

Entry and sustenance strategies of dairy processing firms into supermarkets in Nairobi City County, Kenya

Kamau Vincent Mugo

Institute for Development Studies
University of Nairobi
P.O BOX 30197-00100 Nairobi, Kenya

Corresponding email: mugovinc@gmail.com

DOI: <https://dx.doi.org/10.4314/ajmr.v27i2.3>

Abstract

The growth of dairy processing firms is highly dependent on doing business with supermarkets as supermarkets are powerful actors in the dairy product value chain. This paper therefore, examines the entry and sustenance strategies used by dairy processing firms into supermarkets in Nairobi, Kenya. By way of methodology, this is a case study that conducted two rounds of sampling on a population of eleven dairy processing firms. The first round was a census to verify existence and sizes of predetermined dairy processing firms. In the second round, stratified random sampling technique was conducted to create three categories and thereafter, select dairy processing firms for inclusion in the sampling frame. Data was analyzed through thematic analysis. Findings indicate that New Product Development, distribution chains, diversification, packaging, Mergers and Acquisitions, food safety strategies, market and marketing, and products serve as important entry strategies into the supermarket chains. Organizational structure and slotting allowance were crucial sustenance strategies. Dairy processing firms experience challenges such as safety and health standards, dairy product imports, export markets, trade credit, product promotion, legal certification, supermarket private standards, supermarket own labels and market challenges. Small, medium and large dairy processing firms apply different entry and sustenance strategies and experience different challenges while doing business with supermarkets. This paper, to the best of my knowledge, is the first to explore the different entry and sustenance strategies utilised by small, medium and large dairy processing firms for purposes of gaining access and sustaining their products into supermarkets in Nairobi, Kenya.

Keywords: Entry strategies; Sustenance strategies; Dairy processing firm; Supermarket; Value Chain

INTRODUCTION

Kenya has a robust dairy processing sector estimated at 4% of the country's Gross Domestic Product (GDP) (Rademaker, et al., 2016). The sector has recorded an increase in dairy produce especially milk which is delivered to dairy processing firms for processing. This increase from 419.3 million litres in 2014 to 437.5 million litres in 2015 has translated into a burgeoning of the volume of dairy products such as milk, cream, butter and ghee. The production of yoghurt and fermented milks has also recorded a significant increase of 24.5% between 2014 and 2015 (Kenya National Bureau of Statistics, 2016).

The sector has a complex value chain with diverse actors that include farmers, traders and vendors, collection centers, distributors, processors, and retailers. There is also a proliferation of inputs, products and services (Rademaker, et al., 2016). Dairy processing firms as actors in the sector include few large processing firms and a high number of small and medium dairy processing firms. An estimated 40 dairies are significantly active in production and availing their products to the market through the normal retail channels (Muriuki, 2011).

The National MSE Baseline Survey (1999) categorizes firms into small, medium and large with small firms having less than 49 employees, medium firms having between 50 and 99 employees while large firms have more than 100 employees. The large dairy processing firms concentrate on ambient temperature long shelf life products; medium and small scale processors process high value products such as flavored milk, yoghurt, cultured milk, cream, ghee and butter. A big number of the small specialist dairies produce some products either exclusively or together with few others. Such products include yoghurt, cheese and ice cream (Food Business Africa, 2013). Current trends in Kenya show that the production, marketing and demand for dairy products continues to grow especially for dairy products such as Ultra High Temperature (UHT), milk powder, yoghurt, cheese, butter, ghee and cultured milk which are experiencing growing demand especially in urban areas and regional markets. Further to this, there is increase in dairy processing

firms, dairy investment capacity expansion and technology (Kenya Dairy Board, 2016).

Dairy processing firms depend on the retail market (wholesalers, shops, supermarkets) to sell their products down the value chain. The processors have noted that dairy products continue to gain popularity especially in urban areas due to increased incomes, changing eating behaviors, convenience, and emergence of new actors in the value chain. These new actors include supermarkets which are currently preferred by dairy processing firms as supermarket chains offer high opportunities among other major benefits. The supermarket chains do not only offer self-service but also a touch and feel notion to Kenyan consumers. They have successfully dislodged small scale shops (duka) as the main targets for consumers (Ouma et al., 2013).

Supermarkets have gone beyond the initial middle-class clientele and penetrated the food markets of lower class citizens making them popular ventures. However, the relationship between supermarkets and processors is complicated as supermarkets are very demanding clients. They have high level requirements such as the need for higher and more consistent quality, consistent year round delivery, large volumes of goods, and stringent payment terms. But these requirements do not deter processors and if successfully met, the dairy processing firms look forward to great growth opportunities (Neven and Reardon, 2004).

THEORY

This study applied the Competitive advantage theory which comprehensively covers the internal and external dynamics to a firm. The main proponent, Michael Porter (1990), argues there are five competitive forces that define the rules of competition in an industry. They include potential entrants, buyers, industry competitors, substitutes and suppliers. The goals of competitive strategy for any firm within an industry, is for purposes of positioning itself where it can best defend its interests against competitive forces or influence these forces in its favor. A firm's critical strengths and/or weaknesses are highlighted by the knowledge of its sources of competitive pressure. The firm animates its positioning in the industry,

clarifies areas where strategic changes yield the best outcomes and also highlights areas where industry trends promise the greatest significance as opportunities or threats.

