



TANGA FRESH

Growing Big

TOPIC

Identifying potential Investment opportunities for Tanga Fresh in East Africa

Student ID: 1629381

International Business for Emerging Markets

Name: Daniel Kiptoo Chepyegon

**ID Number: 1629381
chepyegondaniel@live.com**

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“What are the potential investment opportunities for Tanga Fresh in the East African dairy sector?”

HU University of Applied Sciences–Utrecht

International Business for Emerging Markets



Supervised by:

Company Supervisor: Toine Huijbers

Supervising Lecturer: Mr. Menno de Lind Van Wijngaarden

Second Examiner: Karel van Hoestenbergh

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Glossary of terms

EAC market- Common market comprising five East African Countries; Kenya, Uganda, Tanzania, Rwanda and Burundi

Business model- Rationale of how an organization creates, delivers, and captures value (economic, social, cultural, or other forms of value)

Liberation- The removal or reduction of restrictions on free exchange of dairy goods between nations as well as opening up dairy industry to the private sector

Actual capacity- Is the actual capacity of milk processed by a dairy processor in a day

Unattractive business model- Business model which might not be valuable, productive or ethical

MCC's-Are centres having milk collection facilities installed. They are normally placed in rural areas where farmers transport raw milk to be cooled in a bulk tank before being collected by processors.

Mala/Mtindi-Sour Milk

Abbreviations

KDB; Kenya Dairy Board

TDB; Tanzania Dairy Board

DDA; Dairy Development Authority- Uganda

KCC; Kenya Cooperative Creameries

UDC; Uganda Dairy Cooperative

MCC; MCC's

E.A; E.A

E.A.C; EAC

Lpd; Litres per Day

P/d, p/p; per day per person

UN; United Nations

FAO; Food and Agriculture Organization of the United Nations

Cap; Capacity

BoP; Bottom of Pyramid

M; Million

Executive Summary

This report has been published after a successful research study on the East African Dairy Sector (EADS). Besides pursuance of graduation assignment, the study was conducted on behalf of Tanga Fresh upon d.o.b's request with the motive of expanding its existing portfolio in the dairy sector. d.o.b is a Dutch based organization which invests growth capital in financially sustainable African businesses including enterprises in the dairy industry. One of its successful investments is Tanga Fresh, a dairy processing company which is currently the leading dairy processor in the Tanzanian market.

Tanga Fresh has diversified its products, currently processing pasteurized milk, mtindi, yoghurt, and cheese. It's a quality leader and impact oriented company with present processing capacity of 50,000 litres per day. With its managerial expertise, Tanga Fresh has been experiencing an immense growth therefore now seeking for new investments in the same line of operation to invest in, merge with or take over.

This study has been linked with numerous literatures, previously done by management authors, dairy professionals as well as specialized institutions such as SNV, Land O' Lakes, Techno-serve, USAID, Heifer International, FAO and many more. The aim of this interlink is to analyse whether there exists similarities or contradictions in between E.A's dairy sector investment process and existing literature. Apart from literature books, journals, reports and newspapers, the research also involved interviews in the data collection. Eye to eye interviews was conducted on dairy professional interviewees and specialists within the Netherlands. Telephone interviews were conducted for interviewees residing outside the Netherlands.

The most common model or strategy practiced in the dairy sector is product diversification. Though having varied motives, most dairy processors exercise related diversification strategies with the motive of increasing revenue streams and reducing risks. Geographical diversification is always practised in the advanced stage especially by processors who process UHT and milk powder i.e. Brookside, KCC, SALL, Gold dairies and Shumuk.

Other models utilized in the dairy sector include vertical and horizontal business integration, quality leadership, mergers and acquisitions, marketing and MCC management. Jesa dairy in Uganda is one practical example which has successfully practised backward integration. In regard to this, it's important to note that a business model that is flourishing in one company or region does not necessarily assure prosperity in another.

In this report also, all the identified dairy processors in the East African market have been scrutinized, screened, analysed and a list of potential investment opportunities for Tanga Fresh Limited unveiled. The

analysis was done basing on the geographical location of the processor, market performance, daily processing capacities, business models and current nature of business ownership among others. Other recommendations on investment strategies in five scenarios have also been made for Tanga Fresh

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Chapter One

Introduction

Background

The East African dairy market is currently undertaking a radical change. Initially, dairy farming in E.A and Africa at large focused on subsistence consumption where raw dairy products dominated the market. With the liberation of dairy industry and support of EAC governments, the region is now experiencing a shift from raw to processed milk products. This has also forced the dairy farmers to move out from the traditional subsistence mentality to the development of commercial market-oriented approach.

The dairy industry in the recent past experienced a steady growth. This growth was as a result of the rising milk consumer education on the importance of consuming processed dairy products, as well as risks in line with consumption of raw milk. As a result of the increase in market demand for processed milk, dairy processing firms have tried to install facilities for production and also introducing a variety of dairy products. This process hasn't been so smooth for entrepreneurs and investors in the industry in that there has been difficulty in accessing capital to boost the operations of dairy processors.

As a response to this market gap, d.o.b has taken the initiative of financing the dairy processor Tanga Fresh by investing in them thus improving operations and efficiency. d.o.b is a Dutch based organization which invests growth capital in financially sustainable African businesses including enterprises in the dairy industry. Tanga Fresh in Tanzania is one of its main investments which process and market milk products such as fresh/sour milk, cheese and yoghurt.

Research problem

There are many dairy processors in E.A with varied characteristics and way of performing operations. However, Tanga Fresh has not identified the best and attractive processors to work with.

Research question

The research question states “What are the potential investment opportunities for Tanga Fresh in the East African dairy industry?”

Objectives

The aim of the study is to identify and portray current and future dairy investment opportunities in E.A for Tanga Fresh and d.o.b. The specific objectives of this study are;

1. To map the existing dairy industry in E.A, positioning Tanga Fresh in the region in respect to the production capacity, business models, ownership structures and the four marketing mix P's
2. Outlook the East African dairy sector which will entail demand and supply, products, volume of production, geography among others
3. Analysis of potential mergers, acquisitions and investments for Tanga Fresh.

Justification of the study

Following the positive results and lessons learned from Tanga Fresh Ltd. (TFL), d.o.b currently seeks for other potential investment opportunities so as to expand its portfolio in the East African dairy industry. A market research on investment opportunities lying within the E. African dairy industry is therefore essential for the organization.

Acknowledging the current organizations' objective of expanding its portfolio, this research will be of great significance in that at the end of the study, d.o.b will have the insight on who, why and how to invest in the Eastern African dairy industry.

In completion of this research, all the research questions will have been sufficiently answered, suitable market development approaches analysed and investment suggestions recommended.

Sub-questions

- Who are the dairy processors in E.A?
- What is the nature of ownership structures in E.A dairy processing companies?
- Which are the business models used by dairy firms in EAC?
- What is the trend/projection for dairy processors in E.A?
- Who are the potential mergers and acquisition candidates for Tanga Fresh?

Target Audience

This research is done on behalf of the d.o.b upon request. d.o.b invests in growth capital in financially sustainable African businesses which operate in divers fields. The organization currently intends to expand its existing portfolio by investing in E.A dairy market following the positive response received from the sector having invested in Tanga Fresh Limited situated in Tanzania. The company is interested in identifying potential investment opportunities with minimum risks and uncertainties in E.A as the

organization only invests in businesses which are sustainable and lying within its investment guidelines and policies.

Structure

This report is divided into six main chapters which comprise of introduction, literature review, methodology, findings, discussions and conclusions and finally recommendations. Introduction describes the background information of the research topic, objectives of the study as well as overview of the general research on the dairy market opportunities in EAC.

Chapter two which is the literature review explores what's already known about market research, market development and investment opportunities. This involves concepts of doing market research on potential investments as well as models used to invest in them such as mergers and acquisitions. The chapter reviews journals, books, and articles just to mention but a few from authors who have already researched on the subject. Literature review is therefore important as it will help the researcher to link the existing literature to the research problem.

The basis of gathering, recording and analysing data is described in chapter three where in this case involves desk research and interviewing. Chapter four represents the main part of this report because the collected data will influence the data interpretation and recommendations made at the end of the study. Critical findings both qualitative and quantitative data about the E.African dairy market are explained in this chapter.

Chapter five involves the opinions and thoughts of the researcher concerning the findings on the E.A dairy market drawing evidence on investment opportunities. It also includes the explanation of both theoretical and practical implications of the findings. The last chapter upon the analysis of research will actually involve giving suggestions and advice to the d.o.b on the investment opportunities exposed in the research.

Chapter Two

Literature Review

Introduction

Scholars have sought answers to thousands of questions on how to invest and progress in the business world such as: What are the best strategies to grow in a market? How is growth strategies implemented? What are the factors considered before investing in a company? These questions have been responded to though with distinct answers thus this theory made to explore the ever changing answers by scholars such as Ansoff (1957), Mc Carthy (1963), and Sharma (2003) among others. This chapter reviews growth strategies, implementation process and exploration of potential investments.

Market Growth

Growth is an appealing goal to any profit oriented business. However, there is no specific growth strategy that is side-lined for all the businesses pursuing the same objective to follow. Organizations use growth strategies to meet performance goals they have which might include increasing revenues, Impact, revenues or other financial/performance measures. Business strategic decisions are usually based on the methods through which an organization could leverage its existing competitive advantage in promoting value and ensuring growth (Lynch, 2009). In reference to Coulter (2012), organization growth can be approached in 5 dimensions that is international, diversification, concentration, vertical and horizontal integration.¹

According to Coulter, international strategy in organizations involve looking for ways to grow by taking advantage of the potential opportunities offered by global markets protecting it from global competitors. This strategy according to Anderson and Coughlan (1987) seems complex arguing that integration of marketing and distribution functions may only be preferred when the firm possesses specialized knowledge and when agents are difficult to find.

Just like David(2009), Langham (1998), Hoskisson and Hitt (1990),Coulter also acknowledges Ansoff's H.I(1958) model of diversification as being one of the world popular strategies applied by numerous organizations when entering into new volatile markets. Diversification is a means of spreading the base of a business to achieve growth as well as reducing overall risk that can take the form of investments that does address new products, new services, customer segments or new geographical markets (Booz, Allen, and Hamilton, 1985).

¹ See illustration on annex three

Motivators of diversification differs from business to business, Abratt(2003) mentioned that some of these motivators may include, reduction of risks, increase of revenue and revenue streams, increase in growth rate of the firm, and improved stability in earning as well as efficiency. Coulter further describes two types of diversification that is related and unrelated. Related diversification is diversifying into a different industry but one that's related in some way to the organizations current business. Unrelated diversification is diversifying into a different industry not related to the organizations current business.

Horizontal integration is another dimension described by Coulter. Horizontal integration can be said to have taken place when an organization grows by combining operations with its competitors. This growth strategy keeps an organization in the same industry and provides a way to expand market share and strengthen competitive position. Pan American Health Organization (2008) provides examples of horizontal integration as conglomeration, mergers and strategic alliances. This strategy seems to possess relatively a good number of advantages such as cost efficiency and consolidation of information but has so far encountered some critics. The U.S Federal Trade Commission and Department for Justice pointed out that such competitions in the industry competition and antitrust laws might be violated. Despite the critics, many organizations have however successfully used this strategy to grow.

Vertical integration is one in which an organization grows by gaining control of its inputs either backwards or forward. Volberda (1996) states that in backward vertical integration, the organization gains controls of its inputs or resources by becoming its own supplier. He also described that in forward vertical integration, an organization gains control of its outputs citing Apple as a good example having more than 200 retail stores worldwide to distribute its products.

Coulter (2012) in his final explanation explores concentration dimension as a growth strategy in which an organization concentrates on its primary line of business and seeks for ways to meet its growth goals by expanding its core business. This therefore implies that when an organization grows by adding products or opening new locations, then it's using the concentration strategy. In relation to Ansoff's Product-Market growth strategy, all the factors involved in the matrix fall under concentration dimension apart from product-market diversification model.

Product-Market development matrix

Ansoff (1957) developed a strategic matrix naming it The Ansoff Matrix. He highlights four major strategic options through which an organization could adapt its new or existing products into a new or existing marketplace². The first quadrant represents market penetration depicting a scenario where an organization creates a new product to sell to an existing market. Shaw (2007) emphasises that a new product in this case may be a new product with new features (options, Sizes, and ingredients) that are aimed at current customers. In Addition to this, it can also include an existing product that has been improved or modified. According to Hooley (2004), the market penetration option is a low risk option that makes use of existing resources. However, despite the low risk in it, this growth strategy is a major disadvantage as it does not promote corporate growth into other potentially higher earning sectors (Watts et al, 1998).

Product development being the second quadrant directs organization which seeks to invest or offer a new product to an existing market. This option entails any new or modified product targeted at an existing market. Watts (1998) argues that this strategy entails a moderately high risk due to the level of product development and research required to develop a new product for a market that is already used to an existing product (Watts et al, 1998).

Ansoff (1957) recommends market development to organisations that aim to offer an existing product into a new market. This option leverages an existing product into a new geographical region, using different product dimensions, new channels of distribution, or adopting different pricing strategies (Proctor, 2000). The main goal of market development is to attract a new customer segment, using a slightly different strategy but with an existing product (Ansoff, 1984). The risk linked to this strategy has been illustrated by Watts (1998) to be moderate.

Generally, the four marketing strategies is employed by businesses in decision-making processes surrounding product offerings and market growth strategies and its major function is to help organizations in evaluating available options for growth given their product and market mix(Ansoff,1984) . Johnson (2008) also adds that it acts as a method of ascertaining the benefits or risks that are associated with each strategic option where each option is specifically applicable to a given scenario.

² Ansoff's Matrix figure in Appendix one

Implementation of growth strategies

Coulter (2012) highlights implementation options as internal development, strategic partnering and mergers-acquisitions. Coulter indicates that internal development occurs when an organization experiences growth through creation of new business activities by itself. Strategic partnering on the other hand is creation of legitimate relationship which involves combination activities, core competencies and distinctive capabilities by two or more firms for some business purpose.

Mergers and Acquisitions

Another way an organization can implement its growth strategies according to Coulter is to acquire what it needs. Such purchases are done through mergers and acquisitions, both in which an organization combines its operations with another's, but is done differently Coulter (2012). Investopedia.com³ defines a merger as a mutual decision of two companies to combine and become one entity. Williamson (2006) defines an acquisition as a takeover or purchase of one business or company by another company or other business entity.

McCarthy (1963) explores four types of acquisitions that is horizontal merger, vertical merger, concentric merger and conglomerate merger. He describes horizontal merger as two firms operating and competing in the same kind of business activity and geographical market. Boston (1976) on his contribution is of the opinion that vertical merger involves the integration of a customer and supplier. He further explains that this type can be backward or forward.

Mintzberg⁴ in his journal points out that concentric merger is a market extension which takes place between two companies in a similar field whose sales do not overlap but may expand the acquiring firm's geographical or product market owing to related market. Conglomerate merger occurs when firms engaged in unrelated types of business activities come together and operate under one roof (Simons, 2005). Furthermore, mergers and acquisitions can either be desired or not desired by both parties. According to Machiraju (2003), when a merger and acquisition is not desired by both parties, it is referred as hostile merger and if it is mutually desired by both, it is referred as friendly merger. Most mergers are always friendly.

Motives of mergers and acquisitions

Mergers and acquisition is practised by organizations with various motives. These motives are always in line with the organizations' objectives and goals at large. One of the main motives of mergers and

³ <http://www.investopedia.com/university/mergers/mergers1.asp>

⁴ Strategic management journal 6, no.2:257

acquisitions is market expansion. Acquisition/merging with another organization with complementary products or geographic spread provide all the necessary resources in a much shorter time, enabling faster growth (Manne, 1965). Another important motive to note is financial reasons. Mergers and acquisitions is practised by organizations to implement their growth strategies for financial reasons which involve increasing shareholder wealth and strengthening financial synergy through economies of scale⁵.

According to Holstein (2005), acquisitions especially horizontal mergers may also be undertaken to destroy competition and establish a critical mass. Holstein in his argument states that this will increase the bargaining power of the company with its customers and suppliers. Mergers and acquisitions can also be exercised with the motive of cutting costs and increasing efficiency. When two companies have similar products or services, they can create a large opportunity to reduce costs by combining resources, capabilities and activities. When companies merge, they will frequently have an opportunity to combine locations or reduce operating costs by integrating and streamlining support functions (Lubartkin; 1987). Finally, organizations practice this implementation strategy to survive. It's never easy for a company to willingly give up or exit from its identity to another company, but sometimes it is the only option for the company's survival (Kumar; 2009). Post-merger integration strategy should also be chosen careful to avoid failure.

