

**Title: THE RISE OF THE SUPERMARKET: CHANGES IN THE FOOD
RETAILING IN SUB-SAHARA AFRICA**

Assignment 3;

VALUE CHAIN ANALYSIS

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1.0 Introduction

The Researcher is pursuing a study on the growth and development of the supermarkets within the two East African countries of Kenya and Tanzania, with specific reference to the changes in the Fresh Fruits and vegetables (FFVs). A further analysis will be undertaken to examine shop floor space occupied or the volume of locally grown fresh fruits and vegetable vis-à-vis imported FFVs. The focus will be on including small scale suppliers on Supermarkets' food chains.

In furtherance of the study topic, the researcher will seek to establish the value chain from farm-gate produce and prices and follow through the linkage to the wholesalers and ultimately to the retail outlets.

The researcher will seek to interrogate whether the advances made in the food retailing and the respective value chains, particularly in the fresh fruits and vegetables have been inclusive of the small scale pineapple producers. The writer seeks ways of including the small producers in super market's food value chains.

2.0 Background to the study

The last decade has seen increased interest in the supermarket and modern retail sector in developing countries probably as a result of the realisation that supermarkets are no longer a privilege of the rich (Reardon, 2003). The growth in the supermarket is largely driven by increasing income, urbanisation, changing lifestyle and economic liberalisation (chowdhury et al, 2005)

In Africa, South Africa leads with the highest concentration of supermarkets and the rest of Sub-Sahara Africa the growth is a recent phenomenon dating back some few decades back. To an extent the growth in supermarket in the Southern African Region is largely driven by South Africa. Indeed Shoprite with a staff of

over 75,000, 1,220 stores and a turnover of over US\$5. Billion (Shoprite website, 2007) is probably the largest supermarket in Africa. The chain's expansionist strategy has led to the sector growth in many countries.

In Kenya and Tanzania, the retail sector is not as big as South Africa. However in recent years Kenya has experienced growth in modern retailing and the country now- has over 400 supermarkets, projected to control almost 50% share of food trade (Government of Kenya, 2007), with fresh fruits and vegetables taking a big portion. In Tanzania, the growth is not as much but the country modern retail sector is now picking up. Shoprite has an established store and some Kenyan Chains, specifically Nakumatt and Uchumi are said to heading south.

In Kenya, Nakumatt is the largest supermarket with its turnover for the year 2007 reported at Kshs 19 billion (US\$300 million) (Nakumatt website). Uchumi, a public limited company with an extensive branch network has had some operational problems but it is now on recovery path. Tusky's is probably the third largest supermarket in the country maintaining branches in major cities and towns. Another supermarket with a notable presence in several towns is Ukwala.

In Tanzania, Shoprite, a Southern African supermarket chain operates branches in Dar es Salaam and Arusha. In addition there are numerous independent supermarkets dotting major towns in the country.

To a large extent the fast growth of supermarkets has resulted in growth in other sectors especially the agricultural sector. By spurring the agricultural sector, the growth in supermarkets has helped in the reduction of poverty, created jobs and has led to better rural livelihoods. In addition the expected backward linkage has spurred many other sectors of the economy resulting in significant progress in social and economic growth.

Several authors are in agreement that Supermarkets are faced with various challenges such as stiff competition, unresponsive policies and a reduction in profit margins. Rising operating cost coupled with reduced profit margin present a challenge to many supermarkets. To safeguard themselves against the hostile environment, supermarkets must define ways to gain a competitive advantage (Cook, 2003; Humphreys, 2003) through product and costs strategies. One way of having a viable is for the managers to source for fast moving products with huge discount tag or lower per unit costs. Thus the value chain adapted must take into account some of the challenges facing the supermarkets and respond to the challenges including costs mitigation and superior products (Henson et al, 2008; Hobbs and Young, 2001).

2.1 Analysis and problem Identification

Creation of value is important to the survival of the organization. To the supermarkets they must offer their customers a value exceeding cost so as to return profits. By creating successive linkages with the suppliers of FFV such a motive can be achieved. The linkages with FFVs must be seen in the light of making the supermarket not only competitive but also cost effective.

For the supermarket exploring new ways of doing business has become a constant obsession. The supermarkets will therefore create such linkages only if the two twin objectives are achieved. The onus then is on both entities to refine themselves for such a value marriage to occur

To the producers of FFV, their incomes and cost are largely determined by the underlying power structure of the value chain. Yet the structure largely depends on the mode employed for accessing the chain. The mode also determines their capacity, their roles and access to markets.

Since value chains are different (Gereffi, Humphrey, Sturgeon; 2005, supermarkets will willingly pursue a form that not only enhances the bottom line i.e. increasing revenue, reduction in cost and rising return in investment (ROI) but also forms that will appeal to a wider group of stakeholders. Assuming that the investors in the sector are rational, then it is appropriate to assume that Supermarket managers will go for a channel where they will hold more powers than the FFV producers.

Through the value chain analysis, the supermarkets will be able to develop sustainable businesses based on differentiation, cost or both (Porter, 1980, 1985 and as cited by encyclopaedia). The objective of businesses is to survive and for this to happen the business must have a competitive advantage. This advantage may be achieved through superior products at low prices (Humphreys, 2003). A value chain that links the FFV producers with the supermarkets presents an apt opportunity to achieve the competitive advantage.

