some of the key literature related to the subject of the study. These include the concept of physical distribution, sales performance and the historical background of the dairy industry in Kenya.

2.2 THE CONCEPT OF PHYSICAL DISTRIBUTION

Various authors have attempted to describe physical distribution in various ways. Nevertheless the meaning remains the same: to get goods to customers in an economic way while ensuring customer satisfaction.

Bert (1987) describes physical distribution as the flow of finished goods from point of production to points of intermediate and final use. It is the vehicle for viewing marketing organization in its external aspects, and for bridging the physical and non-physical gaps that exist in moving goods from producers to consumers through the exchange process. Ballou (1973) provides the same meaning by stipulating that physical distribution entails a broad range of activities concerned with the efficient movement of finished products from the end of the production line to the consumer, for the purpose of providing a sufficient level of customer service (and the

associated revenues) consistent with the costs incurred for overcoming the resistance of time and space in providing the service. McKinnon (1989) expounds on this description by saying that the physical distribution activities consist of a series of inter-related functions of transport, stockholding, storage, goods handling and order processing. Kotler (2000) says physical distribution starts at the factory, whereby managers choose stocking points or warehouses and transportation carriers that will deliver the goods to final destinations in the desired time at the lowest total cost. Thus physical distribution provides the necessary support of markets by assuming the right quantity of goods placed at the right point at the right time (Marks & Taylor, 1967).

From the above definitions, it can be deduced that physical distribution, being the process of getting finished goods to consumers, encompasses a series of linkages and relationships between a company and its customers. This physical transfer may be done directly or via intermediaries, with the sole purpose of having the goods at the right place at the right time. A company's distribution efficiency is seen in terms of how well its physical distribution linkages work. According to Ballou (1973), physical distribution activities are a consequence of the distance and time gap

between production's location and the point of consumption and of the inability or the economic undesirability of having production output respond instantaneously to the needs of the market place.

2.2.1 History of Physical Distribution

Until the late 1950's most firms were more concerned with the promotion and merchandising of their products than about their distribution (McKinnon, 1989). Though some of the early authorities in marketing regarded physical distribution as a key element in marketing strategy, (La Londe and Dawson, 1969), most firms did not grasp its importance, as evidenced in their "Preoccupation with planning, production, purchasing and sales," relegating the actual movement of finished goods to a secondary role (Stacy and Wilson, 1958, p.278).

Distributive functions were usually regarded as low grade nuisances, accorded little managerial status and assigned less able staff. Warehousing was considered a "necessary evil" and freight transport a "dismal calculus of rates and routes" and "neither activity was felt to make a significant contribution to profitability nor to be worthy of much capital investment

(McKinnon 1989, p.2). During this period, "a certain amount of inefficiency in distribution could be tolerated" (Ballou 1978, p.15).

2.2.2 The Need For Physical Distribution

The need to control costs and raise efficiency, brought about by an increase in competition and the economic recession of the 1950's and 1960's arose. This brought the distribution function into the limelight and forefront of cost reduction.

Ballou (1973) and McKinnon (1989) provide the following as the key forces that are instrumental to the development of physical distribution both in industry and the academic world:

(a) Economic Pressure on Industry:

(i) Distribution costs were increasingly becoming a significant proportion of total costs, as the costs of transport, warehousing and stockholding were rising relative to the costs of other industrial inputs.

(ii) Reduced profit margins, a consequence of several factors, encouraged firms to look for more efficient organizational patterns.

(b) Changes in Customer Demand Patterns:

(i) An increase in population movements, especially the rural-urban mobility in search for, or change of jobs, created a shift in consumer demand, with a need for more/better products and services. This mobility has also contributed to major geographic changes in population concentrations and to a general proliferation of products and product types offered to consumers (competition).

(ii) The concentration of buying power at the retail level for example, enables large companies to set more exacting standards for the delivery of supplies to their shops and warehouses. Besides, manufacturers have to modify their distribution operations in response to the structural changes in wholesaling and retailing.

(c) Technological Changes: These have occurred in areas like:

(i) Stockholding (through palletization), containerization, packaging and in data processing (through the addition of data processing capability).

(ii) . The increase in the preliferation of transportation services and its effect on service choice.

The technological changes in these areas have added complexities into the distribution function such that presently there is an increase in the number of alternatives associated with distribution decisions (and therefore problems). The best choice of a transportation service now is not as obvious as when one or only a few choices existed. The advent of the computer has greatly eased the collection and analysis of distribution cost data and promoted the use of operations research techniques in distribution planning.

Kotler (2000) adds that technology within the distribution channel, especially in retailing, is becoming critical as a competitive tool. Retailers are using computers to produce better forecasts, control inventory costs, order electronically from suppliers, send e-mail between stores and even sell

to customers within stores. They are also adopting, amongst other techniques, improved merchandise – handling systems.

Therefore, a large number of factors have combined to create the necessary conditions for a major reassessment of the role of physical distribution. This is more so in the modern industrial economy (McKinnon 1989).

Kotler (2000) states that a well-planned physical distribution programme can be a potent tool in competitive marketing, because the ultimate goal of physical distribution is to meet customers requirements in an efficient and profitable way. Stewart (1965) and the American Marketing Association (1967) bear the same sentiments, pointing out that physical distribution can be used as a powerful marketing tool capable of generating additional sales. Stewart stresses the importance of balancing the cost of distribution against the quality of service provided, while the American Marketing Association, after exploring the effects of verifications in the standard of distribution service on the level of sales, concluded that firms could significantly increase their profits by co-ordinating marketing and distribution more closely. The Association however acknowledges that the relationship

between distribution service level and sales volumes cannot be easily quantified.

Physical distribution is a contributor to a firm's profitability, healthy cash flow and future prosperity (Wentworth, 1979). The sale of many highly perishable commodities (like dairy products) demands, amongst other factors, a quicker response within the distributive channels (Stacy and Wilson, 1965).