Types of Post-merger and acquisitions strategies

Haspeslagh and Jemison (1991) drew four types of M&A integration approaches.⁶ Preservation approach allows the target firm to continue operating independently following the acquisition. Absorption is the second approach which in essence involves full consolidation of activities for both firms, primarily through assimilating the target firm into its operations and culture. The duo in describing the third approach emphasizes that symbiotic approach involves a period of initial preservation and then a gradual blending of best practices from both firms done. The final approach according to Haspeslagh and Jemison is holding. Holding approach involves a situation where the acquiring firm acts basically as a holding company with no intention of integrating the two firms. According to the two authors, the acquired firm is likely to be kept completely at arm's-length or even decide to disintegrate as a cultural entity.

However, despite the significance of this implementation strategy, there are instances in which other mergers become ineffective and unsuccessful. David (2009) highlights some of the key reasons why many

⁵ Leendert de Bell *organization behaviour week 2*

⁶ M&A matrix at appendix 3

mergers and acquisitions fail which include integration difficulties, inadequate evaluation of the target, inability to achieve synergy, difficulty in integration of different organization cultures among others.

Identifying a potential investment

Before deciding upon investing in any company, there are several factors an investor must take into account one being risk. Moen (2002); Alvesson's (1996); Sharma (2003) in their contribution on investments, caution investors on volatility of emerging markets. Moen in his opinion discloses that despite emerging markets' promise on rapid growth, they are at same time characterised by high risks.

Scholars from varied fields are of the opinion that before making any investment in an emerging market, risk examination is a crucial activity. Jack Clark Francis (1986) revealed the significance of the rate of return on investment reviewing the possibility of default and bankruptcy risk. Clark further illustrates that in an uncertain world, investors cannot predict exactly what rate of return an investment will yield thereby suggesting that investors should formulate a probability distribution of the possible rates of return. On the same matter, Preethi (1986) highlighted basic rules for selecting a company to invest in. She suggested that understanding and measuring return and risk is a fundamental exercise for any investment process. She argues that most investors are 'risk averse' in that they are not considering that in a higher return, the investor has to face greater risks. To avoid or rather minimize risks, Kumar (1992) specified tips of companies to be invested in. He advised the investors to invest in a growing company of a growing industry.

Ramalingam (2009) advises investors to analyse a company's future performance. In his argument, he points out that a prudent way to judge a company's future performance is to look into its past performance. Oviatt and McDougall, 1997; Leonidou and Katsikeas, 1997 in support of Ramalingam's opinion indicates that the past performance gives an investor a rough idea about how well the company will perform in the market during the upcoming years and what return it can expect from the investment. "This is important to know because both the company performance and the return on investment are interlinked. If company function good, you can expect a high gain, but if the company performs relatively bad, you would suffer a painful loss." (McDougall, 2003)

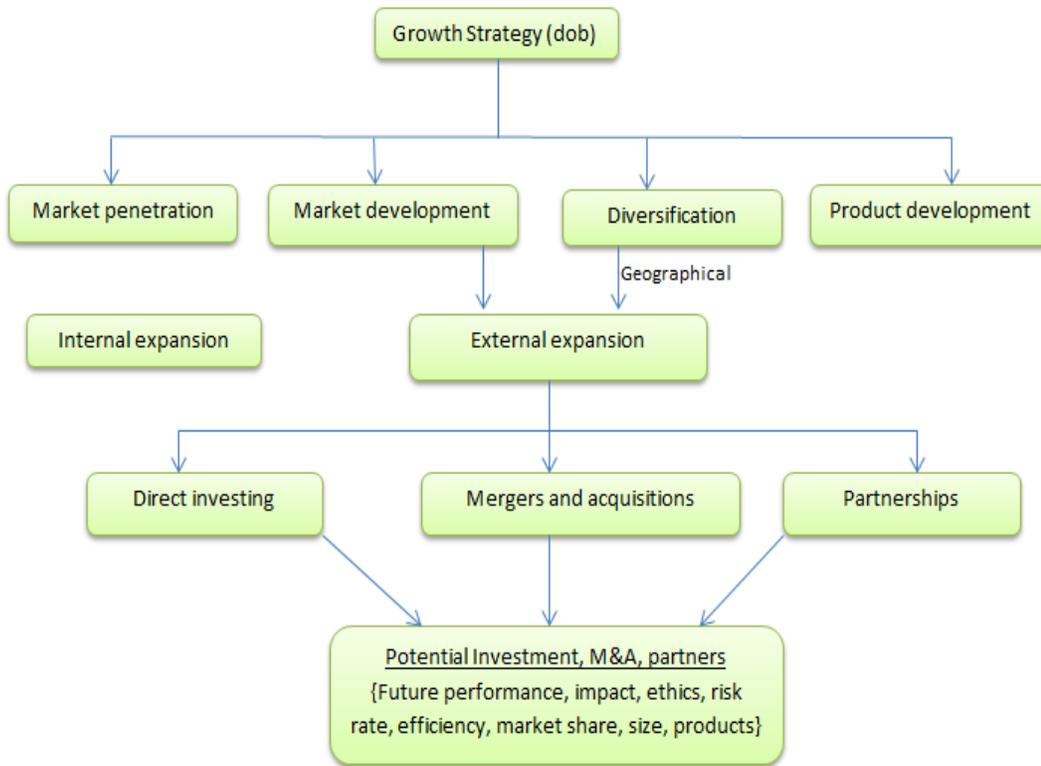
Performance in this regard according to (Scott, 1990) includes finances, profitability, assets, and market share. The investor should carefully analyse the financial statements with special reference to solvency, return on equity, profit margin, ethics, leverage and efficiency of the company (Scott, 1990). He emphasized that every investor should have an understanding of the various investment pitfalls.

Conceptual Framework

The growth strategies as argued by several authors imply that there is no clear strategy that a firm has to employ to be successful. An organization can grow its portfolio either by internal or external expansion. On external expansion, Ansoff (1957) championed the market development approach recommending it to businesses pointing out that it does not possess greater risk and also easier to implement. Implementation of growth strategies is a major challenge facing organization intending to expand. Halstein (2005), Coutler (2012) and Kumar (2009), had a major contribution on mergers and acquisitions strongly suggesting that merging and acquisitions approach was the most reliable and absolute means of implementing growth strategies. Despite critics from authors such as David (2009), Kumar (2009), points out examples organizations which have been successful after exercising this strategy thus acting as strong evidence to the feasibility of applying mergers and acquisitions strategy.

As a means of completing the growth mission after selecting a suitable strategy, dairy processors ought to be filtered out to come out with potential investments. (Scott, 1990) among other authors analyses tips on identifying potential investments which involve; future performance projection, risk rate, efficiency and ethics.

Fig. 1 Paradigm



The paradigm as shown in figure 1 above illustrates the conceptual framework of the study and how d.o.b can incorporate and combine various growth strategies for its success in the East African dairy industry. The incorporation of this model and its proper application is a pathway to a healthy investment.

Chapter Three

Methodology

Orientation

The aim of this study is to examine and identify potential dairy investment opportunities for d.o.b in E.A as to expand its current portfolio. For this purpose, both qualitative and quantitative research method of investigation is chosen. Tashakkori and Teddlie (1998) referred the combination of the two study methods as a mixed research method. This orientation type will be more valuable as it utilizes the benefits of both quantitative and qualitative methodology. Mixed methods research provides strengths that offset the weaknesses of both quantitative and qualitative research (Jick, 1979). With this methodology therefore, the quality of the study will be high in that the researcher will use the quantitative evidence drawn from early E.A dairy studies to make a qualitative analysis.

In line with the nature of exploring investment opportunities, using quantitative or qualitative method only will make the study appear incomplete thus necessitating both procedures. In order to sufficiently address this research problem and come up with a list of potential investments, the researcher is required to first explore qualitative information before using numerical lens to screen multiple phases in the market thereby building an overall understanding of the research problem.

Research design

With the practical nature this research, descriptive research design is preferred. The vindication is to collect, verify, synthesize evidence and to establish facts that can produce the suitable investments in E.A's dairy industry. Descriptive research design answers questions such as what, where, who and how in relation to the research topic. Bickman and Rog (1998) argued that descriptive studies can answer questions such as "what is" or "what was." This design will be effective as the research problem demands exact description of dairy market and processing firms on the market landscape, production capacity, product range, region of operation and models used.

Descriptive research design will also match with the research methodology where both quantitative and qualitative data will be used. Danielle (2010) states, "One of the main benefits of descriptive research is that fact that it uses both quantitative and qualitative data in order to find the solution to whatever is being studied". This therefore makes the approach advantageous in comparison to others as it does accommodate all the data collection methodologies without restrictions.

Data collection

This research is focusing on the East African dairy market. Due to lack of synergy in the five markets, the researcher will collect data for each country once at a time to ensure that the data is systematically collected. The study basically utilizes desk research technique in that data will be obtained from existing resources. Both internal and external desk research techniques will be used in data collection which is in line with the research topic.

Secondary data will be fetched from newspapers, internet, magazines, bulletins as well as existing E.A dairy reports done by organizations such as USAID, SNV, FAO, Heifer, O'Lakes and Techno-Serve.

Key informant interviews with individuals who are practitioners or officials in the dairy industry, small scale commercial farmers, public institutions and non-governmental organizations will also be conducted. Interviews and desk research are considered because the researcher is based in the Netherlands therefore making alternative techniques such as field research and observation inappropriate due to the long distance.

Desk research and interviews will however be effective forms of data collection because Tanga Fresh is now a well-established enterprise and possess a long-term experience in the Tanzanian dairy market making it fairly easier for the researcher to access study materials.

Analysis

Analysis will be done after the findings from all the secondary sources and interviews have been assembled. The first stages in this exercise are to transcript and organize the collected data. Data will then be reduced as the useful data is recorded and those which are less relevant discarded. The examinations and determination will be based on d.o.b's investment guidelines that is investing in existing business with:

- Proven market/track record
- Capability and professional management team
- Growth capital requirement
- Scalable or replicable business model
- Innovative product, service or business model

To ensure that the rationale towards the analysis is clear, crucial subjects should be taken into consideration which includes company size and strength, milk processing capacity per day, company location and product range. These factors will guide the researcher on data interpretation, formulation of future projections and in making conclusions. This analysis technique will screen, sieve, narrow down and finally identify the potential investments for d.o.b.

Limitations

This research is done upon the request of d.o.b where it defines its geographical area of operation as well as industry to be invested in. The scope of study is therefore done within the pre-determined policies and guidelines of the company. The research according to company's geographical description will be conducted in the EAC which comprises Kenya, Uganda, Tanzania, Rwanda and Burundi.

The research outcomes are limited to investment opportunities for d.o.b in the East African dairy Industry. The company intends to expand its existing portfolio in the same region and specifically dairy industry due to the market potential promise in the sector. This limitation in the industry is also linked to the experience possessed by the company.

Beside inaccessibility of data in one package, the five countries under examination in this respect forms one large market. This makes the study cumbersome as far as data collection is concerned. East African like any other emerging market has no centralized institution which collects, analyse and store dairy related data that can be used to inform stakeholders and investors in the industry.

The markets though being in the same region, have differentiated economic status, development characteristics and data sources thus requiring the researcher to study each market individually rather than collectively to avoid generalization.

In reference to data collection, the approach will be limited to desk research. This is so because the investment opportunities to be explored are in E.A and the researcher is based in the Netherlands. The long distance therefore forces the researcher to depend more on interviews and secondary data, limiting him from conducting field research. With the dependency of desk research, the data collected though done at the same time conflict in some cases thus questioning its validity.

Validity

In spite of the above mentioned limitations, the findings of this study still remain reliable. In support of this statement, the dairy reports that the researcher depend upon on the data collection were mostly compiled by organizations which are experienced and specialized in the dairy sector. In an earlier statement, some of these research bodies were highlighted as USAID, Techno-Serve, SNV, Heifer and FAO among others.

In the cases of conflicting information, the researcher will fetch more and extra information from other sources including interviews to ensure that the confliction is reconciled.

For the sake accuracy and validity, the five varied markets are not to be generalized as the East African Market but instead split. Each country is to be treated as an individual market to ensure systematic data collection and avoidance of duplication.

Chapter Four

Findings

Overview of E.A dairy industry

E.A Community is more of an agricultural economy constituting small-scale dairy and crop farm communities. Kenya, Uganda, Tanzania, Rwanda and Burundi have been transforming their dairy sectors through policy formulation and privatization of state owned processing plants to enable dairy processors distribute the values to the entire supply chain.

Globalization and liberation of the East African industry has brought opportunities to the dairy industry. The number of smallholder dairy cattle farming since then has immensely experienced increase. Following liberation and privatization of state owned dairy processors in Kenya, Uganda and Tanzania, the number of processing plants rose by 21, 10 and 28 respectively(FAO,2011). While milk production recorded positive growth, the processing and marketing sections in the supply chain has remained challenged especially when it comes to the number of processing plants as well as production capacity.

This is so because the E.A market is characterized by 75% (Av.est) raw milk consumption which hinders development in the sector. Due to stiff competition from raw milk vendors, the growth of dairy processors and industry in general has been kept a bit lower.

Population income classes

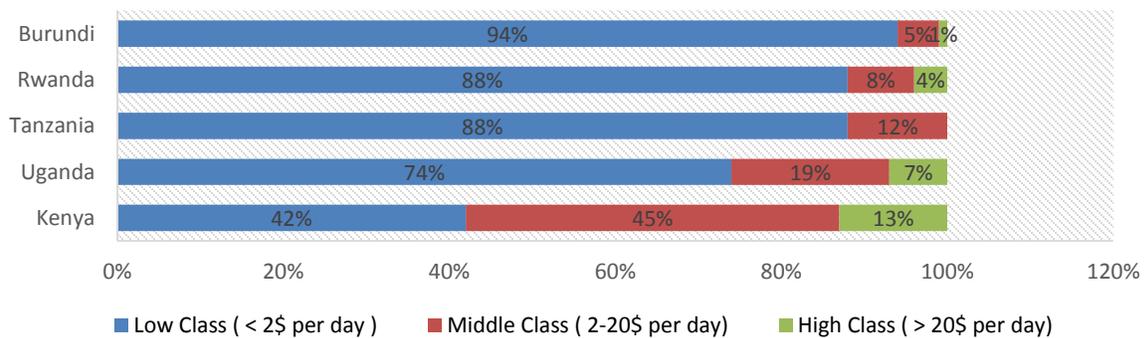


Fig. 2, Data source: African Development Bank, Dynamics of the Middle Class in Africa

E.A has an estimate population of 150 Million people.⁷ An average of about 70% of the total population in the region live below the poverty line (< 2\$ per day).

⁷ CIA Fact book



The percentage of people who are in the low class is however more higher in Tanzania, Rwanda and Burundi. A large percentage of Kenyan population live in the middle class (45%) thus being the highest in E.A.

E.A milk consumption

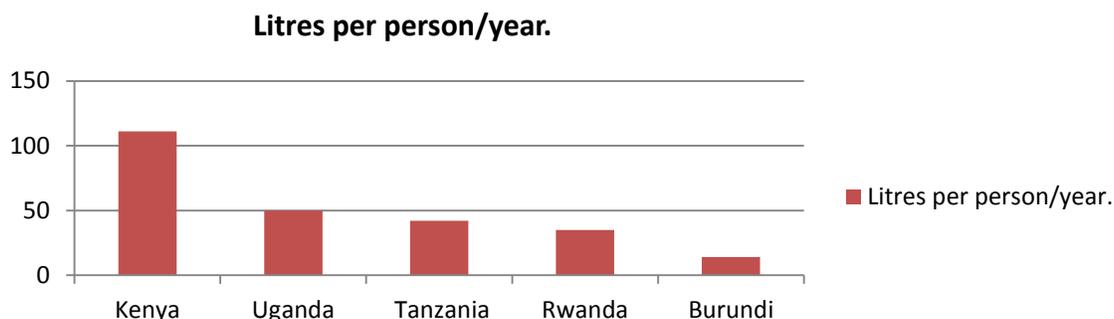


Fig. 3 Source: SNV 2011 annual report

Milk consumption rate is way back below the international recommended quantity of 200 litres per person per year. Kenya is leading with a consumption rate of 111 litres per person/year whereas Burundi has the least volumes of consumption as shown in the graph above. The low consumption rates is attributed to lack of aggressive advertising and fear of getting fat (DDB)

Production Capacity

The East African dairy market has been fairly successful in the recent past as dairy milk processors are able to receive sufficient milk supply with the exemption of the dry seasons which still remains a major challenge. Milk production has however consistently exceeded consumption during the rainy seasons thus encouraging the development of small milk processing plants making cheese and cream.

