
**REVIVAL OF PRODUCTION IN THE FOOTWEAR INDUSTRY IN KENYA
THE CASE OF KARIOKOR IN NAIROBI**

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DECLARATION

I declare that this research is my original work and has not been presented for a degree in any other university. All the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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DEDICATION

To my loving and supportive family members: My spouse Maurice, my daughters Mado and Clare, my sons Glen and Adrian. My late parents Colwans and Claris, for the foundation they built in me.

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ABSTRACT

In the context of Kenya's long-term vision to become an industrialized middle-income country by 2030, its leather and leather products sector, especially the footwear industry offers an important opportunity for industrialization. Having been hard hit due to the structural adjustment programmes in the 1980s, most production units for the informal footwear were on the verge of collapse due to the liberalization of markets and imports of cheap shoes from China and other foreign countries. However, the informal footwear industries at Kariokor seemed to have survived the challenges and are still in footwear production business. Even though production of footwear in the informal industry has increased over the years, it still seems to have an unmet potential whose cause is not clearly highlighted in existing literature. It is against this background that this study provides an understanding of how revival of production of footwear in the informal industry at Kariokor, has taken place over the years and establishes how it has survived amidst the shoe influx phenomenon in Kenya. This process of revival has been assessed through the changes in machinery use, design development, product quality and access to market.

This study used a descriptive survey design to show case how the footwear industry has undergone changes in the past five years. Both quantitative and qualitative methods were used to collect primary data from the respondents using survey questionnaires and key informant interview guides. A qualitative approach of content analysis was suitable for the study since it allowed data collection from the key informants regarding the process of revival. The quantitative approach, through a descriptive analysis was used to show the rate of production of the footwear in relation to the variables mentioned. The key informants were obtained using a purposive sampling technique because they had specific information needed for the study regarding the footwear industry revival process, while the rest of the respondents were obtained through a simple random sampling technique.

The study has shown that even though the producers lack industrial machines, the hand tools that they use still serve the purpose of production. It was also found that all the producers mainly rely on the local markets to distribute their shoes. It was however observed that despite the increased production of shoes, the shoe deficit in Kenya still stands at 24 million pairs and that the industry has a potential to fill it. Another issue emerging from the study is that the training in footwear production is mainly through apprenticeship; a process that ensures continuity in production through transfer of skills from one generation to another.

In reference to the above information, the study also established that the footwear industry's growth in Kenya is bestowed on the small enterprises, which often work in with minimal support from the government and other key stakeholders. It was also established that there has been an effort by the government of Kenya to train the footwear producers through the workshops organized by the Kenya Leather Development Council (KLDC). In order to improve production in the footwear industry, the study made two main recommendations. Firstly, that there should be more sensitization of the producers on the existing footwear training programmes. Secondly, that the players in the industry should be encouraged to embrace appropriate industrial machinery in footwear production processes.

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ACRONYMS AND ABBREVIATION

ACP	African Caribbean and Pacific Countries
ACE	African Creative Economy
AHITI	Animal Health and Industrial Training Institute
CBD	Central Business District
COMESA	Common Market for Eastern and Southern Africa
COMTRADE	Common Trade
EU	European Union
FAO	Food and Agriculture Organization
NCEUS	National Commission for Enterprises in the Unorganized Sector,
MSMEs	Micro Small and Medium Enterprises
NJEMA	National Jua Kali Employment and Marketing Association
SME	Small and Medium Enterprises
TPCSI	Training & Production Centre for the Shoe Industry, Thika
UNCTAD	United Nations Conference for Trade and Development
UNESCO	United Nations Education Science and Cultural Organization
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development

CHAPTER ONE: INTRODUCTION

1.0 Introduction

Kenya has embraced the goal of industrialization as a way to transform the structure of economy into a newly industrializing country by 2020 (KIPPRA, 2000). In order to achieve this goal, policy frameworks emphasize on selective encouragement of specific industries that are labour intensive, resource-based and light manufacturing industries where the country enjoys comparative advantage; through a broad array of support by the government over a 25 year period (Ronge and Nyangito, 2000). This is to enable these industries to initially produce for the domestic market and later to the export market.

This kind of support seemed necessary to boost the production of footwear at the Kariokor which according to key informant, was affected by massive imports of second hand shoes and many artisans closed shops. However, despite this challenge the industry seems to have evolved naturally with minimal support from the government through the forces of demand and supply over the years as the footwear producers strive to remain relevant in the industry amidst the shoe influx phenomenon. The key concern is how the informal footwear industry at Kariokor has revamped its production and how it can increase its competitiveness in footwear products, grow exports, create jobs and create a viable industry that can propel the country toward industrialization.

The process of production of shoe at Kariokor is labour intensive in nature and is influenced by certain factors which include machinery use, design development, product quality and access to market. However, the footwear industry at Kariokor like any other informal industry in the African context has faced a myriad of firm challenges (Adeboye, 1997). The issue that are a challenge to these industries include poor physical infrastructure, corruption, political instability and a poorly developed entrepreneurial class seem to stifle innovation and progress in the informal industries thus affecting production (McCormick and Maulu 2009).

The purpose of this study therefore, is to provide an understanding of how revival of production in the footwear industry at Kariokor has taken place in the past five years. This idea comes in the wake of the shoe influx phenomenon in Kenya that was

brought about by policies that liberated markets allowing shoe to be imported especially from the Far East Asian countries such as China. The study has not only identified the features of the footwear industry which propel production but also analysed the key role that the institutions like the Kenya Leather Development Council (KLDC) play by analysing information gathered from the key informants to establish their contribution to the industry's growth process.

1.1 Operational definitions

This study focussed on the following key terms: Revival, Cluster, and Production. In operational terms, the footwear industry revival process refers to a range of initiatives to improve the industry by concentrating on specific conditions of production that spur growth (Dinh, 2012). The footwear industry revival for the purpose of this study refers to the process of renewal of machinery, restoration of skills and growth of the industry by making it more successful through innovative utilization of raw materials. It refers to the synergy that makes the producers resilient to the challenges or events that may cause disturbance to their system of production. Aspects such as market liberalization that has brought shoe influx in the country can be seen as the hindrances to trading that affect the footwear industry. Revival in this regard is seen as a struggle to restore production of footwear and to remain in business. The conditions for survival for this study are seen through machinery use, design development, product quality and access to market.

Kariokor footwear industry is an informal industry cluster. Porter (1998), defines cluster as a geographic concentration of interconnected companies, specialized supplies, service providers, associated institutions and firms in related industries. Harris (2012), refers to this type of industry as a formation of an agglomeration of economic informality. Sometimes it is referred to as the '*jua kali*' which literally is the "hot sun" in Kiswahili language in reference to self-employed artisans working outdoors in makeshift workshops for lack of covered premises (King, 1996).

Due to the constantly changing mix of consumer concerns, the term increased production in the context of this study refers to a process that ensures application of

tangible inputs such as the raw materials and intangible inputs inform of ideas, information or knowledge to create an output that meet new existing consumer needs. This process can either be entrepreneurial to make profits or technical to show the level of innovativeness and the practical use of machines for production of footwear. This is accomplished by making more effective products that ‘breaks’ into the market or society. The ideas are applied to further satisfy the need of a society.

1.2 Background of the Study

This section highlights a global context of the footwear industry production and narrows it down to the production in Africa and Kenya respectively. The section further shows the opportunities, challenges that the industry has faced and shows the initiatives that have so far been taken to revamp the shoe production industry in Kariokor. This is because it is the main informal footwear production hub in Kenya.

1.2.1 The Global and African context

Leather is considered one of the most widely traded commodities which is rapidly growing and is estimated at over US \$ 100 billion a year. A report by Economic Transformations Group, Inc indicates that in 2013, leather footwear accounted for half of that figure, amounting to US\$53.5 billion (ETG, 2015). Globally, demand for leather and leather products is growing faster than supply due to the rapid demand for new and innovative footwear products worldwide. Certain aspects such as advancements in manufacturing processes, technology innovation, modern, trendy and comfortable shoes are being continuously developed at reasonable prices in order to keep pace with the growing demand for these products.

From the World Statistical Compendium report quoted in SAFLIA (2007), the main footwear producers globally are China at 7,980 million pairs per year, followed by India at 790 million pairs. Brazil, Indonesia and Italy follow at 560, 475 and 348 million pairs respectively. Although the leather sector in Africa has much natural strength such as the availability of raw materials and a ready domestic market, it risks missing out on opportunities to expand into the global market despite the growing global demand for footwear leather products. African countries including Kenya remain marginal players in the footwear production industry (Muchangi, 2005).

Despite owning a fifth of the global livestock population, African countries account for only 4 percent of world leather production and 3.3 percent of value addition in leather. Most African nations, including Kenya, mainly export raw hides and skins and wet blue leather and maintain a low production capacity for finished leather (UNIDO, 2001). This scenario is however different in Ethiopia, which is emerging as an exception to this trend and thriving in the footwear production industry. It is against this background that attention is drawn to the footwear production in Kenya which seemingly has a potential to grow and revert into a leather footwear hub as it was two decades ago(Gegre, 2009).

1.2.2 The Kenyan context

The Kenyan Leather sector directly affects footwear production and is considered as one of the country's promising agro-based industries that has immense unexploited potential as stated in the country's Vision 2030 (Gok, 2010). This potential has not yet been fully realized due to a wide range of constraints in the areas of livestock production, marketing, adoption of appropriate technologies, and creation of an enabling policy environment (Export Promotion Council, 2007). Factors such as poor physical infrastructure, corruption, political instability and a poorly developed entrepreneurial class seem to stifle progress in these industries thus affecting production (McCormick and Maulu 2009).

The problems facing the sector are compounded by the influx of second-hand and imported footwear products which had literally pushed some value addition players out of business (Reinnika, 2015). This factor hindered growth of informal footwear market. Despite this, the sector enjoys immense backward and forward linkages that if well coordinated could lead to improved livelihoods along the entire supply chain (Khan, 2009).

Even though Kenya served as a leather footwear hub for East Africa two decades ago, it is currently a very minor exporter of leather and leather products. It is estimated that the industry earned only US\$140 million, 0.14 percent of world export in 2013 (ETG, 2015). Kenya is also significantly less competitive than global leaders such as China, Italy, and Vietnam in all competitiveness indicators, except availability of and access to raw materials (Gituma, 2011). Furthermore, its competitive position has been eroded

by global imports of new low-cost footwear penetrating Kenyan and East African markets and second-hand imported footwear invading domestic markets.

From the World Bank report quoted in the *Nairobian*, October 23, 2015, the estimates indicate that 26.5 million pairs are imported annually in the second-hand market. Among these, 16 million pairs at 60 percent are from China-Hong Kong, 7.5 million at 30 percent from Europe and the rest from countries in North America and East Asia (Wachira, 2015). The country is considered a low-cost producer of undifferentiated, low-end shoes and boots, estimated at 3.3 million pairs of leather footwear per year, mostly for the domestic market. Bata, Kenya's largest and dominant footwear maker has significantly reduced its production of low-end, men's leather shoes for the domestic market, and its export of leather shoes to the East African market has also declined production rate (FAO, 2012).

Kenya's once vibrant footwear manufacturing industry experienced a downward trend when the government opened the door to more cost-competitive footwear from Asian countries during the 1990s (Mudungwe, 2010). The companies that weathered the storm such as Bata and United footwear were forced to adapt by focusing on more niche markets. The Kariokor footwear producers were also faced with this similar challenge and majority had to close down businesses. The advantage that the footwear producers enjoy is easy access to raw materials. According to Mwinyihija (2012), the Kenyan footwear producers have capitalized on the availability of raw materials, ready domestic market and the relatively low labour cost to reinvent production of shoes and remain relevant in the competitive footwear market. These factors have possibly kept the footwear industry afloat even during turbulent times.

A survey conducted by KLDC in 2012 on the informal footwear in Kenya it was found that 82.9 percent of the Medium Small and Micro Enterprises (MSMEs) making footwear products in Kenya are located in Kariokor. Lamuru footwear industry hosts 12.2 percent. Other informal footwear industries listed by KLDC are Kariobangi and industrial estates in Nairobi. These industries work under similar institutional framework and the high percentage of footwear produced in Kariokor demonstrates potential for increased production. For the very reason of the potential noted above, there has been a concern on how the performance of the informal footwear cluster can

be improved and how the producers can increase production. For this reason, UNIDO and the Kenya Leather Development Authority initiated a move that would yield results with regard to increased production of footwear in Kariokor and would create more jobs.

1.2.3 The informal footwear manufacturing context – Kariokor Market

Kariokor Market is a big, open-air market located on the Race Course Road, just outside the city centre, where one can find the largest range of leather inputs and products in Kenya. More importantly, it is home to the biggest informal (*Jua Kali*) leather goods producers in Kenya. According to the records at Nairobi County Government quoted in ETG (2015), the market has approximately 350 stores and out of that, 200 are within the walled boundary and about 150 located outside in the open air space. From these stores, over 80 percent are estimated to be involved in leather products, either directly or indirectly. It is not only a bustling market, but also a growing one with an untapped potential for further growth. As you walk in, you can see rows of stores full of producers making shoes, belts, wallets, handicrafts.

According to Mudungwe (2012), the Kariokor footwear industry has evolved naturally by ‘adapting’ to the footwear market trends from one generation to another with little support from the government of Kenya. The system of production has since become more sophisticated with suppliers of all the footwear raw materials within reach. From the production of ‘Akala’ shoes in 1980 to the African rebook in 1995, to African boots and now the trendy beaded sandals popularly known as the ‘African Ndula.’ This trend shows the tremendous transformation of the industry regarding designs that match the consumer need. From the COMESA (2012), it is stated that the prospect of the footwear industry in Kenya is strongly upheld by these miniature enterprises such as the footwear production in Kariokor market (COMESA, 2012). This implies that manaufacturing of shoes in Kariokor if revamped can easily transfrom into a footwear production ‘hub’ as seen in Ethiopia.

1.2.4 Revival of production in the footwear industry at Kariokor

In The Star December issue, Muchangi(2011) describes the Kenya Leather footwear Industry as “rising from the ashes” implying that the industry was struggling to rise

against cheap shoes from China that nearly crippled Kenya's shoe manufacturing industry and making competition very stiff. Having been in the industry for the past 25 years, a key respondent reports that the market has self evolved over the years since its inception in 1922. The market derived its name from the words 'carrier corps' when it was used by a contingent of Africans in the British army who carried luggage. The traders in the market initially produced Kiondo baskets that later received interruptions and competition from China, whose traders later patented the baskets and claimed its originality. This made the core producers to change their line of production from baskets to footwear. The traders also manufactured other artefacts and accessories such as new models of baskets, jewellery, wallets. Between 1970- 1980 open leather shoes were produced and later the Akala shoes made from the vehicle tyres, peaking from 1980-1990.