According to McKinnon (1989) and Kotler (2000), the principal task of physical distribution is to ensure that products are available at the right places at the right time and in the right quantities to satisfy customer demand. Availability here is viewed as the output of the physical distribution system, because it is only when products are made available for purchase that they acquire a sales value thereby making it possible for the production and marketing costs to be recovered. What this implies is that presently, distribution is generally considered to be a major cost center, an important marketing tool and a critical determinant of profitability. The processes of manufacturing and distribution are complementary, and that "an unsold

product, however efficiently produced, represents a waste of resources" (Edwards, 1982 p.11).

Physical distribution is also an important contributor to industrial competitiveness. In most cases, the performance of a nation's economy is critically dependent on the quality and cost of its logistical support. The cost of distribution affects the total volume of demand in the home market through its influence on the price at which goods are sold. Fast and reliable distribution does help a country's manufacturers to secure a large market share. McKinnon (1989) stresses that an understanding of distribution's practices is essential to a firm's accounts, as the costs of transport, warehousing and stockholding do rise relative to the costs of their inputs. Marketing initiatives like product line extensions and new marketing channels penetration do impose increasing strains on distribution systems thereby making such systems more difficult to manage and operate.

Physical distribution does also generate employment. This is more so in the service industry where firms are opening up business support in logistical activities. In Kenya for example, there is the Tibbett and Britten business entity which offers such services, especially the transport aspect, at a fee, to

firms which otherwise would find it uneconomical to run their own physical distribution functions.

2.2.3 Physical Distribution Functions

Physical distribution, being the successive transfer of ownership along a marketing channel composed of producers, wholesalers and retailers, or in terms of the physical movement of the goods from factories through warehouse to shops, bridges the gap between production and consumption by fulfilling certain basic functions. Kotler (2000) refers to these functions as market logistics decision areas.

They include:

(a) How should orders be handled? (order processing)

(b) Where should stocks be located? (warehousing/storage).

(c) How much stock should be held? (inventory)

(d) How should goods be shipped? (Transportation).

(e) Communication.

Distance, time and risk tend to form the three dimensions of physical distribution. These therefore require appropriate distribution strategies to be employed if performance has to be enhanced. Strategy in this case refers to

how a firm endeavours to differentiate itself positively from its competitors using its relative distribution strengths to better satisfy customer needs (MacMillan and Tampoe, 2000).

(a) **Order Processing**

Kotler (2000) explains order processing as one that includes order transmission by the sales person, order entry and customer credit check, inventory and production scheduling, order and invoice shipment, and receipt payment. Today, many companies are trying to shorten the order-to-remittance cycle - that is- the elapsed time between an order's receipt, delivery and payment, via use of an integrated order processing system, because the longer this cycle takes, the lower the customer's satisfaction and the lower the company's profits.

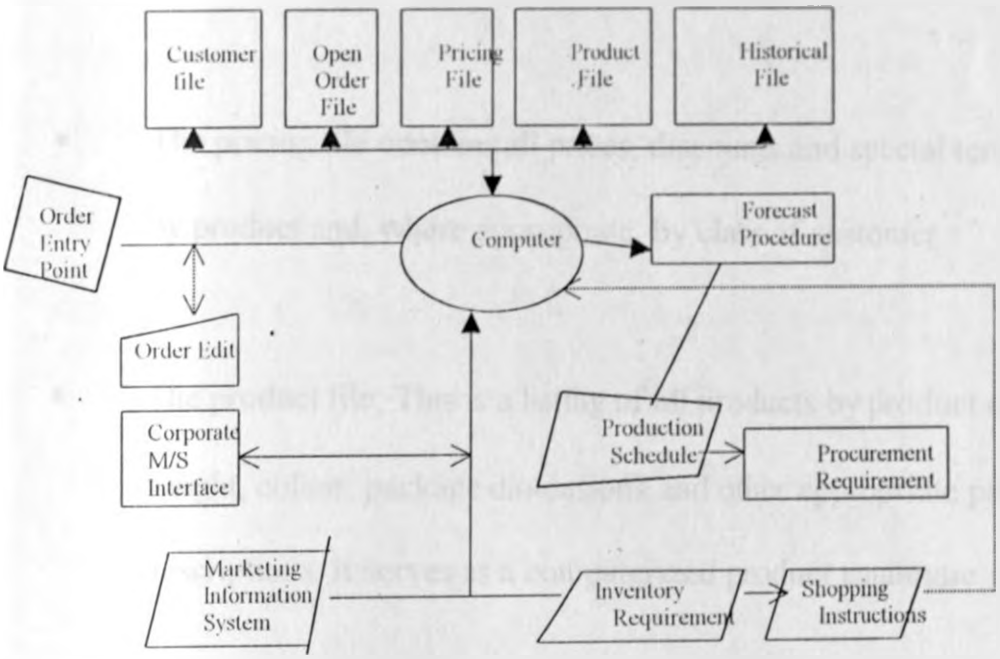


Fig 1: Intergrated Order Processing
Source: Wentworth, 1979, p.30

Figure 1 depicts an **ideal** integrated order processing model, using modern techniques. It involves the following:

- The customer data file: This contains the 'deliver to' and 'invoice to' addresses, credit limits and any special delivery instructions for either distributors or direct-delivery customers.

- The open order file: This maintains a record of all current orders and back-orders. The data here is stored in such a way that breakdowns of

the information are readily available to management by product line, customer, age, geographical area etc. as required.

- The pricing file contains all prices, discounts and special terms of sale by product and, where appropriate, by class of customer.

- The product file: This is a listing of all products by product code, weight, colour, package dimensions and other appropriate product descriptions. It serves as a computerized product catalogue.

- The historical file: This contains sales information, customer information and any other data retained for historical comparative purpose, for example the annual reports or special studies.

For production scheduling, the integrated data base is used as the input into a short-term forecasting model which produces forecasts per individual item within each major product group. It is also used to forecast both the longer term trends and the progress of new products, besides tracking the progress of the latter.