Processing Capacity Utilization('000' litres pd) in EAC

| Country | Installed Capacity | Utilized Capacity | Capacity Utilization % |
|--------------|--------------------|-------------------|------------------------|
| Kenya | 5249500 | 2,394,147 | 46% |
| Uganda | 1081000 | 550,000 | 50% |
| Tanzania | 361600 | 110,115 | 30% |
| Rwanda | 208000 | 24,814 | 12% |
| Burundi | 3000 | 500 | 17% |
| Total | 6903100 | 3,079,576 | 31% |

Fig. 4 Source: Interviews.

The total utilized milk processing capacities in the EAC as per 2012 is estimated to be 3 Million litres per day (from the table). Out of this production capacity, 75% of the totals account for the Kenyan market

which is to a great extent associated to improved industry coordination, infrastructure and government support.

EAC Milk processing trend

The EAC market since its liberation and privatization of the dairy industry has responded positively through consistent milk production increase and growth.

Annual Milk Production trend in E.A

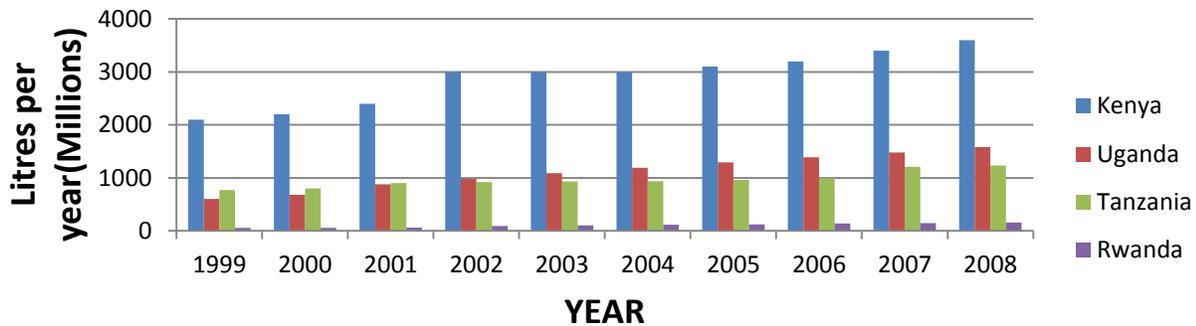


Fig. 5, Data Source: FAO 2011 Report/MINAGRI statistical report (BNR)

From figure 5 shown above, it can be noticed that the each market irrespective of the capacity at least has a positive growth trend.

Kenya

Kenya is considered to have the largest dairy market in E. Africa. The large market has a huge contribution to the wellbeing of all the partners involved in the value chain. The fairly developed industry in addition to restrictions towards imports enabled the Kenyan market reduce its milk imports from 50M litres in 2001 to 10M in 2009. The industry itself is self-sufficient in dairy requirements and has been in the few recent years' not experienced significant importation apart from extreme dry seasons where they import as small as 1% of the total domestic production.

Dairy product Imports and Exports 2001/2009

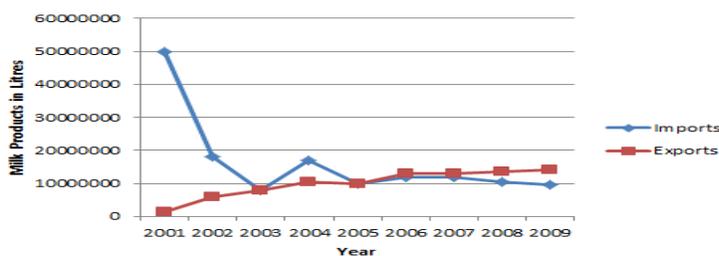


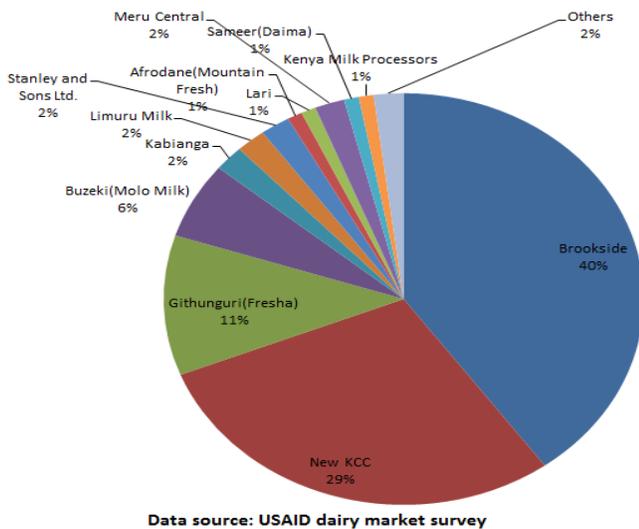
Fig. 6 Data Source: Farmco Agricultural Consultancy



70% of the total milk produced in the farms is sourced from small holder farmers having 5 acres or less. Despite the huge productions from farmers, only 35 % that is 2,367,700 litres per day is traded through the formal market⁸.

Dairy Processors

Currently, there are about 28 licensed dairy processors in Kenya under operation where Brookside and the New KCC are dominating, occupying 69% of the country’s market share. Many of these milk processing companies however neither own MCC’s nor milk transit trucks thereby relying on outsource.



Milk Preference

The dairy processing companies produce varied milk products basing on internal defined target market and financial capability. The main determining factor for the demand of various dairy products is the household preferences. A market survey done by Kenya Strategic Business advisors in 2002 shows that pasteurized milk is the most preferred milk product followed by butter. The survey with 293 respondents indicates that 88 among them preferred pasteurized milk seconded by butter with 60 respondent votes.

⁸ Annex four



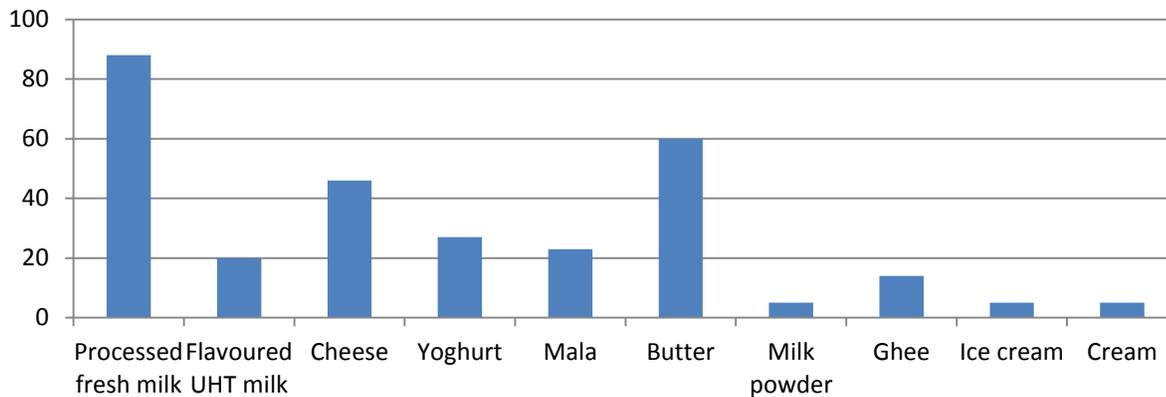


Fig 8. Data source: Kenya strategic advisors 2012 report

Uganda

Uganda's dairy sector has been experiencing a slow growth since 1990's and was estimated to be less than 1% in 2010/2011 as a result of low motivation from the Livestock Ministry (Danish Institute field Research). Irrespective of the sector's slow growth, the milk production in the region is experiencing a commendable growth of about 7 % (2010/2011)⁹. It is estimated that annual 1.05 billion litres which constitutes 70% of milk produced in Uganda is marketed commercially while the remaining 30% is directly consumed in the farms. Out of the total percentage of milk marketed, only 15-10% is sold through the formal marketing channel and the rest as raw milk.¹⁰

MCC's

Uganda is characterized of well-organized MCC's which in most cases owned and managed by cooperatives. There are over 200 milk coolers with an estimated capacity of about 550,000 litres.

| Region | Number | Capacity (litres) | Operating (litres) | Non-operational (litres) |
|------------|--------|-------------------|--------------------|--------------------------|
| Central | 30 | 62,050 | 57,050 | 5,000 |
| Eastern | 19 | 37,900 | 7,500 | 30,400 |
| Mid-West | 4 | 4,800 | 4,800 | 0 |
| South-West | 131 | 316,600 | 316,000 | 0 |
| | 184 | 421,350 | 385,950 | 35,400 |

Fig. 9 Data source: DDA 2011

Most of these MCC's (69%) are found in the South-West region of Uganda because of huge milk production in the area. 90% of the total milk processed is consumed locally whereas 10% is exported to

⁹ DDB 2011

¹⁰ SNV 2011 dairy opportunities in Uganda report

countries such as Kenya, Tanzania, DRC, Burundi, Southern Sudan, Mauritius, Rwanda and M. East. The rising milk production in Uganda has however reduced the quantities of milk imported.

Milk Products Imports/Exports (Metric Tons)

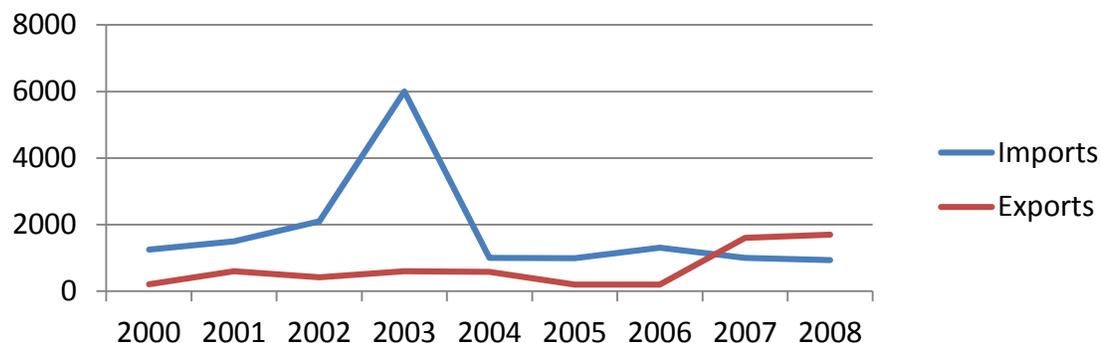


Fig 10. Data Source: SNV dairy investment report.

Uganda in the last decade used to import more milk and other related products than exported. UHT and milk powder were the main products imported to contain the milk deficit especially in the Eastern region. This trend as seen on the graph was changed when the exported volumes for the first time overtook the quantities imported in the year 2007. The increase in milk exportation is linked to privatization of the former state owned Uganda Dairy Corporation Ltd.

Processors

In 2001, there were only 7 dairy processors producing deeply below their capacities with Uganda Dairy Corporation being the strongest. Currently, the number has increased to 15 privately owned industrial processing plants and 9 mini processors.¹¹ More than three quarters of these processing plants in Uganda are located in the Central and South Western regions. By mid-2012, SALL was still maintaining the lead having an estimated percentage of 75 market share.¹² SALL is always the price settler at both farm and retail levels due to its strong influence in the market. Processors normally benchmark and price their products basing on SALL's pricing rather than internal pricing strategies with the motive of remaining competitive in the market. Farmers are also paid very low for their milk sold to the leading processor. Jesa dairy owned by Ugandan Industrialist James Mulwana is a very successful dairy company making use of integrated business model and producing high quality products. The well paid farmers, high quality products and fair retail prices is a potential strategy of ending SALL's long serving dominance in the market

¹¹ Annex five

¹² International Livestock Research Institute

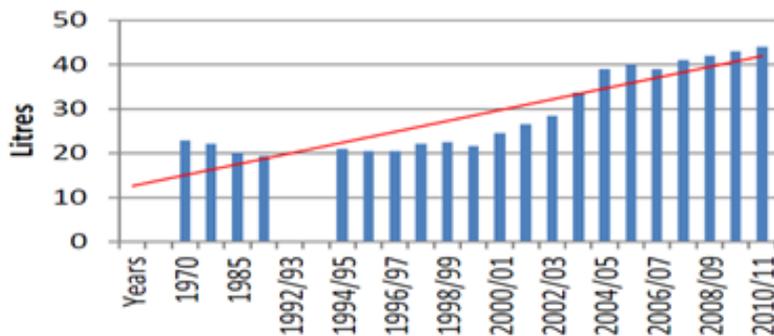
Tanzania

It was estimated that Tanzania was the 3rd country in Africa with a large herd of cattle after Ethiopia and Sudan in the year 2008. Milk production in Tanzania despite the huge cattle number is still very dismal producing only 4.7 million litres of milk per day most of it (70%) coming from the pastoral farming kept in rural areas (ILRI, 2010). Less than 10% of the milk produced is marketed in urban and semi urban areas where consumption is relatively higher.

Consumption

Statistics shows that Tanzania has a big potential to grow its dairy industry compared to Kenya and Uganda as it is currently accelerating its daily consumption.

The trend in per capita consumption of milk is shown in the graph,



Data source: East African Development Phase 2

Fig 11: Consumption trend in Tanzania

Within a time span of only ten years that's from 2001 to 2011, the consumption rate rose by 100%. Despite the steady consumption growth, the demand hasn't been fully met to equilibrium by the local dairy processors due to underutilization of installed capacities.

Imports/Exports

From the interviews contacted, it is evident that imported milk products to some extent still dominate the market irrespective of the high import taxes and other trade barriers. The countries which feed Tanzania with dairy imports include Kenya, South Africa and European Union countries. According to a study done by the UN in 2012, the average value of milk products imported each year for the last 6 years rests at \$34 million per annum. As Kenya and Uganda, Tanzania also experiences shortage of milk during the dry seasons and on the other hand produce surplus milk during the rainy seasons. The surplus milk unlike the duo cannot be fully handled by the processors as most of them neither produce UHT nor powdered milk. The study further showed that dairy products imports is continuously rising with an annual rate of about 9%.

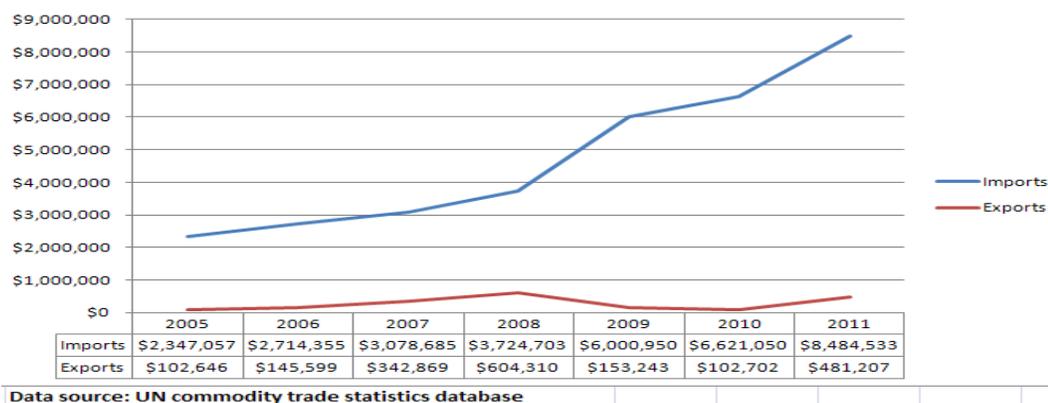


Fig 12. Imports vs Exports in Tanzania

Processors

Tanzania is characterized by high number of small holder processors who underutilize their installed capacities. There is a huge gap left between the installed capacity and actual capacity in most processing plants with the exception of Tanga Fresh. The sum of total processing capacities is about 361600 lpd where only 30% of it was utilized.¹³ The underutilization as cited by the interviewees is mostly associated to poor management, power shortages and insufficient milk supply due to unaccessed widespread producers in remote areas. This logistical constrain and high transportation cost objects the process of milk collection. Large processors (processing more than 8,000 LPD) account for a mere 18% of the total market and control up to 75% of production output during the rainy season.¹⁴

Majority of these dairy processors source their milk from existing collection centres which are operated through farmer’s groups, processors or few traders entitled to do the collection.

Rwanda

Rwanda is the most densely populated country in Africa with a population estimated at 9.2 million. It produces about 610,000 litres of milk per day. Techno-serve in 2008 estimated the amount of milk marketed formally to be 8 percent while 92% consumed in the farms directly or marketed informally. “Raw milk is preferred due to its low cost as processed milk is sold at a double price” (Innocent Rutuma, SNV Rwanda). The dairy sector is receiving a fairly strong support from the government in terms of milk collection centres construction and funding to cooperatives. Logistical problems in the area are minimal due to better infrastructure as compared to other East and Central African countries.