The strongest competitive force is regarded as critical from the vantage point of strategy formulation. The competitive steps taken by a firm presents some noticeable effects on its competitors which in turn triggers efforts to counter such firm moves. He asserts that rivalry among the competitors is a competition for positions through tactics that include competition over prices, advertisement battles, introducing new products and increased customer service. Firms can influence the five competitive forces through strategies formulated after critically analyzing and identifying the key driving factors defining the industry. To benefit from competitiveness and sustainable advantage, firms ought to create value for a customer which is possible through fast responses to the ever changing business environment. However, Porter ignores the fact that government is a force that influences competition within an industry and this can be understood in isolation of the five competitive forces he concentrates on (Porter, 1990).

Empirical Literature Review

Strategy

Strategies are critical in the process of navigating the marketplace. As noted by Wamalwa et al., (2019) strategies are critical in giving a firm direction and purpose for marshaling resources effectively while at the same time coordinating various decisions. Further studies show that in Africa, firm performance positively relates to strategies. This has been shown by Amoako-Gyampah and Acquah (2008) who indicated that firm performance in Ghana positively correlates to competitive firm strategies. Namusonge (2014) indicated that firms in Kenya are flexible and use more than one strategy. Focus strategy used especially in the agriculture sector where firms concentrate on a select group in the industry and tailors strategy to exclusively serve this group.

Entry Strategies of Dairy Processing Firms

New Product Development (NPD) is an important strategy for entering the retail market. Hollingsworth (1994) observes that thousands of new food products are introduced into the retail market but these products face almost certain extinction and only a handful record success. Similarly, Graf and Saguy (1999) note that new products are the lifeline of food companies and the correlation between research and development (R&D) spending and sales is high which means most food companies spend large percentages of their internal R&D finance on product development and applied research. Rudder et al., (2001) concludes that new products are either original, improved or modified products developed through research and development efforts. However, truly innovative products that have never appeared in the market under any guise remain extremely rare. Suwannaporn and Speece, (2003) assert that NPD in the food processing industry is market driven. NPD concentrates majorly on improving quality, shelf life and packaging. Lastly, the Institute of Food Technologies (IFT) (2015) argues that protein content has recently been a key area in NPD with dairy products launching “source-of-protein” or “high-in protein” content products.

Distribution stands as a critical strategy for dairy processing firm’s entry into retail markets. Muriuki (2011) shows that physical distribution is a factor that affects sales performance of firms in Kenya and success of dairy processing firms is highly dependent on the efficiency and effectiveness of their distribution strategies. Odondi (2001); DfID (2001) and Reardon et al. (2012) argue that dairy processing firms enter markets through licensed market channels that have elaborate systems of distribution and retailing. A strong distribution encompasses investments in cooling facilities located in milk surplus areas. These “cold chains” create a cheap and constant network of supply and distribution system.

Mergers and Acquisitions (M&A) are critical strategies for entering new markets especially among global multinationals in the food processing industry. Martinelli (1999) argues that large domestic firms buy off smaller firms which have strong local market presence and good marketing channels. Belik and Roseli (2002) argue that M&A guarantees expansion and immense marketing channels while Wambui (2018) noted that in Kenya, M&A practiced by large dairy firms for instance the merger between Brookside Dairy Limited and Buzeki Dairy in 2016 served to eliminate competition and expand the market share. This strategy had led Brookside to merge and acquire a string of smaller firms including Ilara, SpinKnit and Delamere. Agritrade (2015) noted that M&A rarely transcend national boundaries but Brookside of Kenya acquired Sameer Agriculture and Livestock Limited (SALL) of Uganda thus gaining market advantage.

Food safety attributes of dairy products is a vital aspect of entering retail chains. Wang et al., (2008) show that food safety is a top concern for consumers in China. National standards, certification systems and safety and quality system requirement have been put in place to regulate safety. Reardon, Henson and Gulati (2010) argue that supermarkets in the developing world have increased product safety as they demand for high quality and safe products from processors. Private quality and safety standards by supermarkets and their enforcement of the industry public standards is a trend among most developing countries. Similarly Blackmore et al., (2020) found that in India, Kenya and Tanzania supermarkets tend to exclusively sell pasteurized milk. These formal entities observe high standards of cleanliness and food safety. In Kenya, Kangethe et al. (2018) states that dairy processors in Kenya have the capacity to handle milk safely. Practices such as Hazard Analysis Critical Control Point (HACCP), Good Manufacturing, and Hygienic Practices guidelines are practiced. Other studies such as Mtimet and Karugia (2020) show that preferred places for pasteurized milk which is considered safer than raw milk were supermarkets and hypermarkets.

Empirical studies show that diversification is a strategy for accessing markets. Kariuki (2016)

concludes that access to markets for diversified products has an influence on the performance of dairy processing firms in Kenya. Dairy processing firms have therefore, adopted diversification as a strategy to access markets including retailers. Mwangi and Gakobo (2018) indicate that dairy processing firms in Kenya have diversified and produce various products depending on the size of the firm. Large and medium dairy firms such as New Kenya Co-operative Creameries, SALL, Githunguri dairy, Kinangop and Brookside produce a range of products that include yoghurt, refined milk, fresh milk, ghee, margarine and cream. Small dairy firms specialize and exclusively produce one or two product that may either be yoghurt, Cheddar and dessert.

Sustenance Strategies of Dairy Processing Firms

Slotting allowance is a common practice in the relations between supermarkets and agro food processors and manufacturers. Hamilton (2003) observes that this concept is generically used to represent transactions that may include payments such as introductory fees for new products, floor charges for processors to make sales presentations, periodic stocking fees for existing products, and display fees for special merchandising and promotion. Slotting allowance may be paid by a food processor in exchange for retail concessions that may include to acquire a relatively more desirable shelf space position in the supermarket or to exclude rival processors from obtaining shelf space through an exclusive territory arrangement.