Nabutete in *The East African* (1984) reiterates that the Akala shoes, also referred to as the Afrikan Reebok was later modified to include beads on the straps of the shoes. The manufacturing of the back to school shoes peaked in 1992 with a majority of the manufacturers having acquired the skills and designs from the Bata shoe company in Kenya, where they were previously employed as casuals. The footwear producers copied designs from the 'Bata' shoe company and managed to sell the shoes at cheaper prices giving them a head-start in the market of shoes. This was later followed by the production of office shoes, often referred to as office man, safari boots and the ladies' beaded sandals which are currently the most preferred footwear product. In the year 2000, Ethiopia began exporting leather shoes through Eastleigh and gave the shoe producers of Kariokor better designs to copy from and sold as 'common man' shoes.

Despite showing deliberate effort to revive this industry, there are several factors that hinder the growth of the footwear industry. Dinh (2012) observes that Kenya's lack of cost competitiveness in the footwear subsector results from three major constraints that disadvantage Kenyan producers: the high cost of domestically sold leather and leather inputs which includes 25 percent duty on imported inputs, the high cost of labour and the high cost of electricity. In addition, on the demand side, the local leather footwear producers face stiff competition in the domestic market against the inflow of cheap and new leather and non-leather footwear imports mainly from China and India and against

the growth of the second-hand Mitumba market, which offers an enormous range of high and low quality leather and non-leather footwear at bargain prices.

In addition, infrastructural challenges compound the problems at the production centre. Factors such as poor drainage, inadequate circulation spaces, inadequate stalls and stores for the finished products seem to interfere with the system of production. Despite these constraints, there seems to be an unmet potential in the informal shoe production industry. This background information implies that Kenya has a great potential which lies in the of the medium small and micro footwear enterprises because they are the currently the mass producers of the footwear products in the country. This implicit potential enabled the COMESA Cluster Development team to organize a workshop to further give a diagnostic assessment in the informal footwear industry in 2010. The team identified skills shortage, market access, innovation and access to finance as some of the factors undermining growth of the footwear enterprises (COMESA, 2012).

In order to help the informal footwear industry to counteract the given challenges, the Kenya Leather Development Council (KLDC) and other development partners such as UNIDO and UNESCO would ascertain there is value count at all stages of the leather value and particularly in the small enterprise levels where cobblers are categorized. The blueprint for achieving this begun in 2008 and has since seen progress in the industry (UNIDO, 2008). In summation, the COMESA Secretariat encourages the footwear industry division through the development of clusters, which would form the basis of capacity building and harnessing of financial and technical assistance from national, regional and international stakeholders. This research was based on this renewed synergy for the industry that has since seen the revival of the informal footwear industries such as the one based in Kariokor.

Revival of production in the footwear industry at Kariokor shows the general milestones that the informal footwear industry has undergone and how it has remained relevant and productive in the rapidly growing global footwear market. The milestones in this regard have been studied in the prism of machinery use, product design, product quality and access to market.

1.3 Statement of the Problem

This study investigates the revival of production in the informal footwear industry at Kariokor. This involves examining various aspects of production that has since changed and enabled the footwear producers to stay in business despite the challenges that they face. Contrary to this expectation that the industry would collapse as a result of the influx of imported footwear, it has not only persisted but also considered one of the sectors of the economy that can thrive both in terms of output and employment (Bini 2004). The industry still seems vibrant with new wave of designs coming up to meet the market need.

The main issue of concern is how the footwear industry at Kariokor has revamped its production. The apparent gap that this study fills is the failure to consider the progressive growth that has been realized in the footwear industry production by looking at the changes that have so far been made through the use of appropriate machinery, developing designs that would enhance product quality and the nature of the domestic, regional and international markets that the traders are able to access.

In light of the afore mentioned variables, the study has looked at the changes that have since taken place in the last five years that seem to affect the production of footwear in Kariokor market. Machinery use is one of the variables that have been looked into to determine whether there has been acquisition of new industrial machines to enhance production. In order to meet market demand, designs of shoes often need to be changed due to the dynamic fashion trends. The footwear manufacturers often have to adapt designs based on consumer need. How transfer of skills is done as designs are developed, is a gap that the study fills. The third major aspect of revival considered is product quality and how it affects production sales of footwear and finally, where the products are sold; whether regional, international or local. The study investigates how the footwear industry at Kariokor has adapted to the challenges presented to them and how the producers have managed to stay in business in the last five years; a period within which the country has recorded huge imports of shoes from China.

1.4 Overall Research Question

What is the nature of revival of production in Kariokor footwear industry?

1.4.1 Specific research questions

1. What are the changes in machinery use in the production of footwear at Kariokor?
2. What are the changes in the designs of footwear and how do they determine production of footwear in Kariokor?
3. How has product quality influenced production of the footwear in Kariokor?
4. What markets do the footwear producers in Kariokor access?

1.5 Overall Objective

To examine the nature of revival of production in Kariokor footwear industry.

1.5.1 Specific Objectives

This study focussed on four objectives that determine the informal footwear industries' production.

1. To assess how machinery use determines production of shoes in Kariokor.
2. To assess the changes in design development and determine how it affects production of footwear in Kariokor.
3. To examine ways in which product quality determines the volume of sales of the footwear in Kariokor.
4. To establish the markets that the footwear produced at Kariokor are able to access.

1.6 Significance of the study

This research would firstly build upon the existing literature on the milestones of the informal footwear manufacturing in the past five years. The informal footwear industry at Kariokor is a representation of the medium and small scale footwear manufacturing industries in Africa and information from this research can be used to make decisions on how these industries can be made more beneficial to other informal footwear traders globally.

Secondly, considering that Kariokor is the largest informal footwear industry in Kenya, it would be important to assess how production has been regenerated in effort to fill the shoe deficit gap in the country. This aspect has been analysed in the context of machinery use, design development, product quality, market access and how they influence production of footwear in the industry.

Thirdly, assessing the factors behind persistence of this industry enables readers of this information to understand the plight of the local shoe producer and in a way, promote local shoe sales by appreciating the industry not only as a source of cultural preservation but also as an alternative source of income to many Kenyans and may be influenced to promote home grown products from Kariokor. Finally, the county council of Nairobi is in the process infrastructural development of the industry and needs this information in their plan to improve the market.

1.7 Delimitations and Limitations of the study

Delimitations are setting boundaries for study or limiting the scope of the study to make it manageable (Mugenda and Mugenda, 2003). The scope of this study is limited to Kariokor market because it is one of the largest local shoe manufacturing industry in Nairobi. The market is also an epicenter in the city for clustered production of baskets, woven bags, jewelry and sandals and is a mix of many ethnic groups (Harris, 2014). The respondents are the shoe makers and the shoe traders in the market and therefore its findings may not be generalized to any other population unless it has similar characteristics as those in the study population. However, there is no data base on the total number of informal footwear industries in the open air industry and within the county market stalls. This is because most of them are unregistered and operate without legal trade licences thus limiting the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In determining the changes that have taken place in machinery use, product quality, design development and access to market the analysis begins with the understanding of the theoretical concerns that informs this study. In this regard, the literature in Flexible Specialization and Industrial Districts models have been reviewed to facilitate a further understanding of how Kenya's existing footwear industries continue to survive. This section identifies Kenya's most important footwear producers both formally and informally and highlights the most significant segments and trends of design development and access to domestic and export markets. It also recognizes the restraints affecting the industry and assesses their impact over a period of the last five years.

2.1 Theoretical Literature

Flexible Specialization and the Industrial Districts perspectives informed the theoretical underpinning of this study. Flexible specialization is referred to as the inverse of mass production: manufacture of specialized goods by means of general purpose resources (Sabel, 1984). This is seen as what evolved to be the informal economy in the third world countries. It is a form of industrial organization in which firms specialize in certain products but are able to change in short notice to producing different ones. This theory fits the Kariokor scenario because during the process of production of footwear, the employees are allocated specific parts to work on. In the sandal making process for example, the straps, the beads and the soles are worked on with different people and then assembled to make a complete unit.

As Marshall (1890) envisioned, an industrial district is a region where the business structure is comprised of small locally owned firms that make investment and production decisions locally. In his account, what makes the Industrial Districts' model so special is what Pyke (1992) refers to as 'a social and economic whole' with intensive interrelations between the social, political and economic spheres where the functioning of one part is shaped by the functioning and organization of others.

Industrial clusters like this are ubiquitous in developing as well as developed countries because of agglomeration economies originally pointed out by Marshall (1919). If transacting parties are located near each other, transport costs are saved, transaction costs due to imperfect information and contract enforcement are lowered, and good products and superior production practices diffuse quickly. Thus, industrial clusters enhance the division and specialization of labour among enterprises, the development of skilled labour market, and the dissemination of technical and managerial knowledge. Such agglomeration economies attract new enterprises to a cluster, making the cluster larger and reinforcing the agglomeration economies hence Industrial Districts (Harris, 2014).

The scenario is similar to what happens at Kariokor as it involves production of different product lines such as footwear, bags, ornaments, belts and other artefacts that target different groups of consumers, appealing to their sense of taste and fashion. This study therefore has used the Industrial Districts and Flexible Specialization perspectives to understand how the footwear production sector of Kariokor has been revitalized in regard to the changes that have so far taken place in regard to machinery use, design development, product quality and access to market. These changes have made these producers to remain competitive in a field which is flooded with imported shoes.

An Industrial District is described as productive systems characterized by many small firms that are involved in the production of a homogeneous product (Storper, 1989). The defining characteristics comparable to Kariokor footwear industry are: proximity of a large number of small firms, a network of entrepreneurs with a similar cultural background, implying collaboration and cooperation, the presence of small entrepreneurs and the economy ensuing from these characteristics (Dijk, 1992).

Dijk (1992) further describes an Industrial District as a socio-territorial entity characterized by the presence of both a community of people and a population of firms in one naturally and historically bound region. His description is expounded on by Amin (1992) who says that an industrial district is one type of small-firm network (SFN) of cooperating and competing small-medium enterprises (SME) in a geographic area. The firms are usually very small with about 10 people. They interact with each other sharing information, equipment, personnel, and orders even as they compete with one another.

Revival of production in the footwear industry at Kariokor market can be alluded to the formation of ‘a specialised District’ and is comparable to the industrial rise of the Third Italy which is characterised by the growth of dynamic networks of flexible, strongly related, small and medium-sized firms in craft-based industries (such as clothing, footwear and ceramics) The rise of such a type of industrial development may be described as an endogenous growth process because production and prices of footwear are dependent on cooperation among producers and the demand in the market which propels growth in these industries. The system is formed based on set values and norms which stimulates interactions between local actors and enhances flexibility of the local production systems. The aspect that informs this study is the idea of diverse production of footwear in Kariokor market by a community of people who share similar socio-economic background with one common interest of making ends meeting in their daily lifestyle.

In Industrial clustering, any form of industrial organization featuring a spatial concentration of numerous firms belonging to a similar industrial branch (Brusco 1992). Often, the majority of firms in industrial clusters are small or medium-scale operations (Humphrey 1995; Schmitz 1993). The label of industrial clustering can be applied to a range of industries around the world, from the artisanal ‘*jua kali*’ metal workers or Kariokor footwear producers in certain industrial zones in Nairobi, Kenya (King, 1996) to the producers of high-tech integrated circuits in the Silicon Valley, California (Saxenian, 1985). These clusters seem to have a potential to build industrial capacity by increasing market access, information sharing, facilitating technological upgrading and contributing to the development of supportive institutions within the geographic location of the industry.

McCormick (1998) argues that there are three ways of distinguishing types of industrial clusters. The first category is similar to what happens at Kariokor and Kamkunji in Nairobi where craft-based, artisanal or traditional-sector industrial clusters are engaged in the manufacture of footwear, garment-making, furniture, metal working. The successful cases in this category illustrate the salience of co-operation, product specialization and informal social and institutional arrangements. The second category is the high-tech complexes such as Silicon Valley. These demonstrate the need for huge budgets, vast reserves of venture capital and excellence in technology-intensive

products. The third category are clusters based on the presence of large-firms such as the engineering sector in Baden-Württemberg, the Bata shoe or the Export Processing Zones (EPZ) industry in Kenya which show up the importance of regional institutional support via high-quality training, education, Research and Development and communications infrastructure. These three categories are relevant to this study as they strengthen the idea of revival and growth of the footwear production firms in Kariokor. These aspects however do not consider the transfer of skills that is mainly done through apprenticeship in the production units. Other than apprenticeship, there has also been training of the footwear workers that is organized by KLDC and UNIDO in order to enhance production (UNIDO, 2008). The study also focuses on how this type of training has contributed to the resurgence of production in this industry.

The training programmes are however not supported by Kinyanjui (2010) who argues that African informal enterprises evolved in isolation to become the epicentres of distinctive African businesses with strong social relations and associations clustered in specific localities such as Gikomba, Kamukunji and Kariobangi in Nairobi. These clusters are already industrializing as they focus in specialization of production of industrial goods and need minimal support from the government. This aspect helps the study to highlight the idea that skill development is done through apprenticeship and assesses how it has since ensured continuity in the production of footwear from one generation to another.

Revitalization of these firms is based on the assumption that when industries work in close proximity which enhances the business environment. The *jua kali* environment for instance adapts to the presence of other firms by attracting customers, traders, workers with related skills, individuals and firms wanting to offer services, and still more enterprises anxious to benefit from the markets being created. Kinyanjui (2010) also points out that ordinary people operate their businesses in informal spaces such as *jua kali* and that business entry to this market is easy as there is always some space for an extra entrant. This aspect may explain why there is an increase in population in Kariokor trading zone, a factor which the study intends to find.

The key distinctive features from industrial districts' model that illuminate this study is the pool of specialized labour force and the existence of companies inside districts

belong mainly to the same industrial branch and are usually specialized in just one or few phases of the production chain. This enables specialization, which is assumed to enhance performance.

Apart from the Industrial Districts, Flexible Specialization was also used to understand the factors that have enhanced revival of production of footwear at Kariokor market. According to Scott (1986), flexible specialization theoretical model involved moving from investing huge amounts of money on the mass production of a single product, to building intelligent systems of labour and machines that were flexible and could quickly respond to the whims of the market. According to Collins (2001) and Kinyanjui (2001), the theory is characterized by “A small, highly specialized decentralized firms whose association focus on production for of a niche markets.” Within the industrial system there is heavy network of collaborative relationships between the firms and the community.