¹³ Annex eight

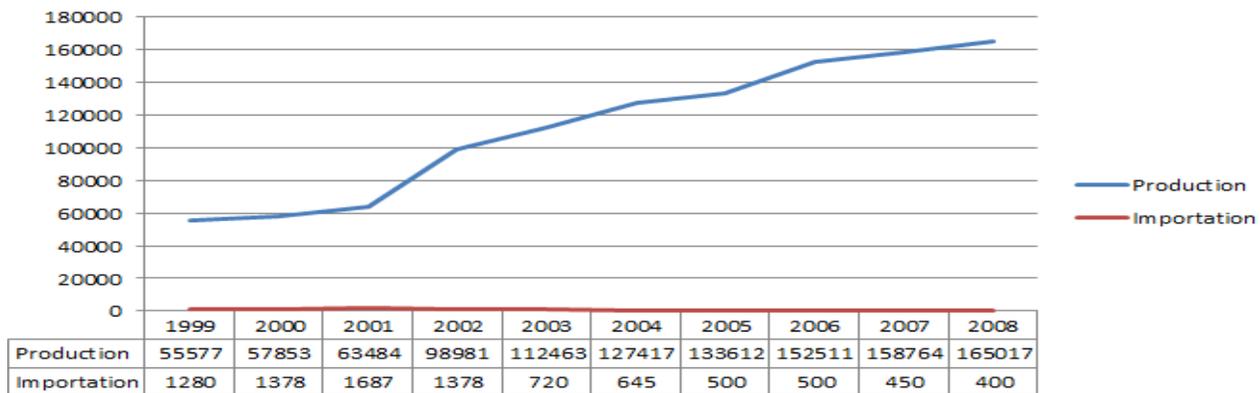
¹⁴ Land O’Lakes International Development



Imports/Production

High population growth in Rwanda has led to increased demand for processed dairy products. As a result of this, the country is thereby forced to invest its small financial resources to import dairy products where powdered milk takes the most part. The graph below shows the trend of milk produced against milk imported from other countries. So far Rwanda has not begun to export any milk products

Imports against Production in Rwanda



Data Source: Investment opportunities Rwanda, SNV

Fig 12. Production vs. Importation in Rwanda

Processing plants

The existing number of dairy processing plants in Rwanda is very small, currently having three active plants namely Nyabisindu, Inyange and Dan Cheese (annex six). Inyange though operating below capacity seems to be the dominant milk processing plant controlling the local market. The company boosted its processing capacity by acquiring Savannah Diaries Ltd based in Nyatagare formerly owned by the government in March 2012.

Burundi

The dairy industry of Burundi is the least developed in the East African region. The whole value chain in the industry is still weak due the country's slow growing economy and policy implementation. The current milk consumption per person per year is estimated to be 8 litres which is extremely low from 220 litres recommended by the international standards.

Imports/Exports

Burundi has a unique pattern of imports as the value of quantities imported raises and falls unexpectedly. The imports are more of UHT milk, powder and cream mostly concentrated or containing added sugar. The export on the other hand is pretty low compared to the imports, the main product being milk cream making up to 95 percent of the exports.

Annual Imports against Exports in Burundi



Data source: UN commodity trade statistics database

Fig. 13. Exports vs. Imports Burundi

Dairy processing

Almost all dairy processors in Burundi are prospective, intending to start operations soon. Bujumbura Central Dairy corporation ltd. formally state owned was the long serving and the only depended dairy processor in the land till the year 2008 when it was privatized. The processor later stopped its operations due to lack of sufficient demand and underdeveloped market. Since then, private investors were allowed to enter the market to enhance a competitive business environment and so far attracted a small number of them. The new upcoming influential dairy processing plant is IAB which has already began trial production of yoghurt.

Chapter Five

Discussion

Population

150 million E.A's population mostly constitute a young population. Young person's ranging between the age of 15 years and below which is estimated to be 70 Million are the highest milk consumers. "Young people having 15 years and below form a group with the highest milk consumption in the market as milk is a prescribed tied especially in developing countries" .Van de Poll.

Fundamentals of socio-economic dynamics are also directly linked to consumption of processed milk. From income distribution data obtained, it is evident that a large proportion of East African population live below the poverty level. 58% of Kenya's population is composed of middle class and high class which is the highest in the region. The large population in middle income class thus explains why Kenya has the highest milk consumption rate in the region, i.e 110 ltrs p/d.p/a. The trend in E.A market clearly shows that the higher the population in high/middle class, the higher the milk consumption rate. From this point of view therefore, it can be said that the low class population has a dismal number of processed milk consumers hence not the main dairy target market.

Milk Consumption

A growing dairy industry is associated to income generation, poverty reduction and value creation to the whole value chain which comprise of direct household dairy dependants, dairy input/equipment suppliers, milk transporters, processors, distributors and consumers. In reference to the consumption growth, East African dairy market though still consuming milk below the international standard recommendations, has a positive growth projection. This can be clearly seen from the consumption trend for the past 10 years. The ongoing education sensitizing people on the importance of consuming processed milk is linked to the consumption growth.

Milk Preference

Direct drivers in consumption of dairy products are hinged to users with different needs. Land O' Lakes also attached this behaviour to long term cultures build in different regions.

East African countries do not have the same milk preferences thus creating difference in milk consumption behaviours in the region. Kenya and Uganda for instance consume processed fresh milk more than any other dairy product whereas in Tanzania, sour milk is highly preferred. In-depth examination bringing this difference points out that income distribution plays a major role in this matter. The taught behind it is that,

the high numbers of Tanzanians living below the poverty line buy raw milk due to its low cost instead of processed fresh milk. On the other hand, the same class of consumers buy sour milk in the market due to the fact that they are not able to make quality sour milk on their own.

These consumption preferences can also be seen directly affecting purchase behaviours hence dairy processors. Dairy firms in the East African region are therefore driven to process milk products in respect to the forces of demand in the market. In this regard, Kenyan and Ugandan processors therefore process fresh milk in large units adding up to 70% while sour milk takes half the stake in Tanzania. Tanga Fresh should be aware of dairy product preference before investing in a different region such as Kenya and Uganda.

Raw Milk

Raw milk in E.A is still a major challenge facing dairy milk processors. This is so because 75% raw milk dominance in the market is too high thereby negatively affecting returns. Raw milk is popular in E.A especially in Rwanda and Burundi due to its low cost in comparison to processed milk. This purchase behaviour is in support of the law of demand which states “as the price of a product increases, a lower quantity will be demanded and vice versa holding other factors constant”. High demand of raw milk therefore translates to the need of fresh milk sold on an affordable price.

Majority of raw milk consumers are the low income class members who try to save some money to spend on other necessities in the bottom layer of Maslow’s hierarchy of needs¹⁵ such as food, clothing and school fees. The Kenyan dairy processors recently received boost when the Government banned hawking of raw milk in January 2013. This initiative seems to be spreading to other neighbouring countries that have already started discussing the same matter in parliament. The ban of unprocessed milk is a reflection of a shift from consumption of raw milk to processed milk which is a great opportunity for dairy processors.

Imports vs. Exports

National imports and exports into and out of a country respectively are practical indicators showing the degree of a need for a product in a market and to whether to introduce it or not. The import and export trend in the five East African countries though presently differ, seems to be having a common origin, development stages and might even end up in the same design in the near future.

¹⁵ Annex ten

Assumption on E.A Import/Export behaviour

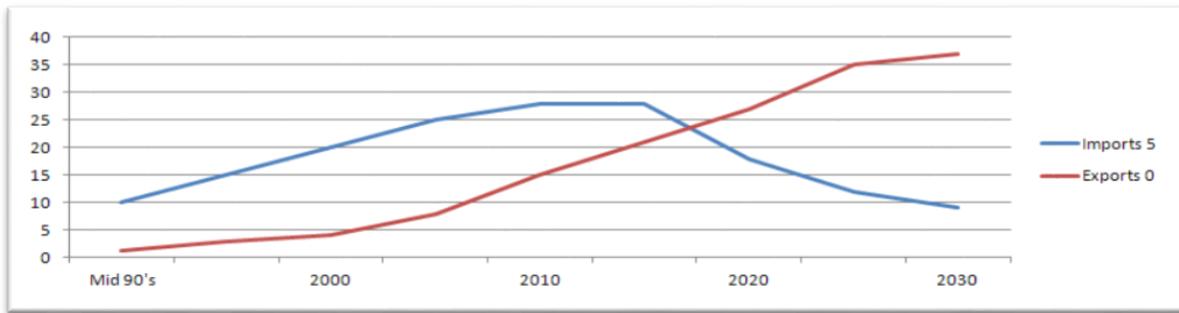


Fig 14. Assumption of E.A's Import/Export behaviour

In early 1950's till early late 90's, East African dairy consumers depended a lot on state owned dairy processors which processed milk products specifically for domestic consumption. Rigid governance, lack of financial access, poor management and limited expertise in the dairy industry could not sustain the rising market needs thereby popularising imports.

Dependence on imports seems to have started reducing in early 20's when the industry was liberalised and state owned dairy companies privatised. Stiff competition in the market led to increase in dairy milk processing where processors begun feeding it's domestic markets, cutting down imports from other countries. Processors commenced to export its products into neighbouring countries when they felt its local market is approaching a saturation point.

The trend in E.A is not moving in the same base in that other countries are ahead of others.

Kenya and Uganda appear to be on the same phase. Initially, they were importing more than what they were exporting and at this moment its exports is overtaking imports. Practically, this shows that the two markets are now sufficiently supplying dairy products into their local markets and the little imports into the two countries is actually mend to fill the gap of unmet customer needs.

Tanzanian dairy market is a unique one in the region in that it's the only market where UHT and other related products are imported at a very high rate (9% annually). This recurrent dairy products increase and stagnating exports exhibits that Tanzanian market hasn't been explored fully.

Though Rwanda processes reasonable units of milk, it hasn't yet exported processed dairy products to any neighbouring country. The deficiency in the market therefore permits the importation of dairy products into the market. In this view, it implies that Rwanda is still trying to fully supply its local market before exporting elsewhere.

Burundi just like Rwanda imports dairy related products though not in large quantities. The exports as well are next to none due to the fact that it has no industrial dairy processor thus exporting traditionally

made products such as cheese to Congo. Current Burundian dairy state indicates that the demand and consumption of processed milk is still very low. Popularity of raw milk and high numbers of people living in the BoP is the biggest reason why its dairy industry is still lagging behind. Investing in Burundian dairy sector in this event therefore is more likely to be challenging as far as market demand is concern.

Dairy Processors

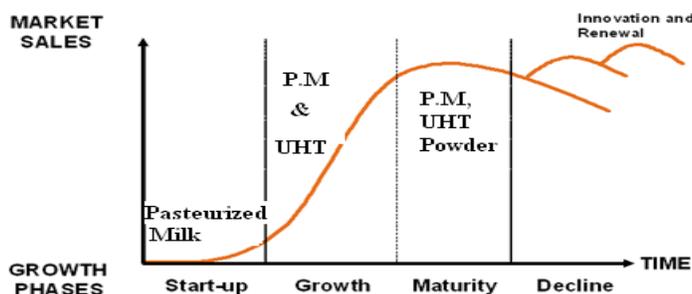
The dairy sector liberation in all the countries apart from Burundi played a major role in transformation of the industry. Initially, all dairy processors in E.A were owned and managed by the state but currently privately owned with the exception of K.C.C. Significance of liberation can be spotted on the present number of dairy processors in the region though many still operating below capacity. Interviewees believe that this is happening because of improper planning as well as inadequate finances. “Most of these dairy processing companies go into business without planning well on how to meet their set goals, some end up processing little milk which I am capable of processing in my own kitchen.” (Cees).

From ownership structure perspective, it can be noticed that a number of these managerial/financed troubled processors were once projects which were initiated by NGO’s. They set up a facility but leave the beneficiaries with no money to run its day to day operations. On the other hand, dairy companies set up by private owners especially those having managerial support from European experts seem to be doing well e.g Tanga Fresh and Gold Dairies. On this grounds therefore, it does emerge that beside financial stability, managerial and operation expertise in the dairy sector is very important and widely needed.

Dairy Product Life Cycle

As stated earlier, dairy firms in most cases process milk and other related products depending on product demand and companies’ financial capability. Some processors however operate on a niche market where they specialize on special products such as ghee, cheese, butter or yoghurt. Apart from such processors operating in a “special” niche market, dairy processors tend to have a common product life cycle.

Figure 15: Dairy processors product life cycle



Reflecting Robert Vernon's (1966) Product cycle on the dairy sector, processors begin the first phase with production of pasteurized milk as a base product and in some cases adding other products such as yoghurt, mtindi, cheese et cetera. In the growth stage, the processors introduce UHT to allow them explore distant markets or avoid losses through expiry but maintaining previous products. The maturity stage involves introduction of powdered milk to the existing products. Milk powder can be sold directly to customers/clients or converted into liquid milk during the dry seasons when there's scarcity of raw milk supply. On his contribution to this discussion, Cees Schelle argues that the industry is set in such a manner that there is no single day where a normal dairy processing company can skip one stage in the cycle for another.

Business Models

In relation to Ansoff's (1957) Four Matrix, product development and diversification models are the most frequent general models utilized in the E.A's dairy sector. Processors tend to introduce a product into the market and later modify it to meet uprising requirements. One example in this case is a situation where pasteurized milk is modified into UHT where the product is slightly modified and its packaging design completely changed.

Product diversification especially related diversification as pointed out earlier by Coulter is also applied in the industry as processors introduce other milk related products to the existing ones. These products might be cheese, butter, ghee, UHT or yoghurt depending on the base product. Only few companies in the region practice horizontal mergers/unrelated diversification due to managerial and financial complexity. SALL, Daima, ASAS and Shumuk are few examples in this case. These conglomerates with business operating under a specified umbrella name invest in the dairy sector to boost its revenues and market share.

Michael Karata explained that Tanga Fresh diversify its products so as to boost and maintain turnover in case one of the products stagnate in the market. Well-developed processors such as Brookside, K.C.C, Gold Dairies, SALL just to mention but a few practice geographical diversifications in the region by exporting dairy products to neighbouring countries and even Middle East.

In addition to the above mentioned models, dairy processors also practice other unique specific models. These models include Mergers and acquisitions, backward and forward integration, marketing, quality leadership and MCC's coordination.

Mergers and acquisitions

Brookside is a renowned dairy processor making use of this business model. It first merged and later acquired Tuzo, Ilara, and Delmonte. This according to Mc Carthy (1963) is called horizontal merger which describes it as two firm mergers operating and competing in the same kind of business activity and geographical market in that all the four above mentioned companies were once competing for the same market.

There are two main reasons why Brookside practices horizontal mergers and acquisition that is to kill competition in the market and secondly, build its strength so as to export its products to other countries. Although good for Brookside's market growth, unfair competition practices can lead to collapse of the whole industry hence not recommended.

Other companies who practice this model though on a low base include Inyange and SALL. In contrary to Brookside who does it with the motive of killing competition, the duo exercises it with the intention of expanding their market share. In reference to Haspeslagh and Jemison (1991), SALL, Inyange and Brookside all practice absorption post-merger strategy where the firms consolidate its activities, operations and culture with the new mergers and acquisitions. Preservation and holding post-merger approaches are rarely exercised.

From negative reactions on Brookside's motive, it's clear that mergers and acquisitions has a limit and should not be used as a tool to suppress others in the market.

Vertical and Horizontal Integration

Basing on Coulter's argument, very few dairy processors exercise vertical integration model. The reason for underutilization of this model is the complexity and expensive cost attached to it as it has proved difficult for various dairy processors to implement. Lord Delamare's farm in Naivasha is one practical example of dairy processors that tried to integrate but failed to benefit from it. Jesa and Baraki sisters also practice this model and so far seem to be fairly successful. The challenge connected to vertical integration is in line with McKinsey's¹⁶ statement pointing out the difficulty associated with the strategy.

Jesa took one step back to merge with Jesa farm with the motive of gaining control of its own inputs as described by Volberda(1996). The processor now seems to be enjoying the better part of this model as it is cutting down its input costs and also reducing cases of milk shortages. This model though advantageous

¹⁶ <http://www.economist.com/node/13396061>

requires dedication and effort from the practitioner due to the time and cost demanded by the business model

Other processors such as SALL and CEFA Njombe practice forward integration as it recently introduced new supply outlets so as to provide its customers with easy access to dairy products. Apart from access, the two firms also use the kiosks to get first-hand information/feedback from customers and also protect them from exploitation through price control.

Coulter (2012) cited conglomeration as an example of horizontal integration. This business strategy can be witnessed but in some rare instances. Azam's, Daima's, SALL's, IDP's, Asas's, and Shumuk's ownership structure signifies that the above mentioned firms are practicing horizontal integration.

The lesson learned in this business model especially backward integration is that vertical integration is expensive and complex to start but if it is well implemented and coordinated, then it can be the best tool for cost reduction.