Innes and Hamilton (2012) argue that in an oligopsonistic market there are numerous processors competing to sell products to few large and powerful supermarkets. Similarly, Nadonde and Kuada (2017) argue that the number of suppliers is higher than supermarket outlets which give retailers flexibility in choosing suppliers and the advantage of dictating terms of trade. An oligopsonistic processor therefore, has incentive to pay slotting allowance to retailers as this avails an

opportunity to the contracted processor to negotiate a higher wholesale price for products.

Challenges Faced by Dairy Processing Firms

In Kenya, dairy processing firms are constrained by lack of equipment, lack of skills, competition and lack of power. Njarui et al. (2010) found that dairy processing firms face distribution and marketing challenges that include competition from other processors, irregular payments, poor road infrastructure and unstable prices. Kenya's Ministry of Livestock Development (2010) observes that large and small specialized dairy processing firms have limited production for high value products (butter, cheese, cream, ghee, and yoghurt) due to limited local consumption but regional markets have a great potential for these products. This is an industrial challenge but in recent times some processors have changed strategies and are searching for niche markets and processing of products such as colorful flavored UHT milk, low fat milk, fruit yoghurt targeting the youth and urban areas.

Emongor and Kirsten (2009) note that supermarkets prefer sourcing from large suppliers due to consistence in quality and quantity. In South Africa supermarket chains in the region import products and rarely source from local food processing firms. Food products sold in South African owned supermarkets located in Zambia, Botswana and Namibia shows that processed foods are imported from South Africa. This factors close out the local firms out of the chains. Das Nair (2017) argues that large supermarkets have considerable buyer power and control on the pricing and terms of trade. The interactions with supermarkets are constrained by costs on access to shelf space, refrigeration space for products, preference for dominant suppliers, standard legal requirements, supermarket private standards such as barcoding, packaging, sustainability criteria, religious requirements and on-going audits which are paid for by the suppliers.

Supplying firms face challenges that include acceptance of trade credit, reliability, return policy, packaging, well-promoted products and poor prices. These factors influence suppliers chosen by retailers. In addition packaging is a very strong

criterion for selection of suppliers and retention of their products in supermarket shelves. It involves product color, packaging material, products temperature, compostability, brand name, leak resistance, capacity and value. Innovative strategies in terms of packaging, distinguish products of small, medium and large processors (Nandonde and Kuada, 2016)

Other studies observe that standardization of safety standards poses a challenge to food processors. Malik et al. (2014) opine that food safety standards include safety and quality in processing. In developed and developing countries unprecedented challenges to processors include globalization of food trade; burgeoning of processed food products with increased amounts and numbers of additives; shifts in food consumption patterns; and more intensified food production systems. Lastly, Slotting allowance demanded by retailers is a challenge for food processing firms. Hendrickson et al., (2001) writes that trade promotions paid by processors (display fees, presentation fees, failure fees and pay-to-stay fees) pose a huge challenge as they amount to large sums every financial year. These finances are paid due to the market power of retailers and also serve as a tool for discriminating between large, medium and small processing firms which pushes some processors out of business therefore, undermining established distribution channels. However, some strong processing firms in the industry have huge successful brands and have an edge in the power relationship. Srivastava et al., (2012) observe that slotting allowance in India is not charged by retailers as in the U.S and China as the Fast Moving Consumer Goods (FMCG) market experiences low proliferation of brands meaning retailers stock the usual brands. Though suppliers are charged a small administration fee, they are required to contribute to the promotional and advertising costs.

METHODOLOGY AND DATA COLLECTION

This paper employed a case study research design and was conducted in Nairobi County, Kenya. Primary data was gathered through interviews where a case study guide served as the data

collection tool. Primary data was also gathered through observation where an observation schedule containing a checklist was used to collect information for developing a narrative account. Some of the issues observed included certificates displayed in the firm's premises; health and safety standards; processing equipment used; and proximity to the market and raw materials. Secondary data was gathered from existing material including books, journal articles, government reports, published theses, and websites among other written material

Dairy processing firms in the County were selected according to their sizes where the number of employees was used to categorize firms as; small, medium or large. Small dairy processing firms had less than 49 employees; medium firms had between 50 and 99 employees while large firms had more than 100 employees. On the other hand, four large supermarkets (Uchumi, Nakumatt, Tuskys and Naivas) were selected based on the fact that they are old players in the retail sector and they control the largest percent of supermarkets' retail market in terms of number of outlets and generated revenue. These supermarket chains control a giant share of the market share in the retail sector. They are also located strategically across Nairobi which is a crucial market place for the retail sector.

The target population for this study were dairy processing firms operating in Nairobi County. These firms must have been supplying dairy products to the four big supermarkets (Uchumi, Nakumatt, Tuskys and Naivas) in this County. Nairobi County hosts Kenya's capital city, it has the highest urbanization levels, and is the most populous in the country. It also hosts a high concentration of dairy processing firms dominated by few large dairy processing firms, a high number of small and medium dairy processing firms that process a range of dairy products including high value dairy products (Food Business Africa, 2014). Furthermore, the dairy processing firms operating in Nairobi County supply dairy products to the main supermarket retail chains including Uchumi, Nakumatt, Tuskys and Naivas (Ouma et. al., 2013).

