

# **Kenya Country Background Report** Successful African Firms and Institutional Change (SAFIC) Project

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# KENYA COUNTRY BACKGROUND REPORT

Successful African Firms and Institutional Change (SAFIC) Project

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September 2013

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## List of acronyms

AGOA African Growth and Opportunity Act

**CET** Common External Tariff

**COMESA** Common Market for Eastern and Southern Africa

**EAC** East African Community

**EU** European Union **FTA** Free Trade Area

GCI Global Competitiveness IndexGCI Global Competitiveness IndexGDP Gross Development Product

**GSP** Generalized System of Preferences

**HDI** Human Development Index

**KAM** Kenya Association of Manufacturers

**KEBS** Kenya Bureau of Standards

KIPPRA Kenya Institute Public Policy Research & Analysis
KIRDI Kenya Industrial Research and Development Institute

MSEs Micro and Small Enterprises

MFN Most Favoured Nation

NMA Nairobi Metropolitan Area

SAFIC Successful African Firms and Institutional Change

**SME** Small and Medium-Sized Enterprises

SSA Sub-Saharan Africa

**UBA** United Business Association

**UNDP** United Nations Development Program

UoN University of NairobiWOT World Trade Organization

WEF World Economic Forum

## Introduction to the SAFIC project

Few would deny that the business environment plays an important role in the success or failure of firms everywhere. Social, political, and economic institutions are crucial determinants of business environment and to a firm's ability to set and implement strategies. Factors such as political stability, the health of the macro---economy, the state of the infrastructure, and the availability of needed skills affect firms' cost structures and ultimately their profits. African business environments are rapidly changing. From being viewed as the 'hopeless Continent' at the turn of the 21st century, Africa is now seen as a place of many opportunities (Economist, 2000, 2010).

The Successful African Firms and Institutional Change (SAFIC) project was born out of the recognition that although African business environments remain to some extent challenging, it is clear that they are changing rapidly. The research project aims to investigate how and why African firms are able to be successful in such changing business and institutional environments. The project also focuses on firm specific characteristics that are rarely discussed in the context of African firms. In this project, we are conducting primary research in three African countries: Kenya, Tanzania, and Zambia. Researchers have since 2012 been studying two sub--sectors in each country. One – food processing – is common to the three countries; the second has been selected due to its importance for each country's political economy.

This paper is exploratory in nature due to the limited research in the field. In this paper, we pay a special attention to the food processing subsector as well as the food processing equipment manufacturing sector owing to their strategic importance to the economy and the focus of the research project. The aim of this paper is to provide the background and establish the context for the research project using secondary data. The paper also provides information on the mapping exercise that has been carried out to date.

The paper proceeds as following: Section A provides a general background of the socio-economic profile of the country, a brief descriptions of the country's political history and economic structure, an overview of the international context and business climate, and discussions of the motivation for the study and the methodology used in mapping firms for the study. Section B describes the agribusiness sector, while Section C describes the tourism sector, which is the second sector chosen by the Kenyan Team. Finally, Section D raises some considerations for further investigation, including both the study's policy relevance and methodological issues.

In conclusion, we would like to sincerely thank the participants in the stakeholders meeting of 1<sup>st</sup> August 2013, who have provided guidance on the mapping exercise and the proposed survey.

## **Section A: Background**

## **Socio-economic Profile of Kenya**

Kenya is a medium-sized country both in terms of its geographic area and population. Kenya's geographic area is 582,642 square kilometres of which 11,230 is water mass and the rest is dry land. Kenya is situated in the Eastern part of the African continent and almost bisected by the equator. Ethiopia and South Sudan border to the north; Uganda to the west; Tanzania to the south; Somalia to the northeast; and Indian Ocean to the southeast. The country's geographic size, however, is misleading because only about a third of the country is arable and two-thirds is arid and semi-arid. The country experiences bimodal rainfall patterns and is heavily dependent on rain-fed agriculture, which means that only about 30 per cent of the land mass is left suitable for growing crops. Hence, non-farm employment and business activities are increasingly important as means of livelihoods for the population in both rural and urban areas.

Kenya has an estimated population of 41.8 million and is projected to grow to 60 million by 2030. Kenya's population is predominantly youthful. For example, 43 per cent of the nation's population is below the age of 15 – while those aged 15-35 years account for approximately 36 per cent of the total population (KIPPRA, 2012). In a country with a youth bulge, and where employment opportunities are limited, the bulge can easily become a demographic bomb. There are concerns that this large mass of frustrated youth will become a potential source of social and political instability.

Although Kenya is considered as one of the most advanced economy in the region, achievements in human development indicators have been low. According to the United Nations Development Programme (UNDP), Kenya's Human Development Index (HDI) falls at the lower end of the medium human development category. Kenya like many other developing countries is in the first stage of development which is factor-driven and competes based on factor endowments –primarily low skilled labour and natural resources (WEF, 2013).

Kenya is rapidly urbanising with an about 28% of the population currently living in urban areas (Republic of Kenya, 2012). There is also a growing middle class population whose consumption patterns and behaviour are different from the traditional Kenyans. As evidenced in literature, the last decade has seen an increasing and changing structure of wholesale and retail trade occasioned by growing number of supermarkets and modernized retail marketers. The growth of supermarkets is now largely driven by increasing income, urbanization, changing lifestyle and economic liberalization (Kamau, 2008). These supermarkets are increasingly stocking imported food stuff.