Quality Leadership

Many organizations claim to be quality leaders. However, this might not be the case as quality leadership always goes beyond product attributes. Edward Chamberlin (1933) in his book *Theory of Monopolistic Competition* clearly pointed out that quality leadership is one best way of gaining competitive advantage. His theory has been proved right by some of E.A's Dairy processors. Good examples of quality leaders are Tanga Fresh in Tanzania, Jesa Farm in Uganda and Fresha processors in Kenya. The three processors relatively have similar characteristics in that they are all quality product oriented and also dairy farmer concerned.¹⁷ This quality differentiation strategy has therefore given them a competitive advantage against their competitors. The success of these three dairy processors is a strong indicator showing that dairy processors "doing good"¹⁸ influences and transforms customer perception towards a company/ its products hence building customer loyalty.

Marketing

Marketing of dairy products is broad in nature involving various forms of marketing designs such as advertising, packaging, promotion among others. The main components of marketing used in the dairy industry is packaging and advertising. In this regard, packaging appears not to be more influential as compared to advertising. Kenya's Molo milk is known to be on the lead as far as advertising is concerned. In 2009, the processor became one of the most popular brands within a very short period of time as a result

¹⁷ Process quality products, pay farmers well and are also concern about the environment

¹⁸ Doing good means being environmental friendly, farmer concerned, and also customer sensitivity

of massive adverts. This strategy was successful due to the fact that the three characters featured in the advert were popular actors who participated in one of the famous local TV programs.

Other dairy processors have also tried use the same strategy but haven't been much successful as they were unable to air an attractive advertisement.

Looking at the case of Molo milk, there is an indication that if an advertisement or marketing in general is properly done, then it may yield good results. However, the drawback behind this strategy is that it is expensive to air an advertisement on T.V or radio. In addition to high cost, the approach in the dairy sector unlike other sectors is also of high risk in that it's hard to pre-determine whether or not the advert will be attractive and influential in the market.

MCC's

From the data collected, E.A dairy industry has varied approaches of managing milk collection; Hiring fleets, partially owning/hiring fleets, owning fleets and finally having no trucks at all thus depending on farmers delivery. The first two approaches are common as many dairy processors can afford to own a small number of trucks thus hire fleet to transport collected milk from MCC's to factories. SALL and KCC own a lot of fleet for milk collection with the intention of managing own milk delivery and also reducing transport cost. As discussed earlier, this approach is known as forward integration. New companies which are not well established always depend on direct delivery from farmers therefore putting them at high risk against companies who can afford to build MCC's. It's is very rare to find a company which completely depends on its own trucks as it is an expensive exercise. The reason why these companies prefer to hire fleet is the transfer of liability from the dairy processor to truck owners. This model in real sense is advantageous considering the poor conditions of African roads especially in situations where farmers in rural areas are to be accessed. Another advantage associated to this model is ease exit strategy. It is very easy for a company hiring fleet to exit a market compared to fleet owners in that there is no worry of disposing assets in case the company has to quit the market. Brookside and Molo Milk tend to make use of this strategy.

MCC's is an aspect which determines the quantity and quality of milk received from farmers. MCC's are always set in strategic positions that is in areas with reliable milk supply, averagely good infrastructure and also regions not far from the dairy processor.

MCC's coordination in Kenya and Tanzania are almost similar in that dairy processors are usually in control of its own centres. In Uganda and Rwanda, this case seems to be different. MCC's in the later countries are mostly coordinated collectively by the government through which cooperatives manage them

and finally sell chilled milk to dairy processors. This state therefore makes it difficult for dairy processors to individually regulate quality of milk.

Potential Investments

Potential investments can be identified with reflection of its past records be it well performing or poorly performing depending on the motive of the investor. Equity investors in most cases tend to invest in well performing firms that have a proven track record whereas growth oriented businesses can either acquire a well performing or poorly performing firm. Well performing processing firms in most cases are acquired with the motive of buying competition or with the intention of gaining strength for regional expansion. Using a practical example, Brookside merged and later acquired well performing Tuzo, Ilara and Delmonte so as to collapse the pressure from its competitors as well as gain regional expansion strength. Merging and acquiring less performing dairy processing firms is done with the intention of developing and improving it. The end targeted result is to boost the company's growth without eliminating prospective competitors from the market.

Merging and acquiring well performing dairy processors is advantageous because it does not take more time and expense to re-establish. In addition this, the company is also more likely to benefit from existing valuables such as goodwill, expertise, customers and suppliers among others. Having mentioned the benefits, acquisitions on well performers has a number of drawbacks in that the cost or M&A is high, threats from conflicting interests will be prone and chances for them accepting the investment deal are low.

Other factors that should be considered before investing in a dairy processor include, the region where the processor is situated, products processed, quantities, business models used, quantity of milk processed per day, ownership and finally asset and financial position of the firm

Conclusion

For the past 50 years, development in the East African countries dairy industry has been fairly experiencing increase due to support from governments' and other development partners such as SNV, USAID, O'Lakes, Techno-serve and FAO among others. The two main stakeholders struggle to create value in the dairy industry with strong focus on dairy farmers and milk consumers.

The efforts involved in the development of the sector include promotion, coordination, development partners' facilitation and direct regulation from government institutions. The E.A dairy industry received a boost from respective governments through liberalization and the "free-market" economic policies development which recently led to the formulation of the E.A Dairy Development Board.

The liberalization and privatization of dairy processing plants such as Savannah, Bujumbura Central, UDC and Tanzania Dairy Limited (TDL) in the region brought down monopolies and opened up opportunities for private investments thus making the sector competitive.

Currently, the number of dairy processors is rising steadily with Tanzania being in the lead having 59 active dairy processors. Most of these dairy processors due to financial, managerial, logistical and legal constraints operate below their capacity. From this study, it was also noticed that the geographical location of dairy plants in E.A is skewed towards specific areas in different countries. The factors considered by dairy processors before establishing or setting up a dairy processing plant in a specified region include infrastructure, availability of milk supply and market accessibility.

The market despite having high number of dairy processors is characterized by few dominants. The power possessed by each processor is not equally distributed in that few big companies in the stated markets have greater influence and control than others over market share and price settlement.

Though more effort has been put in place on the industry, dairy processors still face challenges. A large share of milk produced by farmers (70- 90 %) in the five countries goes through the informal sector. Milk produced in the farms are consumed directly or traded as raw milk by local vendors who capitalize on the commodity's high demand due to its accessibility and low prices offered to consumers.

Secondly, the dairy processors also face the challenge of milk supply. During the dry seasons, processing firms experience shortage of milk hindering the supply, sale and hence returns. They are therefore forced to buy or import milk powder which is later converted into liquid milk. Surplus milk supply on the other hand is experienced during the rainy season which leads to wastage as the dairy processors are not able to handle the whole units thus calling on an extra action.

Dairy sector like any other industry is competitive thereby requiring extreme market management. Processors use varied models and approaches in the market depending on the nature of its products and market conditions. Each model has its own strengths and weaknesses where some experience positive change, negative change and others remain constant. Successful companies with popular models include, Brookside (mergers and acquisitions), Tanga Fresh (quality leadership), Molo Milk (Marketing), Jesa Dairy (backward integration) among others.

As a means of protecting both consumers and dairy processors, the Kenyan government banned commercial raw milk trading, after which other countries in the region started following suit. This campaign led to a favourable business environment for dairy processors and opportunity to milk processing companies for integrating smallholder dairy farmers into the formal market.

The correlation between national imports and exports for dairy products in the five countries under the study indicates that there is a gradual change for the two variables. Kenya and Uganda are the only countries where exports exceed imports. Tanzanian, Rwandan and Burundian markets still provide room for dairy products import. From the study, the average daily consumption of milk in the region is expected to rise with the current consumption growth being a strong indicator. Kenya though leading with average consumption of 111 litres per person per day, is still way below the international recommended standard of 250 litres p/d, p/p.

The consumption rate in all the five countries is experiencing an increase but in different degree rates. This milk consumption behaviour therefore indicates that fresh milk is the most popular product in that it's majorly consumed during breakfast time and averagely thereafter. The market share of fresh milk is widely dominated by raw milk in all countries especially in Burundi, Rwanda and Tanzania.

Chapter Six

Recommendations

It's important to acknowledge that the five markets in E.A under the study though having some similarities have different traits which include quantity of units consumed, product preference, product use, accessibility, purchasing power and so on. This difference sends a signal that each market in the dairy industry should be invested in as an individual and not collectively. Giving examples, Brookside in Kenya and SALL in Uganda haven't been performing well in the neighbouring countries just like they do in their own. Brookside dominance failed to take off in Tanzania though being Kenya's dairy giant. SALL which invests in Kenya as Daima milk is also not performing well in Kenya the way it does in Uganda.

Strategy one: UHT dairy plant (Concentration in Tanzanian market)

Internal growth through establishment of UHT dairy plant is the first step that should be taken into consideration by Tanga Fresh. UHT dairy plant will enable the company supply long life dairy milk in Tanzania as well as its surrounding environments. This new processing phase will also close the challenge of shortage of milk which is normally experienced during the dry seasons. Excess milk received during the rainy seasons will be converted into UHT where it can be stored and transported for long periods and long distances respectively.

Tanga Fresh will as well enjoy the benefits of first innovation from establishment of the new plant thereby boosting its competitive advantage. It's highly possible that Tanzanian processors might be closed out if a new investor introduces a UHT processing plant in the country with the current state of production. It's therefore very important and advisable for Tanga Fresh to secure the Tanzanian dairy market against both internal and external investors before assenting investments in other new markets i.e. Kenya, Uganda, Rwanda and Burundi. More than 70% of the interviewees suggested that establishment of UHT processing plant should be part of first move for Tanga Fresh.

Strategy 2: Mergers and acquisitions

The nature of market to be invested in determines the kind of company to be merged or acquired. Tanga Fresh has predetermined policies which act as guidelines to its investments. It's of high concern therefore that Tanga Fresh should not merge or acquire companies with conflicting interests which might draw away or rather divert its vision and attention of managing the entire value chain. For instance Tanzanian potential candidates for M&A should possess different traits from those in Kenya, Uganda, Rwanda and Burundi. In general, investing in conglomerates having operations in the dairy sector such as SALL,

Daima , Shumuk and ASAS is not recommended for Tanga Fresh due to managerial inflexibility attached to the wide ownership structure.

Scenario 1: Tanzania

In Tanzania, the main component to be looked at is the location where the investment should be made. It should be in a strategic position where the company can easily fetch raw milk from farmers as well as access customers/market without extreme logistical constraints. From the study, it was realized that the biggest market for processed milk especially in Tanzania is in big towns such as Dar es Salaam and Dodoma. Potential mergers should therefore in a position where it can be easy to connect and manage many towns in the country.

Another factor to be considered in Tanzania is the installed and actual processing capacity possessed by the dairy processor. The candidates should have a reasonable utilized capacity that is from 3000 litres and above so that it can allow Tanga Fresh take off without being pressurized much. Viewing from another angle, collapsing processors lying in strategic positions with high installed capacity in Tanzania such as Musoma qualify to be potential candidates.¹⁹ This is so because Tanga Fresh is experienced in the market thereby making it easy to navigate through the challenges that might have led to their collapse. Firms situated in towns such as Azam and Tan might not be very potential in that there is high chance and possibility for the duo to face logistical challenges while accessing rural areas for raw milk especially during the dry seasons.

Scenario 2: Kenya

Kenya is considered the most potential market in E.A. However, such markets possess huge risks especially from the political environment and competition from big companies such as Brookside, KCC and Molo milk. The major risk in this case mainly comes from the political environment. Many dairy processors in Kenya have been in the past linked to political interference which at times leads to its closure and collapse

Examples of companies which have been influenced and linked to politics include KCC, Brookside and all dairy cooperatives such as Githunguri and Limuru. These companies are not advisable to be invested in as it is unpredictable and can be influenced at any given moment no matter the good performance. Githunguri, Limuru dairies and KCC in this scenario are the most affected as their growth declined recently due to political hindrances and interference.

¹⁹ Check recommended processors in Annex One

The companies which seem to be potential in the Kenyan market therefore are the fully privately owned processors such as Molo milk and Kinangop dairies as it is rarely influenced by politics.

Despite milk preferences playing a very important role in the Kenyan market, some niche market players are also performing very well. These players such as Happy Cow and Eldoville though having a slightly small processing capacity possess high potential for market growth therefore considered as potential candidates which should not be left behind.

A point to note in the Kenyan case: It's advisable that only well performing organizations, with minimal political interference should be considered as potential. It is hard to manage a collapsed or declining processor in Kenya as it will always face huge pressure from big market players and unfair competitors. Tanga Fresh should be sensitive enough before investing in Kenya.

Scenario 3: Uganda

Ugandan dairy processors just like Tanzania are not majorly interfered by politics. Beside favourable investment environment, there are other factors that should be put into account before making an investment. The main component to be considered in this market is the position where the processing plant is situated. The candidate processor should be situated in a strategic position where it can easily obtain raw milk and access market. Processors lying in the south western region and those within Kampala and its surroundings are assumed to be very potential considering plenty of milk supply and relatively good market.

The well-organized milk collection system in Uganda makes it a very interesting market to invest in. Despite, having SALL as the major player, the system seems to be changing with new upcoming private firms such as Jesa emerging with unique creative business models to reduce the dominance. The uniqueness of Jesa's business model poses a major threat to SALL therefore being a nice opportunity for Tanga Fresh to invest in.

Many dairy processors in Uganda are good investment candidates as most of them are average performers and situated in strategic positions. It's therefore recommended that Tanga Fresh should invest in Uganda especially in the South Western and Kampala regions. This is because South Western regions lie in a strategic where it is easy to access raw milk as well as market not only in Uganda but also in Rwanda, Burundi, and Northern Tanzania. The rising milk products consumption rate in Uganda is also another good indicator showing availability of current and future market.

Scenario 4: Rwanda

Rwanda in the last three consecutive years has been voted as the most potential market to be invested in. However, it has been discovered from this study that above recommendation does not apply to all industries. For instance, a real estate investor in Rwanda can purchase huge volumes of cement at the same time for construction, and on the other hand dairy products consumers only purchase a certain liters of milk which is enough for him/her and family members and not more.

This therefore shows that the dairy products demand has a limit and the dairy industry in general is majorly shaped by population, social class distribution and purchase power. Rwanda has a very dismal number of people living above the poverty line in addition to the small number of Rwanda's national population. The market size is therefore a major component that should be put into consideration by Tanga Fresh before investing in Rwanda.

According to data obtained, Inyange, is the only potential dairy processor in Rwanda. Recently, the company has been exercising some extra growth strategies which include the acquisition of Savanna dairies. The risk of investing in this company however is the political interference that has been surrounding the processor as witnessed in the recent past.

Scenario 5: Burundi

Burundi has no industrial dairy processor. The high number of people living below the poverty line symbolising dismal market and underdeveloped industry in the country is the reason why investors are not getting into the market. This implies that an interested investor has to establish a new plant plant, new market as well as new dairy environment. The current Burundian state is therefore not recommended for Tanga Fresh to invest in.

The only recommended strategy to reach this market is for Tanga Fresh to invest in the South –Western Uganda. This region lies in a strategic position for supplying dairy products in Uganda and its environs which includes Rwanda and Burundi.