Again on the form of the chain, Supermarkets will pursue a buyer driven chain in which profitability comes from a various fronts such a research, design and marketing (Gerefi, Memedovic, 2003). This will call for a close collaboration with the producers of FFV. Some supermarkets especially the big one has formed subsidiaries that act as intermediaries between supermarket and the FFVs. The purpose is to ensure the FFV not only meets the customer's requirements but also the product costs structure meets the firms' requirements.

The focus of this research will be on the growth of the supermarkets and changes in food retailing in Kenya and Tanzania. The research will seek to understand the dynamics of Supermarket procurement strategies, the value chains pursued by the supermarkets on hand, while at the same time focus on the capabilities of the

small scale producers to fit in the supermarket procurement strategies and thus become actors in the agri-food value chain.

2.2 Problem Statement.

From the point of view of the value chain models for instance the Global Value Chain (GVC) theory (Gereffi et al 2005; and Global Chain Commodity), and further literature on global value chain (e.g. Gereffi et al, 2001; Kaplinsky and Readman, 2001; Kaplinsky et al, 2003; Sturgeon, 2006) there appear to be a linkage between the fast growth of supermarkets and modern retails and the agricultural sector agricultural sector especially the Fresh Fruits and Vegetable (FFV).

The linkage is evidenced by the presence of supermarkets chain in the two East African countries and the formation of subsidiaries by the larger supermarkets (Freshmark for Shoprite, and Freshi and Juici for Nakumatt) to act as intermediaries between FFV producers and the chains. Some European supermarket chains appear to source their FFVs from the region for instance Tesco and Wal mart (Institute of Development Studies, 2005; Humphreys, 2003; Kariuki, 2006)

The researcher will seek to understand the dynamics of the chain in light of the many unanswered questions (see below) and indeed establish the adequacy of the value chain in light of small scale producers of Fresh Fruits and Vegetables, specifically the pineapple farmers.

2.21 Knowledge gaps

The following knowledge gaps exist;

- a) The value chain that the supermarkets within the region are employing to establish linkage with farmers
- b) The powers and governing structure employed in the chain and how much influence each of the actor wields.

- c) The influence of regional economic blocks for instance EAC, COMESA, and SADC on the supermarket procurement strategies and hence their value chains.
- d) The extent of the integration or the inclusion of the small scale farmers in the agri-food value chain and thus within the economies.
- e) The policies governing the establishment of the value chain and their impact on all the actors at country, firm level and households.
- f) .
- g) The sharing of benefits and cost and other resources by various actors in the value chain.
- h) The extent to which the supermarkets have integrated with the local economies especially the agricultural sector and therefore leading to economic development of the two countries.

2.22 Research Objectives

The research objectives are:

- a) Examine value chains that will enhance the vertical linkage between supermarkets and Fresh Fruits and Vegetable sector (specifically the pineapple sector) in Kenya and Tanzania and strengthen horizontal linkages within the agricultural sector
- b) To study and understand the relationship between the growth of supermarkets and the small scale pineapple producers

2.23 Research Questions

The research will provide answer to the following questions:

study seeks to provide answer to the following questions:

- a) To what extent have the growth of local and global supermarkets contributed positively (or otherwise) to the growth of small scale producers in Kenya and Tanzania?

- b) What is the spread of value and margins along the local and global value chains for the supermarkets and the pineapple producers?
- c) To what extent are the supermarkets contributing to agricultural development and hence economic development of the two East African countries?

2.24 PROPOSITIONS

Proposition One:

The growth of local and the Global supermarket chain has positively impacted on the growth of small scale pineapple producers

Proposition Two:

Global Standards have had a negative impact on the growth of the small scale pineapple producers

Proposition Three:

The macro-environment has hampered the establishment of viable linkages between the supermarkets and the small scale producers of FFV.

3.0 Value Chain and Mapping

3.1 The Pineapple Fruit

The primary focus of the study is on the pineapple fruit. This will be achieved through tracing the pineapple production, transportation, packaging, marketing and retailing.

Among the many tropical fruits found in Africa, the pineapple is yet to make its mark as major export and a top revenue earning product in Africa.

In 2005, the world pineapple production stood at 18 million tonnes. This was about 4% of the world fruit production (Felicite-Zulma, 2005). Nigeria, Kenya and Cote d'Ivoire produced 5%, 3% and 1% of the world total. Exports from the three African countries were much less. The world pineapple export market is dominated by central and south America. Ghana and Cote d'Ivoire export substantial amount to the EU countries. Despite Kenya ranking among the ten producers of pineapples, its export to EU of fresh pineapple fruit was negligible.

Supply of pineapple juice concentrate to EU was dominated by Thailand, Philippines, Indonesia, Kenya and Brazil.

Kenya produces approximately 600,000 tonnes of the fruit of which about 300,000 tonnes is exported either in form of fresh fruits or juice concentrates. The largest single producer of pineapple in Kenya is the Del Monte Company, producing about 260,000 MT (Kenya Horticultural Development Program, 2005). The company process and export the concentrate to US and the EU markets.

The fresh pineapple fruit appear to fetch a higher price than the processed variety.

Tanzania with a good climate for pineapple production has not been a major pineapple producer or exporters.

Indeed in the countries selected for the study, pineapple production appear to be well developed especially among the small scale farmers but very little goes beyond the wet markets. This represents lost opportunities to pineapple farmers.

3.2 Supermarkets procurement strategies

In Kenya large supermarkets have established formal contracts with suppliers. For smaller supermarkets, there is no existence of formal contracts and they appear to participate in wet markets and the wholesale markets.

For the large supermarkets there are two distinct procurement strategies, decentralised and centralised. In the centralised system, the decisions on procurement such as choice of supplies, delivery and distributor, orders of products, payments are made at the headquarters, while individual chains decides on the volumes and frequency.