#### **Political History**

At independence in 1963, Kenya adopted a multi-party political system comprising several political parties and federal system of governance. However, this was dismantled through amendments of the constitution to provide for a strong and centralized executive under the presidency in 1964. With a view to further consolidate power, the government banned operations of the only opposition in 1969. A multi-party political system was re-established in 1991. The transition from an authoritarian one-party state political system to a multi-party system has been one of most important features of political development in the country since independence (Kanyinga, 2007). Since the introduction of multi-party system, general elections have been marred by serious political violence fomented by militia organized by the ruling party. The post-2007 election violence is one in a series of reversals of democratic gains that Kenya has witnessed since independence. This resulted in over 1,300 deaths, displacement of over 600,000 persons and destruction property worth billions of shillings. Volatile political environment in Kenya remains one of the stumbling blocks to business climate (Economic Intelligence Unit, 2009; World Bank, 2009).

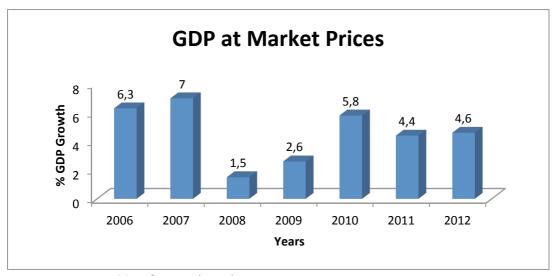
Kenya promulgated a new constitution in 2010 after nearly two decades of debate. A critical issue in the new constitution is the devolution which creates devolved structure of the government with both national and county government. The constitution replaced provincial administration with county governments as provided for in Chapter 10 sections 174-200 whose aim is to ensure that power is devolved to the people (KAM, 2011; Republic of Kenya, 2010b; World Bank, 2011a). Devolution hands over several functions of the national government to the local democratic governments. This structure may have serious implications for the regional development, investments, and resource allocations.

Recent the Republic of Kenya policy documents, including the *Economic Recovery Strategy* for *Wealth and Employment Creation* (2003) and the *Kenya Vision 2030* (2007), have reiterated the country's commitment to expand industry, trade, and tourism as part of Kenya's overall development strategy. The Vision 2030 document envisions Kenya as a "globally competitive and prosperous country with a high quality of life by 2030". This policy document stresses the importance of the manufacturing sector and identifies food processing as the most important single sub-sector in terms of its contribution to GDP (28.7%) and manufacturing- sector employment (34.5%).

#### **Economic Structure of Kenya**

According to the World Bank (2013) and WEF (2013) estimates, Kenya had a gross domestic product (GDP) of approximately US\$ 37.23 billion and a GDP per capita of 924 US\$ in 2012. The GDP value of Kenya represents 0.06 per cent of the world economy, making Kenya one of the developing countries. Economic growth has in most cases fallen short of the government's target of 10%. As shown in Figure 1 the highest growth rates registered were 6.3%, 7.0% and 5.8% in 2006, 2007 and 2010, respectively.

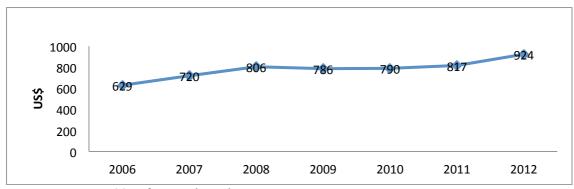
Figure 1: GDP Growth at Market Prices



Data Source: Republic of Kenya (2013)

The economy has experienced a series of internal and external shocks that dampened growth momentum from early 2008. Internal shocks included the post-election violence of early 2008, high food and fuel prices and drought while external shocks have mainly been as a result of the global financial crisis. In 2009, the economy started recovering with growth rate reaching 5.6 per cent in 2010 but dipped in 2011 to grow at 3.6 per cent. According the Vision 2030, economic growth must be sustained at around 10 per cent for Kenya to become a middle-income country by 2030. While GDP growth has displayed a mixed performance between 2006 and 2012, the GDP per capita has been growing steadily from US\$ 629 in 2006 to 924 in 2012 (see Figure 2).

Figure 2: GDP per Capita in US\$



Data Source: Republic of Kenya (2012)

Figure 3 shows that most of the time, Kenya's economic growth moves in the same direction with the Sub-Saharan Africa (SSA) and the world. This can be attributed to increased integration of the African economies through globalization. Kenya registered the lowest economic growth rate in 2000 at 0.3 per cent and the highest in 2007 at 7 per cent (see Figure 3).

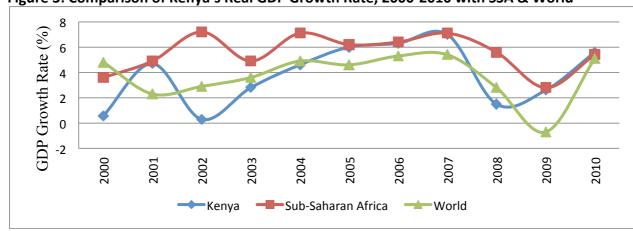


Figure 3: Comparison of Kenya's Real GDP Growth Rate, 2000-2010 with SSA & World

Data Source: World Bank (2013)

#### **Sectoral Contribution of GDP**

Agricultural sector is the mainstay of the Kenyan economy as it contributes an average of 23.8% during the period 2000-2012. As shown in Figure 4, the contribution of agricultural sector declined from 27.2% in 2000 to 25.9 per cent in 2012. It also accounts for 65 per cent of Kenya's total exports and provides more than 18 per cent of formal employment (Kenya, 2010). Majority of the people who reside in the rural areas (about 80 per cent) derive their livelihood from the agricultural sector. Given the dominance of this sector, it is strategic for development, employment creation, and poverty reduction.

The Kenyan economy has however experienced alteration in the recent past with the rise of industrial and services sectors. Although Kenya is one of the most industrially developed countries in East Africa region, the manufacturing sector accounts only for 10% of the GDP. It has been recognised that broad structural transformation of African economies remains an elusive goal. The contribution of this sector to GDP has remained stagnant for most of the period 2000-2012. In terms of employment generation, the sector is estimated to employ an average of 13% of the labour force in the formal sector. Manufacturing activities in Kenya are dominated by food industry in terms of production and exports.