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Appendices

Annex one: Recommended Investments

| | Motivation for the investment | De-motivation | Recommendation (%) |
|------------------|---|--|--------------------|
| Kenya | | | |
| Molo | <ul style="list-style-type: none"> ✚ Well established ✚ Popular brand ✚ Fast continuous market growth ✚ Attractive business model ✚ Situated in a strategic position(milk supply and market) | <ul style="list-style-type: none"> ✚ Due to its fast growth, it might be very difficult for Molo to accept any deal from external investor. ✚ Investor or merger will have dismal managerial control power | 80% |
| Kinangop dairies | <ul style="list-style-type: none"> ✚ Young processor thus require financial support ✚ Recent Crown Creamers acquisition is a boost to its business development ✚ Strategic position (market and milk supply) | <ul style="list-style-type: none"> ✚ Small market share | 55% |
| Kabianga | <ul style="list-style-type: none"> ✚ Situated in a high milk supply region ✚ Matching business approach to Tanga Fresh ✚ Best dairy processor in western Kenya ✚ Average milk processing capacity per day | <ul style="list-style-type: none"> ✚ Political interference due to its nature of ownership | 45% |
| Githunguri | <ul style="list-style-type: none"> ✚ Unique business model ✚ Stakeholder concerned especially to farmers ✚ Fresha is a national brand ✚ Not interrupted by milk shortages ✚ Wide range products | <ul style="list-style-type: none"> ✚ Rigidity due to large number of members/shareholders ✚ Very high government interference ✚ Its market growth has stagnated for a while ✚ production plant is only based in one region | 30% |
| Kieni dairy coop | <ul style="list-style-type: none"> ✚ Farmer concerned ✚ Located in a strategic region | <ul style="list-style-type: none"> ✚ Political interference ✚ Managerial challenges | 35% |
| Happy cow | <ul style="list-style-type: none"> ✚ Proven track record ✚ Unique business model ✚ Good reputation and public image | <ul style="list-style-type: none"> ✚ Narrow product range | 50% |
| Eldoville | <ul style="list-style-type: none"> ✚ Average market performer ✚ Good business model, ✚ Potential market growth ✚ Quality and innovation oriented | <ul style="list-style-type: none"> ✚ Risk market as they may lose market in case the airline and hotel distributor terminates the contract. | 50% |

| Uganda | | | |
|--------------------------------|--|---|-----|
| Jesa | <ul style="list-style-type: none"> ✚ Attractive business model ✚ Exercise business ethics ✚ Has good customer loyalty ✚ Situated in a strategic position ✚ Continuous market growth | <ul style="list-style-type: none"> ✚ Might be tough to enter into a new deal because of its advanced stage | 85% |
| Gold Dairies | <ul style="list-style-type: none"> ✚ Matching business model with that of Tanga Fresh, ✚ Quality driven ✚ Farmer concerned ✚ Large market share, ✚ Wide range products | <ul style="list-style-type: none"> ✚ In partnership with Dutch Gold dairies and other organizations thereby limiting the chances of striking a deal due to complexity | 70% |
| Birunga Dairy | <ul style="list-style-type: none"> ✚ Located in a strategic region ✚ Differentiated business model ✚ Produces UHT only | <ul style="list-style-type: none"> ✚ Producing UHT only ✚ Dependence on traditional business model | 68% |
| G.B.K Dairy Products (U) Ltd. | <ul style="list-style-type: none"> ✚ Long serving experienced player ✚ Structurally well established ✚ Stable market share ✚ Strategic position | <ul style="list-style-type: none"> ✚ Slight conflicting interests | 65% |
| Maama Omuluki | <ul style="list-style-type: none"> ✚ Fairly good business growth ✚ Strategic position ✚ Experienced management ✚ Maximum utilization of installed capacity ✚ Produces pasteurized milk only | <ul style="list-style-type: none"> ✚ Produces pasteurized milk only | 70% |
| Hillside Dairy and Agriculture | <ul style="list-style-type: none"> ✚ Situated in a strategic position ✚ Potential market growth | <ul style="list-style-type: none"> ✚ Underutilized capacity ✚ Managerial challenges | 60% |
| Tanzania | | | |
| Musoma | <ul style="list-style-type: none"> ✚ Declining production hence easy to be acquired ✚ High chances to acquire business ownership ✚ Mara is in a relatively strategic location ✚ High milk supply zone Production ✚ Availability of processing and milk collection equipment | <ul style="list-style-type: none"> ✚ Power shortage is a major challenge ✚ Managerial problems ✚ Might be challenging to coordinate Tanga with Musoma due to the long distance | 78% |
| Shambani graduates | <ul style="list-style-type: none"> ✚ Positive growth ✚ Proven track record ✚ Strategic location ✚ Attractive business model | <ul style="list-style-type: none"> ✚ Physical expansion needs ✚ Might be difficult to acquire business ownership | 70% |
| Cefa Njombe | <ul style="list-style-type: none"> ✚ Strategic position ✚ Well established networks | <ul style="list-style-type: none"> ✚ Might be difficult to acquire business ownership | 67% |

| | | | |
|---------------------|--|---|-----|
| Dairies | <ul style="list-style-type: none"> ✚ Attractive business model(Integrated) | <ul style="list-style-type: none"> ✚ Requires physical expansion | |
| Tan Dairies | <ul style="list-style-type: none"> ✚ Stabilized market E ✚ Existing goodwill ✚ Strategic position to market ✚ Wide product range | <ul style="list-style-type: none"> ✚ High transportation cost for raw milk as its located in Dar ✚ Chances for Tan accepting the investment deal might be low | 60% |
| Northern creameries | <ul style="list-style-type: none"> ✚ Potential market growth ✚ Situated in a fairly strategic position ✚ Average performer | <ul style="list-style-type: none"> ✚ Underutilization of processed capacity | 40% |
| Azam | <ul style="list-style-type: none"> ✚ Well established supply chain ✚ Modernized machinery ✚ Quality leadership approach which is in line with Tanga Fresh's model | <ul style="list-style-type: none"> ✚ Striking a deal with a conglomerate company is risky ✚ Require physical expansion | 50% |
| Mara | <ul style="list-style-type: none"> ✚ Strategic position ✚ Experienced in the industry | <ul style="list-style-type: none"> ✚ Stagnating market growth ✚ Old machinery ✚ Need for operational expansion and development | 40% |
| Arusha dairies | <ul style="list-style-type: none"> ✚ Potential for future growth ✚ Moderately good business model | <ul style="list-style-type: none"> ✚ Prone to milk shortages during dry seasons ✚ Declining production due to machinery wear and tear | 25% |
| Rwanda | | | |
| Inyange | <ul style="list-style-type: none"> ✚ Large market share ✚ Potential growth ✚ Strategic position ✚ Wide product range | <ul style="list-style-type: none"> ✚ Slow business growth ✚ Political interference | 40% |
| | | | |
| | | | |
| | | | |

Annex Two: Dairy processors description and models

Kenya

Brookside

Brookside milk processing firm has recently grown steadily more than any other dairy processor in the E. African Region. It does currently export its products to various countries which include Tanzania, Uganda, Rwanda and Egypt. Some observers question the company's fast rate and mode of expansion: Brookside aggressively bought out every one of its major competitors in Kenya over the last few years which comprise of Spin Knit (Tuzo), Ilara and Delmonte. Spin Knit was the last acquisition, with KCC remaining as the only state-owned buyer of last resort with its intentions of becoming a monopoly. Developing dairy processors blames Brookside for closing down competitors' factories and building an unhealthy and unproductive monopoly in the market. The company sign contracts with farmers who regularly supply milk to their MCC's having predetermined prices. Half of the trucks collecting milk in various parts of the country are owned by the company while the second half is outsourced.

Molo Milk

Molo milk was established in the year 2008 by one of former Tuzo distributors. The brand has gained high performance and popularity due to its aggressive marketing campaigns. Its advertisement "Usiseme maziwa, sema ng'ombe" on the Kenyan T.V stations which overshadowed all the local and international brands in Kenya won the hearts of both real and potential milk consumers and was voted the best by Ipsos Synovate. The combination of both marketing strategies and low cost milk prices has made Molo Milk prosper and appear visible in the dairy market. The daily business newspaper on 14th April 2013 reported that Molo Milk overtook KCC becoming the second best popular brand after Brookside.²⁰

KCC

The state owned Kenya Co-operative Creameries Ltd has operated in Kenya since 1925 making it the oldest dairy processor in Kenya. New KCC was reborn in 2003 after collapsing in the 90's because of government interference and mismanagement. It gained back its competitiveness through its wide range products, well distributed cooling plants and infrastructure including milk powder processing plants which help them maintain their daily supply. The company is now facing a strong challenge due to stiff competition in the market and more so, financial crisis.²¹

²⁰ <http://www.businessdailyafrica.com/Corporate-News/Molo-Milk-beats-KCC-Brookside-as-preferred-brand--/539550/1731258/-/tivx3nz/-/index.html>

²¹ <http://www.nation.co.ke/business/news/New-KCC-hit-by-financial-crisis-probe-report-shows/-/1006/1669894/-/od3mqj/-/index.html>

Githunguri (Fresha).

Githunguri operated as a dairy cooperative society since the year 1961 until July 2004 when the society commissioned its own milk processing plant on the grounds of milk surplus in the region. The cooperative on 2012 according to Nation newspaper dated 16 July had Ksh.3 billion annual turnover. The success of the cooperative is linked to strong support from its 18,000 members as well as influential marketing. To benefit the whole society, the cooperative outsources its distributors to cover its markets through bidding.

Kabianga Dairies

Kabianga dairy ltd is the only milk processing plant in Western Kenya. The region has high potential of supply and demand as far as milk is concerned. The organization has well organized cooperative members who play a vital role. Unlike other dairy processors, the firm does not spend much on advertisement but rather dominate the Western Kenya's market due to its low priced products benefiting from low transport cost.

Eldoville

Eldoville is a family enterprise which was established in the year 1985 producing high quality products in Nairobi. The firm is currently seeking to start a new processing plant in Nyandarua, Kiambu County. The focus market for Eldoville is unique in that it skimmed its prices so as to target the high class market such as the five star hotels, Institutions and airlines. The firm on October 2012 estimated its monthly turnover to US\$ 180,000.²²

Daima Milk

The milk processing plant is a joint venture between Sameer Group and RJ Corp of India. Sameer is targeting changing lifestyle trends, emphasizing healthy living by packaging both high and low priced products. Sameer Agriculture and Livestock, the firm behind Daima milk venture, spends more time and resources on advertisements and innovation. In September 2012, the company developed zero bacteria shelf life fresh N-Natural milk, Daima Whole milk packed in a 500ml UV-resistance and oxygen barrier poly sachets with a 30-day shelf life without refrigeration.²³

Limuru Dairies

Limuru milk has been a sustainable milk processing company taking advantage of its closeness to capital city Nairobi. Initially, it collected milk using its own trucks till 2012 when the company was mismanaged

²² <http://www.youtube.com/watch?v=eAE2tIn-ZpM>

²³ <http://www.standardmedia.co.ke/?articleID=2000065258>

by directors. The company directors then sold the trucks to repay its debts. This also led the company with over 10,000 shareholders cease from ghee, butter and mala production.²⁴

Meru Central Dairies

The dairy cooperative can be traced back to 1984. Since those long years, the cooperative's market share has been seen growing steadily. Their support on dairy farmers through training and prior payment has enabled them achieve strong customer loyalty.

Kinangop Dairy Limited

Kinangop Dairy Limited was incorporated in the year 2004. Mr. Mutahi the entrepreneur who established the company was once a milk supplier delivering milk to Tuzo Dairies. The Company operated as a mini processor till the year 2012 when it made investments on new facilities and acquisition of Crown Creamers Ltd. so as to diversify products and grow its market share. This recent expansion is targeted at doubling its present processing capacity of approximately 10,000 litres of milk per day. To facilitate this expansion, Kinangop directors are currently seeking a growth capital of KSH. 480M in form of equity.

The family business in addition to milk processing has diversified into other lines of operation, which include; two supermarkets, animal feeds store and Coca-Cola distribution store.

Aspedos Dairy Ltd.

Aspedos was incorporated in 2009 and is now striving to get its share in the market through price competition and media advertisements. The company has fairly grown since its establishment.

Lari Dairies

Lari dairies was registered as a limited dairy company in 2005 and currently having more than 13000 members. The cooperative earned an estimate of € 300m in 2009 and was seeking for finances to expand its portfolio.²⁵

²⁴ <http://www.the-star.co.ke/news/article-2411/limuru-milk-farmers-protest-over-lease-deal>

²⁵ <http://www.youtube.com/watch?v=Za2DL5F1HMw>

Uganda

In 2001, seven dairy companies were pasteurizing, packaging, and selling milk mainly to urban areas in central and south-western areas, where two among the seven processors were specifically producing only cheese. Currently, the number has grown to 16 private milk processors mostly located in the central and southwest milk sheds operating below 30 to 50 percent capacity.

Sameer Agriculture and Livestock Ltd. (SALL)

SALL is using the brand name Dairy fresh on its products enjoying approximately 75% of Uganda's dairy market. The company experienced a fast growth due to improved management upon its acquisition from the Government State owned Uganda Dairy Corporation in August 2006. Beside, good management, SALL is enjoying a strategic position giving them a competitive advantage as it's the only dairy processor situated in Kampala City. SALL sources its milk from district cooperatives in Western and Central Uganda, which have established about 135 MCC's equipped with coolers and generators as well as testing kits provided by SALL.

Processed milk is distributed directly to wholesalers and retailers. Recently, they developed a model of lowering their prices through the introduction of 'Tetrafino' a 30 percent cheaper packaging material. It has also set up contracts with about 24 schools, to which it sells milk in 250ml sachets on a daily basis. In an attempt of safeguarding its market share, SALL in the year 2011 initiated the Fresh Dairy Branded Kiosk Self Employment Scheme, a franchising for distributing and selling the company's milk products in Kampala and Entebbe; by 2012 over 150 kiosks had been established.

Jesa Dairy

Jesa dairy successfully demonstrated the viability of the integrated model. This company is different from SALL and all other processors in that it heavily relies on its own dairy farm for raw milk as processing inputs. Additional milk is sourced from neighbouring farms at premium prices when required.

Shumuk Dairy (Go Fresh)

Shumuk Dairies has a wide portfolio, trading in Uganda, Kenya, Tanzania, Rwanda and South Sudan. The dairy firm has since inception grown due to strong support from Shumuk group in relation to financial, organization advice and brand name lift. It has also built several MCC's with large storage capacity which is a now a success due to their creation of a wide farmers' network.

Maama Omuluki Dairies

Mama Omuluki Dairies Ltd (Mama) is a private company which launched its milk processing plant in 2010 with support of SNV. This establishment was laid down following successful study showing Mama's potential market growth. Previously, the company specialized in selling raw milk for a period of 8 years. "Maama Omulungi is now competing favourably with the major milk brands for shelf space in some of the largest supermarkets in the country." (SNV Uganda; 2012)

Gold Dairies

Gold Dairies was founded in the year 2011 targeting developing farmers in rural areas. The company currently delivers fresh milk products not only in Uganda but also to Kenya, Tanzania, Rwanda, Burundi, Ethiopia, S.Sudan, Congo and Eritrea. In partnership with Gold Dairies in The Hague, the company is using new techniques, experience and knowledge transferred from the Netherlands to manoeuvre in the market.

White Nile

White Nile Dairies is an outstanding and only dairy processor in the Eastern province.

Birunga

Birunga processing firm is making use of the linkage/network strategy to remain competitive. So far, the company has signed MOU'S with several partners such as Ugandan government, FAO and SACCO's.

Rwanda

Nyabisindu

Nyabisindu dairy processing plant was established 1937 and was popularly known as King's plant. The plant was in early 1990's processing about 15000 litres of milk per day. This however did not last for long as the plant was completely damaged and vandalized during the civil war. The plant was rehabilitated in 2000 and now sourcing milk directly from its farm, 5 equipped MCC's and small scale farmers delivering milk directly to the processor.

Inyange

The dairy was started in the year 1999. Inyange does not own MCC's therefore relying on cooperatives and farmers who directly deliver milk to the firm. Due to low supply of milk during the dry season, Inyange started diversifying its products by introducing juice and mineral water into the market in order to sustain

the investment. The company boosted its processing capacity by acquiring Savannah Diaries Ltd based in Nyatagare formerly owned by the government in March 2012.

Dan-Cheese

Dan-cheese in Gishwati specializes only on cheese production. Currently, it has four mini plants each receiving milk from nearby farmers and pursuing traditional cheese-making practices.

Tanzania

Tanga Fresh

Tanga Fresh is the biggest dairy processor in Tanzania. Presently, it has a processing capacity of approximately 50,000 litres of milk per day. Tanga Fresh is known of its quality products and good relationship with stakeholders which majorly comprises dairy farmers. The company has a network of more than 4,000 small-holder dairy farmers who are guaranteed that their milk will be bought by the company.

The company besides offering quality products is also creating impact to people living in the BoP. This is done mainly by paying farmers timely basis with literally high prices compared to other dairy processors. Its target is to increase milk money paid to small holders from TSH 2,800,000,000 as per 2007 to TSH 11,000,000,000 in 2017 within Tanga region. With the help of professional management team in The Netherlands, this goal is more likely to be achieved before the elapse of the stated period. The combination of impact investing, quality orientation and professional management is therefore the major driving gear behind its current success.

Musoma Dairies

Musoma is a family owned business. Gedion Mazara owns 60% of the total shares while 40% is owned by his wife Esther. Musoma is enjoying huge supply of milk due to dense cattle population. It does supply its products to a wide market in Tanzania which include Dar es Salaam, Mwanza, Arusha, Mbeya, Musoma and some parts of the island Zanzibar. Musoma shaped its market segment by stopping the production of cheese citing little profit compared to other products. “At the moment we don’t produce cheese because liquid milk is more profitable”, Mazara. The company has set up 14 MCC’s in the villages situated several kilometres away from Musoma town where herders take their milk for sell and getting paid on weekly or monthly basis. Mazara however cited working capital constraint and power cuts as the major

challenges that the company has been facing for several years which is now reducing its production drastically.