There were 11 dairy processing firms in Nairobi County as compiled from the Kenya Dairy Board, supermarkets procurement list, internet searches,

published material and through directly contacting dairy processing firms to determine their location and also competitors in the County. The top level management personnel, heads of departments and heads of specific firm operations in these dairy processing firms formed part of the respondents. These respondents were engaged through interviews that were conducted in their respective firms. The interviews were conducted in the processing firms to enable the researcher to observe some of the issues of interest to the study.

The researcher applied sampling as a technique for selecting dairy processing firms involved in the study. Two rounds of sampling were conducted where the first round was a census of the eleven dairy processing firms in order to obtain data regarding their sizes based on the number of employees. This was followed by stratified random sampling technique which aided the researcher to create three categories of dairy processing firms. Each of the strata was exclusive and contained large, medium and small dairy processing firms respectively. Stratified random sampling was preferred in order to attain a proportional representation from the three different categories and to also ensure units in every stratum have similar attributes.

Random sampling technique was applied to select dairy processing firms from each stratum for inclusion in the sample. In this process, the 11 dairy processing firms were allocated numerical values from 1 to 11. These numbers were randomly sampled by use of a computer program (Stat Trek Random Number Generator) in order to randomly select two firms from each of the strata. The selected firms were contacted for purposes of carrying out the study. However, only four firms responded positively (2 large, 1 medium and 1 small). Therefore, the researcher replaced the firms and contacted other firms for inclusion in the study. However, the replacement firms declined to participate and therefore, other firms were contacted for inclusion. The study ended up with four large firms, one medium firm and one small dairy processing firm which accepted to participate.

Primary data from these dairy processing firms was gathered through interviews with the use of a case study guide as a data collection tool. The data

gathered was transcribed and cleaned for purposes of analysis. Data analysis was conducted through thematic analysis where data was examined for recurring patterns of core themes between and within the transcribed reports (Bryman, 2015). This data was presented using a table and also in narrative form, suitable for qualitative data.

FINDINGS AND DISCUSSION

Firm Characteristics

The findings indicate that dairy processing firms are differentiated on grounds of age and number of employees. The number of employees was used as a proxy to categorize firms as small, medium or large. The findings reveal that the actual number of years these dairy processing firms have been in operation range from 6 to 92 years (Table 1). This indicates these companies have surpassed the psychological three years of operation barrier where most firms collapse before attaining the age of three.

Table 1: Characteristics of Dairy processing firms

| Dairy Processing Firm | Age of Firm (Years) | Number of Employees | Size |
|-----------------------|---------------------|---------------------|--------|
| Firm 1 | 27 | 350 | Large |
| Firm 2 | 92 | 1500 | Large |
| Firm 3 | 8 | 900 | Large |
| Firm 4 | 18 | 200 | Large |
| Firm 5 | 6 | 68 | Medium |
| Firm 6 | 10 | 10 | Small |

(Source: Field Data, 2017)

Regarding the type of machinery used in production, findings show that production equipment used by dairy processing firms was either semi-automated or automated machinery. The levels of technological adoption varied from large, medium and small firms. Large firms were highly automated with majority of them automating functions such as packaging and wrapping of the dairy products.

This study also sought to find out the health standards and safety precautions in the premises and area of operations of the dairy processing firms. From observation, the dairy processing firms met the minimal standards set by the regulatory authorities. Safety gear, protective instruments, special attire for specific locations, fire safety equipment, floor hygiene, medical kits, aeration and lighting were all adhered to. Copies of the occupational health and safety policy were pinned at specific points in most of the processing plants.

Entry and Sustenance Strategies of Dairy Processing Firms into Supermarkets

The study revealed that New Product Development (NPD) is variedly applied by small, medium and large dairy processing firms in Kenya. Small dairy processing firms are mainly specializing firms that prefer status quo as they mainly produce unique high value products as observed in Firm F6. The medium dairy processing firms also consider NPD as a strategy for penetrating into supermarkets. Medium dairy firms introduced new products such as bottled water for purposes of accessing supermarkets. The products were of high quality, are fast moving and have relatively lower production costs. On the other hand, large dairy firms have experience in NPD and have successfully launched a number of new products. Most of these dairy processing firms have penetrated the supermarkets but they seek to use NPD to expand their market share and wade off competition. Apart from R&D, large firms are keen to consider consumer feedback as an avenue for NPD. The new products mainly target the refreshment and corporate markets as well as new geographical areas regionally and internationally. The findings also indicate that large firms seek to introduce new products that are long lasting and have a long shelf life (milk powder and Extended Shelf Life). Lastly, several large dairy firms (F1 and F3) have NDP strategies targeting new products in the non-dairy product category (juice and water). These findings echo conclusions of Hollingsworth (1994); Rudder et al., (2001) and Suwannaporn and

Speece (2003) who allude to the value of NPD. New products are mainly in the form of new flavors for dairy products, long shelf life products and non-dairy products such as water, honey and juice.

Market and marketing strategies are important in the entry process into supermarkets. Dairy processing firms concentrate on expanding sales to supermarkets they supply products to and also upcoming second tier level supermarkets. The small, large and medium dairy processing firms have different marketing strategies. Small specializing dairy processing firms dealing in premium products concentrate on the middle and upper class citizens and therefore, one-on-one marketing is preferred while dealing with supermarkets. Medium dairy processing firms, on the other hand, employ direct marketing strategies where personal contact is involved. It also involves flexible one-on-one negotiations with each supermarket. Large dairy processing firms (F1, F4 and F3) have varied marketing strategies. Large firms conduct advertisements on new and old media, set up bill boards and conduct corporate social responsibility (CSR). Particularly, large firms have an online presence with websites and social media pages. Further to this, large firms have interactive social media platforms (Facebook page and twitter handle) where pictures, videos, promotional material and information are posted. These platforms offer chances for popularizing products and marketing the firm in the online community. They are also a symbol of a modern firm. These findings update the literature by Odoni (2001) DfID (2001) and Reardon et al. (2012) which fail to capture the fact that new forms of marketing are now in existence and dairy processing firms have more options.