Wentwoth (1979) further elaborates that the above product forecast is relayed into a materials requirement planning programme, which in turn calculates production schedules and purchasing requirements. The system also performs the standard inventory control, warehousing and delivery documentation, and accounts receivable functions. Besides, the system interfaces directly with the company's central management information system and can provide on demand, through an aggregate forecasting module, measurements of market share by product line or geographical area. Reports can be produced to a regular timetable.

(b) **Warehousing**

This refers to the storage of finished goods until they are required and sold. The logic here is that production and consumption cycles hardly match. The storage function helps to smooth discrepancies between production and the quantities demanded by the market. The company must thus decide on the number and location of the warehouses – depots, sub-depots, wholesalers and retailers (Kotler, 2000) and whether they should be company owned or rented. Storage and its accompanying function of finance give depth to the market. Storage is a means of which commodities are protected from

deterioration, and surplus supplies are carried over for future consumption in periods of scarcity (Stacey *et al*, 1965). According to this author, storage gives dimensions to the market for a commodity – that is – time and place utility is invested in goods through the storage process, for it involves decisions on what to store where and when. Thus the economic factors associated with storage include location, space utilization and product preservation (McKinnon, 1989; Wentworth, 1979).

(i) Location: This includes depots, sub-depots, wholesalers and retailers. Most of the depots/warehouses are designed to meet the specific needs of different product groups, and are usually located in large population centers. Their main roles is to receive goods for storage and onward transmission or delivery, with the aim of smoothing out production cycles and speeding up the distributive process.

(ii) Utilization of space and stock handling go hand in hand. Thus an optimum layout design that will neither push up handling costs (for the sake of higher space utilization) nor waste space for the sake of reducing handling costs must be arrived at (Stacey *et al*, 1965).

A company might own private warehouses and also rent space in public warehouses. Storage warehouses store foods for moderate-to-long periods of time (for example depots), while distribution warehouses receive goods from various company plants and suppliers and move them out as soon as possible (Kotler 2000).

(iii) Product Preservation: This refers not only to prolonging the 'storelife' of the goods, but also making them last longer in use. This is particularly true in food products. Most dairy products for example require cold storage. Preservation is also not only important for domestic consumption but also in catering establishments, aircraft and export purposes. Stacey et al (1965) stresses that the important factor in as far as distribution is concerned is that frozen foods are breaking down the gap between the producers of highly perishable products and the stores, whose benefits are extended to the consumer.

(c) **Inventory**

Inventory decision – making involves "knowing when to order and how much to order" (Kotler, 2000, p541). When to order refers to the stock level at which to place a new order – the order (reorder) point. This order point should balance the risks of stock-out against the costs of overstock. In deciding how much to order, a company needs to balance order-processing costs and inventory-carrying costs. The former consist of set up costs and running costs - that is - operating costs when production is running for the item. The latter–the inventory–carrying costs–include storage charges, cost of capital, taxes and insurance, depreciation and obsolescence. Thus the larger the average stock carried, the higher the inventory – carrying costs. Therefore, the optimal order quantity can be determined by observing how order-processing costs and inventory – carrying costs sum up at different order levels.

(d) **Transportation**

This involves availing goods in warehouses, dealers and customers. The spatial separation of producers and consumers creates the need for movement (McKinnon, 1989). Transport, together with communication, is a major factor in determining the extent of the market areas. According to

Kotler (2000), transportation choices do affect production, pricing, on-time delivery performance and the condition of the goods when they arrive, all of which affect customer satisfaction. Decisions on transportation modes involves making choices on whether to use private, contract or common carriers. A private carrier is where the manufacturer has own fleet. A contract carrier is an independent organization selling transport services to others on a contract basis. A common carrier provides services between predetermined points on a scheduled basis and is available to all manufacturers at standard rates.

Communication

According to McKinnon (1989), there must be a two-way transmission of information between producers and consumers to regulate the flow of goods between them. Wentworth (1979) summarizes the major functions of a distribution information system as shown below (see fig. 2):

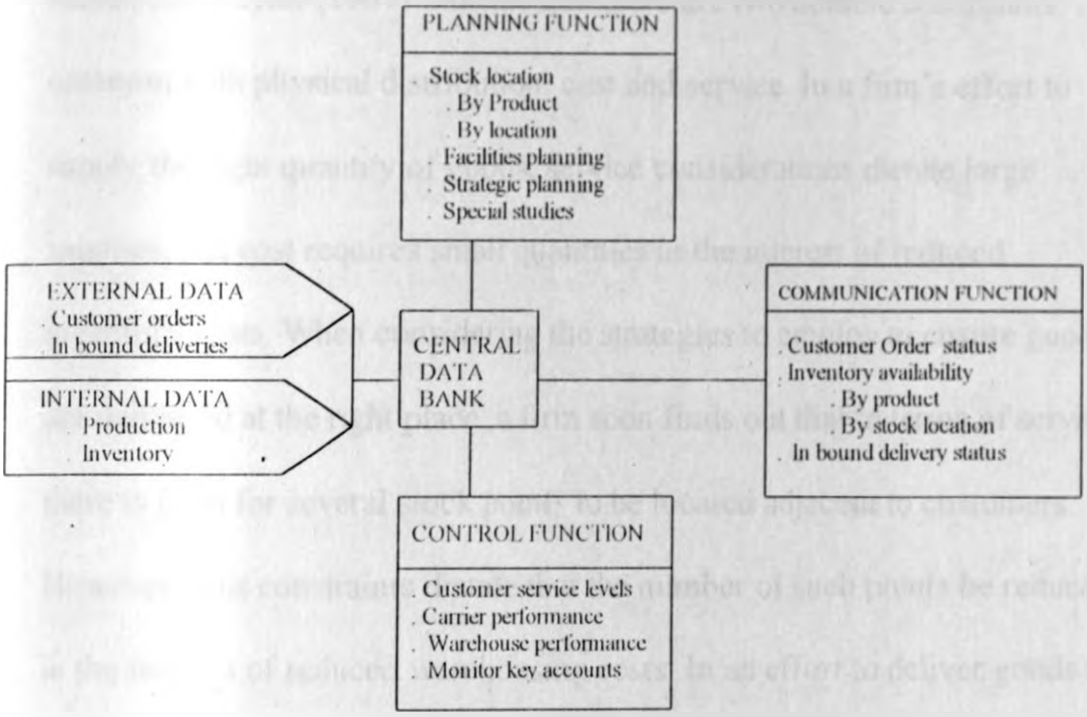


Fig. 2: Major Functions of a distribution information system.
Source: Wentworth; 1979, p.32

It is important to note that the above illustration is as seen from the distribution manager's point of view, and is just a conceptual outline. It can be tailored to an individual firm's own situation before becoming operational. It is based on two key assumptions:

(i) That the external and internal flows of information should be integrated in a central data bank; and

(ii) The distribution manager's primary functions involve planning, control and communication.