In the decentralised system, the chains are allowed to make decision on choice of supplier among certified vendors, decide on when to order and delivery as well as on volumes (Neven et al, 2005).

Irrespective of the system, large supermarkets have entered into contracts with suppliers especially medium and large scale suppliers in regards to quality, frequency, certification of suppliers and in respect to payments. Some products are sourced through brokers.

Nakumatt has a specialised wholesalers *fresh and juicy ltd*, (a wholly owned subsidiary of Nakumatt) which not only procure fresh fruits and vegetables from producers but carry out value adding activities for instance trimming, weighing and packaging. The company supplies the same to Nakumatt and other customers.

In Tanzania, Shoprite has its wholly owned subsidiary, *Freshmark* (Deventer, 2006) which sources for fruits and vegetable from the region and supply the chain. *Freshmark* sources mainly from South Africa but with some supplies especially vegetables coming from other countries.

3.3 Functional Analysis

Stage of the Chain	Function(s)	Agent (s)	Output
Input supply	Supply of inputs to farmers including pesticides and chemicals	Seed suppliers Pesticide/Chemical Suppliers	Care and tendering of plants
<i>production</i>	cultivation cultivation	small farmers large farmers	Pineapple Fruits
Processing	Processing of Fruits concentrate Fresh fruits	Processors Cooperative society	Fruits concentrate Cuts fruits Fresh fruits
Whole selling	Selling of fruits concentrate, fresh fruits to wholesalers	Wholesalers Super market buying agents (special purpose entities)	Fruits concentrate Cuts fruits Fresh fruits
Exports	Sale and distribution of product to regional and international market	Large scale farmers (MNC's) Processors (MNC's) Cooperatives society Export agents Supermarkets special agents	Channelling of products to regional and international market
Retailing	Sale and distribution of product to local,	Supermarkets (local and international) Wet markets	

	regional and international market		
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From the above functional analysis the following pineapple value chain (figure 1) was generated.

3.4 Value chain

3.41 Computation of Value chain Margins for Thika (Kenya) and Tanga (Tanzania)

**VALUE CHAIN MARGINS
FARMERS-THIKA DISTRICT (KENYA) and TANGA (TANZANIA)**

S/no	Costs (per 1 ton)	Kshs (Kenya)	%	Tzs (Tanzania)	%
	Seedlings/propagation	2,000		30,000.00	
	Fertilisers	2,500		50,000.00	
	Labour (average for 2 years)	11,000		150,000.00	
	Other costs	4,000		100,000.00	
	Total cost	19,500		330,000	
	Cost per Kg	19.5	0.65	330.00	0.57
	Selling Price				
	Wet Markets	30		500.00	
	Supermarkets/wholesale co	32		-	
	Brokers/Agents	28		650.00	
	Gross Margins	Kshs	%	Tshs	%
	Wet Markets	10.5	35%	170	34%
	Supermarkets/wholesale co	12.5	39%		
	Brokers/Agents	8.5	30%	320	49%

VALUE CHAIN MARGINS-Supermarket (Kenya and Tanzania)

Purchase Price	Kshs (Kenya)		Tshs (Tanzania)	
Wholesale companies	35		0	
large scale farmers	28		0	
Agents/Brokers	30		700	
Other Costs				
Transport	1.5		15	
Packaging, cutting etc	0.5		10	
All other costs	0.45		25	
Total costs	2.45		50	
Selling Price	50		900	
Gross Margins to Supermarket	Kshs	%	Tshs	%
Wholesale companies	12.55	25%		
large scale farmers	19.55	39%		
Agents/Brokers	17.55	35%	150	17%

Note: Information should not be attributed directly to the supermarkets

The value chain are presented below;