The services sectors include wholesale and retail trade, financial intermediation, real estates, and transport and communication. In 2012, the wholesale and retail trade accounted for 10.2% of the GDP, while transport and communication accounted for 9.3%, financial intermediation 5.2% and real estate 4.1%. The contribution of the construction sector has grown from 3.1% in 2000 to 4.1% in 2012.

30 27.2 25.9 25 22,3 21.7 21,4 20 15 11.3 10.5 10 5 0 2000 2004 2007 2008 2009 2010 2011 2012 Agriculture Manufcaturing Construction Myholesale and Retail Trade and Hotels Transport & Communication Financial Intermediation Real Estate

Figure 4: Sectoral Contribution to GDP 2000-2012

Data Source: Government of Kenya, Economic Survey (2006, 2013)

As stated above, food processing is the most important single sub-sector in terms of its contribution to GDP (28.7%) and manufacturing- sector employment (34.5%).

In 2011, the manufacturing sector expanded by 3.3 per cent which was low compared to 4.5 in 2010. The slow performance was mainly attributed to contractions in the food processing, leather and footwear, paper and paper products, rubber products, and electrical machineries sub-sectors (Republic of Kenya, 2012). The sector's growth was also hampered by soaring cost of fuel and weak Kenya shilling which lowered the demand for manufactured products. In addition, drought experienced in 2011 reduced the availability of raw materials for the agro-based industries.

#### **Business Climate**

Kenya's business climate has not been favourable for a long time. The post election violence witnessed in early 2008 compounded the problem. According to the World Economic Forum (WEF) (2012), Kenya was ranked 106<sup>th</sup> out of 144 countries included in the survey, with a Global Competitiveness Index (GCI) of 3.7. This is a decline from the 2011 ranking where Kenya had a GCI score of 3.8 to be ranked at a position of 102. In terms of institutional capability, infrastructure, macroeconomic stability, Kenya was ranked 106<sup>th</sup>, 103<sup>rd</sup> and 133<sup>rd</sup>, respectively. Some of the impediments to business climate include corruption, inflation, tax rates, insecurity, access to financing, inadequate supply of infrastructure, inefficient government bureaucracy, and policy instability (see WEF, 2012: 218). In terms of starting a business, one has to go through 12 procedures requiring an average of 34 days. To enforce a contract in Kenya, one requires 465 days and 47.2% of the value to actually enforce it. Kenya is ranked 78<sup>th</sup> out of 183 economies surveyed (World Bank, 2011b). Business firms compete on the basis of price and sell basic products or commodities with their low productivity reflected in low wages. These conditions suggest that the business environment in Kenya is still somewhat problematic and unstable.

Recent opinion surveys such as Kamau (2012) also post a gloomy picture of the Kenyan economy. Most respondents in the survey (84%) indicated that the current economic situation was bad and only 10% indicated that the economic situation in Kenya was good. Respondents also reported that their individual economic situation was worsening over time, with 71% reporting their situation as bad. The evidence from the survey shows that rural population is worse off compared to the urban population. A majority of Kenyans (48%) felt that the economy was not headed for the right direction. On taxes, most people reported that not only are they difficult to compute, but they are also not used prudently. Under such circumstances, some people would even avoid paying taxes. Some of the economic problems that people feel that the government should address include economic management, unemployment, food shortage, cost of living (prices), poverty, security and corruption.

#### **International Context**

Kenya is a founding and an active member of the World Trade Organization (WTO), which is concerned with the liberalization of global trade. As a member, Kenya accords Most Favored Nation (MFN) treatment to most of her trading partners. In addition, the government has always factored in the agreements reached in the WTO in the trade policy and legislations. Kenya's participation in the WTO largely revolves around agriculture because it forms the backbone of the economy and produces the country's major export commodities. A key concern is that market access for agricultural products is constrained by export subsidies, and Kenyan products are therefore not able to compete on a level playing field. Dumping of counterfeit products in the country is another issue of great concern. Another concern is the deteriorating terms of trade, as the increase in the value of trade is not matched by a corresponding increase in export earnings. Kenya therefore acknowledges that concrete steps should be taken to appropriately integrate developing countries into the multilateral trading system.

Apart from its obligations in the WTO, Kenya is an active member of two regional trade agreements, the East African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA). The EAC is comprised of five countries, that is, Burundi, Kenya, Tanzania, Rwanda and Uganda. It was revived in 1999 when the treaty for its reestablishment was signed by Kenya, Uganda and Tanzania. The EAC treaty was ratified in July 2000. A custom union (CU) signed in March 2004 and commenced on January 1, 2005. In 2012, Kenya's exports to the EAC accounted for 53% of the country's total exports to Africa and 24% of total exports to the world (EAC, 2012). COMESA is comprised of 19 member states and has a population of over 389 million and an annual import and export bill of US\$32 billion and US\$82 billion respectively. The COMESA Free Trade Area (FTA) and Custom Union were launched in 2000 and 2009 respectively. The launch of the COMESA CU means that member states that join the union have to adopt the agreed Common External Tariff (CET) to be charged to third parties of zero per cent on capital goods, zero per cent on raw materials, 10 per cent on intermediate goods and 25 per cent on finished goods.

Kenya is also involved in cross-regional trade arrangements including the Economic Partnership Agreement (EU-EPAs) with the European Union (EU) and benefits from the US African Growth and Opportunity Act (AGOA) and Generalized System of Preferences (GSP). Under the GSP a wide range of Kenya's manufactured products are entitled to preferential duty treatments in countries granting unilateral GSP preferences. In this regard, Kenya's international context can be viewed as falling in concentric circles, starting with its neighbours in the EAC, and extending to the COMESA, Africa, and the globe. Manufacturing firms wishing to export to these markets must take into account, not only Kenyan regulations, but also the phytosanitary regulations of their proposed export destinations. Most Kenyan manufactured exports are bound for the regional EAC and COMESA countries which together account for over 40% of exports.