Asas

Asas dairy under the umbrella of ASAS Group of companies has been in the dairy industry since mid-80's though the actual processing commenced in 2000. The firm has positioned itself as a quality leader and has been investing much on the quality of its products. In 2004 for instance, ASAS Dairies won the Gold Award in Geneva at The Century International Quality Era Awards (2004).

Tan Dairy

Tan Dairy is the largest dairy producer in Dar es' Salaam. It is a well diversified enterprise in that apart from dairy processing, Tan also offers juice and honey to its consumers. In regard to collection, the dairy processor uses its own trucks to collect raw milk purchased from both small and large scale farmers in the upcountry.

Shambani Graduates

Shambani was started by two young graduate students in 2003 with initial processing capacity of 30 litres per day. The enterprise has grown steadily and now producing slightly above 2400 litres per day. It uses local technology in processing its products with the motive of innovating local talent. Shambani has also deployed the required hygiene standards and other innovative systems to make the firm competitive in the market.

Mara

Mara Milk had 7 MCC's as per 2012 collecting milk from small scale famers and milk vendors trading on behalf of distant farmers. Due to competition from Musoma Dairy, Mara prices its products basing on the price list of its strong competitor so as to have a place in the market. Mara has a depot and a number of milk kiosks in Musoma.

Baraki Milk Processor

Baraki is owned by Baraki Sisters of the Catholic Church and was established in 1986. The enterprise has integrated its business rearing 70(est.) dairy cows with a large number of sheep and goats in the centre so as to cut their cost of production. In addition, the Centre has two collection centres and has established close relationship with Vendors and other milk producers. The high quality products allow the processors to have eased marketing channels with its main target groups being hotels, restaurants, schools, milk kiosks and direct consumers.

CEFA Njombe Milk

CEFA is an integrated processor which established its processing unit after successfully managing and supervising the dairy processes for farmers in Njombe region. It has built good relationship with its competitors in contrary to other processors who normally view their competitors as rivals. CEFA and ASAS have a good relationship such that when ASAS has surplus milk; it is taken up by CEFA and vice versa thus stabilizing milk markets for farmers in Njombe area. The processor has three MCC's which is carefully maintained with the collaboration of NJOLIFA Society.

Arusha Dairies

The Arusha Dairy Plant was established 1996 reaching up to 4.500 l/day in 2002-2004. This capacity was later reduced to the current volume of 2.000 l/day²⁶ due to wear and tear of the installed small scale machinery. Arusha has established its own outlet channels which are used to distribute milk products in some specific regions. Besides selling, the outlets also act as a testing tool which is used to gather information from customers whenever need arises.

Azam

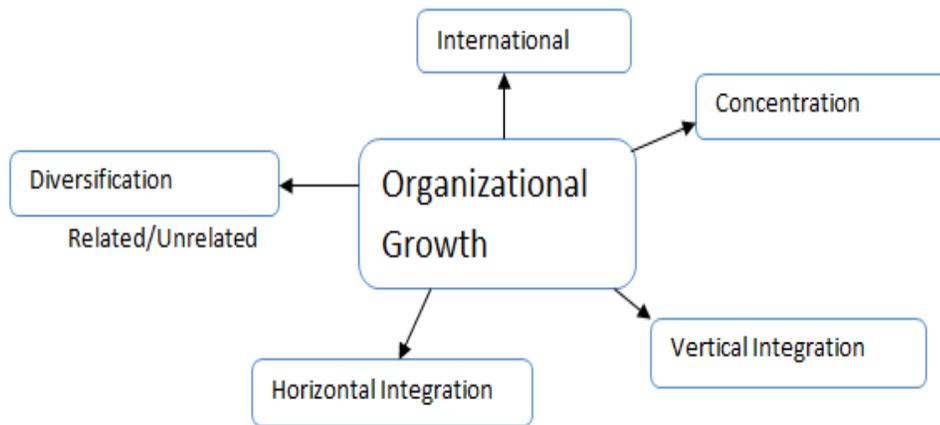
Azam is one of the investments working under the umbrella of Bakhresa Group of companies. With the association of Danice a/s, a sister company of Tetra Park from Denmark, Azam produces high quality products meeting the international standards. This has been made successful with the world class machineries and equipment from Catta and Technoice Italy. The growth of the processor can also be attached to the well-organized distribution channel for its products. Milk products are sold through excellent distribution network of wholesalers/retailers as well as tricycles making the commodities available to the masses at their door steps and more so at affordable prices.

International Dairy Products (IDP)

IDP has created a special market segment in the Tanzanian dairy industry. It is supplying its products to popular "high class" hotels not only in Tanzania but also in Zanzibar which include Serena, Royal Palm and Impala Hotels among others. This has also enabled the processor to build a strong brand "Serengeti Delight" for its products thus spending less on marketing activities.

²⁶ Niras Finland

Annex Three: Organization growth (Coulter; 2012),



Annex Four: Ansoff's market-product development matrix



Source: http://taydeaburto.com/wp-content/uploads/2010/02/Ansoff_Matrix.jpg

Annex Five: E.A Dairy Processors

1. Kenya

| | Company Name | Brand Name | Mark share | Region | Installed Cap lpd | Prod cap lpd | Product range | Ownership Structure |
|----|--|-------------------|------------|--------------|-------------------|--------------|---|----------------------------------|
| 1 | Brookside (Brookside, Ilara, Tuzo, Delamare, Delmonte) | Brookside | 40% | Ruiru | 1200000 | 750000 | Pasteurized milk, cream, butter, Ghee, flavoured milk, sour milk, Powdered milk | Private (Family Owned) |
| 2 | New Kenya Cooperative Creameries | KCC | 29% | Nairobi | 2300000 | 950,000 | Pasteurized milk, Sour milk, Powdered milk, Yoghurt, Ghee, Cheese, Butter | Parastatal |
| 3 | Buzeki Dairy (Kilifi, Molo) | Molo | 11% | Molo, Kilifi | 450000 | 225000 | Pasteurized milk, yoghurt, flavoured milk, sour milk | Private |
| 4 | Githunguri Dairy Farmers | Fresha | 8% | Githunguri | 300000 | 170000 | Pasteurized milk, Cream, butter, Ghee, sour milk, Yoghurt) | Cooperative Society |
| 5 | Limuru Dairies | | 2% | Limuru | 600000 | 20000 | Pasteurized milk, yoghurt, sour milk, butter, ghee | Famers cooperative society (70%) |
| 6 | Kabianga | Premier | 2% | Kericho | 150000 | 80000 | Pasteurized Fresh milk, Mala, Yoghurt | Cooperative Society |
| 7 | Sameer Agriculture (Adarsh Developers) | Daima | 2% | Nairobi | 150000 | 50000 | Pasteurized milk, Butter, Cheese, sour milk, Cream, Yoghurt | Conglomerate (Sameer Group) |
| 8 | Meru Central Cooperative Union | | 1% | Meru | 60000 | 35000 | Pasteurized milk, ghee, ice cream, sour milk | Cooperative Union |
| 9 | Afrodane Industries | Mount Fresh/ Afya | 1% | Murang'a | 60000 | 12000 | Pasteurized milk | Private (family owned) |
| 10 | Farmers Milk Processors | | 1% | Kericho | 15000 | 6000 | Pasteurized milk, Mala, Yoghurt and Butter | Cooperative |
| 11 | Lari Dairies Alliance Ltd. (Sundale) | | 1% | Nairobi | 45000 | 15000 | Ghee, yoghurt, Pasteurized milk | Cooperative society |
| 12 | Bio Food Products Ltd. | | 0.30% | Nairobi | 5000 | 2000 | Yoghurt, sterilized whole milk, cream flavoured milk. | Partnership (Willow investors) |

| | | | | | | | | |
|----|--------------------------|-------------|-------|----------|---------|---------|--|------------------------------|
| 13 | Happy Cow | Jolly Fresh | 0.01% | Nakuru | 8000 | 5000 | Yoghurt, Cheese | private (family) |
| 14 | Stanley and Sons | | | Nairobi | 10000 | 3000 | Whole & Skimmed milk, Yoghurt, Mala, Cream, Cheese | Private |
| 15 | Eldoville | | | Nairobi | 8000 | 3,500 | Yoghurt, cheese, cream | Private(partnership) |
| 16 | Greenland | | | Nairobi | 11000 | 2000 | Pasteurized milk, Yoghurt, Mala, Cream, Butter | Private |
| 17 | Egerton University (GDI) | | | Njoro | 6000 | 4000 | Processed milk, yoghurt, Mala | Private (Egerton University) |
| 18 | Doinyo Lessos Ltd. | | | Eldoret | 20000 | 5000 | Fresh milk, mala, Yoghurt, cheese, Ghee | Cooperative |
| 19 | Adarsh Developers | | | Nairobi | 20000 | 3000 | Pasteurized milk, Butter, Ghee, Cream. | Conglomerate-(Adarsh) |
| 20 | Sunpower Products | Brown's | | Limuru | 3000 | 1000 | Cheese, Cultured milk, Ice cream | Private |
| 21 | Kinangop Dairy Ltd. | Alpha | | Kinangop | 12,000 | 10,000 | Pasteurized milk, Cream, Cheese | Private (Family) |
| 22 | Alpha Dairy | | | Nairobi | 3500 | 1200 | Milk Ice cream | Conglomerate(Alpha group) |
| 23 | Aberdare Creameries | | | Kikuyu | 3000 | 1000 | Pasteurized milk | Cooperative Society |
| 24 | Miyanji Dairy Farm | | | Mombasa | 2000 | 1000 | Pasteurized milk, Mala, Yoghurt | Private |
| 25 | Teita Estates Ltd. | | | Mwatate | 10000 | 2000 | Pasteurized milk, Whole Milk and Yoghurt | Cooperative |
| 26 | Kieni Dairy Ltd. | | | Nyeri | 50000 | 24447 | Pasteurized milk | Cooperative |
| | Total | | | | 5189500 | 2367700 | | |

Annex Six: Dairy Processors Uganda

| No | Company Name | Location | Installed capacity Liters p/day | Capacity Utilization Liters p/day | Product Range | Ownership Structure |
|----|--|-------------|---------------------------------|-----------------------------------|--|-------------------------------------|
| 1 | Sameer Agriculture and Livestock Ltd. (SALL) | Kampala | 550000 | 375000 | Pasteurized milk, UHT, Yoghurt, Butter, Ghee, Powdered milk. | Private (Conglomerate Sameer Group) |
| 2 | Jesa Dairy Farm | Busunju | 40000 | 30000 | Pasteurized milk, Yoghurt, Cream Butter. | Private |
| 3 | G.B.K Dairy Products (U) Ltd. | Mbarara | 96000 | 15000 | Pasteurized milk, UHT, Ghee. | Private |
| 4 | Shumuk Dairy | Mbarara | 32000 | 15000 | Pasteurized milk, UHT, Yoghurt, Ghee, Cream | Private (Conglomerate) |
| 5 | Birunga Dairy | Kisoro | 36000 | 8000 | UHT | Private |
| 6 | Gold dairies | | 15000 | 6500 | UHT, pasteurized milk, Yoghurt, Cream | Private |
| 7 | Maama Omulungi Dairy | Wakiso | 8000 | 8000 | Pasteurized Milk | Private |
| 8 | Seasons Dairy | Kayunga | 5000 | 4000 | Cheese. | Private |
| 9 | Hillside Dairy and Agriculture | Mbarara | 40000 | 3000 | Pasteurized milk, Yoghurt. | Private |
| 10 | White Nile Dairies | Jinja | 6000 | 3000 | Pasteurized milk, Yoghurt, Cream, Ghee. | Private |
| 11 | MADDO Dairies Ltd. | Masaka | 4000 | 2500 | Pasteurized milk, Yoghurt | Private |
| 12 | Paramount Dairies | Mbarara | 3000 | 2500 | Cheese | Private |
| 13 | Nirma Dairy and Foods Ltd. | Entebbe | 5000 | 2200 | Pasteurized milk, Yoghurt, Cheese. | Private |
| 14 | Toro Dairy Cooperative Society Ltd. | Fort Portal | 4000 | 2000 | Pasteurized milk, Yoghurt. | Private |
| 15 | Family Choice | Mbarara | 2000 | 1200 | Yoghurt, Pasteurized milk, Sour butter, Ghee. | Private |
| 16 | Pearl | Mabarara | 200000 | — | In process of installing milk powder plant. | Private |
| 17 | Holland Dairy | Kampala | — | — | In process of installing cheese plant. | Private |
| | TOTAL | | 1046000 | 477900 | | |

Mini Processors in Uganda

| No. | Name | Location | Utilized Capacity | Products |
|-----|----------------------|-------------|-------------------|--------------------|
| 1 | Cream of Uganda | Bweyogerere | 2000 | Ice Cream |
| 2 | Rainbow Industries | Mukono | 2000 | Yoghurt, Ice cream |
| 3 | Fidodido | Kampala | 1600 | Ice Cream |
| 4 | Mack IC Ltd. | Namuwongo | 400 | Ice cream |
| 5 | Snowman's | Kampala | 400 | Ice Cream |
| 6 | Rick Ice Cream | Muyenga | 400 | Ice Cream, Yoghurt |
| 7 | Quest Dairy Products | Kampala | 400 Per Week | Ice Cream |
| 8 | Piccadilly | Kampala | 180 per Week | Ice Cream |
| 9 | Zinellos Ice Cream | Kamokya | | Yoghurt, Ice cream |

Annex Seven: Dairy Processors Tanzania

| No. | Company Name | Location | Installed Capacity lpd | Utilized capacity lpd | Product Range | Ownership Structure |
|-----|---------------------|---------------|------------------------|-----------------------|--|----------------------------------|
| 1 | Tanga Fresh | Tanga | 70,000 | 50,000 | Pasteurized milk, Mala, Yoghurt, Fresh cream, Cheese, Butter, Ghee | Private |
| 2 | Tan Dairies(Desa) | Dar es Salaam | 15000 | 8000 | Pasteurized milk, Fermented milk, Yoghurt, cheese, butter, ghee | Private |
| 3 | Mara Milk | Mara | 15000 | 6000 | Pasteurized milk, ghee, UHT | |
| 4 | ASAS Dairy | Iringa | 12000 | 6000 | Pasteurized milk, ghee, yoghurt, butter | Private(ASAS Group of Companies) |
| 5 | Northern Creameries | Arusha | 45000 | 4000 | | |
| 6 | CEFA Njombe Milk | Iringa | 6000 | 3200 | Pasteurized milk | Cooperative |
| 7 | New Musoma Dairy | Mara | 120000 | 3000 | UHT, pasteurized milk, yoghurt, butter, ghee, Mala | Private (Family) |
| 8 | Barakik Sisters | Mara | 3000 | 2100 | Pasteurized milk, Ghee, Sour milk | Private(CHurch) |
| 9 | Azam Dairy | Dar es Salaam | 3000 | 2000 | | Private |
| 10 | Victoria Maziwa | Mara | 1500 | 1000 | | |
| 11 | Shambani Graduates | Morogoro | 4000 | 1000 | Pasteurized milk | |
| 12 | Nronga Women | Kilimanjaro | 3500 | 900 | | Cooperative |

| | | | | | | |
|----|------------------------------|---------------|------|-----|--|-------------------|
| 13 | Mbokomu-Fukeni Mini Dairies | Kilimanjaro | 3000 | 800 | | Cooperative |
| 14 | Arusha Dairy Cooperative | Arusha | 5000 | 800 | Pasteurized milk, mala, yoghurt, Cheese, butter, cream, unpasteurized milk | Cooperative |
| 15 | Kondoki Small Scale | Kilimanjaro | 1200 | 600 | | |
| 16 | Vwawa Cooperative Society | Mbeya | 900 | 600 | | Cooperative |
| 17 | Kalali Women | Kilimanjaro | 1000 | 550 | | Cooperative |
| 18 | Ammy Brothers Ltd. | Tanga | 2000 | 500 | Pasteurized milk, yoghurt | Private |
| 19 | Irente Farm | Tanga | 1000 | 500 | | private |
| 20 | Chawakimu Cooperative | Coastal | 1000 | 500 | | Cooperative |
| 21 | SADO Dairy | Coastal | 1000 | 500 | | |
| 22 | Mountain Green Dairy | Arusha | 1500 | 500 | | |
| 23 | Inuka Dairy Group | Arusha | 300 | 500 | | |
| 24 | Nyuki Dairy | Mara | 100 | 500 | | |
| 25 | Mwanza Mini Dairy | Mwanza | 3000 | 500 | | |
| 26 | Kikulula Milk | Kagera | 1000 | 500 | | |
| 27 | Mbeya Maziwa | Mbeya | 1000 | 500 | | |
| 28 | Marakueni | Kilimanjaro | 1000 | 450 | | Cooperative |
| 29 | Kyaka Milk | Kagera | 1000 | 450 | Cheese, yoghurt | |
| 30 | Naberera | Manyara | 1000 | 400 | | |
| 31 | Kagera Milk(KADEFA) | Kagera | 3000 | 400 | | |
| 32 | Ng'uni Women | Kilimanjaro | 1000 | 350 | | Cooperative |
| 33 | Muvinwanya | Kagera | 1000 | 350 | | |
| 34 | Montensory | Tanga | 1000 | 300 | | Women Group |
| 35 | Profate Dairy Inv. | Dar es Salaam | 1000 | 300 | | Private |
| 36 | Mannow Dairy | Dar es Salaam | 1000 | 300 | | |
| 37 | West Kilimanjaro | Kilimanjaro | 1000 | 300 | | |
| 38 | Mbareni Women | Kilimanjaro | 1000 | 300 | | Cooperative |
| 39 | Same (Engiteng) | Kilimanjaro | 500 | 300 | | |
| 40 | Terat | Manyara | 500 | 300 | | |
| 41 | International Dairy Products | Arusha | 5000 | 300 | Mala, yoghurt, cheese | |
| 42 | Kijimo Dairy Cooperative | Arusha | 1000 | 300 | | Cooperative |
| 43 | Longido(Engiteng) | Arusha | 500 | 300 | | Women Cooperative |
| 44 | Del Food | Kagera | 1000 | 300 | | Farmers group |