Marks and Taylor (1967) indicate that there are two notable constraints common with physical distribution: cost and service. In a firm's effort to supply the right quantity of goods, service considerations dictate large supplies, but cost requires small quantities in the interest of reduced inventory costs. When considering the strategies to employ to ensure goods are delivered at the right place, a firm soon finds out that in terms of service, there is need for several stock points to be located adjacent to customers. However, cost constraints dictate that the number of such points be reduced in the interest of reduced warehousing costs. In an effort to deliver goods to customers at the right time, a firm may desire to employ a strategy that ensures that scheduling is accomplished via use of the fastest and safe means of transport. But transport costs dictate use of slower modes of transportation like road and rail carriers.

Therefore, in view of these constraints, a proper application of physical distribution strategies requires a constant balance between the needs of revenue–producing policies (as reflected in customer service requirements), and cost-reducing aspects which adversely affect service and therefore overall performance. This balancing however will depend on each firm's

marketing plan. This may explain why for example two firms in the same industry follow what appears to be diametrically opposed physical distribution programmes. The purpose of this study is to find out if there are such firms within the dairy industry and if so, what influence do their different physical distribution strategies have on their overall performance in terms of sales volume and market share?

2.2.4 Physical Distribution and Sales

Both sales people and distributors and 'key contacts' with customers, and so can provide feedback against existing products and even clues to new products. A firm's physical distribution policies are important determinants of the function of its sales, because the choice of a particular distributive or market channel sets the pattern for the sales force operations. This pattern may be set both geographically and also with regard to the target customer classes (Still, et al, 1998). The number of outlets to handle a firm's products affects the size of the sales force, the nature of sales organization and the scope of the sales activities.

Decisions, for example, have to be made not only on the kind of co-operation to be extended to the intermediaries (in the form of margins and merchandising) but also on the co-operation to be expected from them. An

observation in most Kenyan urban centers indicate that most dairy processing firms distribute their products using all available means like bicycles, kiosks, trolleys (push-carts) besides the established retail outlets like supermarkets and general grocery shops. Though this may imply intensive product distribution, the issue arises as to the overall sales performance especially when other physical distribution functions like order processing, inventory control and warehousing are considered.

2.3PERFORMANCE

This refers to a firm's efforts to attain the set objectives using appropriate strategies as per the plan. It is usually expressed in terms of efficiency, using variables like profitability, market share and sales volume.

Performance measurement may be quantitative or qualitative (CIM Study Text, 1997). Quantitative measurement is that which is expressed in figures and given for example as cost levels, delay in delivery time and market penetration per product. Qualitative performance measurement is observational and judgemental, It is essential to note that most firms adopt both approaches to performance measurement, based on targets to be

attained. For purposes of this study, the selected performance areas of interest are the sales volume and market share.

2.3.1 Sales Analysis

This helps determine the sales volume. It consists of measuring and evaluating actual sales in relation to sales goals. (Kotler, 2000). The most common sales management objectives include achieving sufficient sales volume, experiencing continuing sales growth, achieving the best customer service and providing ample contribution to profits.

There are two specific tools used in sales analysis: the sales-variance analysis and the microsales analysis. The sales-variance analysis measures the relative contribution of different factors like price and volume decline to a gap in sales performance, especially in terms of sales volume. The micro-sales analysis looks at specific target areas (like products, territories), that failed to produce expected sales, and causes for such failures are sought for. Thus either of the two approaches provide not only the actual sales volumes but also help establish why the difference occurred in relation to the set targets. The use of sales volume as a measure of sales performance in the

dairy industry is highly valued, especially due to the fact that the products' demand currently exceeds the supply.

2.3.2 Market-share Analysis

Kotler (2000) and CIM (1997) provide three definitions of market-share:

- **Overall market share:** This is a firm's sales (in a specified market) expressed as a percentage of total sales by all firms within the industry and within the same market.
- **Served market share:** This is a firm's sales expressed as a percentage of the total sales to its served market, whereby the "served market" refers to all the buyers willing and are able to buy the product(s).
- **Relative market share** is the firm's market share in relation to its largest competitor.

For purposes of this study, the overall market share will be adopted. This is because the dairy products for all firms distributing within Nairobi are basically the same, competing for the same types of customers. Variations in reaching these customers may be due to ownership of transport means, quality of sales force, location/ownership of warehouses and the general order-processing and inventory management. These are also in view of the

fact that there are several other factors that affect market share, like the percentage of all customers who buy from the firm (customer penetration), the size of the average customer purchase from the firm expressed as a percentage of the size of the average customer purchase from an average firm (Customer selectivity), price selectivity and customer loyalty.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The study was a descriptive study. It was set to establish if there is a relationship between the dairy firms' sales and market share performance level and their physical distribution strategies.

3.2 THE RESEARCH SETTING

The study was conducted within Nairobi because most of the dairy processing firms that distribute their products in the city either have established offices or have set up base within the vicinity. The main reasons why Nairobi was chosen as the study area are:

- Nairobi provides the largest market opportunities for dairy products – both in geographical terms and the number of market segments, for example:
    - Educational institutions like schools and colleges
    - Hotels – as users and consumers
    - Large, several retail outlets
    - The airline industry – the Nairobi Airport Services
    - Other food processors like RAZCO Food Products, Nestle Foods, Cabury's (K) Ltd, and the bakeries.