Piore and Sabel (1984) argue that Flexible specialization is characterized by multi-purpose equipment and innovation. This is because the skilled labour, with innovative mentality, produces items for utilitarian purposes as demanded for by the consumers. They strive to deliver the value to the consumers. The production of footwear in Kariokor is highly seasonal as the producers make footwear depending on market demand and consumer need. Another element that describes flexibility model is clustering of enterprises or small firm communities in order for the producers to exchange ideas. The existence of small firms is a strength that Kariokor producers enjoy because it enables them to produce footwear in batches with enhanced quality. The physical nearness of production units also enhance exchange of ideas and also make the development of institutions and interventions more easy and effective.

In Kariokor, the footwear industry, revival of production of footwear is realized through specialization which implies basic division of labour during the process of production. The efficiency of these local networks results in a health competition that encourages innovations and can be used to fill the shoe deficit gap in the market. As the producers employ economies of scope in production, they are able to create specific designs that satisfy market need. Flexible specialization theory underscores the relevance of skills and knowledge, design development, machinery use and access to market in the process

of revival of production. These industries also have a potential for wealth and job creation through the generation and exploitation of intellectual property. They employ creativity, cultural knowledge and intellectual property to produce products and services with cultural meaning (ACP, 2006).

Flexible specialization model also lays foundation for understanding how the reintergrated footwear production units within Kariokor enable producers to enhance skills of production by encouraging specialization of production of parts of the footwear and redesigning them to create new products for the market. It is therefore important to note that skill development through specialization in the production of the uppers of shoes, has become a major factor that influences production in the footwear industry at Kariokor.

Although techniques and processes vary widely from one design to the next, footwear production generally takes place in the small firms, sometimes with multiple family members engaged in different aspects of the process. Even where organized artisan structures exist, artisans typically produce within community settings and skills are passed down from one generation to another through apprenticeship. This study has further assessed the effect of skill development on production of shoes in the industry and assesses the extent to which these initiated skill development programmes affects production at the informal footwear industry.

There are certain similarities about the footwear industry that the Kariokor industry shares with other industries in other countries. Ganguly (2008) notes that in most countries, informal footwear industries are artisanal because they rely on their craftsman ability to produce. Most of them operate from the cottage industry or “home based.” He found that almost half of the footwear industries had some formal existence because they have trade licenses issued by the local authorities and that a number of industries are family owned. Kinyanjui (2010) acknowledges that the economic informalities in Kenya have a level of formal existence because the traders are issued with receipts to allow them to carry out trading in respective areas.

Another similarity as observed by Ganguly (2008), shows that in India just like Kariokor, the industry basically male dominated and the social background of owners

reflects their artisan root from the traditional cobbler caste of Chamars. Most of the owners have barely attained the minimum level of education and they develop their skills through apprenticeship at home. The idea of kinship and apprenticeship is strongly brought out in the informal footwear production at Kariokor as determinants of production of shoes; a fact which is clearly demonstrated in the discussions of the findings from the study. More information is sought from the apprentice in the firms in order to illustrate how transfer of skills is done to sustain production of footwear at Kariokor. Transfer of skills seems an important venture for continuity in the process of production of footwear and in Kariokor it is mostly done through apprenticeship by the use of the rudimentary tools that are locally available for production.

From the theoretical literature models discussed above, it may be deduced that industrial clustering is significant to industrial development and can spur growth. This can be realized due to the close proximity of firms that enable them adapt to change as they attract customers, traders and workers with related skills. This causes old institutions to change and new ones to spring up, hence revival and spontaneous growth of the industries.

Another idea that illuminates this study is that clustering facilitates the dispersion of technological ideas that is useful in qualitative production. It does this by permitting the rapid flow of technical information between producers operating near one another, and also by enhancing information flow between traders, producers, suppliers, and others connected to the cluster (Nadvi and Schmitz 1994). Given that one of the major characteristics of developing countries is their weak technological base, technological spillovers within a cluster becomes very important.

Whilst the above literature shows a high level of agreement on the potential of the footwear industry being transformed into a ‘specialised district’ to enhance growth in the footwear production; little focus is shown on how the system of production has regenerated over the years through an endogenous process. The literature doesn’t address the operational constraints caused by inadequate support by the government of Kenya and the opportunities that help them counter the constraints. The literature underscores this study’s focus on the factors that have contributed to the resurgence of footwear production in the informal footwear industry. Considering that the basic

material that the industry uses is leather, a situational analysis of the KLDC further provides supportive information on the potential of the industry to grow.

2.2 Empirical Literature

This section illustrates case studies of footwear production globally, regionally and narrows down to the cases in Kenya and provides estimates in terms of revenue (USD Million) and volume (Million units). It also recognizes the drivers and restraints affecting production of footwear. The Kenyan perspective is highlighted to provide an in depth understanding of the status of production in both the formal and the informal footwear industries. This is because there seems to be a vibrant and competitive informal sector, concentrated in the Kariokor market cluster in Nairobi that produces low cost leather footwear and goods for Kenya and the region.

2.2.1 Demand for Leather and Footwear Products

From the World Footwear Year book report (WFY, 2013), the global footwear industry has been experiencing rapid expansion, primarily due to rapid demand for new and innovative footwear products worldwide. Poon(2015) in *Global Footwear Research* acknowledges that due to advancements in manufacturing processes, modern, trendy and comfortable shoes are being continuously developed at reasonable prices in order to keep pace with the growing demand for these products. The use of machinery directly affects the quality of production as it influences the nature of designs and the speed at which production happens. This study has therefore captured how the type of machines used at Kariokor, has promoted design development of footwear that is relevant to the market trends.

Taura and Watkins (2014), in *Counteracting Innovation Constraints*, opine that there seems to be an overall rise in the retail culture which triggers the growth of global footwear market. Factors such as great diversity in the footwear market and easy availability of products in many retail outlets are factors that could encourage impulse buying of these products. Khan (2009) supports this idea by suggesting that there has been improvement in the advertising and marketing related investments made by different brands of footwear products. Moreover, internet retailing through the modern trendy applications on the mobile phones such as WhatsApp and Facebook are also gaining prominence for the purchase of footwear across different countries. These

channels are gaining popularity for the purposes of shopping for general footwear. With the understanding of the changes that have so far taken place regarding reaching out for consumers, the study not only assesses how the producers counter the branding challenges in their effort to access the markets by identifying the mode of communication, but also determines whether these channels have contributed to the revival of production in the local footwear industry.

According to the estimates of the World Footwear Year book (YFW, 2014), the footwear sales are projected to increase at a growth rate of 5 percent during 2013-2018 to reach \$331 billion in 2018, according to estimates based on (WFY). The basic driver of this growth was increased sales in emerging markets resulting from population growth and emergence in developing economies of a large middle class group with a relatively good purchasing power. Population growth is a factor that may lead to the demand of footwear that propels the informal footwear at Kariokor to continue producing as they strive to fill the shoe deficit gap. This literature helps this study to assess the weekly production of rate at the informal footwear industry at Kariokor and to determine its sustainability if all factors of production were to remain constant.

From the global footwear research, Poon (2015) finds that long term growth rates for leather products in developing countries are twice as high as in developed countries. These comparisons of the demand and supply across regions indicate that, the demand for leather products is growing much faster than supply. This situation may have been caused by more rapid population growth, particularly within younger population cohorts, and rapidly increasing disposable income. This comparison relates to the resurgence of production in the informal footwear sector as they strive to meet the market need, a situation relevant to the study of production in Kariokor market.

Kenya like many other African countries, is an exporter of raw hides and skin and wet blue but maintain a low production capacity for finished leather footwear (KLDC, 2012). Remarkably, however, in Ethiopia for example, the industry in Addis Ababa resumed vigorous growth not only taking the market back but also finding its way into the international market (Bloomberg, 2014). Some factories in Ethiopia export shoes in bulk to Italy and other developed countries as well as neighbouring African countries. These high-performing enterprises are considered exceptionally successful in Sub-

Saharan Africa. Considering that the footwear production unit at Kariokor is seen as informal footwear ‘hub’ in Kenya, the study therefore highlights how this has been achieved over the years especially after the industry suffered a setback due to the liberalization of markets in the 1980s.

China-made shoes flooded into the African markets plunging the local footwear industry into a slump. The Economic Transformation and Growth (ETG, 2015) however reports stringent environmental regulations put on the tanneries that led to the closure of most tanneries. This has since contributed to the relatively low production of shoes in 2014 and 2015 in China, which affords new opportunities for exporting Kenyan products. Implications of reduced Chinese production and competitiveness for Kenyan leather producers are profound. This literature indicates that there is hope in Kenya’s footwear manufacturing sector and shows a possibility in realization of growth in the footwear industry as experienced in Ethiopia. The literature also provides a basis of comparison of the drop of footwear exports and the increase in production in the informal footwear industries in Kenya.

COMESA (2012), on *The Diagnosis of the Leather Sector*, it is stated that leather footwear production in Kenya stands at ten million pairs per annum. From this data 1.5 million pairs are from formal and large firms. The implication is that MSMEs produce eighty five percent of total footwear leather output in Kenya. This KLDC report forms a basis for this research as it clearly shows the potential of the industry and also suggests that the future of the footwear industry in Kenya is therefore upheld by these miniature enterprises and can be a contributor toward achieving industrialization in the country.

In a study carried out by World Bank Group (2014), it was found that many formal and informal producers of footwear in Kenya are engaged in the production of school shoes, sandals, military/security boots, and men’s shoes due to the high demand. This is further associated with a significant share of the Kenyan population in school and in the working age bracket. Additionally, the rising security concerns due to terrorism and other factors has led to an increased demand of military/security boots over the last few years; It was also found that these items are considered more as “uniform” products that do not require advanced design capacity or sophistication. These Kenyan-made products seldom have high variety and the ones from the informal sector share a similar

rudimentary design. This literature informs the study of the nature of production of footwear in Kenya but fails to narrow it down to how production is specifically carried out in Kariokor, a fact that is illuminated in the current study.

The Tradecraft report in 2008 project that, “If Kenya produced leather footwear from all its hides and skins, the earnings could rise fourfold to around Kenya Shillings 16 billion (€144 million), and directly employ around 10,000 people.” This prognosis implies that Kenya could be producing much more footwear for its domestic population rather than being flooded by cheap imports undermining local production. This however depends precisely on the industry becoming more competitive. Considering that Kariokor market is thriving in the local footwear production, this literature would provide further grounds for assessment on how production has been sustained over the years albeit the serious global challenges.

From the Ministry of Industrialization 2015 report, the 7000 leather shoe craftsmen in Kariokor received machinery to automate their operations in 2015 and it was projected that this would improve output and quality of the finished footwear. According to Economic Survey (2014-2015), this move resulted in an increase in production of shoes with uppers of leather by 3.8 percent. Taura and Watkins (2014), confirm that there is a great improvement in the process of production of footwear and also implies the immense unmet potentials in the footwear production. The footwear artisans produce highly competitive products in terms of price and durability in comparison to the established enterprises.

From this literature it may be deduced that the local footwear industry is slowly being transformed into a production hub hence the formation of a ‘specialized district’. The literature further provides an understanding of how the formation of the Kariokor industry into an Industrial District can be used to increase competitiveness of the footwear products. In addition, adequate support from the government of Kenya, would increase interaction in the production units, encourage specialization of production, improve on product quality and enhance the productive capacity of footwear. This is achievable by providing an in depth understanding of how production has been revamped in the informal footwear industry by identifying factors responsible for this evolution in regard to how machinery is improved on to promote better designs and to enhance the quality of the shoes that are produced that match market need.

Even though there seems to be improvement in production in the informal footwear industry, there are a myriad challenges that the producers have to contend with. From the World Bank report in *Accelerating Kenya's Leather Industry* in 2015, there are a number of factors which currently hinder the growth of its leather industry. In the tanning sector, a major difficulty is the lack of quality effluent facilities, which increase the environmental and health costs associated with processing finished leather. In the footwear sector, whose target markets are high-end domestic and high-end exports markets; the challenges include high cost and low availability of quality hides, scarce design and process skills, difficulties in accessing and understanding export markets, and insufficient availability of growth capital. There is need therefore for this study to assess the role played by the institutions that support leather development such as the Kenya Leather Development Council (KLDC), Animal Health and Industrial Training Institute (AHITI), and the Training and Production Centre for the Shoe Industry (TPSCI) and determine how they influence the quality of leather being used in Kariokor as the main raw material.

2.2.2 Competition from the second-hand (*Mitumba*) shoes

The findings from the Business Insider (2014) indicate that the second hand market accounts for around 63 percent of footwear sold in Kenya. Around 26.5 million pairs of Kenyan footwear are sold per year in second-hand *Mitumba* markets. Among new shoes, the majority of purchased shoes are in the low-cost category, with an insignificant amount of shoes in the high-cost category. This trend hints at the purchasing power of the Kenyan population as well as the distribution of economic class in Kenya. Non-leather shoes dominate in both the Mitumba and lower price range footwear, which dominate the Kenyan footwear market. Out of an estimated 42 million pairs of shoes that are being purchased in Kenya annually, 15 million pairs (36 percent) are leather shoes. According to experts' estimations, domestic producers only supply low-price and mid-price leather shoes into the market which is approximated at 2.6 million (Amenya, 2006).

According to Mwinyihija (2014), a study reviewing the leather sector development strategy footwear estimates indicates that 11.7 million leather shoes are imported from overseas while only about 3.3 million pairs (including 2.6 million low-price shoes and 0.7 million mid-price shoes) are being made domestically. Most of imported leather shoes arrive via the second hand *Mitumba* market (8.5 million) while the majority of

Kenyan-made leather shoes come in the form of low-price shoes produced mainly by the informal sector. In order for Kenyan leather footwear producers to grow and capture increased market share, it is critical to understand the trends of both Kenya's informal sector and the *Mitumba* market and what makes them competitive in the Kenyan market.

Mudungwe (2014) reports from the research carried out by the COMESA secretariat group that the *Mitumba* market accounts for some 57 percent of the total leather shoes purchased in Kenya, while new, low-cost leather footwear accounts for 32 percent, and Kenyan produced, low-cost leather shoes only account for 17 percent. An understanding of the *Mitumba* market and how it holds a strategic advantage in the competition for low-cost goods will allow for an informed approach to increasing growth in sales of new, low-cost goods and making them more competitive with second-hand goods. One important implication of the growth of the *Mitumba* market is that as the Chinese non-leather shoe imports continue to make up a larger share of the second-hand footwear market, there will be a gradual reduction in the availability of second-hand leather shoes in the Kenyan *Mitumba* market. This scenario creates an enabling environment for Kariokor footwear producers to gain foot in the consumer market.