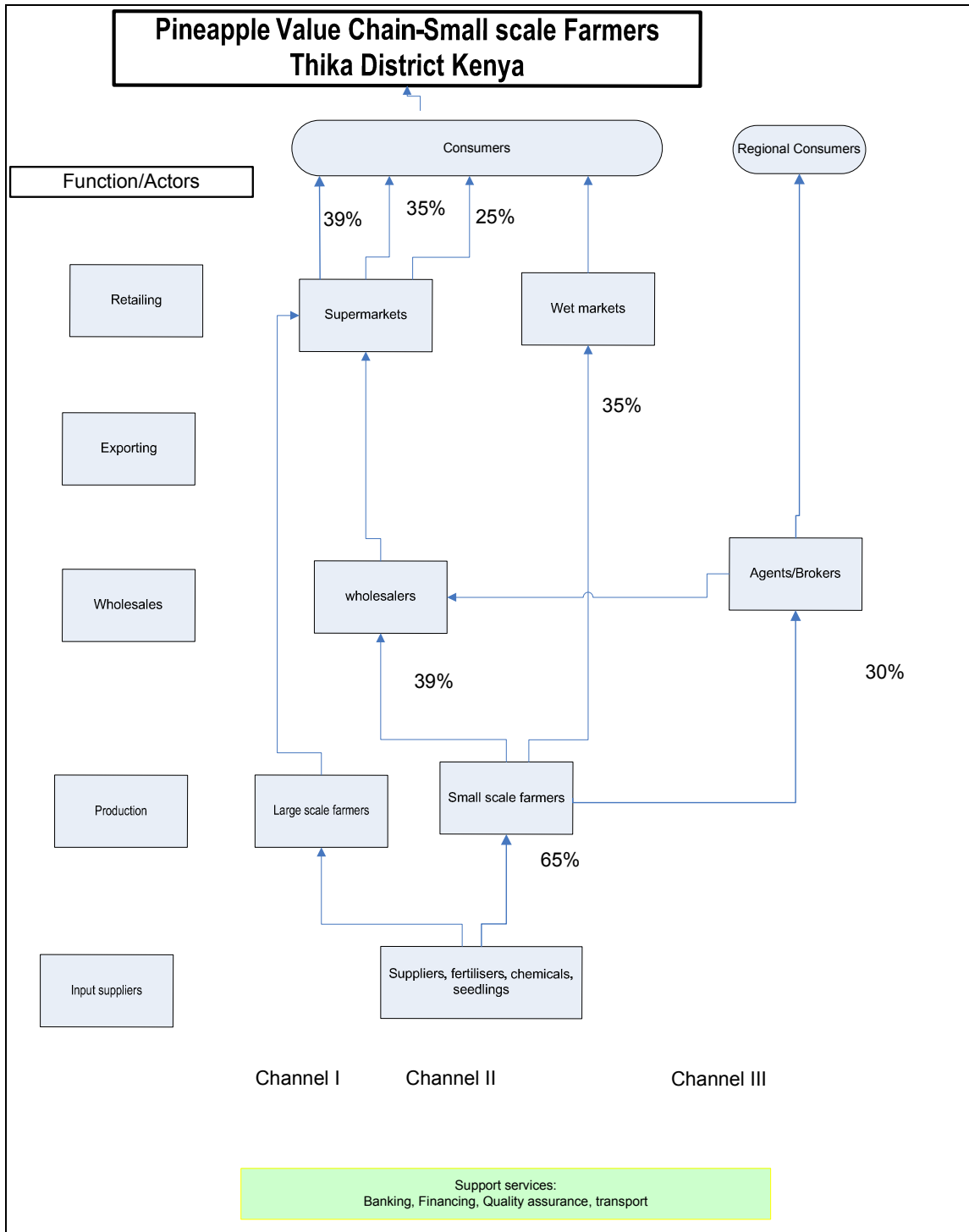


Figure 1

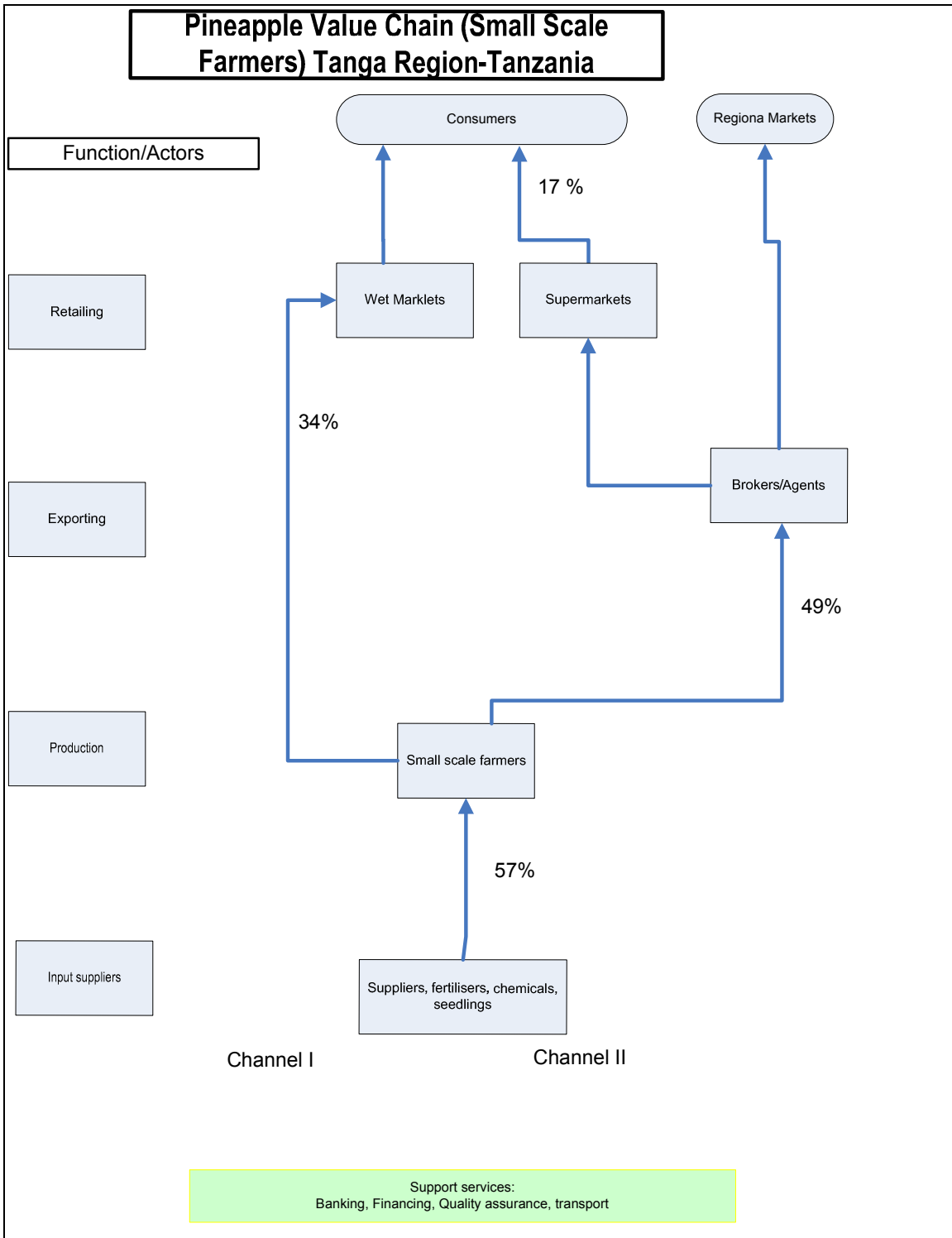


Figure 2

3.4.31 Comments on the Pineapple value chain for small scale farmers-Thika District and Tanga in Tanzania

There are three channels in the value chain as shown in figure 1.