Food processing industry is a core building block in the Kenyan manufactured products. It meets the basic needs of the poor and also links directly to the agricultural sector. Hence enhancements to its efficiency have important development impacts. Thus, the food processing industry not only provides basic goods for the poor, but also serves a growing market which fosters domestic entrepreneurial and innovative capabilities. Growth of agroprocessing industries is dependent on technological capability. On this account it is important to examine sources of technology used in food processing. It is argued that Chinese sourced technologies dominate in the agro-processing industry but this has not been empirically examined in Kenya. Our goal in food equipment manufacturing sector is to trace through the value chains major sources of technology used in food processing as well as how technology innovation can be enhanced in Kenya.

## **Motivation of the Study**

What is puzzling is the fact that despite the difficult business climate, some local firms have done well. This study is therefore designed to understand how the successful businesses manage to weave through these conditions and remain not only operational, but in some cases, highly successful.

The Economic Recovery Strategy for Wealth and Employment Creation (Kenya, 2003) and the Kenya Vision 2030 (Republic of Kenya, 2008b), have reiterated the country's commitment to expand trade and industry as part of Kenya's overall development strategy. This research project therefore investigates successful firms in two related industries namely food processing and the manufacture of food processing machinery.

The two sectors chosen for investigation -- food processing and the manufacture of food processing machinery – are diverse in terms of size and linkages. They consist of micro, small, medium, large and very large firms, which form a pyramidal structure with three tiers (see McCormick et al., 2007). The base of the pyramid is occupied by micro and small enterprises (MSEs) that produce mainly for the domestic market. The MSEs are the backbone of production in Kenya, producing mainly for the domestic market. Further up are medium and large-scale firms in the formal sector and producing for both domestic and export markets. Large and small scale firms in these two sectors are linked in various ways (McCormick and Alila, 1997; McCormick and Atieno, 2002).

Recent studies show that SME development is closely linked with growth. Moreover, there is consensus among scholars and policy makers that SME enterprises are drivers of economic growth in many countries. A healthy SME sector contributes prominently to the economy through creating employment opportunities, generating higher production volumes, increasing exports, introducing innovation, and entrepreneurship skills (Ardic et al., 2011; USAID, 2007; KIPPRA, 2008). The most common definitions used by regulators are based on the number of employees, sales and/or capital. The most common among the three is the number-of-employees criterion. The employment threshold is a mandatory indicator that any enterprise must fall within in order to be defined as an SME. SMEs are those enterprises that employ between 10 and 99 employees. Small enterprises are those employing between 10 and 49 employees whereas medium enterprises would be those employing between 50 and 99 employees.

In Kenya, a Micro and Small Enterprise (MSME) is officially defined as an enterprise employing between 1 and 100 employees whether formal or informal (CBS, ICEG and K-REP, 1999; Republic of Kenya, 2005). Micro-enterprises have less than 10 employees; small enterprises have 10-49 employees while medium sized enterprises have at least 50 but less than 100 employees. The sector has a range of enterprises that differ in structure and operations. Some few MSMEs are formal but majority of these enterprises do not regularize their operations beyond the licensing requirements by local authorities. MSMEs play an important role in the Kenyan economy. As indicated in 2012 Economic Survey, total employment recorded in the informal sector increased from 6.8 million employees in 2006 to 8.1 million in 2011, while the formal sector increased only from 1.86 million to 1.95 million employees during the same period.

MSMEs and SMEs comprise the majority of the firms under our study. However, the study will also focus on large firms. Parastatals and Multinational Corporations were excluded in the mapping exercise.

#### **Mapping Exercise & Survey Methodology**

Because of the comparatively limited sampling of firms in the food processing industry, we started by identifying firms in the food processing industry, tracked their location, and finally ranked each of the firm according to its period of existence and level of employees (e.g. each firm had to have been in existence for five years and have at least 10 employees or more to be called 'successful').

In published statistics food processing is grouped with beverages and tobacco, and the combined total in 2010 was Kshs. 58.6 billion, or about 2.8 per cent of GDP. The Kenya Association of Manufacturers estimates that the food processing industries account for approximately 50 per cent of manufacturing production turnover. In addition, agro-food technologies play a critical role in facilitating agro-processing industries. Precise data on manufacture of food processing machinery is not readily available, but the larger category of 'equipment manufacture' accounted for Kshs. 6.1 billion, or 4.2% of Kenya's manufacturing value added in 2011.

In order to get some information about these two sectors, we carried out an extensive mapping exercise between August and September 2012. The detailed report of this mapping exercise is attached in Appendix 1. Information was gathered from a variety of sources including Kenya Bureau of Standards (KEBS), Kenya Industrial Research and Development Institute (KIRDI), Kenya Association of Manufacturers (KAM), United Business Association (UBA) and local authorities. As the research is still on-going we hope to find additional firms in the industry through websites and field visits. A consolidated list from all these sources was analysed during a team meeting held in August 2012. The team worked on the list to eliminate obviously foreign owned and government owned firms. The team also eliminated with products that were outside the scope of the study. The mapping exercise collected preliminary firm level data on employment, production and location with a view to collecting more detailed data during the survey to be conducted later in 2013. The scope of this study is the Nairobi Metropolitan area. The Nairobi Metropolitan Area consists of Nairobi and the local authorities around it. These include Limuru, Kiambu, Thika, Ruiru, Mavoko, Machakos, Kikuyu, Kangundo and Kajiado have been excluded in the study (see Figure 5).