- The general large population

- Nairobi has accessibility to special storage facilities that cater for the perishability of dairy products

3.3 THE POPULATION

The population of interest in this study consisted of all the dairy processing firms that distribute their products in Nairobi. The list was availed from the Kenya Dairy Board who license the business. Thus the stud was a census survey of the 13 firms approached, only 8 (62%) agreed to participate and responded in time.

3.4 DATA COLLECTION

The research made use of both primary and secondary data. Primary data was collected via a questionnaire that was administered on a "drop and pick later" basis. The questions were in both open-ended and close-ended format The questionnaire is divided into two parts (see appendix 2). Part I is about the profiles of both the firm and the respondents. Part II covers the physical distribution strategies employed, and firm's performance.

The respondents were mainly managers in sales, marketing and distribution One firm had the personal assistant to the Managing Director respond to the questionnaire. Secondary data was availed mostly from the Kenya Dairy Board which has updated information on the dairy industry, including data from the International Livestock Research Institute.

3.5 DATA ANALYSIS

Data was analyzed with the aid of descriptive statistics such as frequencies and percentages. The aim was to establish the quantitative extent of any similarities in the performance level of firms which appear to be employing relatively similar distribution strategies. Being a qualitative kind of research, the contents of the open-ended questions were analyzed and where applicable, were used to explain the close-ended responses.

CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

This chapter presents the findings of the study. It is divided into three sections. Section one deals with the firm profile. Section two looks at the physical distribution strategies employed, while the third section deals with the firm performance, in terms of sales and market share.

4.1.1 Ownership of the Firms

This analysis was necessary as it helps establish the type of firms being studied. Table 1 provides a summary of the findings.

Table 1 Ownership of the Firms

Ownership	Number	Percentage
Sole Proprietorship	4	50
Partnership	0	0
Limited Liability	4	50
Total	8	100

From the table above, it is clear that half of the firms studied fall under sole proprietorship, while the other half operate under limited liability type of ownership. It was also observed that generally, the firms under sole

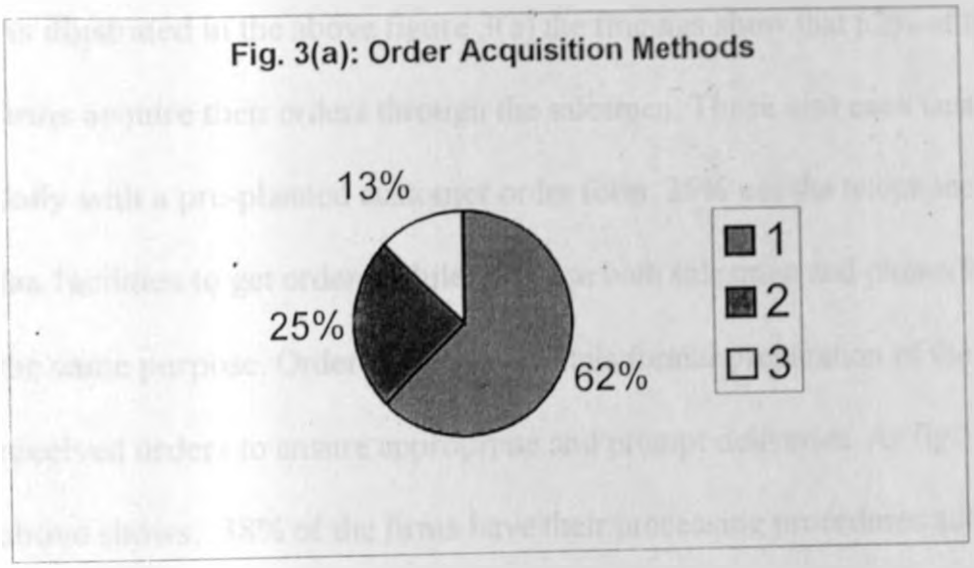
proprietorship tend to emphasize certain product specialization (like yorghurt, cheese and cream) for specific niche markets within Nairobi. The other dairy products like the pasteurized fresh milk, though produced, are not given much emphasis. In contrast, the firms under limited liability type of ownership, though providing similar products like those of the sole proprietors, tend to emphasize the production of pasteurized fresh milk which they distribute to all types of customers throughout Nairobi.

4.2 PHYSICAL DISTRIBUTION STRATEGIES EMPLOYED

This section attempts to analyze the physical distribution strategies used by the firms under study. The strategies are categorized into four key physical distribution functions of order processing, storage, inventory and transportation.

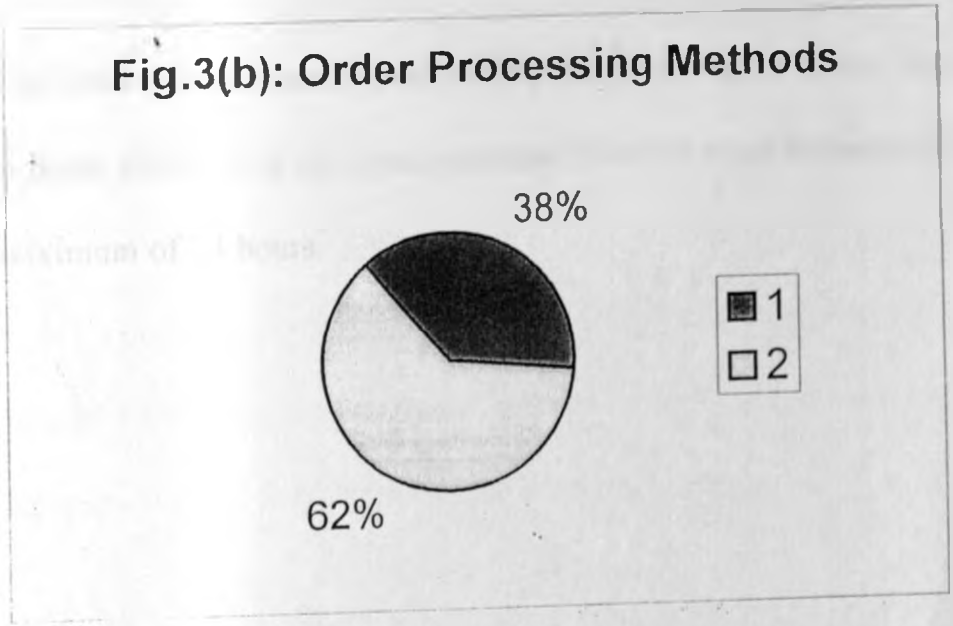
4.2.1 Order Processing

The study sought to find out how orders are obtained from customers, processed and delivered. It also sought to establish the order-to-remittance cycle. The findings are as summarized in figures 3(a) and (b) below.