- The figure shows that the cost of inputs is 65%.
- It is more profitable for the small scale farmers selling to wholesalers where they are able to fetch a Gross margin of 39%. This compares favourably to selling to brokers and wet markets where the margins are 30% and 35% respectively
- For supermarkets, Gross margins are highest when they source their products from large scale farmers where they fetch 39% compared to 35% and 25% for wholesalers and Agents/brokers.
- Margins for Farmers are low when they sell through Agents, a gross margin of 30%. The brokers do not invest in the business and have little connection to the local economy.

Pineapple value chain for small scale farmers- Tanga in Tanzania

- Different from Kenya, small scale farmers in Tanga have no access to a third channel and are confined to wet markets and Brokers/Agents.
- The total cost of inputs is at 57%
- An interesting finding is that Farmers are better off selling their produce through Brokers where they fetch 49% of Gross Margin as compared to a low of 34% when they sell through Wet markets. This discourages the development of Wet markets which have more extensive linkage to local economy than the predatory habits of the Brokers.
- Supermarkets fetch gross margin of 17%. This may be explained by the high margins that are paid to the farmers. This reflects a rather high cost gradient for produce.

Comparison of Pineapple value chain for small scale farmers- Tanga in Tanzania and Thika in Kenya

- The two value chains are structurally different and the margins radically without correlation. Consider that costs of inputs vary, while in Tanzania farmers pay 57%, in Kenya, this is more at 65%. This is a difference of about 8%.
- In Tanzania, a Farmer can fetch Gross Margins of 49%, while in Kenya it is 39% or a difference of 10%. This is significant for a small scale farmer.
- The Kenya small scale farmer has an option of three channels through which to sell their produce.
- In terms of Value chain development, it seems the Kenyan farmer will be at an advantage largely due to availability of direct sales to the supermarket.
- The Tanzania Value chain shows a more peasantry type of farming with shallow linkage to the premium market with long term sustainability. Although Tanzania enjoys higher margins through brokers, this is a fickle link and not sustainable.

3.5 Key Actors and major organisations targeted for surveying and interview

3.51 Key actors

For the purpose of this study, key actors will refer to actors within the chain who:

- i. Own the product being studied
- ii. Influences the direction of the chain, it's profitability and chain governance
- iii. Provide necessary services without which the chain profitability or otherwise will be adversely affected.

The main actors identified from the chain are:

- a) Small scale producers-This group of people may not wield a lot of influence in the chain governance. They are the objects of this particular study. The study will seek to interrogate small scale farmers in both Kenya and Tanzania
- b) Large scale farmers-They may wield a lot of influence on either way of the chain. Such large scale farmers include Del Monte and Kakuzi Limited.
- c) Processors-The size and ownership of the processors will determine the extent of their influence on other players as well as their profits and cost. Where the large scale producer also happen to own the processor, then group wield immense power. Where the processor is a multinational, again a lot influence and power rests with the processor. One such processor is Del Monte.
- d) Cooperatives (Farmer Associations)-This is grouping of small scale farmers. The management and organisation of this player is important in determining the extent of influence and to a large extent profitability of

- the farmers. The study will seek to understand their views and strategies of accessing the global value chain.
- e) Wholesalers- Their power and influence as well as profitability depend to large extent on their size and ownership. As noted above, some Supermarkets have formed wholly owned subsidiary companies specifically procuring supplies from producers.
 - f) Supermarkets-They are much organised and many especially the multinationals have special companies, 100 % owned formed for the purpose of procuring fresh fruits and vegetables. They are the main link to the customer and as such they yield immense influence on the chain governance.
 - g) Exporters/ Agents-This group yield immense power especially where the products are destined for the export market. They are normally few players but important in linking small scale producers to global market. In some cases, the large scale operators own the export firms. In almost all the cases, small scale operators have to go through them. They are important in understanding the operations of the chain
 - h) Airlines-This is the preferred mode of transporting the product to international market because of it perishability nature. Depending on the location of the production, airlines are important players and significantly influences the cost and hence the profitability of the chain.
 - i) Consumers-They determine the demand and other products dynamics. To a large extent, the product characteristics are generated from the consumers' needs and wants by the retailers.

3.52 Key actors targeted for interviewing.

From both the functional analysis and the chart 1 above, the key actors and organisation targeted for surveying and interview are;

- Community based field officers and government extension officers in the area of agriculture
- National research Institutions (Kenya and Tanzania)
- Private research institutions
- Multinational research institutions
- Major suppliers of inputs such as chemicals and seedlings
- Small scale farmers
- Farmers associations
- Large scale Farmers
- Del Monte (K) Ltd.,
- NGO's operating in the field of Fruits and vegetables
- Processors
- Fruits wholesalers
- Supermarkets (in both Kenya and Tanzania)
 - Shoprite (Tanzania)
 - Uchumi, Nakumatt, Tuskys, Ukwala (all in Kenya)
 - Other super markets
- Export agency
- Horticultural development agencies (Kenya and Tanzania)
- Ministries of Agriculture and cooperative development (Kenya and Tanzania)
- Air lines

4.0 Business and Institutional environment

Kenya and Tanzania have membership to various trade blocks that affect their internal and external policies and relevant to the supermarket sectors as well as the fresh fruits and vegetable sector.