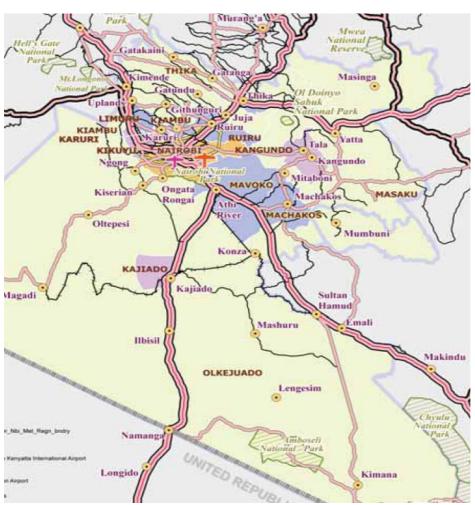


Figure 5: Nairobi Metropolitan Area map

Data Source: Republic of Kenya (2008a)

For the sake simplicity, interest and to make a comparative analysis, only a couple of subsectors in the food-processing sector have been selected in agreement with the partners in the SAFIC study (i.e. Tanzania and Zambia): the subsectors of food, beverages and tobacco have been selected.

## **Section B: Description of Food Processing Sector**

Vision 2030 stresses the importance of the manufacturing sector and identifies food processing as the most important single sub-sector in terms of its contribution to GDP. A recent report by the World Bank stresses that "Food processing is another sector where the country can use its natural base in agriculture to reach the next level of competitiveness" (World Bank, 2012). Other studies have identified a sub-sector of food processing - maize as a key cluster, whose growth can help Kenya achieve the Vision 2030 goals (KIPPRA, 2012). Food processing consists of multiple value chains beginning in agricultural production and reaching into domestic, regional and global markets. Therefore the sector contributes both to employment and export earnings in the economy.

In published statistics, food processing is grouped with beverages and tobacco. Table 1 shows the contribution of manufacturing to GDP. It shows that food, beverages and tobacco contribute about 3.2% to GDP. This figure has been constant since 2007.

Table 1: Manufacturing Sector - Percentage Contribution to GDP

	2007	2008	2009	2010	2011
Manufacturing % of GDP	10.4	10.8	9.9	9.9	9.4
Manufacture of Food, beverages,					
tobacco % of GDP	3.2	3.1	3.2	3.1	3.2
All other manufacturing %	7.2	7.7	6.7	6.8	6.2

Data Source: Republic of Kenya (2012,p. 21)

It has been estimated that food processing contributes approximately 20% of manufacturing value added.

Table 2 shows the growth in manufacturing. It highlights that food processing has experienced declining growth in recent years. Growth in 2011 was 1.6% from a high of 8.7% in 2007. This fall in growth has been attributed to generally weak economic conditions, high cost of fuel, and drought conditions that reduced availability of raw materials (Republic of Kenya, 2012).

**Table 2: Manufacturing Sector - Percentage Growth** 

	2007	2008	2009	2010	2011
Manufacturing %	6.3	3.5	1.3	4.5	3.3
Manufacture of Food, beverages,					
tobacco %	8.7	-1.8	2.2	3.4	1.6
All other manufacturing %	5.2	6.0	0.9	5.0	4.0

Data Source: Republic of Kenya (2012, p. 23)

Table 3 shows the contribution of manufacturing to wage employment in the private sector and shows that manufacturing forms a large proportion (about 17%) of private sector employment.

Table 3: Manufacturing Sector - Percentage Contribution to Employment

	2007	2008	2009	2010	2011
Manufacturing Wage					
Employment ('000)	237.9	237.2	238.6	242.4	247.6
Total Private Sector					
Employment ('000)	1281.7	1305.9	1346.5	1399.6	1446.6
Manufacturing as % to Total					
Private Sector Employment	18.6%	18.2%	17.7%	17.3%	17.1%

Data Source: Republic of Kenya (2012, p. 65)

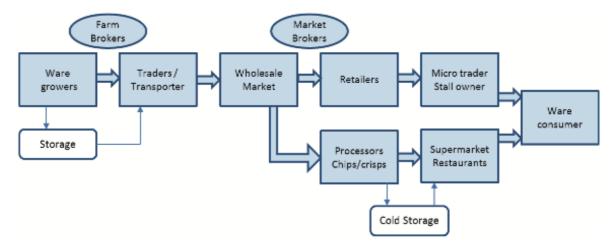
In summary, the food processing sector and manufacturing in general have the potential to contribute more significantly to economic growth in Kenya and it is hoped that the results for the SAFIC project will provide some useful policy guidelines for private sector development. The food processing as a category covers a wide range of products including mean, fish, dairy, bakeries, fruit juices, grain milling, horticultural products, sauces and jams and snacks. To ensure some comparability with sub-sectors in the other countries that are part of this project, the sub-sectors that we focus are: Dairy, Edible Oils, Grain Milling, Sauces and Jams and Snacks.

#### Food processing value chains

Due to the different nature in raw materials as well as the final product, the value chains for processed food differs in terms of the actors involved, the degree of integration and the associated benefits. Food processing is one of the sectors singled out for emphasis in the Vision 2030. The food processing sector consists of multiple value chains and is often characterized as being fragmented with very little vertical integration in which, the value chain begins with agricultural production and reach into domestic, regional, or international markets. An important element in these chains is the supply of machinery for processing different products for different markets. Although Kenyan firms, especially the large producers, import machinery, there is also some local production.

Figure 4 gives an example and shows that potato traders and brokers have a dominant position between farmers and consumers

Figure 4: Example of the potato value chain



Data Source: Janssen et al. (2013)

#### Food processing firms in Kenya

Total number of firms in our population is 619. Table 4 lists the number of firms in each of the product grouping of the population. The snacks grouping has the largest number of firms – 277, while edible oils has the smallest number of firms, i.e. 10. The structure and competition in each of the sub-sectors is very different. Though exact figures are not available, observing the industry shows that Dairy, Edible oils and Grain milling are dominated by large firms. For example, it has been estimated that 3 large dairy processors dominate 80% of the sales in the market. These firms display oligopolistic behaviour. The snacks industry has very many small processors but it is not clear what proportion of the market is controlled by the larger firms.