As noted earlier Global trends indicate that the demand of leather goods is growing faster than the supply. This data however reflects a contradiction from the report made by KLDC (2014), that the local footwear producers make about 8.5 million pairs of shoes annually. These facts therefore need to be re-assessed to ascertain the rate of production of shoes in the informal footwear industries. Projected economic growth rates and the expansion of the middle class in countries like Kenya indicate that there is an increasing market opportunity for Kenyan leather products. Decreasing supply of leather goods from countries like China, in conjunction with increased demand for leather products in emerging economies, presents a unique opportunity for Kenya to capitalize on this supply gap. The study therefore seeks to determine the challenges that hinder the local footwear producers from bridging the deficit gap yet there is a ready market for the footwear.

2.2.3 Footwear production in the formal and informal sector

According to FAO (2014), the data in the Baseline Analysis of the footwear Industry in Kenya, the biggest player in Kenya's formal footwear sector is Bata Shoes. As at 2014, Bata owned 130 retail stores Kenya and also operates regionally in Rwanda, Uganda, Tanzania, Burundi, and South Sudan. Even though the company is fully integrated and operates its own tanneries and manufacturing facilities and retail outlets, it however faces stiff competition from 'Mitumba' market and the informal footwear producers who reportedly produce low cost and affordable shoes.

From *The Business Daily* (2014), a study to assess the performance of the Bata shoe industry, it is acknowledged that the designs standards of production set by the Kenya Bureau of Standards make the company face unfair competition from the overseas manufacturers. The study also found that Bata's primary challengers which account for 60 percent of its lost sales were offshore, low-cost footwear manufacturers especially from Kariokor market. The second hand market accounts for 40 percent of Bata's lost sales. In response to this competition, Bata has been able to secure a niche for specialty work shoes and rugged casual footwear with a simple but distinctive design. Bata's brand and its distinct position in the East African market are well supported by its retail distribution network. United footwear, the findings indicate that their production is focussed on security, military and industrial boots. It reports production of about 200 pairs of boots per day.

This literature acknowledges that the informal footwear industry poses a threat to the Bata shoe company but does not reflect the advantage that the informal footwear industry would have against the giant Bata shoe company. The literature also clearly indicates the brand names like 'Bata' have an edge over footwear which is locally produced at Kariokor market. Despite these advantages that they enjoy, production at Kariokor is still growing. The studies do not capture how the informal industries have countered these stiff competitions not only from the formal footwear producers but also from the 'mitumba' market, a gap which this study has filled.

Most of the products at the informal footwear industries are not branded and yet they still manage to sell their products. This study has focussed on how the producers still

manage to access the local market despite their products being unbranded. The study also assesses how the producers reach out to their customers in the relatively competitive market and how they strive to counter this competition. Establishing the mode through which the markets are accessed demonstrates the changing trends with regard to reaching out to consumers thus showcasing revival process.

The main types of footwear at Kariokor market include sandals, men's office shoes, school shoes, security boots and safari boots. The report also indicates that the school shoes and security boots are sold locally while sandals are mostly sold to traders from the neighbouring countries such as Uganda, Tanzania, Rwanda and Burundi. In spite of its internal constraints and industry wide challenges, the informal sector has demonstrated a high degree of resilience and remains competitive as it continues to export a great amount of finished leather products to regional countries. From this report, increased production of footwear is evident in the informal industries and therefore provides a need to assess the type of machinery that are currently being used and how they have affected production.

2.2.4 Effect of Machinery use and production

This situation at Kariokor is comparable to a case study in Zimbabwe's informal footwear production industry that found that older and simpler machinery had an advantage, in that local skills can operate and maintain such equipment more efficiently (UNACTAD, 2010) The case studies have also shown that efficiency in the use of such technologies can be pushed to its limits by the demands of export markets. It is reported for instance that, much of the equipment in shoe factories in Zimbabwe is old, but it is also 'appropriate' in that it is operational and is readily maintained with local skills.

Productivity in the informal industry according to United Nations Trade and Development (UNACTAD) is measured in units such as pairs per person per day. The study discovered that the rate of production is low by international standards from 7 to 45, with international levels two to three times higher for comparable styles (UNACTAD, 2010). This scenario at Kariokor production units may not be regarded as

low because the total costs of production; reflecting the written-down costs of the ‘outdated’ but operational equipment and relatively low labour costs, would make the producers cut on cost of production and still be competitive. This situation may have been favoured by the relatively slow pace of technological innovation in the footwear industry world-wide. The scenario is similar to the local footwear producers in Zimbabwe who exhibit confidence in the hand tools that they use and considered them efficient because it is “all” that he had and knew how to operate in his production of sandals.

The literature in the study carried out in Zimbabwe provides a link on how the footwear production can be increased with ‘available’ machinery without the heavy industrial machines. Musabayana (2006) in a study on *Determinants of Key Networking Success Factors and Threats*, reveals that in Zimbabwe lack of access to information on the existing market opportunities and in exports, poor quality products and poor product design and differentiation, and lack of promotional activities, both locally and internationally are the main factors that hinder the locally manufactured products such as the footwear to penetrate the export market. This literature provides a comparison in production in regard to how the use of machinery and tools that are ‘available’ at Kariokor production units can increase production of high quality products that can compete in the export market.

2.2.5 Kenya’s footwear markets

This section highlights empirical literature gathered from both international and regional markets. From the UN Comtrade (2014) research on Export market, it is shown that Kenya’s export of leather footwear is relatively small, totalling only US\$2.8 million in 2013. There has been an overall positive upward trend of Kenyan leather exports since 2007, with a spike in the year 2010. Kenyan leather footwear exports have increased significantly (by a factor of 31.4) from US\$88,000 in 2007 and US\$555,000 in 2008, to US\$2.8 million in 2013.²² According to interviews with experts from the KLDC, most exports are Bata’s exports of military/industrial and safari boots to the regional market (Uganda, Tanzania, Zambia).

However, it is important to note that the number reflects official trade data, which is always highly underestimated because many are exported or smuggled through Kenya’s

porous borders to neighbouring countries. However, a primary research done by ETG (2015) shows that the shoes from Kariokor has not significantly penetrated the export market and attributes this to a weak value chain that would improve the network of the shoe producers with the foreign markets. This factor raises the idea of competitiveness of the footwear produced at the informal footwear industries and creates the need for an assessment on how production is done and how footwear gets to the retail outlets within the country and across borders, a gap which this study fulfils.

Table 2.2.2 shows an upward trend of the leather footwear export to East African Community (EAC) countries from 2007 through 2013 is consistent with the global export trend. This suggests that the main export destinations for increased Kenyan leather products will be the regional market, through the EAC countries. The data represents footwear from both the formal and informal production industries. From KLDC (2014), baseline survey, it was implied that most of these footwear exported are produced in the informal footwear industries. This therefore suggests that there is a general increase in production and yet the shoe deficit gap is not yet filled in Kenya. This concern calls for an assessment of how the footwear produced accesses its markets.

Table 2.2.2 Top 10 destinations for Kenyan leather footwear exports, 2009-2013 (US\$ ')

	2009		2010		2011		2012		2013	
1	Uganda	460	Zambia	1,575	Uganda	360	Zambia	743	Uganda	827.87
2	Tanzania	241	Uganda	1,292	Tanzania	313	Uganda	558	Zambia	735.86
3	U.K	182	Tanzania	294	Zambia	189	U.S	207	Tanzania	322.9
4	Malawi	122	U.K	251	S.Africa	134	Japan	196	Zimbabwe	156.22
5	Israel	64	Malawi	108	Japan	131	Tanzania	196	Malawi	143.21
6	S.Africa	41	U.S	93	U.S	112	S.Africa	155	U.S	113.78
7	U.S	37	S.Africa	45	U.K	109	Turkey	148	Japan	99.364
8	Rwanda	34	Australia	31	Rwanda	37	U.K	112	Italy	71.045
9	Germany	29	Austria	21	Spain	26	Zimbabwe	95	U.K	54.849
10	Italy	25	Germany	19	Austria	25	Rwanda	41	S.Africa	36.742
Total		1,233		3,729		1,436		2,452		2,562

Source: UN Comtrade, 2014

In summary, the empirical literature reviewed highlighted the principal leather products and demand for footwear and it shows how demand for footwear supersedes supply. This factor strengthens the argument that there is a potential for further growth in the footwear industry. A look at markets, its market dynamics and influence of second-hand products in Kenya sheds more light on the competitive nature of the footwear industry that the producers have to counter to stay in business. The unanswered question therefore is how they have managed to survive over the years.

The literature has also provided estimates of leather products and implies that footwear is the biggest leather good sub sector. Despite being the largest subsector, Kenya still fails to capture much of the potential value inherent in the global leather footwear product value chain. The empirical studies dwelt on the weaknesses of policies and frameworks that varied countries put in place to support the informal industries. The highlights are basically on the failures of the informal industries to pick up and access the international or global market. Other challenges mentioned in the literature include absence of trade and industrial policies that give priority to footwear manufacturing, insufficient business leadership and inadequate skill development.

The UNIDO report however confirms the earlier literature that despite these challenges the SMEs still make very important contribution to poverty reduction because they tend to be labour intensive, are often a first step into employment for the poor, and are a seedbed for entrepreneurship and industrialization (UNIDO, 1997). The issue here therefore is not whether or not the footwear products can reach the global market but how to do so in a manner that would sustain growth in the industry considering that there is a ready market as earlier reported.

Of importance to this current study are the gaps left by the above reported case studies. The first observation is that none of the above studies highlighted the straight relationship between revival of production and the changes in machinery, product design, product quality and how the producers access market. The second issue is that the current study highlights the possible related factors that have contributed to the resurgence of production of footwear such as social networking and skill development which has not been captured in the literature reviewed.

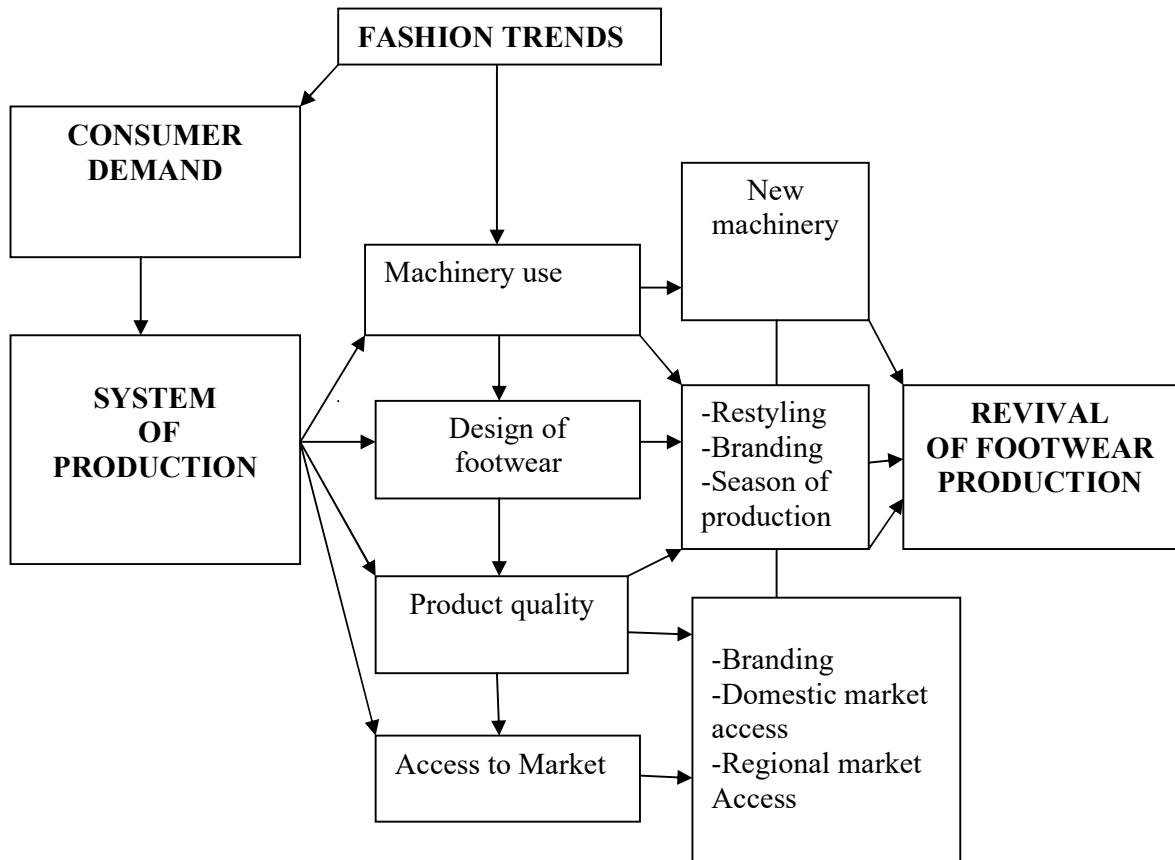
2.3 Conceptual Framework

The reviewed literature has demonstrated the system of production in both formal and informal footwear industries. A display of the markets, market dynamics and the influence of second-hand products in Kenya has also been reviewed. Despite the footwear industry recording a higher production and sales of footwear and the inflow of cheap, new and second hand products; a deficit of footwear still occurs due to high demand and low supply. This implies that there is a ready market in the footwear industry.

These factors underscore the basis of this research because the system of production is dependent on type of machinery that is used. The machines further influence the designs, the speed with which a shoe can be produced and quality of the end product. Production is further enhanced through the integration of production units with a system of social networking which improves skill and product development through apprenticeship. Other factors such as great diversity in the footwear market and easy availability of products in many retail outlets are anticipated to encourage impulse buying of these products.

The conceptual framework of this study as represented in figure 2.3 shows interactions between variables. The consumers are driven by the fashion trends in the market. The fashion trends are influenced by the globalization effect that see designers emulate varied cultural trends to satisfy consumers needs. These changing trends are implications of the footwear revival process as initiated through aspects design development which influence the quality of the products and access to market. These variables are supported by other extraneous variables such as information on the current designs in the market and on market access. With adequate information the producer tends to have the zeal to produce more and to remain in business

Fig 2.3 Conceptual Frame work



Source: Author's conceptualization, 2016

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This section describes the strategies and procedures that were followed in the study. The sections discussed include: research site and rationale, the research design, target population, sample size and sampling procedures, research instruments, data collection procedures and analysis techniques.

3.1 Research Site and Rationale

This study targets Nairobi's Kariokor market because it is one of the markets that hold a large informal shoe industry in Kenya. This footwear cluster borders the CBD to the south, Ngara to the west Ziwani to the east and old Racecourse Estate to the north. The area is inhabited by producers in the '*Jua kali*' cluster mainly dealing in the production of basketry, shoe making artistry and sale of African made sandals. Out of the 300 plus stores, there are at least 200 within the walled boundary and about 100 outside. Over 80 percent are estimated to be involved in leather products, either directly or indirectly. The market derives its name from 'carrier corps' because the original inhabitants used to carry luggage for the colonial military corporals. The market is also historically known for producing African made baskets (Ciondos). This has since changed as it is currently known for producing numerous footwear products. According to Kenya National Bureau of Statistics Population and Housing Census Nairobi (2009), the size of the market is approximately 1.25ha and has about 7000 traders.