| | | | | | | |
|----|---------------------|----------|---------|--------|--|---------------|
| 45 | Bukoba Milk Bar | Kagera | 500 | 300 | | Farmers group |
| 46 | Kayangi Milk | Kagera | 1000 | 300 | | |
| 47 | Orkesumett | Manyara | 500 | 250 | | |
| 48 | Agape Dairy Group | Arusha | 500 | 200 | | |
| 49 | Tukwamuane Dairy | Mwanza | 500 | 200 | | |
| 50 | Mutungu Milk Bar | Kagera | 800 | 200 | | Farmers group |
| 51 | Salari Milk Bar | Kagera | 800 | 200 | | Farmers group |
| 52 | Kashai Milk Bar | Kagera | 800 | 200 | | |
| 53 | Sua | Morogoro | 3000 | 200 | | |
| 54 | New Tabora Dairies | Tabora | 16000 | 200 | | |
| 55 | Gondi Foods | Dodoma | 600 | 200 | | |
| 56 | Singidan Dairy | Singida | 500 | 200 | | |
| 57 | Nanyuru Sisters | Lindi | 500 | 200 | | |
| 58 | Jitume Dairy Group | Arusha | 300 | 150 | | |
| 59 | Idafaso Dairy Group | Arusha | 300 | 100 | | |
| | Total | | 335,600 | 96,350 | | |

Annex Eight: Dairy Processors Rwanda

| Processor | Region | Installed cap lpd | Utilized cap lpd | Utilized % | Product Range | Ownership structure |
|--------------------|-----------------|-------------------|------------------|------------|--|---------------------|
| Inyange Industries | Kicukiro-Kigali | 150000 | 40000 | 27% | Pasteurized milk, flavoured yoghurt | Private |
| Nyabisindu Dairy | Nyanza district | 15000 | 3000 | 20% | Cultured drinking yoghurt, Flavoured yoghurt | State owned |
| Dan-Cheese | Gishwati | 5000 | 3000 | 60% | Hard cheese | Private |
| Masaka | Kigali | 15000 | 1500 | 13% | Cheese, Crème fraiche | Private |
| Rubirizi | Kicukiro-Kigali | 8000 | Not operating | 15% | Pasteurized milk, cultured drinking yoghurt | Private |
| Ruyenzi | | 25000 | Not started | 0% | – | Private |
| UDAMACO | | 40000 | Not started | 0% | – | Private |

Annex Nine: Dairy Processors Burundi

| Processor | Region | Range of products | Installed capacity lpd | Utilized Cap lpd | Ownership structure |
|---------------------------|-----------|-------------------------|------------------------|------------------|---------------------|
| Bujumbura Central Dairies | Bujumbura | Pasteurized milk, Cream | | Not operating | Private |
| IAB | Bujumbura | Pasteurized milk | 1500 | Not started | Private |
| Nyabisabo | | Pasteurized milk | | Not started | Private |
| Milk Chel | | Cheese /Cream | 1000 | 300 | Private |
| Bukeye | | cheese | 500 | 200 | Private |

Annex Ten: Hierarchy of Human needs



Source: [Maslow](#) Robie Benve

Annex Eleven: Summary of interviews done

| Name | Profession | Country | Remarks | Email |
|-------------------|---|-------------|--|--|
| Michael Karata | General Manager Tanga Fresh | Tanzania | <ul style="list-style-type: none"> ✚ Tanga Fresh to Invest in UHT plant ✚ There is a direct correlation between milk preference and dairy product demand in Tanzania ✚ Tanzanian market largely depend on imported UHT and sweetened products | mkarata@tangafresh.com |
| Alnoor Hussein | Director, Tanga Fresh | Tanzania | <ul style="list-style-type: none"> ✚ EAC free market only applies to UHT ✚ It is easy to export products from Kenya to EAC and not vice versa ✚ Tanga Fresh should not merge with processors having conflicting interests ✚ Tanga Fresh should concentrate on Tanzanian market first ✚ Musoma might be a good investment for Tanga Fresh | alnoorh@kaributanga.com |
| Cees Schelle | Independent Dairy Professional | Netherlands | <ul style="list-style-type: none"> ✚ Invest in UHT plant ✚ Tanga Fresh should target Mombasa market after introduction of UHT ✚ Management is a problem to many dairy processors ✚ Kenyan dairy market is affected extremely by political interference ✚ Dairy processors underutilize installed capacities due to insufficient funds and managerial challenges ✚ Eldoville might be a good investment for Tanga Fresh | cmaschelle@hotmail.com |
| Richard A. Obuobi | Senior Advisor , Enterprise Development and Impact Investment Advisory Services, SNV | Kenya | <ul style="list-style-type: none"> ✚ Most dairy processors forget the contribution of farmers to the dairy value chain ✚ Invest in a dairy processor situated in a strategic position | robuobi@snvworld.org |
| Innocent Rutamu | Dairy Research Analyst, SNV Rwanda | Rwanda | <ul style="list-style-type: none"> ✚ Inyange is a potential investment ✚ The dairy sector in Rwanda faces some slight political interference | innorut@gmail.com |

| | | | | |
|------------------------|---|-------------|---|--|
| | | | <ul style="list-style-type: none"> ✚ There is dismal logistical challenges in Rwanda ✚ Raw milk is the most consumed product ✚ UHT packaging is too costly ✚ Dairy farmers are paid well in Rwanda | |
| Dr. Venant Nihorimbere | Senior Lecturer, Dprt of Food Science & Technology- Université du Burundi | Burundi | <ul style="list-style-type: none"> ✚ There is no commercial processor in Burundi ✚ Most dairy consumers do not afford processed dairy products ✚ Burundi import small units of dairy products ✚ Burundian market is underdeveloped ✚ Raw milk is highly consumed | venant.nihorimbere@gmail.com |
| Maarten van de Poll | Area Sales Manager Africa, Friesland Campina Export | Netherlands | <ul style="list-style-type: none"> ✚ E.A dairy market is well protected ✚ Invest in UHT plant ✚ Consider urbanization in Tanzanian market ✚ Class distribution is a major drive to the demand of processed dairy products ✚ Tanga Fresh should stabilize its market share in Tanzania first ✚ The middle class and upper class are the main dairy processed product consumers ✚ "If I had sufficient money I could run and invest in South-Western Uganda" | maarten.vandepoll@frieslandcampina.com |
| Anton Jansen | Senior Dairy Team Leader, SNV | Kenya | <ul style="list-style-type: none"> ✚ Kenya is a potential country to invest in ✚ Political interference in the sector is still high ✚ Brookside is a good investment for a commercial investor ✚ Retailers are the cause of high milk prices in Kenya ✚ Kinangop might be an interesting investment for d.o.b ✚ Happy cow, Eldoville and Bio food are potential to be invested in ✚ Githunguri's growth rate is stagnating due to political interference | ajansen@snvworld.org |

| | | | | |
|------------------|---|----------|--|--|
| | | | <ul style="list-style-type: none"> ✚ Uganda is a potential market | |
| Frederick Dutilh | Marketing Specialist, Friesland Campina | Nigeria | <ul style="list-style-type: none"> ✚ Uganda and Rwanda are potential markets ✚ Tanzanian market is not fully explored ✚ Tanga Fresh should target big towns ✚ Identify the ratio of middle class population against lower class ✚ Dairy processors need to work together with farmers | fhndutilh@yahoo.com |
| Teddie Muffels | Agricultural Counselor, Embassy of United Kingdom of the Netherlands | Rwanda | <ul style="list-style-type: none"> ✚ Rwanda is a potential market to invest in ✚ Inyange is an interesting investment for d.o.b | Teddie.muffels@minbuza.nl |
| Zystra Lut | Founder and coordinator of small holders delivering milk to Tanga Fresh | Tanzania | <ul style="list-style-type: none"> ✚ Farmers have a major contribution to the dairy's value chain | lztangafresh@kaributanga.com |

Annex Twelve: Dairy processors not to be invested in

| KENYA | | | | |
|-------|---|----------|------------------------------|---|
| | Company Name | Location | Production capacity(L p/day) | Reason not to be invested in |
| 1 | New Kenya Cooperative Creameries | Nairobi | 950000 | -State owned -Political interference -Too big for Tanga Fresh to invest in |
| 2 | Brookside(Brookside, Ilara, Delmonte, Tuzo) | Ruiru | 750000 | -Too big for Tanga Fresh to invest in -Conflicting interests -Exercising unhealthy Competition -Might not have financial needs |
| 3 | Sameer Agriculture (Adarsh Developers) | Nairobi | 50000 | -Too big for Tanga Fresh to invest in -Might be difficult to secure business ownership (conglomerate) |
| 4 | Meru Central Dairy Cooperative Union | Meru | 35000 | -Political interference -Inflexible due to large number of shareholders |
| 5 | Kieni Dairy Products Ltd. | Nyeri | 24447 | -Political interference -Inflexible due to large number of shareholders |
| 6 | Limuru Dairies | Limuru | 20000 | -Underperforming -Declining performance due to political interference -Mismanagement |
| 7 | Greenland | Nairobi | 20000 | -Unattractive business model -Not situated in a strategic position |
| 8 | Lari Dairies Alliance Ltd. | Naivasha | 15000 | -Inflexible due large number of stakeholders -Political interference -Mismanagement -Unattractive business model |
| 9 | Afrodane Industries | Murangá | 12000 | -Tiny market share -Narrow product range -Unattractive business model |
| 10 | Kenya Milk Processors | Kericho | 6000 | -Might be difficult to secure business ownership -Limited market -Political interference |

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| 11 | Delamere | Naivasha | 5000 | -Declining market share -Unsuccessful business model |
| 12 | Doinyo lessos | Eldoret | 5000 | -Underperforming -Less control in the market |
| 13 | Egerton(GDI) | Njoro | 4000 | -Public institution owned(Research purposes only) |
| 14 | Stanley and Sons | Nairobi | 3000 | -Too small |
| 15 | Teita Estates | Mwatate | 2000 | -Too small |
| 16 | Alpha Dairy | Nairobi | 1200 | -Too small |
| 17 | Mayanii Dairy | Mombasa | 1000 | -Too small |
| 18 | Aberdare Cremeries Ltd. | | 1000 | -Too small |
| 19 | Browns | Limuru | 1000 | -Too small |
| | UGANDA | | | |
| | Company Name | Location | Capacity Utilization Litres p/day | Reason not to be invested in |
| 1 | Sameer Agriculture and Livestock Ltd.(SALL) | Kampala | 375000 | -Too big to be invested in -Conflicting business models -Managerial complexity due to its ownership nature (conglomerate) |
| 2 | Shumuk Dairy | Mbarara | 15000 | -It's a conglomerate thereby making decision making rigid incase its invested in |
| 3 | Seasons Dairy | Kayunga | 4000 | -Narrow market(produces Cheese only) -Slightly operating below capacity |
| 4 | White Nile Dairies | Jinja | 3000 | -Not in a strategic region thereby limiting future growth -Experiencing milk shortages especially during the dry seasons |
| 5 | MADDO Dairies Ltd. | Masaka | 2500 | -Tiny market share, -Require structural expansion |
| 6 | Paramount Dairies | Mbarara | 2500 | -Small for Tanga Fresh -Narrow market (produces cheese only) -Require structural expansion |
| 7 | Nirma Dairy and Foods Ltd. | Entebbe | 2200 | -Unattractive business model -Require structural expansion |
| 8 | Toro Dairy Cooperative Society Ltd. | Fort Portal | 2000 | -Too small for Tanga Fresh |
| 9 | Family Choice | Mbarara | 1200 | -Too small for Tanga Fresh |

| | Tanzania | | |
|----|------------------------------|--------------------------|--|
| | Processor | Utilized Capacity | Reason not to be Invested in |
| 1 | ASAS Dairy | 6000 | -Acquisition of business ownership might be difficult due to its ownership state -Conflicting interests |
| 2 | International Dairy Products | 3000 | -It's an international organization with rigid management -Formulation of business decisions is likely to be inflexible |
| 3 | Baraki Sisters | 2100 | -Institutional organization thereby making it inflexible to merge with |
| 4 | Victoria Maziwa Mara | 1000 | -Too Small |
| 5 | Nronga Women | 900 | -Too Small |
| 6 | Mbokomu-Fukeni Mini Dairies | 800 | -Too Small |
| 7 | Kondoki Small Scale | 600 | -Too Small |
| 8 | Vwawa Cooperative Society | 600 | -Too Small |
| 9 | Kalali Women | 550 | -Too Small |
| 10 | Ammy Brothers Ltd. | 500 | -Too Small |
| 11 | Irente Farm | 500 | -Too Small |
| 12 | Chawakimu Cooperative | 500 | -Too Small |
| 13 | SADO Dairy | 500 | -Too Small |
| 14 | Mountain Green Dairy | 500 | -Too Small |
| 15 | Inuka Dairy Group | 500 | -Too Small |
| 16 | Nyuki Dairy | 500 | -Too Small |
| 17 | Mwanza Mini Dairy | 500 | -Too Small |
| 18 | Kikulula Milk | 500 | -Too Small |
| 19 | Mbeya Maziwa | 500 | -Too Small |
| 20 | Marakueni | 450 | -Too Small |
| 21 | Kyaka Milk | 450 | -Too Small |
| 22 | Naberera | 400 | -Too Small |
| 23 | Kagera Milk(KADEFA) | 400 | -Too Small |
| 24 | Ng'uni Women | 350 | -Too Small |
| 25 | Muvinwanya | 350 | -Too Small |
| 26 | Montensory | 300 | -Too Small |
| 27 | Profate Dairy Inv. | 300 | -Too Small |
| 28 | Mannow Dairy | 300 | -Too Small |
| 29 | West Kilimanjaro | 300 | -Too Small |

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|----|--------------------------|-----|---|
| 30 | Mbareni Women | 300 | -Too Small |
| 31 | Same (Engiteng) | 300 | -Too Small |
| 32 | Terat | 300 | -Too Small |
| 33 | Kijimo Dairy Cooperative | 300 | -Too Small |
| 34 | Longido(Engiteng) | 300 | -Too Small |
| 35 | Del Food | 300 | -Too Small |
| 36 | Bukoba Milk Bar | 300 | -Too Small |
| 37 | Kyangi Milk | 300 | -Too Small |
| 38 | Orkesumett | 250 | -Too Small |
| 39 | Agape Dairy Group | 200 | -Too Small |
| 40 | Tukwamuane Dairy | 200 | -Too Small |
| 41 | Mutungu Milk Bar | 200 | -Too Small |
| 42 | Salari Milk Bar | 200 | -Too Small |
| 43 | Kashai Milk Bar | 200 | -Too Small |
| 44 | SUA | 200 | -Too Small |
| 45 | Gondi Foods | 200 | -Too Small |
| 46 | Singidan Dairy | 200 | -Underutilization of installed capacity -Underperforming, -Unattractive business model, -Prone to milk shortages |
| 47 | Nanyuru Sisters | 200 | -Too Small |
| 48 | Jitume Dairy Group | 150 | -Too Small |
| 49 | Idafaso Dairy Group | 100 | -Too small |
| 50 | New Tabora Dairies | 200 | -Too Small |

| | Rwanda | Reason not to invest in |
|---|---------------|---|
| | Processor | -Utilized capacity |
| 1 | Dan Ghee | -Small processor, -Narrow market (niche player specializing on hard cheese only) |
| 2 | Masaka | -Small processor -Narrow product range |
| 3 | Nyabisindu | -State owned |