Table 4: Number of Firms in Food Processing Sample by Product Grouping

Broad Area	No of Firms
Dairy	80
Edible Oils	10
Grain Milling	184
Sauces and Jams	78
Snacks	267
TOTAL	619

Data Source: Mapping Exercise 2012

The lists that were obtained during the mapping exercise did not contain information on the size of the firms either in terms of employment or earnings. Therefore at this stage it is difficult to make any substantial comments on this, except to note that it is likely that there are both large and small firms in our population. Foreign and parastatal firms were excluded from our population.

#### **Institutional & Policy Framework**

Just like the governments of Zambia and Tanzania have an overarching political mandate over the food processing industry (or any industry in general), so does the government of

Kenya. In regards to the food processing industry, the government's decisions affect the level and stability of input and output process, investments incentives, which in turn have an overriding affect on the production levels, costs, revenues as well as the allocation of resources. In fact, according to a report by FOA, if Kenya is to maintain or increase its productivity and income growth for the various actors involved in the supply chain, the government will need to be an active player in the field; for instance by encouraging investments (e.g. establish SEZ) and pursue the right kind of policies. The report further pinpoints that, the government of Kenya must increase the agricultural productivity and incomes of small-holder farmers, reduce over-reliance on rain-fed agriculture, encourage diversification into non-traditional agricultural commodities and so on. This will eventually enhance especially SMEs opportunities in the competitive market (Alila and Atieno, 2006).

Currently, the Vision 2030 appears to be an important milestone in the country's history. One of the strategies in the agricultural sector is to increase market access through the export of processed, branded, and packaged agricultural products to regional and global markets (see p. 44). However, the outcome of this development programme so far is still to show.

## **Section C: Description of Food Processing Equipment Manufacturing Sector**

The equipment manufacturing sector consist of a wide range of products including machinery for all types of operations in the processing of foodstuffs like vegetables, fruits, nuts, meats, poultry, fish, dairy products, grains, cereals, bakery and confectionery products, beverages, and animal feeds (Sweeney, 2009). It does not only include those actors who manufacture food processing equipment exclusively, but also those who manufacture agricultural equipment and at the same time some food processing equipment. The firms also differ substantially ranging from small and micro enterprises to large industrial plants.

In most Kenya government policy papers, manufacturing sector is treated as one broad category together with other sectors of the economy like agriculture, tourism, service, mining, construction among others. The manufacturing sector has over the years maintained a stable performance averaging 3.4% growth since the 1990's and contributing about 11.5% of GDP. Therefore it is difficult to differentiate the contribution of different segments of the manufacturing sector. According to the African Development Bank Africa Economic Outlook report on Kenya of 2012, the sub-sectors within manufacturing registered mixed performances in the first half of the year. In 2011 manufacturing growth was inhibited by high production costs, high taxes, poor infrastructure and cheap imports (ADB, 2012). In addition, a substantial and expanding informal sector engages in small-scale manufacturing of household goods, motor-vehicle parts, and farm implements.

About half of the investment in the industrial sector is foreign, with the United Kingdom providing half. The United States is the second largest investor. There is also increasing Chinese ownership in businesses operating in Kenya. Despite the recognition of the

importance of the sector, a survey by UNIDO in year 2000 showed that that investment in equipment and machinery was low, with roughly half of the firms refraining from investing altogether, and with the majority of the investing firms reporting modest investment rates (Sorderbom, 2001).

Food processing machinery can be defined as "the set of methods and techniques used to transform raw ingredients into food for consumption by humans or animals." This broadly includes the machinery involved in the preparation and processing of food products and beverages. Each food processing sub-sector requires equipment for processing and conditioning the food product into a food which is convenient, safe, attractive, economic, appetising and packaged to maximise sales of the product and to raise its impact above that of a competitor's product. This is a fairly complex sector. The complexity of the food processing equipment manufacture should be seen in relation to the vast, multi-dimensional food processing industry.

The demand for food processing equipment is also a derived one. The growth of the food processing sector leads to increased demand for the processing equipment. As the sector grows, demand for the food processing equipment locally will increase which help to avoid the drains the scarce foreign exchange reserves and exportation of jobs that would have been created locally. The Kenya Association of Manufacturers estimates that the food processing industries account for about 50 per cent of manufacturing turnover. Even though precise data is difficult to find, it is further noted that the 'equipment manufacture' accounted for Kshs. 6.6 million in 2005. In addition, as most of the food processing firms rely heavily on procuring equipment and/or components of equipment from Asia as well as the local formal and informal outlets, it may result in poor equipment quality control and certainly results in limited consumer choice. Ultimately, there are also costs associated with fixing poor quality machines when they break down.

In terms of machinery types, the global market for food processing machinery and equipment is primarily driven by the meat processing machinery and poultry processing machinery. Increasing population, rising income levels, growing urbanization and increasing consumer demand for protein food are driving demand for meat and meat products across the globe. Global per capita meat consumption is likely to increase over the next 10 years, and given the rapidly increasing world population, further increase in meat consumption levels is inevitable. This increase in demand for meat and meat products, and the subsequent rise in meat processing activity are driving market prospects for meat processing machinery and equipment market.

## The food processing equipment manufacturing value chain in Kenya

The details of the food processing equipment value chain are still unknown. However it is known that the food processing equipment firms also manufacture equipment for other sectors such as hospitality and restaurants. Furthermore, the firms do a combination of local manufacture and importation of equipment.