From the KLDC (2012) survey, Kariokor is a key supplier of low-cost leather shoes in Kenya and their leather products are dominated by shoes followed by sandals, wallets, belts and other products such as the leather balls, accessories, and African ornaments. The survey showed that one leather footwear stall can produce between 40 and 50 pairs a day. One larger store with six employees has a capacity of making up to 300 pairs of shoes a day. However, not many stores are operating in full capacity unless it is peak season. On average, one sandal-producing stall receives an order of 1,000 to 1,200 pairs of leather sandals per month. According to ETG (2015) estimates, 60 percent of 300 stores are engaged in producing leather footwear and each stall works for 300 days per

year with a production of 50 pairs of leather shoes per day translating to 2.7 million pairs a year. This estimate implies that the total yearly income for the footwear producers at Kariokor market would be approximately 1.4 billion if each footwear, was to cost 500 Kenya shillings.

The rationale of the site is attributed to the survey by KLDC in 2014, which showed that 82.9 percent of the Medium Small and Micro Enterprises (MSMEs) of the footwear products are drawn from the footwear industry at Kariokor. This has created a need to establish how the footwear industry still maintains such high production level amidst the many challenges mentioned in section one.

3.2 Research Design

The study used both qualitative and quantitative techniques conducted through a descriptive survey method; reflecting a mixed model research design approach followed in the analysis. Mugenda and Mugenda (2003) define survey method as an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables. The study adopted the descriptive survey design; a method involving the use of standardized questionnaires or interviews to collect data about people and their preferences, thoughts, and behaviours in a systematic manner (Bhattacherjee, 2012). This method allows for cross referencing of data collected from various respondents using questionnaires and interviews guides. The design is suitable for the study since it allows data collection regarding revival of production of footwear in Kariokor and highlights the factors that affect production at the informal footwear industry at Kariokor. The model tests both the dependent and independent variables are measured at the same point. The survey questionnaires were first administered to the producers who own shops at Kariokor, followed by interviews of the key informants to corroborate the information from the questionnaires and to make the research more authentic. Both qualitative and quantitative methods are used to rule out aspects of respondents' biasness in providing information.

The qualitative method in descriptive survey sought to obtain information that described existing phenomena by asking individual respondents about their attitude and experience in regard to shoe production process. It was necessary to use univariate analysis to quantify the data by determining the footwear produced on a daily and use

the data gathered to estimate the yearly production and income. The selected group from Kariokor were asked questions regarding machinery use, innovative methods, product designs, product quality and how they access their market. Questionnaire surveys were used to collect data from the respondents selected from the shoe manufacturers and interview surveys were used for collecting data from the key informants. Section A of the questionnaire sought background information on the respondents in regard to the level of education, age and gender. Section B was on business characteristic while section C was on machinery use, design and skill development, access to market and apprenticeship. In order to make the research more authentic, additional data was obtained from the secondary sources, both published and unpublished materials.

3.3 Target Population

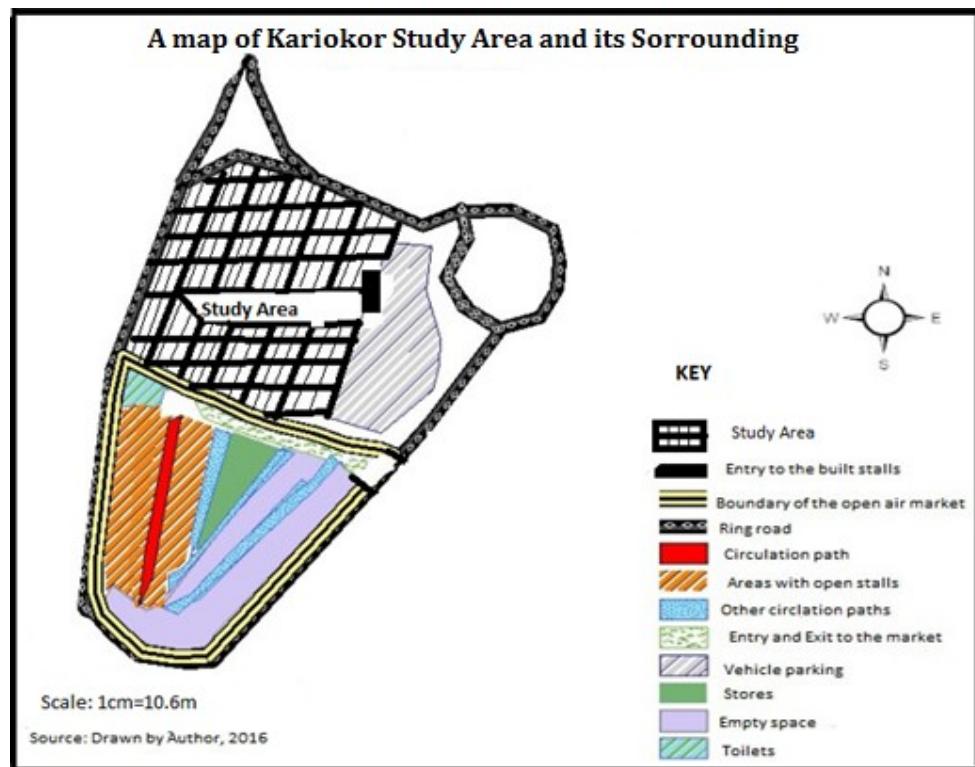
A population can be defined as the complete set of subjects that can be studied (Kombe and Tromp, 2006). This study targets a population about 300 footwear manufacturing units in Kariokor.

3.4 Unit of analysis and sampling

The unit of analysis in this study were the footwear enterprises at Kariakor Market Nairobi. From the market records, there are about 300 stalls within the Kariokor market operating varied micro and small enterprises. According to Kombe and Tromp (2006) a 30 percent of the target population is adequate representation of the population. A sample size 90 respondents was derived from calculating 30 percent of the total population of 300 units.

A purposive sampling technique was used to identify the key informants who included the chairpersons of the associations and executive committee members within the footwear industry. Five key informants were identified; County Market superintendent, KLDC chairperson, Kenya Footwear Manufacturers Association secretary, Kariokor market association chairperson and Kenya Cobblers Association Chairperson. The Key informants then gave guidance categorization of the type of footwear produced at Kariokor and in identifying the various participants in the training programme that was organized by KLDC.

Figure 3.4 below, the map of the project area of Kariokor market and other surrounding features



Source: Author, 2016

The first stage of the sample chose 90 investigative units by a systematic random sampling from the 300 stalls that make up the footwear production at Kariokor. According to the market superintendent some firm owners have combined more than one stall to expand their working space. Because the stalls are already numbered, a number from one to 90 was next assigned to each production unit. This was done starting from the left side of the main entrance in a clockwise direction around the market. A diagram for the market is provided for in figure 3.4. To determine the final list of the sample one of the numbered stalls was selected through a simple random sampling. Once the eligible respondents had been identified from the stalls, purposive sampling was again used to identify the units who have apprentices and a sample of 30 percent was derived from the list of 90 units. A list of 27 units who had apprentices

were used to gather data on skill development. A purposive sampling was again used to identify the respondents who had attended the KLDC led workshops. From the sampled group of 90 only 16 had attended the workshops and all of them were interviewed.

3.5 Data sources

The primary data was gathered from the footwear producers in Kariokor. The secondary data as reflected in earlier literature was sourced from previous research reports of organization such as UNIDO, COMESA secretariat and archival data from City Hall in Nairobi. More information was sourced from sectoral association that was relevant to the study such as the KLDC.

3.6 Research Instruments

Interview administered questionnaires and interviews guides were used to collect data. The questionnaire had both open ended and close ended questions. The questionnaires for shoe manufacturers comprised of 5 sections. Section A elicits the background information of the producer; section B elicited information on the business characteristics and the raw materials. Section C sought information on the design upgrading and skill development. Section D is on skill development training programme and section E on product design development. The apprentice's questionnaire was in two sections. Section A sought the background information of the trader while Section B collected information on training and compared performance before and after the training programme.

An interview guide was used to explore qualitative questions to the key informants. The key informants were: The County Market Superintendent, KLDC chairperson, Kenya Footwear Manufacturers Association secretary, Kariokor market association chairperson and Kenya Cobblers Association Chairperson. The chairpersons who were used to elicit information on the level of involvement of the KLDC and UNIDO in enhancing the informal footwear industry revival process.

3.7 Data collection methods and process

The first step in data collection was to get approval from the supervisor to proceed for fieldwork. Thereafter, a letter authorizing the research was obtained from the City Hall Market Section. This was followed by the recruitment of one research assistant who

was inducted in one week. This was to enable him to understand the research problem and research methodology, and how to administer the research instruments. The research assistant worked closely with the researcher during the data collection period.

A pilot study was conducted on a selected sample similar to the actual sample that was included in the study. Subjects in the actual sample were not used in the pre-test. The procedures used in pre-testing the questionnaires were identical to those used during the actual data collection to allow meaningful modifications to the research instruments.

The pilot study that was conducted on the 9th and the 10th day of July 2015 and it yielded useful information that was used to redraft the study questionnaires. It also helped to reveal shortfalls in the questionnaire. For example, unclear instructions, insufficient writing space, vague questions and wrong numbering were revealed and corrected, thus improving the questionnaire. The responses from the questionnaires were analyzed to check if the methods of data analysis were appropriate and suitable. The open ended questions during the pre-test were reshaped to provide closed ended answers.

There was a face to face interview with the key informants from government institutions like County Government of Nairobi market superintendent who is in charge of stalls and markets in Nairobi. The executive committee members of the informal social groupings such as the Kenya Footwear Manufacturer's Association (KFMA) and the Kenya Cobblers Association who are based at Kariokor market were interviewed. The Kariokor Market Association chair person and the KDLC secretary were then interviewed on the respondents' participation on the workshops and training programmes offered by UNIDO. The information from the key informants was used to corroborate the response from the survey questions. The interview sessions took between 20 to 30 minutes. During the interview sessions, the research assistant took notes. The informants provided additional information which may not have been captured in the research.

Due to the nature of the respondents' busy schedule at the market, interviewer administered questionnaire were used to gather information from the respondents and the sessions lasted between 30 to 40 minutes due to interruptions from customers. The

questions were based on revival of production and were grouped in the following sub themes:

- General characteristic of the respondent and production system in the footwear industry
- Machinery use and production
- Product quality and production
- Skill /Design development/ apprenticeship and production
- Market access and production

Observation was used to capture observable variables and recording them down. Some of the aspects that were observed include different footwear products in the market, machinery used; counting of the number of open stalls within the market and photography was used to capture the designs.

3.8 Document Analysis

The documents analysed included a list of stalls from the Nairobi County Market Section at City Hall, business permits, the sales diary, book keeping records and album of designs. The aim of document analysis of book keeping record was to track the trend of sales and to help in determining the weekly volume of sales. The business permits was used to confirm legal status of the businesses. Increased production was portrayed when the data in the documents indicated progress in the number of shoes that were sold weekly. The album was used to show the different designs of shoes made and to determine the changing trends of design development. Information gained through document analysis was used to supplement data gained from the interviews and questionnaires.

3.9 Data processing, Analysis and Presentation

Before the data was analysed, it was validated, edited and then coded. In the validation process, the questionnaires were checked to determine whether an accurate number or acceptable sample was obtained in terms of proportions of the issued questionnaires. Questionnaires were also checked for completeness. Information from interview guides was expected to be straight forward since the questions had been validated. During editing, the questionnaires were scrutinized to check whether there were errors and omissions, adequate information and legibility and whether the responses were relevant.

The third step in data processing involved coding. After going through all the collected questionnaires, uniform categories of responses were identified, classified and fed into appropriate categories in a computer worksheet using SPSS Version 20.

The data was analysed by employing both quantitative and qualitative approaches. The qualitative method used in this study was content analysis from both the primary and secondary sources of data. Information in regard to machinery used was coded and frequencies drawn to determine the nature and efficiency of machinery that has been used in the last five years. More information regarding product quality and design development was obtained and presented in a pie chart obtained to show the distribution of the different types of footwear produced at the market. This information was gathered by analysing information from newspapers, financial reports and online reviews through the selection of concepts, categories and themes. The data was analyzed concurrently with the primary source of data so that facilitated flow and consistency of information. Qualitative data was used to clarify information, give explanations and opinions that may not have been captured in the questionnaire. This information was recorded, coded and analysed through SPSS version 20.

In order to condense and categorize the thematic concepts, the notes from the key informants were coded in special numbers based on the research questions in the following order:

- KRQ1: County Market superintendent
- KRQ2: Kenya Footwear Manufacturers Association secretary
- KQR3: Kariokor market association chairperson
- KQR4: Kenya Cobblers Association Chairperson
- KRQ5: KLDC chairperson

Coding of the data was done according to the preset questions in the interview schedule which involve looking for similarities and differences in the data collected to be able to form themes and categories and converting them into numeric format. The key themes were summarized, transcribed and included quotations to illustrate the concepts. Field notes were analysed immediately so as not to lose any important information that would be used to supplement the interviews carried out. This generated interpretations about the phenomenon of interest.

Analysis of quantitative data was done using the descriptive data analysis method which involves statistically describing, aggregating, and presenting the constructs of interest or associations between these constructs. The variables included the characteristics of the footwear units: age, gender, education level and the nature/line of products. These variables were presented in a pie-chart and a bar graph. Single variables were analysed using univariate analysis to determine the number of shoes sold and the frequency of access to the other markets and distribution done on frequency tables. All this was done by employing SPSS (Statistical Package for the Social Sciences) to analyze responses from the closed-ended questions being assigned numbers, for instance 1 for Yes and 2 for No. The open-ended questions, responses are numbered according to themes with each theme having a code. Frequency tally was then used to assign each expected response in the data to the theme it closely corresponded to. Information was then be generated and be presented in form of graphs, tables and charts indicating frequencies and percentages. The data presentations were done through Microsoft excel package.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.0 Introduction

This chapter presents the key findings of the study in a sequential and logical order and a discussion of the same. It highlights how revival of production in the informal footwear industry at Kariokor has happened over the last five years in the following sub-themes: General characteristic of the footwear production units at Kariokor, machinery use, product quality, design development, market access and production. The study also further illustrates the role of apprenticeship in skill development and examines the effect of industrial policy framework on skill development. The above sections correspond with the research objectives and questions in chapter 1.