4.1 WTO

WTO is a multilateral trade agency that regulates trade between members. Currently the body has about 152 members, including Kenya and Tanzania. All members have equal votes and decisions are based on negotiations and agreements among members. Fresh Fruits and Vegetables (FFV) is bound by tariffs that are negotiated within the member states. This may impact negatively on study countries as trade in agriculture is highly subsidized in the North i.e. EU, US and Canada, and thus making it hard for products from developing countries to accessing the markets.

4.2 COMESA

This is a growing regional block and perhaps the largest in Africa, covering countries in East, Central, North and Southern Africa. Kenya is a founder member of COMESA and at the moment much of her trade is with other member states. COMESA plan to become a custom union and this will impact heavily on the two sectors of modern retailing and fresh fruits and vegetables. For supermarkets, their procurement procedures will be impacted heavily by the proposed custom union.

4.3 SADC

These fallow under the Regional Trade Agreements as per Art, XXIV of GATT and notified under the enabling clause. It is trade block that is operating as a

Preferential Trade Area (PTA) and hopes to become a full Customs Union. Tanzania is a member of SADC. The members agree on both internal and external tariffs for members and non members. Through this arrangement members have agreed to liberalise substantially all trade as per WTO rules. This will have a long term positive impact of creating a bigger market for perishables-FFVs. The competition within the block will lead to increased competitiveness of the sub sector. In addition, there is notable investment in the SADC region by Southern African Countries. Although this may not entirely be attributed to SADC, its influence in the direction of investments within the block cannot be ignored either. Another influence whether positively or negatively is on the procurement strategies of supermarkets especially those with branches within the region for example Shoprite.

4.4 EAC

The block has Tanzania, Kenya, Uganda, Rwanda and Burundi. A custom union has already been established within preferential treatment for trade within the block. Like COMESA and SADC, EAC has influence on trade directions within the member states and will also influence cross border investments within the countries. At the moment Kenyan supermarkets are set to invest or expand their business in member states i.e. Uganda, Tanzania and Rwanda. In the case of fresh fruits and vegetables, there is a lot of trade between the countries especially Kenya, Uganda and Tanzania. There are proposals to create a monetary union.

4.5 European Union

The block covers much of Western Europe and is expanding rapidly towards the east. No doubt this block has the single most important influence on the fresh fruits and vegetables as most of the produce from Kenya and Tanzania is destined to the region. One area which has impacted negatively is the introduction of European standards on safety and quality. These have directly

affected the trade in fresh fruits and vegetables. In addition the region supermarkets are major global players and are increasing becoming more vocal in issues of environment and health and safety. Recent developments include the air mile debate which is bound to have a very major realignment in the fresh fruits and vegetables trade. Another area of concern is the level subsidies enjoyed by producers within the EU, shielding them from competition from producers from developing countries including Kenya and Tanzania.

4.6 National level

4.6.1 Macro economy:

The countries macro economic stability will lead to increased support to the FFV sub sector. Both fiscal policies and monetary policies adversely or positively affect the profitability of the sector. High interest rates and a strong currency are linked to availability of credit and profitability to the farmers and exporters. In addition the level of investments in both Supermarkets and fresh fruits and vegetables sector is largely influenced by macro economic variables.

4.6.2 Politics

Political stability ensures that enterprise can plan better and that cost of international and national credit is low and predictable. The sector is based on perishables and very short shelf life. Any instability will result in disruption of supply lines and market disruption. This will lead to immediate losses. The recent political events are good pointers how politics affect the sector. Major producers of FFV reported losses in the period of January 2008, when the country was hit by political uncertainty and violence. Similarly supermarkets investments and operations are also influenced by the politics of the day. Tanzania has a more predictable political environment than Kenya.

4.6.3 Security

Security ensures firms and farmers invest less in their own arrangements. Farm insecurity affects supply lines and the same to the outlets. Again this was evident during the election that Kenya went through in January 2008, where almost all sectors of the economy were badly affected. Tanzania enjoys relatively better security environment than Kenya.

4.6.4 Government services (health, education and infrastructure)

Infrastructure development affects not only investments in the two sectors i.e. FFV and Supermarkets but also profitability of the existing businesses. A major concern especially producers of FFV is the level of infrastructural environment in rural areas. This has hampered the development of the sector. Both Kenya and Tanzania lack good infrastructure. Another areas key to the sector is investments in health and education. The two not affect the supply of trained personnel but also research and cost of doing business.

4.6.5 Regulation and bureaucracy

Trade regulation of the FFVs sub sector has at times hindered the growth and expansion of the sector. The World Bank report on doing business is a good indicator on the impact of regulation and bureaucracy on trade.

4.6.6 Support services (finances, business development services, Research and Development)

These services are important for the growth of supermarkets and the fresh fruits and vegetables sector. Research affects development on new varieties, compliance with standards and responsiveness to the ever changing environment. Kenya appears to do quite well as the financial sector is deeper than in Tanzania. In addition the country boasts of well established research institutions focussing on agriculture.

4.6.7 Society and culture

Society and culture determines the way companies compete and do business. This has an impact on sector competitiveness of the sub sector.

4.6.8 Climate and environment

FFVs sub sector is vulnerable to weather patterns and changes. The study countries rely on rain fed systems and little irrigation. This creates vulnerability and thus product risk to producers.