Regarding product diversification strategies, dairy processing firms seek to increase their product categories and also the variety of each category as this increases chances of success through accessing and penetrating supermarkets. The current study observed that dairy processing firms deal in high value products such as yoghurt, as these products fetch higher prices, while products that include fresh milk remain a prerogative of large dairy processing firms. Fresh milk is capital intensive, sensitive and has high competition. Recent patterns

show that dairy processing firms are venturing into non-dairy products such as water, honey and juice which have succeeded in supermarkets. Small dairy processing firms strategically produce one high value dairy product especially in the fermented category (yoghurt). This category is easier to process; find markets in supermarkets; and the steps for processing such products are readily accessible and easy to follow. The specialization strategy also allows for maximum utilization of available resources for firm operations and also allows for high quality dairy products.

Medium dairy processing firms specialize in several value-added products in the fermented category as their main dairy products (yoghurt and 'lala'). These dairy firms also have plans to introduce new products such as water and fresh milk as they are on a growth path. Large dairy processing firms on the other hand deal in a range of products from fresh, fermented, milk powder, butter, ghee, and cream. Their main product is fresh milk which records higher sales volumes compared to other products. The study established that high value products (value added products) have higher profit margins compared to other dairy products and therefore, large firms seek to increase the output volume of value added products. This finding corroborates the study by Kariuki (2016) who established that the range of products of a dairy processing firm was crucial in gaining entry into the supermarkets and the firms are keen to diversify volumes of value added products as it has a positive influence on accessing supermarkets. Similarly, Nadonde and Kuada (2016a) indicated that retailers prefer sourcing various products from a single supplier in order to reduce operation costs.

Packaging as a strategy has been capitalized on by the dairy processing firms which consider various aspects of packaging in order to market their products. Findings show supermarkets have little influence on packaging but they serve as lucrative channels of relaying consumer feedback on the packaging preference of consumers. Small firms' (F6) packaging strategy is centered on market requirements. Firms use R&D and market research to establish consumers' preferred packaging material and design and adopted that to inform the strategy of using bottles. Small firms have limited

varieties of packaging but prefer the bottle which is cheaper and easier to stack and transport. The medium dairy processing firms (F5) package products in cups and bottles. This is strategically centered on the fact that markets are segmented and different clients prefer specific packaging quantities and designs. Therefore, medium dairy firms categorized packaging into two segments where the cups handle smaller quantities for the small scale consumers while bottles are for large quantity packages for 'executive consumers'. The color and design of the package is also warm and friendly in order to attract consumers. Medium firms have adopted several packages that suit market requirements as well as their financial capabilities.

Large dairy processing firms strategically consider consumer feedback, R&D and have innovated ways of packaging for specific markets. These firms have a variety of packages for different products under production. Findings reveal that a specific product category has suitable packaging which aligns to handling, cost, transporting, refrigeration, storage, volume, safety, target market and longevity. Large firms (F1, F2, F3 and F4) however, try to strike a balance and adopt the most effective and efficient package. Further to this, the packaging material is attracting environment concerns and dairy firms are adopting recyclable containers.

This study revealed that distribution strategies are applied by dairy processing firms in varied ways while entering supermarkets. Small dairy processing firms (F6) distribute through self-delivery, medium firms conduct self-delivery but hire distributors in case of excesses (F5). Medium firms prefer this strategy as it gives a personal touch to client supermarkets. Large firms (F1, F3 F2) practice self-distribution and contract distributors concurrently. Most of these firms have a wide geographical coverage and diverse market. This requires a robust distribution network that these dairy processing firms complement with contracted distributors or agents. This observation was also made by Muriuki (2011) through his study on physical distribution. However, this study segments firms and elaborates the practice as conducted by each category. Odondi (2001); DfID (2001) and Reardon et al. (2012) address the distribution system and their

conclusions on elaborate systems through distributors and cold chains clearly march our findings regarding the large dairy processing firms.

This study found that Mergers and Acquisitions are common especially among the big dairy processing firms. Small and medium firms have not engaged in M&A. Three of the four large dairy processing firms (F1, F2, and F3) have either acquired or merged at some point. One of the firms (F3) acquired a small outfit and went on to make it one of the fastest growing dairy firms while another firm (F1) was acquired by new investors. M&A in these cases as this study found out was for purposes of increasing the asset base, injecting new capital, expanding production machinery, and gaining new market networks especially the powerful supermarket network. These findings correspond to the studies by Martinelli (1999) and Belik and Roseli (2002) who argue M&A serves to increase market networks. The findings also indicate new ideas on why dairy processing firms engage in M&A therefore, updating the literature and giving a case of firms in the Kenyan dairy industry.