4.1 Characteristics of the respondents and production of footwear in Kariokor

An analysis of the characteristics of the production units provides an in-depth understanding of the nature of footwear manufacturing within Kariokor. Taking the small footwear industry in the stalls as a unit of analysis, the study sought information from the owners of the production units. The characteristics investigated included gender, age, level of education, experience in footwear production and the description of the footwear produced. It was important to investigate these characteristics because the previous studies have highlighted them as crucial in determining the potential of the footwear industry in terms of skill and design development. Because the industry is labour intensive in nature, characteristic such as age, gender and education level gives more insight on how the footwear industry has evolved over the years.

4.1.1 Gender of the footwear producer

Analysis on the gender of the owners of the production units showed that majority of footwear units are owned by males with an 88.9% representation as compared to 11.1 percent representation of females. This disproportionate distribution may be attributed to the labour intensiveness of the industry that requires masculinity and favours males over females. From the observation made, majority of women who own the units deal with the designing of the upper parts of the sandals and are less labour intensive. In

most cases more labour intensive units are male dominated and they manufacture African boots, school shoes situation that may be associated with the masculine nature of the work. The data of the gender in the production industry as displayed in Table 4.1.1

Table 4.1.1: Gender of the footwear producer

Gender	Frequency	Percent
Male	80	88.9
Female	10	11.1
Total	90	100.0

Source: Field survey, 2016

4.1.2: Level of education of the footwear producer

The level of education of the respondents was measured in terms of the highest education level a respondent has attained. Table 4.1.2 below tends to portray that majority of respondents have completed secondary school level of education at 47.8 percent. From this data only 7.8 percent of the respondents had acquired additional training after secondary school completion at tertiary colleges. The respondents who did not get the basic education were only 1.1 percent.

The above finding implies that the education level of the producers is good and that they the ability to be trained is high. Ironically, very few have acquired additional training skills to enhance production and growth of the industry. The findings also implies that should there be programmed training session organized by the KLDC team, it would be easier for these footwear producers to learn and adapt to new hardware and software skills if given an opportunity to do so. In this regard, the respondents are likely to benefit more from the workshop organized by UNIDO in footwear production Training of the footwear producer therefore becomes feasible.

The benefit of this information to the industry is what is described in literature by Nadvi and Schmitz (1994) as ‘faster diffusion of technological knowledge;’ a factor which spurs revival of production in the industry. Due to the closeness of the firms to each other, information flow would be enhanced hence, technological spill-over that promotes growth in the industry hence the creation of an Industrial District.

Table 4.1.2 Level of education of the respondents

Education Level	Frequency	Percent
No formal education	1	1.1
Completed Primary	17	18.9
Not completed primary	4	4.4
Completed secondary	43	47.8
Not completed secondary	18	20.0
Tertiary college	7	7.8
Total	90	100.0

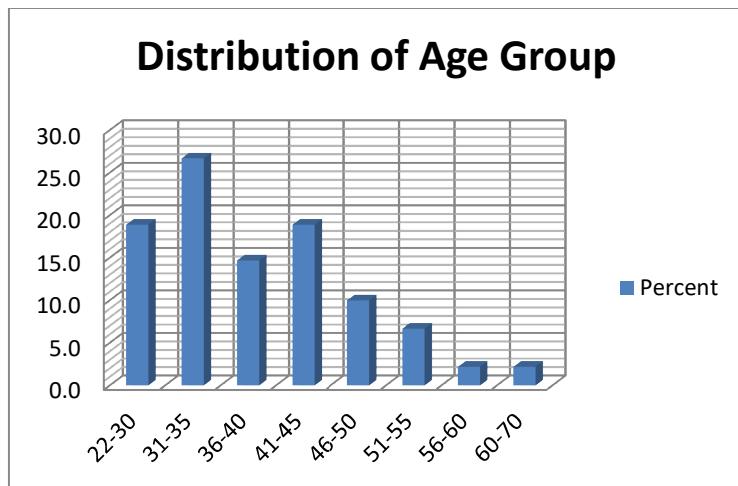
Source: Field Data, 2016

4.1.3 Age of Respondents

Table 4.1.3 shows the mean age of the respondents is 38.5. This scenario implies that the producers at Kariokor are still relatively ‘youthful’. Figure 4.1.3 below displays the age distributions of the respondents. It shows that majority of enterprise owners are under the age of 35 years, with 45.6 percent. The study indicated that most of the owners of these small production units are within the age group of 31-35 and the average age is 38.5. This statistics indicate that the producers at Kariokor are relatively young and presumably ‘strong.’ It also implies that the industry is bound to have continuity from generation to generation because the majority may still have longer years to work.

Considering that the footwear industry has been dynamic depending on the market trends, the relatively younger generation are likely to adapt to the changes in fashion and produce designs that meet consumer need. This therefore would increase competitiveness in the footwear industry. This changing fashion trends support the idea of revival of production in the industry as more changes are likely to be realized in the years to come.

Figure 4.1.3



Source: Field Survey, 2016

The data in table 4.1.3 indicates that the mean age of the respondents is 38.6 and corresponds with the COMESA (2012) baseline study in the informal footwear industry that the producers are relatively young and therefore suit the labour intensiveness of the footwear industry.

Considering that the informal footwear industry is labour intensive as pointed out by McCormick (2009), this relatively younger age group may make production better because the relatively young generation are presumably more energetic than their relatively older counterparts and are likely to be more productive in the footwear industry for more years. The report also clearly indicates that most of the workers employed by these MSMEs are currently in the 22 to 40 years age group. This younger age group provides renewed energy that is needed in the industry. This aspect therefore qualifies the model of industrial districts. It is however noted that quite a number of the respondents have not received formal training in footwear making and should be the target for intervention.

Table 4.1.3: Mean age of the respondents

	N	Minimum	Maximum	Mean	Std. Deviation
Age of the producer	90	22.00	67.00	38.5778	10.08389

Source: Field Survey, 2016

Other characteristic of the footwear enterprises that were observed and analysed in this study was the composition of workforce within production stalls. It was found that most of the units had between 2 to a maximum of 12 employees. It was also realized that a number of units had apprentice at different levels of training in the shoe production. From KLDC (2012) baseline analysis, the human resource data had recorded workers of between 2 and 3 per production unit. The number has since increased and this is a contributory factor to the increase in production of footwear at Kariokor. From the daily tax collection data, it is approximated that the total population in the production units both in the open air and the county council stalls is about 7000. From this information the industry seems to have attracted more traders over the years and therefore can explain why production has been vibrant in the industry.

Considering that the numbers within the production units has increased, it was therefore necessary to assess the years of experience the producers have had in the production of shoes in order to determine the process of evolution in this industry. It was established that some of the respondents within age group of 36-67, had been in Kariokor for a period of between five and twenty five years. The new entrants into the market were thirty percent while those who had been in the industry for a period of more than five years were fifty four percent as presented in table 4.1.4. This information concurs with Kinyanjui (2010) who points out that ordinary people operate their businesses in informal spaces such as '*jua kali*' and that business entry to this market is easy as there

is always some space for an extra entrant. Since the firms attract customers, traders and more workers with related skill, change in production becomes inevitable because the producers are likely to be innovative in order to gain competitive advantage in the industry.

Table 4.1.4: Years of experience in the footwear industry

Category	Frequency	Percent
New entrants below one year	27	30.0
Below three years	14	15.6
Above 5 years	49	54.4
Total	90	100.0

Source: Field Survey, 2016

4.1.5 The nature of Production of footwear and Organisation

In trying to further understand revival of production, the study sought to assess the system of production by using a qualitative analysis of the key informants' response. This finding was also used to help in the understanding of how the theoretical underpinnings of Flexible Specialization and Industrial Districts can be applied to these small industries. A report from the market superintendent based in Kariokor was used to present an in depth understanding of how production system works within the industry and it revealed that the small footwear production firms at Kariokor are artisan rooted because they produce craft based shoes using locally available tools.

The survey found that more than half of the production units were more than twenty years old and it shows that they have been in business for a relatively longer period of time. During this period, the key respondent confirms that the production of shoes has been dynamic depending on the market demand. There have been many changes in regard to production of shoes in Kariokor; from the production of open leather shoes, to Akala, to safari boots, to school shoes. Only half of the units had some formal existence in the sense that they have trade licenses or business permits from the Kenya

Revenue Authority. A lack of legal recognition of the business may imply that the proprietors may not access financial support from the banks hence hindering growth of the industry.

Some of the units are family owned or under sole proprietorship and a few are partnership based. It was noted that the cluster is virtually male dominated, may be due to its masculine labour intensive nature. Another reason given by the respondent is that most of the producers are historically workers from Bata Shoe Company who resigned to start up their own production firms.

There are various production groups related to footwear which are observable during the process of production. A section of producers deal with sole making while others deal with stitchery and bead work for the upper part of the shoe. Some workers also specialise in embroidery work and making of special designs of slippers. In most of units, the production is carried out by three workers, a replica of what is described in the Charmars as ‘soleman, upperman and finishman.’

This scenario shows that there is specialization in the informal system of production. The footwear producers have another advantage because they are clustered. Firms in industrial clusters tend to specialize in carrying out particular processes or stages in the production and distribution channel. If there is a pool of specialized labour in the industry, performance and competitiveness is enhanced. Specialization in production in this regard enhances the unit’s ability to innovate and supply high quality products and also benefits from agglomeration (McCormick and Oyeyinka, 2007).

One respondent observed that division of labour amongst the shoe producers is effective and from his perspective it can be seen as a smaller version of flexible specialization developed in central and north-western Italy, as described by Piore and Sable (1984). The distribution of small firms in close proximity encourages product specialisation with certain stalls specialising in producing ladies’ and children’s footwear while others specialise in producing men’s footwear. In slightly larger units, production is done by at least five artisans. Special or out-sourced work is also done within the production unit. The finishing work involves stippling work and polishing of products. This process is duplicated without any technological improvement. In Kariokor, some producers

specialize in the production of safari boots, female sandals, school shoes, office wear, kitenge shoes and military boots. The data to show the distribution of the product line is provided for in figure 4.3.2

The above finding clearly corresponds with Marshall's (1920), idea on the formation of Industrial Districts which are seen as special due to the nature and quality of local labour which is integral to the 'district' and is highly flexible. Production is further enhanced when individuals can move from stall to stall and share information. The owners of businesses and workers seem to share the same norms and values of business and this further enhances commitment to the 'District' in this regard the community is seen as relatively stable and it enables evolution of strong local cultural identity and shared industrial expertise.

From the analysis of the documents where weekly production is recorded in some units, there is an indication that production of footwear differs significantly from peak (high) to slack (low) season. In peak season depending on the design and the type of footwear, a group of 4-5 workers engaged in different tasks can produce 24 to 36 pairs of footwear working 9-10 hours a day. Gross estimate of footwear production from surveyed firms show per worker productivity of 7.75 pairs and 4.6 pairs per day in peak and low season respectively. Considering that all this is done manually, it is therefore presumable that with adequate support especially in machinery acquisition, then production can be robust and the potential of filling the shoe deficit gap can be realized.

4.2 Machinery use and production of footwear in Kariokor

In reference to answer research question 1, the study sought to assess the nature of machinery that the footwear producers use and identify the changes in machinery that contributed to the evolution of footwear production. It was found that the most commonly used machine is the singer sewing machine and a few others used the gulf sewing machine. The study showed that about 80.4 percent use with a sewing machine and 19.6 percent use a set of rudimentary cutting tools. From this data, there doesn't seem to be a change in regard to acquisition of new machines to improve production.

There was however no direct comparison with other types of machines such as the skiving machine, grinding machine because a high percentage of 80.4 own only one

type of sewing machine. The study also assessed a combination of machines that are generally used to facilitate production. Apart from the sewing and cutting tools used, an assessment was made on the general possession of other machines that are used in the process of production.

It was necessary to compare the tools and machines that were assessed by KLDC in 2012 and the ones being used now in order to determine whether there has been any significant change made. The data in Table 4.2 below gives a summary of a combination of machines used in the footwear production units in a baseline survey in 2012. The KLDC survey has been compared to the current findings of this study in table 4.3.1.

Table 4.2 Summary of machine combination in footwear production unit

Combination of Machines	Percentages
Tools only	8.5
Complete production line	4.9
Sewing Machine	64.7
Sewing and roughing machine	17.1
Sewing and sole press	2.4
Skiving machines	2.4
Total	100

Source: KLDC (2012) Baseline Survey

The data in table 4.2.1 is a representation of the machines that are currently being used for production. It was realized that the sewing machine is still the most commonly used item for stitchery of the uppers of the footwear. A small percentage of producers however reported that they do not need any machines because they produce the Akala sandals and therefore can only use rudimentary tools. From this data it is realized that the progress in machinery use has been slow and minimal. This low rate of machinery uptake is attributed to lack of finance and the relevant skills to operate the machines. It therefore shows that the proprietors have not invested heavily in machinery upgrading to improve production, the unmet potential to fill the shoe deficit gap as reviewed in the literature.

The demand for shoes is growing faster than supply and to counter this, the producers at Kariokor have resorted to engaging more employees since there are no industrial machines to speed up the process of production. This may explain why the population at the production centre has increased. The employees are therefore likely to work for longer hours as they try to match consumers demand.

Table 4.2.1 Machines and tools used in footwear production at Kariokor

Type of Machinery used	Frequency	Percent
Stippling machine	13	14.4
Sewing machine	47	52.2
Folding machines	10	11.1
No machines are needed	7	7.8
Electric sewing machine	13	14.4
Total	90	100

Source: Field Survey, 2016

The respondents highlighted that there was no comparison to the other industrial machines because they don't use them for production. The singer sewing machines are what they own and know how to operate and maintain. A key informant- the chair person of Kariokor footwear association reported that even though a few of the producers had undergone the training organized by UNIDO, it may not be relevant because the machines that are used for training during workshops are not available at their production units.

4.2.2 Type of machines owned

	Frequency	Percent
Sewing machines	80	88.9
Cutting machines	10	11.1
Total	90	100.0

Source: Field Survey, 2016

A Likert scale in table 4.2.3 to measures the level of condition of the machines that is currently being used and 76.7 percent of the respondents indicated that they were efficient. Even though the data in table 4.2.2 indicates that the machines are efficient. This is contrary to the observation made which show that the system of production is mainly manual and slows down the speed and the rate of production per week. The inability to purchase new machines is attributed to inadequate finance. If the type of machinery used in production was to be considered as a major factor then situation at Kariokor would therefore imply that production in the informal footwear industry is at a disadvantage and may be incomparable to the well established companies with industrial machinery such as 'Bata'. This information however contradicts the FAO (2014) data which shows an increase in production in the informal footwear industries.