4.6.9 Local standards

Local production standards affect the quality of the FFVs and their marketability.

4.6.10 International standards

International standards have an impact on local production, output and sector productivity. The private standards are in most cases higher than the Government set standards, they cost more to implement and add more costs to the farmers and lowers their profitability. International private standards are now a major concern to Fresh fruits and vegetables producers as it not only affect their participation in agri-food chains but the distribution of benefits and costs.

5.0 Key issues

5.1 Chain upgrading

Chain upgrade is moving to activities that offer higher returns (Gereffi, 1999). In the FFV/supermarket analysis, upgrading as key plank of the firm becoming more profitable and having a higher Return on Investment (ROI). Given the level of competition within the firms and within the economy, upgrading is not only necessary for a firm to survive but it is mandatory if a firm wish to have more value adding functions and to remain competitive (Kaplinsky and Readman, 2001; Gerefi et al, 2001; Schmitz, 2004; Avdasheva et al 2005; Sturgeon, 2006) .

In the FFV/Supermarket, upgrading may be done as follows:

- a) Product upgrading- Producers may need to consider fruits variety that take less time to mature and meets the specific needs of customers as communicated by the supermarkets.
For the supermarkets, it is worth considering retailing of dried fruits.
- b) Process upgrading- Small scale producers need to incorporate new farming techniques that not only ensures higher yield per acreage but reduces the production risks. They also need to learn modern post harvesting methods that will reduce post harvest losses. In addition with the private standards stressing more on the issues of safety, quality, convenience and sufficiency, it is mandatory that producers appreciate newer farming processes that address both private and public standards. Similarly supermarkets may opt to consider other procurement strategies that reduce waste from farm gate to the retail store.
- c) Functional upgrading- For small scale producers, they should consider taking some function that are currently done down stream, such as cutting, packaging and hence adding more value to their products. This however can only be done if the farmers are willing to form associations that will not take over these functions but other additional functions such as processing (processing of dried fruits, juices and concentrates) and marketing. In the case of captive market, the level and success of functional upgrading will to a large extent depend on the willingness of the retailers to assist the producers (especially small scale producers) to upgrade through support in form of information, capacity and technology. For the supermarkets and whole sale companies, taking some upstream activities through strengthening of the vertical linkage not only ensures quality, safety standard and sufficiency but also adds value.
- d) Inter chain upgrading- With the establishment of farmers association; it is practical for farmers to use the same medium for marketing other

agricultural produces such as milk. This will however depend on the farmers operating environment (including local, national and meso environment) and the ease with which the chain can be expanded to accommodate other products or processes. Of particular importance is the extent to which the government is willing to assist farmers especially in the areas of rural infrastructure, provision of credit and market access.

Within the supermarket: This can be achieved by moving from products with low returns to products with high returns. In the case of pineapples the supermarket may opt to retail only products that meets certain minimum quality and fetches a higher premium. At the moment the quality of pineapple does vary and so is the premium paid. This however requires the supermarket/retailers to closely monitor the upstream activities.

Within the local economy: The supermarket may opt to establish backward linkages with pineapple farmers at the national level.

Within the region: This is possible by taking into account regional flows of fresh fruits and integrating all functions from production to retailing

For the producers, product and process upgrading may be easy but functional and inter chain upgrading may present challenges. In the case of functional upgrading, challenges include the strong control of some of the more value adding functions within the chain such as branding, distribution and marketing by lead firms (Schmitz, 2004; Abonyi, 2006). Other challenges may include lack or absence of skills such as the latest technology (Joly, 2007) which is important for accessing the markets and lack of upgrading resources (Schmitz, 2004). As noted by Kaplinsky et al, 2003, in the case of wood industry, South Africa, producers may also face other challenges on increasing the supply of the product, the changing prices of products meaning that upgrading may not be

enough to mitigate producers from incurring losses and low transformation rate especially for the inter-chain upgrade.

6.0 Opportunities and constraints

6.1 Review of major Opportunities

6.11 Supermarkets;

Kenya and Tanzania are still at the infancy stage of modern retailing. In Tanzania, the number of major supermarkets is about 5 while in Kenya, it is slightly above 400 and the growth of supermarkets between 1993 and 2003 was about 18% (Neven and Reardon, 2005). Considering that return on investment for emerging market is still high, compared to developed world, opportunities exist in tapping the potential market.

In available statistics show that there is a growing preference for supermarkets in Developing countries compared to wet markets especially for Fresh fruits and vegetables. The recent economic survey of Kenya (Government of Kenya, May 2008) shows that supermarkets are now controlling over 50% of the retail market.

In addition, the economies of the two countries have registered positive GDP growth in the past decade, with Tanzania registering a GDP growth averaging in excess of 6% and Kenya averaging 3%.

6.12 Fresh Fruits and vegetable wholesale companies

Established supermarket for instance Nakumatt has wholly owned subsidiaries dealing with procurement of fresh fruits and vegetables. Nakumatt has Fresh and Juici limited. Shoprite (South African chain with branches in Tanzania) has Freshmark a leading fruits and vegetable wholly owned subsidiary of Shoprite

procuring fresh fruits and vegetables from over eleven countries and supplying Shoprite and other supermarket chains (Deventer, 2006).

In both Kenya and Tanzania, whole sale companies sourcing fresh fruits and vegetables and then packaging and branding can be established. This will present the much needed linkage between small scale producers and retailers.