Regarding the sustenance strategies used by dairy processing firms into supermarkets, Davis et al, (2009) and Hamilton (2003) showed that organizational structure and slotting allowance were crucial sustenance strategies for dairy processing firms. Small firms (F6) have lean and flexible organizational structures that allow personal contact and sustenance of relations with supermarkets by any personnel who establishes contact. This indicates small firms have a fluid organization structure with flexible terms that require marketing to be a prerogative of every personnel. Medium dairy processing firms are structurally organized into a hierarchical model. The organizational structure is rigid with no overlaps in the allocated mandates and therefore, marketing remains under the mandate of the sales and marketing department who are charged with dealing with supermarkets. Large dairy processing firms have a broad and rigid organizational structure. They have many departments which work autonomously with no overlaps in the mandates therefore, the structures are rigid.

This paper also revealed that slotting allowance as a strategy is a common industrial practice and

supermarkets have control over any payments made. It is informal in most cases but this is not the case with two dairy processing firms (F1 and F3) which have formalized these payments in written JBP's with supermarkets. Findings indicate that supermarkets have control over these payments but the arrangements vary from one dairy processor to the other. Small dairy processing firms specializing in a single, unique and high value premium product rarely pay slotting allowance to supermarkets. However, the intense competition in the industry plus the influx of new products is making slotting allowance a common practice for small dairy processors. Medium dairy processing firms also deal in high value and competitive dairy commodities. However, the need to secure strategically located shelves and space has pushed medium firms to pay slotting allowance as a strategy to secure gondolas. The funds are flexible depending on agreement between the firm and the supermarket involved.

Large dairy processing firms have also been strategically paying slotting allowance to supermarkets. However, two large dairy processing firms (F1 and F3) have formalized slotting allowance through a written Joint Business Plan (JBP) with supermarkets. The JBP stipulates the amount, period and secured shelf and/or fridge space. Further to this, it stipulates the percentage discount large dairy processing firms offer to the supermarket for sales made. These finding corroborates Hamilton (2012) who stated these transactions have become normalized in some industries. Further, Innes and Hamilton (2012) and Nadonde and Kuada (2017) who show in an oligopsonistic market slotting allowance works to the advantage of supermarkets as it reduces the profit margins of dairy processing firms.

Challenges Experienced by Dairy Processing Firms in Accessing and Sustaining products in Supermarkets

This paper established that dairy processing firms face challenges relating to importation of products. Large dairy processing firms (F1 and F2) face access challenges into some supermarkets which

sell imported dairy products. Firm F2 deals in powdered milk which is also imported by supermarkets from external markets while firm F1 produces lactose free milk which some supermarkets also import. Such imports compete with local products thus affecting sales volumes and profit margins as the imported products are cheaper. This finding relates to Emongor and Kirsten (2009) who observed that supermarket chains in Zambia, Botswana and Namibia import products from South Africa and rarely source from local food processing firms.

In terms of exports only three large firms have managed to achieve such a feat. Firms F1, F2 and F3 export dairy products to the regional and/or international markets. These firms export to neighboring countries including Tanzania, Uganda, Rwanda, Somalia and Sudan which have less developed industries. Firm F2 exports further to countries like Burundi, DRC and Zambia and also the Middle East (Oman and Qatar). Findings reveal that a large percentage of exported products are value added products such as long life milk, creamery butter, cream milk powder, skimmed milk powder, ghee, and cheese. One of the main challenges identified include non-tariff barriers (packaging, content recipe, quantity, labeling) which are a major stumbling block to dairy processing firms. Large firms also face different country specific standards (bacteria load and quality) which complicate bulk production of export products that fit varied standards set by different countries. This finding echoes McCormick et al. (2013) who stated that manufacturing firms exporting to other markets must adhere to not only the Kenya standards but also phytosanitary regulations of the countries they export to.

Another challenge is trade credit where delays in payment of goods supplied to supermarkets is common. Small dairy processing firms are more affected as their contracts with supermarkets indicating a forty five days grace period is mostly disregarded. Medium dairy firms also indicated the terms with supermarkets especially large ones are not adhered to and big supermarkets have a tendency to exceed the payment timelines which affects the cash flow of the dairy firms which in

turn negatively impacting payments to suppliers and acquisition of production material and instruments. Lastly, large dairy processing firms (F1 and F3) have put in place Joint Business Plans (JBP) with supermarkets that stipulate payment period within which payments are made after the delivery of products. Firm F4 requires a bank guarantee before allowing trade credit services with supermarkets. Generally, big supermarkets are powerful in the dairy product value chain and have a tendency for noncompliance with payment agreements leading to litigations.

Trade promotions pose a financial challenge to dairy processing firms. Large dairy processing firms engage in trade promotions stipulated in JBPs with supermarkets. However, the cost of trade promotions are solely met by dairy processing firms. This is similar to sentiments of Nandonde and Kuada (2016) argue that supermarkets choose and retain supermarkets based on trade promotions. The case is different for small dairy processing firms which do not conduct trade promotions with supermarkets. Specialized firms (F6) deal in unique products and do not engage in trade promotion activities as supermarkets have no alternative to their premium dairy brands. Costs involved in launching and creating product awareness is high and supermarkets offer little help in sharing these costs. This finding relates to conclusions of Srivastava et al. (2012) who found out that processing firms pay for promotions as well as administration fees to supermarkets.

Supermarket private standards pose a challenge to dairy processing firms which have to fulfill these exclusive preferences. Small dairy and medium dairy processing firms adapt to some supermarket private standards while large dairy processing firms show mixed results. Some fulfill private standards by a specific supermarket or groups of supermarkets while others do not. The study challenges Das Nair (2017) by stating private standards are not a challenge to dairy processing firms especially large ones. Firms F2, F3 and F4 indicated that dairy firms dominate in terms of products and therefore, dairy processing firm set the pace for supermarkets. The small and medium firms positively compare to Das Nair's (2017) conclusion that supermarket private standards have

a negative effect on the cost of doing business as well as the profit margins.