Key

1 - Salesmen
2 – Telephone/fax
3 – Salesmen/telephone/fax



Key:
1 - Manual
2 - Automated

As illustrated in the above figure 3(a) the findings show that 62% of the firms acquire their orders through the salesmen. These visit each customer daily with a pre-planned customer order form. 25% use the telephone and fax facilities to get orders, while 13% use both salesmen and phone/fax for the same purpose. Order processing entails formal preparation of the received orders to ensure appropriate and prompt deliveries. As fig 3 (b) above shows, 38% of the firms have their processing procedures automated while 62% do it manually. All firms physically deliver their products to customers with a few of their distributors collecting them from the factory premises.

The order–to-remittance cycle slightly varies among the firms. The findings indicate that 25% of the firms take upto 36 hours while the rest, 75%, take a maximum of 24 hours.

4.2.2. Storage/Warehousing

Due to variances between the production and consumption cycles, it was deemed necessary to establish the availability and ownership of storage facilities among the firms. All firms have warehouses, and all confirmed that distribution costs were very important determinants of the warehouse location. Half of the firms considered proximity to customers as another very important factor, while the other half regarded proximity to plant as the important factor.

With regard to ownership, one firm has no single warehouse of its own. It relies solely on distributor warehouses. Three firms rely on both own and distributor warehouses, while the rest (four of them) own all the warehouses.

The stockhandling procedure within warehouses includes acquisition of store orders, lifting and shifting of goods within the store and loading. All the firms studied do carry out these activities manually.

4.2.3 Inventory Decision – Making

This involves the determination of re-order points and the quantity to order. Knowledge of appropriate re-order point helps balance the risks of stock-out against the costs of overstock, while an understanding of the correct order quantity may help balance the order processing costs against the inventory-carrying costs.

Out of the different milk and milk products distributed in Nairobi, all firms rated the fresh pasteurized milk as the fastest moving product. However, none of the respondents provided the re-order point for this product (or even the others). Some avoided the question altogether. All the firms encounter risks of both over-stock and stock-out. To arrest these risks, half of the firms provided strategies in place while the rest did not provide any strategies.

To counter over-stock, reduction of raw milk prices to dairy farmers is implemented to discourage them from supplying more. During stock-out periods these prices are raised to motivate the same farmers. Plans to install driers for milk powder production are in place for at least two of the firms, to help control the stock-out risks during the lean season.

4.2.4. Transportation

A majority of the firms (75%) use the agent → Wholesaler/retailer → consumer, and retailer → consumer channels of distribution. The rest (25%) utilize all the available channels to ensure their products are in as many outlets as possible. According to the former, costs due to distance, and inadequate transport facilities, are key determinants of the channel choice, while the product brand and customer type determine the channel choice for the latter.

All the firms transport their products to the distributors/outlets by road. Five of the firms, use private, company-owned carriers, two use both company-owned and contract carriers, while one utilizes common carriers. For the majority that use private company-owned carriers, ability to control distribution activities, including costs management, are provided as the main reasons. The rest cite inadequate funds to afford own transport. The findings on transportation also revealed that one firm does use boat services to ferry its dairy products to neighbouring Tanzania, through Mwanza.

From the above analysis it can be deduced that a majority of the firms prefer using own transport means to deliver their products to particular outlets as opposed to hired transport means and mass channel utilization. This enables them to have full control of the transport facilities and services.

4.3 PERFORMANCE

A summary of the firms' performance, in terms of sales volume and market share during the year 2000/2001, is shown in the table below:

Table 2: Firm Performance: Sales Volume and market share, 2000/2001

Firm	Sales (million litres)	Market share (%)
a	23.4	41.1
b	12.96	22.7
c	8.1	14.2
d	5.57	9.8
e	4.86	8.5
f	1.2	2.1
g	0.54	0.9
h	0.362	0.6
Total	57	100

As the table above indicates, the firms under study contributed approximately 57 million litres of milk and milk products to the Nairobi market, as reflected in their individual sales volume. The highest sales volume was 23.4 million litres while the lowest was 0.362 million litres, providing a wide range of 23.038 million litres. The firm with the highest sales volume has a market share of 41%, while the lowest has 0.6%. Besides distribution functions, other factors did play a part to this wide range.

DISCUSSION AND CONCLUSION

The findings of the study indicate that all the dairy processing firms do employ the physical distribution functions of order-processing, storage and transportation, except inventory management. Differences arise as to the approaches used in the implementation of these functions, which in turn lead to variations in performance levels. Implementation decisions are made and communicated in accordance with the firms' kind of ownership (and therefore management levels).

It can be noted from the findings that firms which acquire their orders through their sales teams (62%) generated sales volumes of at least 5 million litres and above during the year 2000/2001 as opposed to those that rely solely on phone/fax facilities. Those with automated order processing facilities (38%) tend to perform even better, with sales volumes of over 8 million litres generated during the same period. Though most of the firms (75%) deliver their goods to the market within 24 hours after receipt of orders, the sales volumes vary greatly. This may imply that other than timeliness alone, other factors play a major role in influencing sales performance. It is also apparent that firms which own warehouses, which

comprise 50% of those studied (firms a-d in table 2), tend to have a favourable sales volume edge over those that rely on rented warehouses.

With regard to transportation, firm 'a" (table 2) for example owns all its fleet of sales vehicles, which are appropriately conditioned to suit the different milk brands. This, coupled with an effective well-equipped sales team, has given the firm the overall best position in sales volume and market share, amongst the firms studied.