This situation at Kariokor is however comparable to a case study in Zimbabwe's informal footwear production industry that found that older and simpler technology had an advantage, because local skills can operate and maintain such equipment more efficiently (Sonobe and Otsuka, 2010) The case studies have also shown that efficiency is achieved because the local producers seem more comfortable with the local hand tools that they use and still manage to meet market demand. For instance, much of the equipment in shoe factories in Zimbabwe found to be old, but it is also 'appropriate' in that it is operational and is readily maintained with local skills.

Table 4.2.3: Rating of machinery

	Frequency	Percent
Very efficient	10	11.1
Efficient	69	76.7
Inefficient	4	4.4
No machines are used	7	7.8
Total	90	100

Source: Field Survey, 2016

The study also sought to find out the machines that most units were in dire need of that would enhance production. The respondents however observed that there was need to expand production units by acquiring industrial stitching machines, skiving, sole press and grinder that can enable them to do mass production to save the time spent on

production of each shoe. All the respondents at 100 percent reported that they can improve production speed and quality if they acquired the machines. The respondents were also asked to give reasons why they consider the tools as inappropriate during production and 75.5 percent of them reported that the manual sewing machine consumes so much time as compared to the electric sewing machines which would enhance faster production. This response is indicated in table 4.2.4.

Table 4.2.4 Reasons why the tools are considered inappropriate

Why Tools are considered inappropriate in the process of production of footwear		
	Frequency	Percent
Difficult to use	6	6.7
Consumes so much time	68	75.6
The use of machines do not apply	6	6.7
All the tools have specific functions and there is only one sewing machine	10	11.1
Total	90	100

Source: Field Survey, 2016

The key informant KQR2 reported that whereas the enterprises want to purchase new machines, they are unable to do so due to insufficient funds. The respondents report that in as much as the singer sewing machine may be considered ‘efficient,’ it may be considered unreliable and that the stitchery quality is hampered thereby affecting footwear quality. He further confirmed that the machines at Kariokor cannot match the industrial sewing machines that they use during KLDC workshops. The amount of solidity exerted by human hands may not be sufficient to realize a durable bonding between the sole and the upper part of the footwear. From this information it may be deduced that the high number of footwear produced may be reflected in the sandals since it requires little energy to produce as compared to the other types of footwear.

The response in regard to machinery gap necessitated further exploration on the type of machines which are mostly preferred. Among the machines listed by the respondents included: Manufacturing stitching machines, skiving machines, sole press machines and lasts. Since most of these enterprises are operating in close proximity, these machines can be shared, to enhance faster and quality production of footwear.

Another challenge reported by the key informants was the inadequacy of electricity because they currently use a single phase and cannot accommodate heavy machinery even if the members of the association were to pool resources and acquire one. There is also inadequate space to store machinery and other valuable items that enhance production. Technological uptake is generally low in reference to machinery acquisition. This finding on machinery use concurs with other research finding that highlight inadequate machinery as a draw back to the industry's growth. Mudungwe (2012) makes a similar observation in his finding from the baseline analysis done on informal footwear industries in Kenya.

4.3 Design development and production

Research question 2 sought to find out the changes in design of shoes and how it affects production. From the literature reviewed, training of the footwear producers enhances product design development and there are institutions that provide this kind of training and the study sought to whether the footwear producers at Kariokor had received such training. This question was initially explored by creating a frequency table to see the number of respondents who have received formal training and those who have been trained through apprenticeship. Out of the 90 respondents it was found that, only 34.4 percent received training from the institutions and 65.6 percent reported that they trained through apprenticeship. The training facilities mentioned by the respondents included AHITI, Kabete Technical Institute, and Training and Production Centre for the Shoe Industry (TPCSI). Some workshops and seminars were initiatives by KLDC to support the Kenyan leather industry and to boost the industry's competitiveness.

Table 4.3: Shoe manufacturing formal training

	Frequency	Percent
Yes	31	34.4
No	59	65.6
Total	90	100.0

Source: Field Survey, 2016

The data in table 4.3.1 confirms that there seems to be minimal support given by the training institutions. Most of the respondents reported that they were not aware of any such training centres. There seems to be little communication and cooperation between the institutions and the local footwear producers and their effectiveness is almost negligible. This data however corresponds to the ETG (2015) findings on that the Training and Production Centre for the Shoe Industry (TPCSI), a training institution that was set up by UNIDO, has failed to fulfil its objective. This well-equipped facility is highly under-advertised and underutilized because only a few artisans in the industry are aware of its existence, and as stated in table 4.3.1 only one respondent mentioned TPCSI

Table 4.3.1: Training service provider

Training service provider	Frequency	Percent
No training received	59	65.6
AHITI	13	14.4
COMESA and KLDC Workshop	16	17.8
Nyamawa Polytechnic	1	1.1
TPCSI	1	1.1
Total	90	100.0

Source: Field Survey, 2016

The information in table 4.3.2 indicates the nature of training that the respondents received. This information was necessary to establish the influence of training and evolution of production of footwear with respect to design development and information on marketing. It was found that 65.6 percent of the responded were not aware of the nature of training offered by the above mentioned institutions and those who trained had basic concepts of design development, leather technology and marketing.

Table 4.3.2 Type of training received

	Frequency	Percent
No training received	59	65.6
Design development	15	16.7

Leather technology	9	10.0
Marketing	2	2.2
Networking	5	5.6
Total	90	100.0

Source: Field Survey, 2016

The respondents were asked whether a structured training programme was useful in production and a small number of 5.9 percent reported that the training they received on the job has been of help and has made them more competent in the line of design development. If the level of skill development were to be measured by the level of formal training then it would imply that the footwear manufacturers have very limited skills because only 34.4 percent had been trained through a structured programme.

In order to build up more answers for research question 2 on design development, the study sought to find out how the changes in designs have been regenerated over the years. This was done by asking question on the changes that have occurred in designing the footwear. It was found that designs are passed down from one generation to another through apprenticeship. This aspect of the study therefore concurs with a study conducted by ILO, confirming that skills are developed through informal apprenticeship system, such as what is being practised by '*juakali*' operators in Kenya. This has proved effective transfer of skills in the informal economy (ILO, 2010). Improvements in the production processes or product technology need to be accompanied by a labour force which has the relevant professional skills to help the small firms improve their productive capacity.

One of the key informants KQR2 confirmed that skill development in Kariokor is mainly done through apprenticeship. The trainees who are interested in developing their skills learn to do so in the job because it is affordable and sometimes done through mutual agreement between the trainer and the apprentice. According to the informant, apprenticeship limits creativity as most designs are copied across the market.

Table 4.3.3: Distribution of apprentice in the production units

Production Units	Frequency	Percent
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00	54	60.0
1.00	7	7.8
2.00	13	14.4
3.00	8	8.9
5.00	4	4.4
10.00	4	4.4
Total	90	100.0

Source, Field survey, 2016

Table 4.3.3 indicates that 54 production units did not have any apprentice while the rest of the units had apprentices ranging from four to thirteen. From the above response it was necessary to establish how skill acquisition has influenced production and how it has contributed to the revamp of the footwear industry. A likert scale was used to analyse this data and it was realized that 72.5 percent of the respondents were in agreement that skill development through apprenticeship or training service providers such as TPCSI would enhance production of footwear to a great extent.

Table 4.3.4: Extent to which skill development has affected production

	Frequency	Percent
Great extent	37	72.5
Minimal extent	11	21.6
No extent	3	5.9
Total	51	100

Source: Field Survey, 2016

Out of the six Key informants, three had formal training and regularly attend the workshops that are conducted by the KLDC. Their contribution to the study was used to build up the discussion from the quantitative findings. In addition to the above presentation, the study found that The Kenya Footwear Manufacturers' Association (KFMA), the Kenya Cobblers Association (KCA) in collaboration with the Kenya Leather Development Council (KLDC), initiated a programme that brings together small scale footwear manufacturers to enhance skill development. This was started in 2011 and has since seen the producers increase production through improvement in designs. The workshops and seminars are organized yearly to train the cobblers in product design development and to conduct a baseline survey on the activities in the market.

4.3.5 Design preference in the footwear production

Research question 2 was further explored by assessing the origin of designs and find out how the development of designs would affect production. Design development assessment was also necessary to help in identifying the type of footwear products that are commonly made and to establish the reason behind the preference to a particular type of footwear. From the study in Kariokor, most designs are developed through copying from other designs that already exist in the market. Some designers originate their designs from African print fabrics and Maasai beads to enhance the products while others copy designs from the imported shoes.

Revival of production in this case is characterized by the changing trends of designs that meet the customers' need. It is noticeable that of the 90 premises studied, majority preferred making the beaded sandals and this is attributed to customer's preference. Out of the 90 units studied 27 of them made the sandals for both males and females. The Kitenge shoe is relatively new in the markets and the study showed that it is quickly gaining popularity with 16 units manufacturing it.

Table 4.3.5 Design preference in footwear production

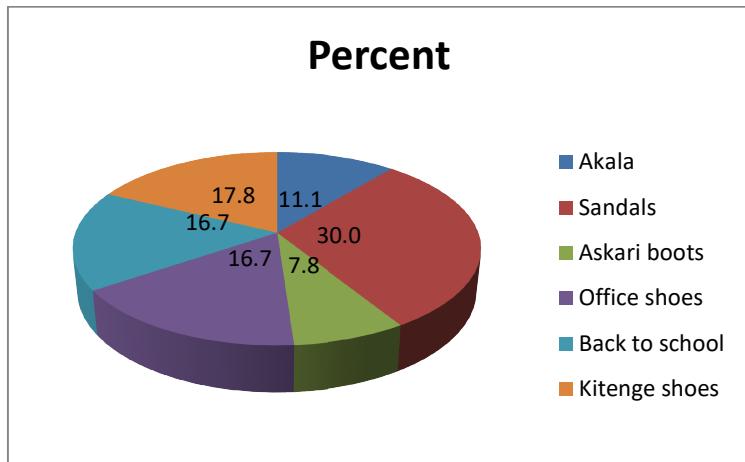
Type of shoe preferred	Frequency	Percent
Akala	10	11.1
Sandals	27	30.0
Askari boots	7	7.8
Office shoes	15	16.7
Back to school	15	16.7
Kitenge shoes	16	17.8
Total	90	100.0

Source: Field survey, 2016

The respondents were asked to indicate the type of footwear that they mostly prefer making and the response displayed in the pie-char below. Figure 4.5 shows that 30

percent of the producers prefer making the sandal; this is followed by Kitenge shoes at 17.8 percent. The least preferred product is the school shoes at 9.8 percent.

Figure 4.3.5 Design preference



Source: Field Survey 2016

The respondents attributed the above result to customer preference. The school shoes are preferred only when schools are opening whereas the beaded sandal is used in all seasons. Another determining factor of design preference was the cost of production. The materials for making the sandal are considered affordable whereas the materials for making the school shoes and office shoes are found to be more costly. From the qualitative literature gathered, the Kitenge shoes are quickly gaining popularity at 17.8 percent level of preference. In the earlier literature presented this is attributed to the market trend and the readily available African print fabric which is used for the uppers of the shoes. The producers therefore do not use leather as a raw material in this regard.

Table 4.3.6 Reasons for special preference

Reason	Frequency	Percent
Easy to make	12	13.3
Raw materials readily available	43	47.8
Demand from customers	33	36.7
Affordable to the producer	2	2.2

Total	90	100.0
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Source: Field Survey, 2016

On whether the footwear producers had changed designs in the last five years, table 4.3.7 indicates that majority of the respondents have changed designs of their products in the last five years based on customer preference. The table presents 96.7 percent of the total number of respondents who have changed designs of footwear and product line depending on market need. The designs are changed by copying what already exists in the market.

Table 4.3.7: Change of designs for the last five years

	Frequency	Percent
Yes	87	96.7
No	3	3.3
Total	90	100.0

Source: Field Survey, 2016

The beaded sandal was singled out for an in-depth analysis in this case because it is the most preferred product in the shoe industry. This data relates to what was earlier discussed on machinery use that showed that the producers use the sewing machine and hand tools to manufacture footwear. This would possibly explain why the most of the producers prefer making sandals. Another possible reason for this preference lies on the cost of production of a single footwear. The sandal in this regard is less complicated and takes a relatively smaller amount of leather as compared to safari boots or school shoes.

The study found out that most of the respondents had introduced new changes in their products in order to meet market demand. This finding is similar to other research findings (Kamau & Munandi, 2009; McCormick et al., 2007); in the garment SMEs in Jericho market implying that these changes occur as a result of the market demands from where the producers copy designs. Whereas exporting firms like Bata Shoe Company have been investing in product design and in quality control facilities as required by export markets, the small firms do not employ designers in their firms.

Typical exporting firms have strict quality control systems in place (Musabayana, 2006). Quality is regarded as an important part of production, and quality standards are insisted upon at every stage of the production process.

4.4 Product quality and production of the footwear in Kariokor

To answer research question 3 on product quality, the respondents were asked to state factors that affect product quality. According to the respondents, the production of quality footwear heavily depends on not only the quality of the raw materials used but also the kind of machinery used. Table 4.4 lists the materials needed in the production of footwear. The total cost of material in the process of shoe production by the MSMEs range from approximately 200 Kenya shillings for sandals, to approximately 800 Kenya shillings for a pair of boots with the main material being leather and soles.

The findings also indicate that all the respondents confirmed what was indicated in earlier literature that all the materials needed for footwear production are available within Kariokor. It was also confirmed that all the leather, soles and other accessories such as shanks are manufactured in Kenya. Other raw materials include insole, beads and special threads. There are a few enterprises that import cheap soles to reduce on the cost of production.

Table 4.4.0: Main raw materials-Local leather

	Frequency	Percent
Mostly	84	93.3
Rarely	6	6.7
Total	90	100.0

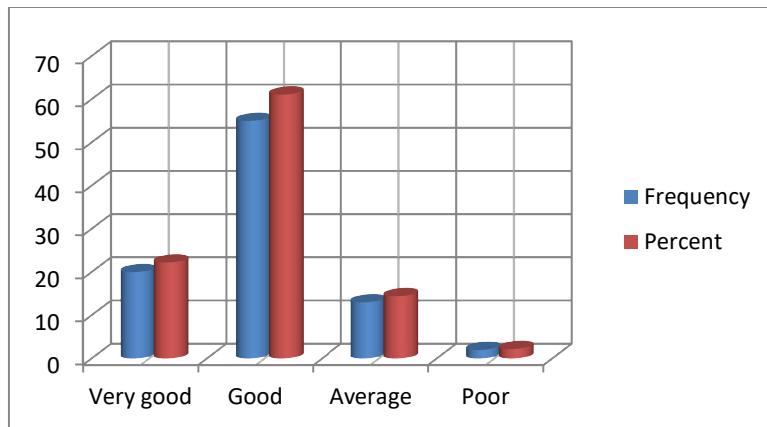
Source: Field Survey, 2016

From the early literature reviewed, it was noted that leather still remains the main raw material used in the shoe industry. From the 90 units studied, 93.3 percent rely on the local leather as their main raw material. Apart from the units that make Akala sandals,

all the other footwear producers used soles that are imported from other countries. The raw materials are also said to be good with a 52.9 percent rating.