The study also established that dairy processing firms concentrate on promoting their brands and discourage supermarkets from producing 'own label' dairy products. Small and Medium dairy firms cannot brand supermarket goods with private labels as this is counterproductive to their growth objectives. However, large dairy processing firms are flexible. Firm F1 and F2 customize some dairy products for supermarkets. Firm F3 stated 'own label' products do not have an effect on already established dairies in the dairy industry. Large dairy firms conducting 'own label' ensure contracts are strategic to their branding and income. These finding corresponds to Srivastava et al. (2012) who argued that large dairy processing firms only participate when their brand and income are not compromised.

RECOMMENDATIONS TO DAIRY PROCESSING FIRMS AND POLICY MAKING AUTHORITIES

This paper recommends that small, medium and large dairy processing firms automate their distribution systems and synchronize this to supermarket procurement systems. Automated and synchronized systems between these two actors in the value chain would be useful in alleviating the loopholes present during returning of damaged and/or spoilt dairy products from the supermarkets. Moreover, automation of these systems would be critical in monitoring sales, detecting stock availability and determining when to supply products to supermarkets.

The marketing strategies of dairy processing firms, especially small and medium dairy processing firms, ought to expand and adopt modern avenues including new media. This marketing strategy should be conducted in conjunction with supermarkets as they are the main channel of dairy products.

This study revealed that the packaging of dairy products is informed by consumer feedback as well as R&D. However, current trends show that the preferred packaging material by dairy processing firms is plastic. This paper recommends that dairy

processing firms adopt either biodegradable or recyclable packaging material in order to cushion against future environmental regulations.

There is need to address the issues regarding trade credit. This paper notes that there is no clear framework governing payment of debts to dairy processing firms especially by collapsing supermarkets. The available channels include litigations against collapsed and/or cash flow struck supermarkets. This paper recommends that dairy processing firms, national regulatory bodies and other national authorities develop sustainable policy frameworks that protect both the dairy processing firms and supermarkets in case of cash flow problems or bankruptcy as huge debts owed to dairy processing firms by supermarkets continue to curtail their growth. Supermarkets have to be regulated through a debt ceiling addressing the maximum debts they can owe suppliers.

Regarding the importation of dairy products, this paper recommends that Kenya Dairy Board (KDB) regulates importation of the same especially lactose free milk and milk powder which threaten domestically produced dairy products particularly by the large dairy processing firms.

There is need to level the regulatory playing field in the dairy industry. This paper notes that there is need to uniformly enforce regulations and standards within the industry. Large dairy processing firms are favored and this practice should be regulated by KDB through uniform application of regulations and standards in the industry.

In terms of the market, the study noted that the regional market remains unexploited by Kenya's dairy processing firms especially small and medium firms who specialize in value added dairy products. To this end, national authorities including KDB should create avenues such as regional international fairs and exhibitions to popularize products of small and medium firms.

This paper had a limitation that may inform future research. The study focused on the entry and sustenance strategies employed by dairy processing firms while dealing with large supermarket chains only. However, useful insights learned from the inquiry show there is increasing growth and

prominence of second tier supermarkets especially in the current financial crisis that characterizes two of the four big supermarket chains in Kenya. The growing importance of second tier supermarkets, as useful retailers, especially to dairy processing firms shows the need to expand academic inquiry and include these supermarkets. Therefore, future studies should involve the second tier supermarkets.

REFERENCES

- Agritrade (2015). Pioneer Merger of Dairy Processors in Kenya and Uganda. Retrieved on 15 April 2021 from <http://agritrade.cta.int/Agriculture/Commodities/Dairy/Pioneer-Merger-of-Dairy-Processors-in-Kenya-and-Uganda.html>
- Amoako-Gyampah, K., & Acquah, M. (2008). Manufacturing strategy, competitive strategy and firm performance: An empirical study in a developing economy environment. *International journal of production economics*, 111(2), 575-592.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17 (1), 99-120
- Belik, W. and Rocha dos Santos, R., (2002). Regional market strategies of supermarkets and food processors in extended MERCOSUR. *Development Policy Review*, 20(4), pp.515- 528.
- Blackmore, E., Guarín, A., Alonso, S., Grace, D., & Vorley, B. (2020). Informal milk markets in Kenya, Tanzania and Assam (India): An overview of their status, policy context, and opportunities for policy innovation to improve health and safety.
- Bryman, A. (2015). *Social research methods*. Oxford: Oxford University Press.
- Central Bureau of Statistics. 1999. *National Micro and Small Enterprise, Baseline Survey*.