Constraints encountered by these firms in their efforts to adequately distribute their products in the market include:

- Unfair competition from hawkers of raw milk.
- Seasonality in availability of dairy products
- Lack of reliable information on demand patterns including changes in dairy consumption habits with urbanization
- Lack of, and unreliable access to inputs, particularly credit facilities,
- Poor infrastructure, particularly roads
- Slow changes in the policy environment and the enactment of regulations to back up policy changes.

In conclusion, it can generally be stated that dairy processors that distribute their products in Nairobi do practice more or less similar physical distribution strategies, albeit under varying implementation degrees, due to the influences of the aforementioned constraints. Also, from the analysis, it appears that the physical distribution strategies employed by these firms do influence their sales volumes and market shares, such that those firms that adequately manage their physical distribution functions tend to perform better than those that do not.

Recommendations on Findings

From the foregoing, it is clear that dairy processing firms do strive to employ appropriate physical distribution strategies in their efforts to attain their various objectives, all related to performance. The recommendations below may contribute towards high-level performance attainment:

- The proliferation of the sales of raw whole milk by hawkers in urban areas may be an indicator of varying milk demand and consumption preferences. These should be understood and exploited in the improvement of the milk marketing system not only in Nairobi but within the whole country, with due regard to health and quality standards.

- In the interest of fair competition and the maintenance of all – year dairy products availability thereby contributing to national food security, all the dairy processors in Kenya should strive to be equal partners in the rationalization of dairy marketing in the country. This issue calls on the need to institutionalize the arrangements for the maintenance of strategic dairy reserve in order to be able to cope with milk shortfalls during the recurrent annual dry periods and shortages arising from occasional droughts. (Using price changes as a weapon to fight seasonality is not an appropriate strategic too at all). Modalities should be worked out regarding sharing costs associated with the storage of the requisite strategic dairy reserves.
- There is need for thorough appropriate research into demand patterns for dairy products. The demand for milk and its products, like other consumer goods, is a function of population size, income levels and the elasticity of demand for milk, retail price and, to a lesser extent, taste and preference over other products. Thus the demand pattern can be forecasted based on assumptions about trends in these variables, and the expected rise in dairy demand over time.

The essence of having an appropriate demand pattern here is to help the firms have a basis for their inventory decision making, which in turn will curb the stock-out/ overstock problems. It also will contribute towards appropriate marketing strategies.

- To curb the poor infrastructure, especially the roads, there is need besides government efforts, for an increase in public investment so as to contribute towards road maintenance. This would help not only in a cost-effective distribution of processed milk, but would also increase milk off take in dairy producing areas.
- Out of the 45 dairy processing firms licensed by the Kenya Dairy Board, only 13 manage to distribute their products within Nairobi. About 15% of these licensed processors have already folded up business, while one has been purchased by its competitor on a going – concern basis. The major reason behind all this is a lack of strong capital base, due to inaccessibility to financial/capital credits. With high demand potentials for dairy products, such findings can be used to source for reliable finances to help boost the dairy processing business.

- The dairy industry's legal framework to increase the benefits of market liberalization in the Kenyan economy has lagged behind the policy change. Though the Kenya Dairy Board (KDB) now issues licenses to traders of raw milk, the regulations that were there before liberalization (that disallowed trading in non-processed or non-pasteurized milk products) are still in place.

The KDB needs to be empowered to set and implement regulations regarding raw milk handling, permissible time to retailing, and adulteration, combined with some incentives to the milk traders (like provision of basic training in milk handling and hygiene or an official stamp of approval). This would make it possible for a larger portion of the milk market to fall under regulatory control, thereby improving the average standards of milk in the market. In essence the KDB may attempt to:

- initiate appropriate dairy policy reform
- create an enabling environment for players in the industry to operate efficiently through proper use of levies obtained from these players

- Facilitate relevant and co-ordinated demand driven dairy policy, technology and market research.
- Fully implement only the desirable policies.

- The dairy products' distribution strategies in line with marketing strategies should be well designed to enable the firms achieve especially the following objectives:
  - Determine customer needs through market research.
  - Identify the specific markets to serve
  - Analyse the firm's competitive advantage, and hence build a marketing strategy around it.

Limitations of the Study

1. An exhaustive study of all the dairy processing firms as per the initial list would have produced more reliable results. Lack of co-operation from the omitted firms frustrated this effort. These same firms held the study with a lot of suspicion, stating that the information sought for in the questionnaire was their private and confidential property.
2. Time allocated for the study was quite limited, both for the researcher and respondent.

Despite these constraints, the execution of the study was done with utmost care to minimize the effects of these limitations.

Suggestions for Further Research

This research covers physical distribution functions in general. Further studies should be conducted to cover:

- The in-depth roles of each of the physical distribution functions within the dairy industry, and their overall effect on the marketing strategies employed.
- Physical distribution and firm performance, with emphasis on factors like profitability, growth and survival in the currently competitive environment.

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APPENDIX I

LETTER OF INTRODUCTION

Dear Sir/Madam,

RE: A STUDY ON PHYSICAL DISTRIBUTION IN THE DAIRY INDUSTRY

I am a post-graduate student, pursuing a Masters of Business Administration degree at the University of Nairobi.

In partial fulfillment of the course requirements, I am carrying out a research in the above-stated subject. Your Company has been selected to participate in the research. The purpose of this letter is therefore to request you to provide the required information to the best of your knowledge, by filling the herein attached questionnaire.

This exercise is strictly for academic purpose. All the information you disclose will be treated in strict confidence, and in no instance will your name be mentioned in the report.

Your co-operation will be highly appreciated.

Thank you.