6.13 Export to global and regional markets

At the moment much of pineapple produce is consumed locally especially in Tanzania. Kenya is major fruit exporter but as noted elsewhere the driver here is the Del Monte Company. Opportunities exist for both packaging and exporting fresh fruits and vegetables to global markets such as the European Union, the United States, China and Japan.

Processing can be done locally and juice and concentrates exported to major world markets.

There is a growing market for dried fruits especially in the European Union and the United States. This is an opportunity that can be tapped.

6.14 Branding

One of the reasons why Kenya seems to do well in export of pineapple juices and concentrate is because the market is dominated by the Multinational Company (Del Monte) which processes fresh pineapple into concentrate and juices for both local and export market. Opportunity exists in creating a strong brand name for the purpose of penetrating both the local and international market. While this is happening in Kenya, Tanzania can do more to enjoy higher returns.

6.15 Processing and packaging

Numerous opportunities exist for the processing and packaging of the fruit. There is a case for packaging concentrates for institutional consumers and fresh packaging for individuals and families.

6.16 Investments in infrastructure

There are opportunities for investing in roads and rail transport, refrigeration plants and air transport.

6.17 Investment in micro financing companies.

One of the biggest constraints to the participation of small scale farmers in the value chain is lack of capital. Presently accessing finance is not only a hurdle but is expensive. Investing in micro finance is an opportunity that will spur the growth of the sector.

6.18 Training

Small scale producers have limited business management skills. This is one area where NGO's can invest in.

6.2 Review of major constraints

6.21 Finance costs

For a modern supermarket that appeals to all lifestyles, set up capital is a major constraint. In the two countries i.e. Kenya and Tanzania, credit facilities are few and expensive. In addition to the high cost of borrowing, collaterals are hard to come by.

Finance for initial capital outlay, expansion and working capital remain a major constraint.

In the pineapple value chain, Finance costs specific to the product will include production cost (the fruits on average take 18-24 months, requiring proper care).

In addition to production cost, there are other issues of processing, packaging and distribution, adding to an already expensive venture.

6.22 Infrastructure costs;

The infrastructure in both countries, Kenya and Tanzania is both unreliable and costly.

The road network and coverage is low in both countries. Ports of Mombasa and Dar es Salaam are inefficient resulting in long delays in cargo handling and as result adding up to the cost of doing business. Indeed the average cost of transporting a 20ft container is about US\$1,500 to East Africa, compared to other destinations where it is lower than US\$1,000.

Power is not only unreliable but also expensive. Within the COMESA region, for instance, cost of power in Kenya is almost thrice the cost of power in Egypt (The East African, 2008).

All this will add up to the cost of doing business making an otherwise viable entity a loss making firm. In the value chain, the constraint affects the channel and firms will most likely decide on a channel that optimizes returns. The option is to pass the cost to either the downstream actor in case or the upstream actor but this depend first on the power held by the actor and secondly on the price elasticity of the product in question.

6.23 Labour market

In both countries, there is a large pool of unskilled labour. However unskilled labour will absorb a higher level of labour supervision (World Bank Reports), adding to the business cost.

Difficulty in hiring index and difficulty in firing index is 33 and 30 for Kenya while for Tanzania it stands at 89 and 60. Firing cost in terms of weeks of wages is 47 and 32 for Kenya and Tanzania respectively. For OECD it stands at 26.

Indicator	Kenya	Tanzania	Region	OECD
Difficulty of Hiring Index	33	89	41.7	25.2
Rigidity of Hours Index	0	40	43.9	39.2
Difficulty of Firing Index	30	60	42.2	27.9
Rigidity of Employment Index	21	63	42.6	30.8
Non wage labour cost (% of salary)	4	16	12.3	20.7
Firing costs (weeks of wages)	47	32	68.3	25.7

Source: Doing Business

2008

www.doingbusiness.org/

At the moment, the cost of labour in both Tanzania and Kenya is favourable compared to the Western countries. Unlike in Kenya, labour unions are not as strong in Tanzania, but the issue of skilled personnel remain a challenge.

6.24 Business Regulatory procedures

The business regulatory environment in both countries is rigid with constraints to business relating to starting a business and licenses requirements.

The Doing business 2008 report ranks Kenya at number 72 and Tanzania at 130.

This implies that it is easier to do business in Kenya than in Tanzania.

In starting a business it takes 12 procedures in each country whereas in the high income countries (OECD) it takes on average 6 procedures. Duration required to

start a new business is 44 and 29 days in Kenya and Tanzania respectively. It only takes 15 days in High income countries.

To deal with business licenses and other regulatory issues in Kenya, there are ten procedures while in Tanzania they are 21. Duration is 100 days for Kenya and 308 days for Tanzania. Corresponding statistics for OECD is 14 procedures and the duration is 153 days.

	Kenya	Tanzania	OECD
Ranking (out of 178 economies)	72	130	
Starting a business			
No. of Procedures	12	12	6
Duration in Days	44	29	14.9
Dealing with licenses			
No. of Procedures	10	21	14
Duration in Days	100	308	153.3
<i>Source: Doing Business 2008</i>			
<i>www.doingbusiness.org/</i>			

6.25 Organisation and management

This is a major constraint especially to small scale farmers. Their inability to operate in clusters, limit the advantage of economies of scales and hence opportunities to access high value markets. In addition many lack business development as well as entrepreneurial skills; hence the business mortality is quite high.

6.26 Competition

In Kenya, local supermarket chains are well established presenting a big threat to Multinationals. Metro and Curry, a South African, was unable to make a mark in Kenya and had to close down their operations.

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