## The food processing equipment manufacturing firms

The SAFIC team mapping exercise identified 49 firms that are directly involved in manufacture of food processing machinery and equipment. These firms are all located in Nairobi Metropolitan zone including Ruiru, Thika and Kiambu areas. The data was compiled from five main sources, Kenya National Bureau of Statitistics (KNBS), Kenya Bureau of Standards (KEBS), Municipalities of Kiambu, Mavoko, Kikuyu and Ruiru, Ministry of Agriculture and United Business Association (UBA) and the Yellow pages.

#### **Institutions and Policy framework**

In the manufacturing sector, *Vision 2030* identifies food processing as a key sub-sector, and notes that equipment, presumably including food-processing machinery, is another important manufacturing sub-sector (see p. 60-61).

The lack of high-quality data constitutes one of the major impediments for rigorous and policy relevant research on African industry, and the vast majority of previous economic research on Africa has therefore been based on aggregate data. While aggregate data are useful in many circumstances, the range of issues that can be addressed relating to industrial performance are inherently limited since the aggregation will mask firm-specific behavior (Sorderbom, 2001).

The market for food processing machinery and equipment globally is linked to the structure, behaviour and trends in food processing industry, which has been the scene of several changes in recent times, right from processing techniques employed to the equipment and machinery used (Research and Markets, 2012). A number of factors seem to influence this sector. Being a derived demand sector, the type of food products demanded by consumers, new processes employed by food processing companies, government regulations, and growing awareness levels about health and hygiene directly influence the market prospects for food processing equipment.

A global survey of the sector indicated that the food processing machinery and equipment market witnessed across the board recovery in growth in 2010, strongly supported by the revival in global economy after a two-year low, and strong resurgence in growth fundamentals, such as increase in income levels, growth in consumer spending, increase in demand for processed foods, steady rise in food processing activity, and subsequent increase in capital spending by food processors (Research and Markets, 2012).

## **Section D: Considerations for Further Investigation**

#### **Policy relevance**

The planned SAFIC research is in line with existing policy in Kenya and is also expected to generate findings and recommendations relevant for policy formulation and implementation. Policy relevance can be considered at three levels: National, regional, local.

The SAFIC choice of the food-processing and food-processing machinery subsectors reflects national priorities as articulated in *Vision 2030* (Kenya 2007). *Vision 2030* names six priority sectors, including agriculture and manufacturing. Industrial and trade policies provide the strategies through which Vision *2030* can be realised. The draft National Industrialisation Policy, 2011-2015, envisions industry as Kenya's new 'engine of economic growth' (Republic of Kenya 2011b). The draft policy further identifies 'agro-processing and value addition' as means for revitalising industrial development. The latest generally available draft of the National Trade Policy is dated 2010 (Republic of Kenya 2010a). The policy document covers not only the traditional divisions of international and domestic trade, but also pays attention to regional trade and e-commerce. Furthermore, the status of draft policies after the election in March 2013 of the first government under Kenya's new constitution is not clear. The most recent drafts may proceed to parliamentary discussion and action, or a new government may wish to start the process with an entirely new document. Either way, the SAFIC researchers will use existing linkages with the ministries concerned to shape the research so that as far as possible it provides useful inputs for Kenya's future trade and industrialisation policies.

Success, especially in the highly sensitive industries such as food processing and machinery production, often requires that firms pay close attention to national and international standards. The Kenya Bureau of Standards (KEBS) is the national body charged with developing and monitoring standards (KEBS, 2013). KEBS has 32 technical committees under its Food and Agriculture division. Of these, at least six deal with issues likely to be relevant to the SAFIC research: Horticulture and fresh produce; edible nuts and seeds; processed cereals and pulses; processed fruits and vegetables; food labelling, and food additives. The SAFIC team will make use of linkages already established with KEBS to become better informed. We will also invite KEBS staff to participate in stakeholder meetings.

Kenya is a member of both the East African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA). This should give the country easy access to regional markets. In fact, however, the low level of regional trade is a concern. The situation is largely attributed to the existence of Non-Tariff Barriers (NTBs), including excessive bureaucracy and

corruption (Ligami, 2013). Nevertheless, the research is expected to yield information about how successful firms cope with NTBs among other barriers to market expansion. Such findings should be useful for the development of both national and regional policies to govern regional trade.

University of Nairobi as an institution. With the county governments coming into existence only after the 2013 elections, it is hard to do more than speculate about how they might influence or be influenced by the SAFIC research. The researchers will attempt, however, to secure interviews with the governors of the counties in which the study is being conducted, namely Nairobi, Kiambu, Kajiado, Thika, and Machakos. The purpose of these interviews will be to open channels of communication and to explore areas of mutual benefit in the carrying out of the research.

A second area of 'local policy' concerns policies of the University of Nairobi (UoN). Through the office of the Deputy Vice Chancellor for Research, Production, and Extension, the University is participating in a British Council funded project entitled Development Research Uptake in Sub-Saharan Africa (DRUSSA). The project's aim is to encourage academic researchers to be concerned about the ways in which their research is being received and used. The SAFIC research team believes that there can be positive synergies between DRUSSA and SAFIC that will benefit both researchers and the firms being studies. Since the Kenyan Team Leader is a member of the UoN DRUSSA team, collaboration should not be difficult.

#### Methodological issues

Both the survey and the case study portions of the methodology raise issues that the Kenya team will need to deal with. The main survey issue concerns the difference in the sizes of the populations of the two sub-sectors. The mapping exercise identified 619 food-processing firms that appear to fit the size and ownership profile of the SAFIC project, but only 28 firms manufacturing food-processing equipment. We believe that there are more equipment firms and we therefore continue to search for them. In the first round of searching, we mainly looked for 'food processing machinery'. We will now attempt to identify the main types of equipment used in each category of food processing and search for firms making these items. We believe that this approach will yield additional firms.