Yours faithfully,

ODONDI RUTH
MBA STUDENT

DR. R.M. MUSYOKA
SUPERVISOR

APPENDIX 2

QUESTIONNAIRE

Please answer the following questions by giving the necessary details in the provided spaces or by placing a mark (✓) in the appropriate box

PART I. FIRM AND RESPONDENT PROFILES

1. Name of Firm.....
2. Year of Establishment.....
3. Ownership.....
4. Title or position of respondent in the firm.....
   .....
5. How long have you been with this firm? .....Years
6. What products does your firm produce and market?
   (a) Fresh homogenized milk (all types) ☐
   (b) Ultra-Heat-Treated milk ☐
   (c) Cultured milk ☐
   (d) Fresh cream ☐
   (e) Yorghurt (all flavours) ☐
   (f) Cheese (all types) ☐
   (g) Ghee ☐
   (h) Butter (salted/unsalted) ☐
   (i) Condensed milk ☐
   (j) Powder milk (all types) ☐
   (k) Others (please specify).....
   .....

7. What are the firm's main markets in terms of:
   (a) Geographical location?.....
   .....
   .....
   .....
   (b) Segments (types of consumers/user)?.....
   .....
   .....
   .....

PART II – PHYSICAL DISTRIBUTION

8. In your efforts to serve customers, briefly explain how customer orders are processed, from point of order receipt to pointof delivery and payment. .....
   .....
   .....
   .....
   .....

9. How long, on average, does this process take?
   (a)..... minutes
   (b)..... hours
   (c)..... days
   (d)..... weeks
   (e)Others (please specify).....

10. How many warehouses does the firm have?
    .....

11. To what extent were each of the following factors important in determining the location of your warehouse?

	VI	I	FI	SI	NI
(a) Cost					
(i) Distribution costs	☐	☐	☐	☐	☐
(ii) Real Estate costs	☐	☐	☐	☐	☐
(iii) Processing costs	☐	☐	☐	☐	☐
(b) Proximity to plant	☐	☐	☐	☐	☐
(c) Proximity to customers	☐	☐	☐	☐	☐
(d) Other (please specify)	☐	☐	☐	☐	☐
.....	☐	☐	☐	☐	☐
.....	☐	☐	☐	☐	☐

Key
VI: Very Important
I: Important
SI: Somewhat Important
NI: Not Important at all
FI: Fairly Important

12. What percentage of these warehouses are owned by the firm? .....%

13. Is the stock handling procedure (for example acquisition of store orders, lifting and shifting of goods within the store, and loading)

	Yes	No
(a) Automated?	☐	☐
(b) Manually done?	☐	☐

14. Among your firm's products (as given in question 6), which ones move fastest in the Nairobi market?
    .....
    .....
    .....

15. For each of the named fastest moving products, what is the re-order point (in quantity form)?

.....

.....

.....

16. Do you ever encounter risks of:

	Yes	No
(a) Overstock?	☐	☐
(b) Stock-out?	☐	☐

17. If 'yes' to any of the above, how do you attempt to overcome the risks?

.....

.....

.....

18. Which of the following channels of distribution does your firm employ?

(a) Agent → Wholesaler→ Retailer→ Consumer ☐

(b) Wholesaler → Retailer → Consumer ☐

(c) Retailer → Consumer ☐

(d) Supply directly to consumer ☐

19. What is the rationale behind your channel choice?.....

.....

.....

.....

20. Which means of transport does your firm use most to deliver products to these channels?

(a) Road only ☐

(b) Rail only ☐

(c) Both road and rail ☐

(d) Other (please state)

.....

21. If by road only, what type of carriers or motor vehicles, in terms of ownership, are used most?

(a) Private (company-owned) carriers ☐

(b) Contract carriers ☐

(c) Common carriers ☐

(d) Other (please specify).....

22. What justifications determine the type of carriers used most?.....

.....

23. On average, what is the firm's annual sales volume generated in the past year by its channels of distribution?

(a) Milk..... litres
(b) Other products ..... kgs

24. What do you base your sales analysis on?
(a) Factors that contribute to the overall short-fall ☐
(b) Specific target areas like product type ☐
(c) Other (specify).....
.....

25. What are the key causes of variances in your firm's actual sales volume against the set targets? .....
.....
.....
.....
.....
.....

26. Which of the following strategies does your firm employ most in ensuring appropriate co-ordination is enhanced between your sales team and the distributive network?
(a) Gaining product distribution ☐
(b) Obtaining distributor identification ☐
(c) Reconciliation of business goals ☐
(d) Sharing promotional risks (co-operative advertising) ☐

27. What other distribution support tasks do you provide to your distributors/retailers?
.....
.....
.....
.....

28. How would you rate the importance of the following in determining the size of your market share?

	VI	I	FI	SI	NI
(a) Distribution functions	☐	☐	☐	☐	☐
(b) Customer penetration	☐	☐	☐	☐	☐
(c) Customer loyalty	☐	☐	☐	☐	☐
(d) Customer selectivity	☐	☐	☐	☐	☐
(e) Price selectivity	☐	☐	☐	☐	☐

29 In your efforts to provide new dairy products to your distributors/retail outlets, what strategies do you use?

.....

.....

.....

.....

30 How do you get non-store retailers informed so as to pass the same message to their customers (the final consumers/users)?

.....

.....

.....

.....

31 What control measures have you incorporated into your physical distribution plan to ensure prompt product availability?

.....

.....

.....

.....

32 Generally, what major hinderances do you find in setting up effective distribution strategies?

.....

.....

.....

33 How do you try to overcome these hinderances?

.....

.....

.....

Thank you for your co-operation

APPENDIX 3
LIST OF DAIRY PROCESSING FIRMS TO BE SURVEYED

	NAME OF FIRM	H/Q LOCATION
1.	Bio Foods Ltd	Nairobi
2.	Brookeside Dairy/Ilara Dairy	Ruiru
3.	Delamere Dairy	Naivasha
4.	Doinyo Lessos Creameries	Eldoret
5.	Eldoville Farm	Nairobi
6.	Limuru Milk Processors	Limuru
7.	Spin Knit	Nairobi
8.	Premier Dairy	Kericho
9.	Meru Co-operative Dairy	Meru
10.	Nyota Dairy	Kitale
11.	Lelkina Dairies	Molo
12.	Kenya Co-op. Creameries	Nairobi