- Das Nair, R. (2017). How big supermarket chains in southern Africa keep out small suppliers. Available at <https://theconversation.com/how-big-supermarket-chains-in-southern-africa-keep-out-small-suppliers-65198>
- Davis, J. P., Eisenhardt, K. M., and Bingham, C. B. (2009). Optimal structure, market dynamism, and the strategy of simple rules. *Administrative Science Quarterly*, 54(3), 413-452.
- DfID. (2001). *The Kenyan Dairy Sub-Sector*. Ebony Consulting International
- Emongor, R., and Kirsten, J. (2009). The impact of South African supermarkets on agricultural development in the SADC: a case study in Zambia, Namibia and Botswana. *Agrekon*, 48(1), 60-84.
- Food Business Africa. (2014). *The Dairy Industry in Kenya*. Available at: Africa's Food and Beverage Industry magazine. <http://www.foodbusinessafrica.com/index.php/resources/industry-features/512-the-dairy-industry-in-kenya?showall=>
- Graf, E. & Saguy, S. I. (1999). *Food Product Development from Concept to the Market Place*, CRC Press, Boca Raton, FL.
- Hamilton, S. F. (2003). Slotting allowances as a facilitating practice by food processors in wholesale grocery markets: profitability and welfare effects. *American Journal of Agricultural Economics*, 85(4), 797-813.
- Hollingsworth, P. (1994). "The perils of product development", *Food Technology*, June, pp. 80-8.
- Institute of Food Technologists (IFT) (2015, September 1). *Yoghurts, dairy beverages lead protein new product development*. Retrieved from Institute of Food Technologist. <http://www.ift.org/FoodTechnology/Daily-News/2015/September/15/Yogurts-dairybeverages-lead-protein-new-product-development.aspx>
- Kang'ethe, E. K., Muriuki, S., Karugia, J. T., Guthiga, P. M., & Kirui, L. (2018). *Scoping study report on: National food safety architecture of the dairy value chain in Kenya*.
- Kariuki, A. N. (2016). *Influence of Product Diversification Drivers on Performance of Dairy Enterprises in Kenya*. (Doctoral dissertation, Jomo Kenyatta University of Agriculture and Technology).
- Kenya Dairy Board (KDB). (2016). *Kenya Dairy Board*. Available at: <http://www.kdb.co.ke>
- Kenya National Bureau of Statistics (KNBS). (2016), *Economic Survey 2016*. Nairobi: Government Printers.
- Martinelli Jr., O. (1999). *Globalisation and the Food Industry: a study from the large companies*. São Paulo: FAPESP-Amparo Foundation for the Research of São Paulo State.
- Mtimet, N., & Karugia, J. (2020). *Consumer perception of milk safety in Kenya*. Nairobi, Kenya: ILRI. Patron: Professor Peter C Doherty AC, FAA, FRS Animal scientist, Nobel Prize Laureate for Physiology or Medicine–1996.
- Muriuki, H. G. (2011). *Dairy development in Kenya*. Food and Agricultural Organization, Rome
- Mwangi, E. W., & Gakobo, J. (2018). *Growth strategies and performance of selected milk processing companies in Kenya*. Unpublished MBA Thesis. Kenyatta University.
- Namusonge, M. J. (2014). *Linking competencies with strategies: The case of small and medium-sized exporting firms in Kenya*. *International Journal of Social Sciences and Entrepreneurship*, 1 (11), 418-439
- Nandonde, F. A. and Kuada, J. (2016). "International firms in Africa's food retail business- emerging issues and research agenda", *International Journal of Retail & Distribution Management*, Vol. 44 Iss 4 pp. 448 – 464

- Nandonde, F. and Kuada, J. (2017). "Modern food retailing buying behaviour in Africa: the case of Tanzania", *British Food Journal*, Vol. 118 ISS 5 pp. 1163 – 1178
- Neven, D. and Reardon, T. (2004). The rise of Kenyan supermarkets and the evolution of their horticulture product procurement systems. *Development Policy Review*, 22(6), 669–699
- Odoni, R. (2001). Physical distribution and sales performance. A case of dairy processing firms in Nairobi. (Unpublished MBA Research Project). University of Nairobi, Kenya
- Ouma, D., Mwangi, T. D. and Oduok P. M. (2013). Modeling Agility in Kenyan Supermarkets Chain Expansion. *International Journal of Business and Commerce* Vol. 2, No.8: Apr 2013[21-36]
- Porter, M. E. (1990). The competitive advantage of nations. *Harvard business review*, 68(2), 73-93.
- Priem, R. L., and Butler, J. E. (2001). Is the resource-based “view” a useful perspective for strategic management research? *Academy of Management Review*, 26 (1), 22–40
- Rademaker, C. J., Bebe, B. O., van der Lee, J., Kilelu, C., and Tonui, C. (2016). Sustainable growth of the Kenyan dairy sector: a quick scan of robustness, reliability and resilience (No. 979). Wageningen University & Research, Wageningen Livestock Research.
- Reardon, T., Henson, S., & Gulati, A. (2010). Links between supermarkets and food prices, diet diversity and food safety in developing countries. *Trade, food, diet and health: perspectives and policy options*, 111-130.
- Reardon, T., Timmer, C. P., & Minten, B. (2012). Supermarket revolution in Asia and emerging development strategies to include small farmers. *Proceedings of the National Academy of Sciences*, 109(31), 12332-12337
- Rudder, A., Ainsworth, P., and Holgate, D. (2001). New food product development: strategies for success?. *British Food Journal*, 103(9), 657-671
- Suwannaporn, P., and Speece, M. (2003). Marketing research and new product development success in Thai food processing. *Agribusiness*, 19(2), 169-188.
- Wamalwa, H., Upadhyaya, R., Kamau, P., and McCormick, D. (2019). Strategies of Kenyan firms: a case study of food processing firms in Nairobi. *African Journal of Economic and Management Studies*.
- Wambui, K. A. (2018). The Effect of Mergers and Acquisitions on the Dairy Industry in Kenya: A Case of Brookside Dairy Limited (Doctoral dissertation, United States International University-Africa).
- Wang, Z., Mao, Y., and Gale, F. (2008). Chinese consumer demand for food safety attributes in milk products. *Food policy*, 33(1), 27-36