Although we still continue to search for additional equipment firms, the final number is likely to remain small. Our original plan, as laid out in the SAFIC proposal, was to survey 100 food-processing and food-processing machinery manufacturers. The plan was silent on the distribution of the 100 firms between the two subsectors. We are currently considering various

options for constructing the sample, but a decision will have to wait for the final mapping of the equipment subsector.

A second methodological issue affecting our sampling stems from the lack of employment and ownership information is the lists used for the mapping. This makes it difficult to construct a stratified random sample based on either of these variables. The alternatives – an unstratified sample or a sample stratified according to product group – are less satisfactory. The team is currently discussing which approach to use. The team has also noted that the lack of employment and ownership information will require us to oversample in order to have a pool of substitute respondents to draw on in cases where the sample respondent fails to meet the employment and/or ownership criteria.

The third methodological issue concerns the case studies. The team has investigated different types of cases and has concluded that a qualitative case study approach is preferable to the problem-oriented study commonly used for teaching in business schools (Yin, 2003; Baxter and Jack, 2008; GlobaLens, 2012). The original proposal calls for 20 case studies. We believe that it may be difficult to cover so large of an amount in-depth studies, and we therefore propose to reduce the number to ten.

## **Concluding remarks**

The country background paper shows the importance of this research project as very little is known about specific reasons for success of African firms. The two sectors chosen are interlinked but likely to be very different based on their different technologies, skills requirement and investment levels. The Kenyan SAFIC team will follow the selected firms over a period of three years, and complement this research with interviews of representatives of the formal institutions, culminating in a presentation of data to a variety of stakeholders.

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## Appendix 1 - Report of the mapping exercise

#### Introduction

The mapping exercise aimed at identifying and locating food-processing firms and food processing machinery manufacturers within the Nairobi Metropolitan Area that will form the population for the main study. The exercise was conducted between mid-July and September 2012.

#### Methodology.

The mapping exercise proceeded in three stages. First, the SAFIC team carried out a number of key informant interviews with the aim of familiarizing themselves with the range of activities in the two sectors and obtaining their lists of firms. We interviewed officials from the Ministry of Industrialization, the Ministry of Agriculture, the Kenya Industrial Research and Development Institute (KIRDI), the Kenya Bureau of Standards (KEBS) and the District Agriculture Officer-Ruiru. We also visited the Agricultural Technology Development Centre-Ruiru where we talked to Centre Manager.

Field visits of industrial clusters and local authorities within the Nairobi Metropolitan Area to obtain their lists of registered businesses in the two sectors was also done. The following municipal councils were visited: Limuru, Thika, Ruiru, Kiambu, Kikuyu, Mavoko, Machakos and Ol Kejuado. Similarly, industrial clusters visited included Baba Dogo, Kariobangi, Kamukunji, Kenya Industrial Estates and Nairobi Industrial Area. Additional lists were also obtained from KEBS, the Nairobi City Council and the Kenya Association of Manufacturers (KAM).

Finally, the team isolated relevant firms from the various lists to form full sectoral lists namely grain milling, bakeries, fruit juices and jams, snacks, horticultural and food-processing equipment manufacturers. The final output of the mapping exercise was the production of a draft report. At the moment, the team is still going on with data collection.

#### Findings and results.

During the Naivasha Team Retreat in August 2012, the team looked at two main lists-the Nairobi City Council and the KEBS list with the aim of identifying relevant firms. However, the Nairobi City Council list proved quite complex and was subsequently dropped. The team resolved to rely more on the KAM and KEBS lists instead.

The KEBS list was quite comprehensive and proved resourceful. It had a total of 4048 firms covering diverse sectors. To expedite the process of singling out relevant firms, the task was divided equally among the seven participants. At the end of the retreat, a total of 898 firms were obtained from the KEBS master list. Additional categories were created such as foreign, parastatals, and non-SAFIC to assist in future studies. This list has since been updated to 910 firms.

Although most of the firms were found to be in the KEBS list, a total of 28 additional firms were identified from the various municipal lists. The additional firms have since been incorporated into the master list. Field visits to industrial clusters also generated valuable information

regarding firm location, activity and contact information. The team was impressed by the level of innovation particularly among the metal fabricators. Although most of them were judged to be too small for the study, Nyaweco Engineering Works Ltd of Kariobangi Light Industries was singled out as a potential case study. The firm exhibited exceptional professional management and innovation that impressed the team. The firm has a website on which contact information as well as product information is displayed.

#### Challenges.

Logistical issues experienced at the beginning of exercise were resolved. Apart from that, while the KEBS database provided a very comprehensive listing of food processing firms, it did not have a comparable list for equipment manufacturers. Work to identify food equipment manufacturers is therefore ongoing.

Sorting out relevant firms from the municipal lists was also a challenge given that much of crucial information relating to business size, nature of business, physical location, telephone contacts was lacking. Only the Town Clerk of Thika Municipality offered more details of firms regarding nature of business, physical location and telephone contact.

Most businesses were registered in owner's personal names making it difficult to decipher the nature of business. Furthermore, classification codes used by municipalities were equally too broad comprising activities out of the scope of SAFIC. Only those firms whose names depicted their type of business were picked. Similarly, because information on size was lacking, there is the possibility that the final list could contain micro-enterprises which are out of the scope of the study. Field survey may help to generate additional information needed to screen out such firms.

Another challenge related to the difficulty in accessing certain industrial clusters. For instance, an interview with one official of the Kamukunji industrial cluster revealed that the team needed to pay between Ksh. 8000 to 10000 access fee and a daily charge of Ksh. 1000 for a tour guide. Consequently, no enterprise was identified although the official confirmed existence of a good number fitting our study. After follow up, another official has been identified and has pledged to assist.