From the conceptual framework, the quality of the materials used determines the quality of the end products. The findings from the study indicate that most producers use tannery ‘rejects’ in form of wet blue to produce shoes. These products are cured and processed within the industry at affordable rate. Other accessories are also obtained from within the market. Figure 4.4.1 presents the rating that producers give of the nature and quality of the raw materials that they use in the production of different types of footwear. Availability of affordable raw materials and affordable labour cost are factors that the producers seem to enjoy as contribute to the revival of production of footwear. These factors also determine the cost of production which is found to be relatively low due to the increased numbers of workers within the production units as reported in the earlier data; that make labour cost affordable.

Figure 4.4.1: Rating of the quality leather as a raw material



Source, Field work (2016)

The finding on the cost of production correspond to COMESA (2012) report on the unit cost of shoes which according to the current study is still relatively cheap. It was discovered that the average price in most shops in Nairobi for similar products are selling at a price of 1500 Kenya shillings and above while at Kariokor the unit price per shoe still stands at six hundred Kenya shillings. This therefore shows that these

informal footwear industries have the ability to displace other competitors in the industry because the established firms may have higher overhead costs as compared to the informal footwear producers in the small units in Kariokor. This relatively low cost of production cuts across all products which includes sandals, safari shoes, boots and man office shoes. It was however reported that in spite of this benefit, most products from this industry still fail to reach proper retail outlets because of quality and supply discrepancy, which is a plus for the formal footwear manufacturers.

Table 4.4.1: The unit cost of production per shoe

Materials	Average costing for footwear (%)
Leather	53
Soles	33
Insole	04
Shanks	01
Other accessories	10
Total	100

Source: KLDC Data Baseline analysis (2012)

On the question of the shelf life of the footwear produced at the market, most respondents stated that the market is seasonal and estimating how long a shoe takes on the shelf awaiting to be sold was rather difficult. This was done in a measure of between 1-4 weeks. The researcher therefore picked on an average time between the high season and the slack season to approximate the shelf life of a footwear product. The same measure was undertaken to approximate the number of shoes sold weekly and the profit obtained from the weekly sales. The descriptive table below shows the distribution of the shelf life, the number of shoes sold, and the approximate profit per week.

Table 4.4.3: Shelf life of footwear measured in weeks

	Minimum	Maximum	Mean
Akala	1.00	4.00	2.7143
Beaded sandal	1.00	4.00	1.4615
Back to school	1.00	4.00	1.9231

African boots	1.00	4.00	2.5556
Office shoes	2.00	4.00	3.1111
Kitenge shoes	1.00	1.00	1.0000

Source, Field work 2016

The research however found that even though most of producers use what they referred to as the wet blue ‘tannery’ rejects because it is cheap, but it compromises the quality of the shoes. Most of the quality leather are very expensive and out of reach to the informal footwear producers at Kariokor. The respondents however acknowledged that even with the tannery rejects their shoes still seemed more durable than those from China. There is a noticeable changing trend of footwear type being produced at Kariokor with a small percentage of producers using African print fabrics for production of shoes. Even though the producers in this type of shoes are small, it confirms the dynamism of production which heavily depends on market demand.

In the literature reviewed on the leather sector, Mwinyihija(2012) observed that once the raw material is processed to the recommended levels, the added value to finished leather (from raw material) is increased by 243% and for transformation to leather footwear an increase of 850% is realizable. This aspect re-emphasizes on Kenya’s desire to fast track the leather value addition initiative in the leather sector (KLDC) under vision 2030 and attaining her Sustainable Development Goals (SDGs). Apart from Kenya earnings in 2013 amounting to 13.6 billion Kenya shillings per annum, there are prospects that with 70% value addition initiative targeted at footwear production; the country would have earned an estimated K.sh 73 billion in the same period. In order to improve on product quality, other case studies by Sonobe and Otsuka(2006) had cited branding and differentiated products to appeal to customers. This is however not applicable to Kariokor because their products cannot be distinguished.

The increase in production from the findings of this study was approximated to about 50 percent in the last five years. Earlier presentation indicated that there a new way of production of shoes that doesn’t involve using leather as a raw material which has quickly gained popularity. The footwear producers use fabrics instead of leather. This

discussion confirms earlier literature that suggested rapid growth that can be realized in these industries if the producers were to receive adequate support from the government in terms of machinery acquisition, skill development and infrastructural improvement (Mudungwe, 2010). Revival of production in this case occurs when the manufacturers become more innovative and creative by using fabrics instead of leather to create shoes.

With his background on leather training from AHITI, a key informant KRQ4 provided a highlight on the yearly training programme initiated by the KLDC that ensured that animal farmers were equipped with the knowledge of producing quality hides and skin. Innovations are appreciated in this respect through the innovative methods that ensure improved methods of leather processing. Leather processing has been regenerated from ground drying that was used in 1980, to wet salting which is currently being used.

The informant has also acknowledged that there has been improved sensitization of farmers on how to keep healthy animals to produce quality leather. The role he plays in improving quality of the materials is networking with the farmers regarding the quality of materials. This is enhanced from the time the animal is slaughtered to the time the leather reaches Kariokor market to the end product. He also observed that the improved sensitization has seen the footwear industry enjoy a variety of raw materials from; goat leathers, to rabbit fur, to ostrich leathers, to tilapia leather to Cow leathers and Camel leathers. All these are done to the different finishes such as suede, nubuck, pull up, antique grain, split leather, full grain leather, and pigmented leather. All these are currently available in varied textures. The change in the quality of the leather produced is also another factor that shoes that indeed revival of production has taken place over the years.

4.5 Gross Margin and Break Even Analysis

The literature reviewed earlier indicated that the informal footwear industry has managed to survive amidst many challenges. One of the challenges highlighted was competition from the ‘mitumba’ market and cheap imports from China. In order to guarantee sustainability and potential growth for the future in the informal footwear industry, it was necessary to analyse the gross profit margin of the footwear in Kariokor. Gross margin is crucial in gauging the sustainability of a business. This is

because in every business, the ability to generate enough cash for raw materials, pay the rent and employ the employees who create the products and services is determined by the gross profit margin. This margin also demonstrates a firm's ability to translate sales into profit (Mudungwe, 2010).

From the various literature reviewed, it can be argued that every industry needs to ensure sustainability of its production. It was therefore necessary to establish the profit margin in the footwear industry at Kariokor to ensure its sustainability. Table 4.5 was adapted from the ETG, 2015 research carried out across informal footwear industries in Nairobi. The data shows that the enterprises in Kenya are generated a minimum and a maximum gross profit margin of 18.9 and 39.4 percent per pair in 2015. From table the sandals are the most profitable generating a gross margin of 39.4% and boots has the lowest at 18.9 percent.

The types of shoes listed table 4.5 include; sandal, school shoes, boots and safari shoes. This comparative analysis of profit margin adapted from the KLDC (2010) survey and 2015 field survey was necessary to determine whether there has been growth in production over the years. It is noticeable that the most preferred shoes which were the sandal still recorded the highest number of weekly sales. This type of shoe also has the least shelf life and the records the highest profit. This result was expected considering that the cost of production of sandal is also relatively low as compared to the other types of shoes.

Table 4.5: Gross profit margin per unit

Footwear type	Gross Margin (%)
Sandals	39.4
Boots	18.9
Back to school	23.10
Safari shoes	28.36
Average	27.45

Source: Adapted from ETG (2015)

The details of profit margin from the study are displayed in table 4.5.1. The sandal in this case is still the most popular product that with a 30.7 percent profit margin. The difference in the profit margin in 2015 and 2016 is because the scope for ETG research was wider than the Kariokor research. This is attributed to the low cost of production and that it is not as complex as making the boots or the school shoes.

Table 4.5.1 Weekly profit

Average profit per week	N	Minimum	Maximum	Mean	Percent
Akala sandal	6	400.00	50000.00	10733.3333	21.3000
Beaded sandal	40	500.00	50000.00	15565.0000	30.7000
Back to school	34	2500.00	20000.00	9250.0000	18.2000
Office-man shoes	20	1500.00	15000.00	5950.0000	11.8000
Kitenge shoes	12	7500.00	12000.00	9125.0000	18.0000

Source: Field Survey (2016)

From the key respondents, it is evident that the footwear production has at Kariokor informal industry has changed for the better over time from the micro production, to small and medium production firms that produces approximately 1.7 million pairs of shoes annually. This data however indicates that the production is way below the level of consumption in the Kenyan market which is reported to be 34 million pairs per annum, thereby justifying the need for the ‘big push’ to increase production. This data however doesn’t concur with the report from COMESA (2012), baseline analysis that puts the shoe production from the informal industry at 8.5 million pairs per annum.

4.9 Access to market and production of footwear

Research question 4 sought to establish how the footwear producers accessed market and to identify the most popular market base for the shoes produced in Kariokor. The findings indicated that 100 percent of the respondents have their market base within Kariokor and that most units are totally dependent on the social media to reach out to customers. Table 4.9 indicates that 67.8 percent of the respondents currently use social

media to reach out to the customers as compared to hawking that was done before. Some customers reported that they used calendars as a mode of advertising the products in the market 17.8 percent however said that they don't have a specific way of communicating to the customers and instead they use any available mode. The social media listed included WhatsApp, face-book, and basic communication using the mobile phone.

Table 4.9: Mode of Access to market

Mode of Marketing	Frequency	Percent
Social media	61	67.8
Calendars	16	17.8
Both social media and calendars	13	14.4
Total	90	100.0

Source: Field Survey, 2016

An analysis of the nature of customers who accessed the footwear market indicated that most production units sold their products within the Kariokor market with a few selling their products to Maasai market, village market and other markets within the city. The majority of buyers of products made in Kariokor are retail storeowners who visit the market to place orders that may range from 20 to 100 pairs of shoes. The retail storeowners then bring Kariokor Market-made shoes to their respective stores in different parts of Kenya and sell them directly to consumers. Many producers in Kariokor Market are not aware of what happens outside of their walls once the footwear products are bought.

It was necessary to analyse how the local footwear access market because the literature reviewed indicated that the most of purchased shoes are from the local footwear industry as compared to the formal footwear industries such as 'Bata' that sell more expensive shoes. This trend hints at the purchasing power of the Kenyan population as well as the distribution of the economic class in Kenya. Because the study focussed on

the revival of production of footwear it was necessary to establish how the producers manage to compete against the second hand shoes and the imports from China and Ethiopia.

It was found that a few units have their market channels to the markets within Nairobi County. This distribution established that only 27.7 percent of the producers channel their products to the markets in the city. It was discovered however that 95.6 percent of the products are channelled to other local markets across Kenya. From the distribution on table 4.9.1 it is also evident that almost all units have no link with the international markets but instead they reported that they have links with the regional markets across East Africa which includes Tanzania, Rwanda and Uganda.

The study found that sales are made through wholesaling and retailing to customers who mostly come to buy the products from the production units. A few units produce shoes on special orders from companies and firms. It was discovered for example that the ‘askari boots’ are specifically made on special requests from the security firms. This information was received from the qualitative interview that was conducted on the question that was to assess the cooperation level of producers as they manage to penetrate the market and how they counter the challenges experienced and still remain in business despite the flooding of the market with second hand shoes and other imports from East Asia.

The data presented at Kariokor is consistent with the data from the UN Comtrade (2014) data that shows that the major regional outlets for footwear produced in Kenya are Uganda, Tanzania and Zambia. The report however differs on the information sought on the international markets, because none of the respondents showed access to the international markets. The inability to access the international market is associated with the lack of information on how to enhance product quality and increase competitiveness.

Table 4.9.1: Access to market

Selling Shoes Within Kariokor Market

	Frequency	Percent
Mostly	90	100.0
Other Markets Within Nairobi		
Mostly	25	27.8
Rarely	65	72.2
Total	90	100.0
Regional Markets for Product sales		
Mostly	34	37.8
Rarely	56	62.2
Total	51	100.0
International markets		
Mostly	1	1.1
Rarely	89	98.9
Total	90	100.0
Local markets		
Mostly	86	95.6
Rarely	4	4.4
Total	90	100.0

Source: Field Survey, 2016

By contrast however and consistent with training and skill development, it was realized that long-established enterprises operated by entrepreneurs who have some level of tertiary training or who had attended the workshops organized by KLDC tended to develop some market channels to directly reach the ultimate customers. About 37.8 percent of the respondents said that they have since built market channels in the local markets within Kenya and regional markets within the East African region such as Rwanda, Tanzania, Burundi and Uganda.

The above finding corresponds to McCormick's (1998) idea that domestic markets can easily be broadened and that where markets are small relatively specialized, producers who can manufacture small batches can out compete the large firms. Basing this argument on FAO (2010) data that places formal footwear manufacturing at 1.5 million per annum, the implication that the small footwear manufacturers are out-competing the

large firms is confirmed. Earlier data had shown that the general footwear production in Kenya stands at 10 million pairs per annum, implying that the informal production is at 8.5 million pairs. The domestic market in the case of Kariokor has become a valuable asset to the producers.

The most striking idea about market access is the level of satisfaction that most respondents have shown with the domestic market. For them out-competing the larger firms is more than enough. Some respondents however have established ties with the regional markets and are doing booming business and this is also an indicator of increased production. From the above discussion it can be concluded that evidence of revival has been realised through the broadening of domestic market and accessing the regional market in the last five years. If more support is given to this industry than it can easily penetrate international markets.

What can be learned from Kariokor is the resilience and determination that the producers have shown as they struggle to stay in business. There is however little contribution made by the KLDC especially regarding skill development and design development and in changing the system of production at Kariokor. Furthermore the wider exercise of revamping the footwear sector focussing on skill development as offered by the institutions has so far been hampered with due to inadequate machinery. This aspect emanates from lack of finances to purchase the required machines and lack of space to fix the machines.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The previous chapter presented the key findings and discussion of the study in the informal footwear industry at Kariokor with specific indicators showing revival of production in the footwear industry. This chapter presents a summary of the study basing it on the discussion from chapter 4. Conclusions are drawn and recommendations made on possible ways of improving approaches to boost the local footwear industries. Possible areas for further research are also proposed.

The focus of this study was to assess the changes that have taken place in the informal footwear industry at Kariokor that have caused the revival of production of footwear. Earlier research had also implied increased production of footwear in the sector. The main interest has been placed on the nature of production as determined by machinery uptake, design development, product quality and access to market. The findings of this survey contribute to knowledge in the area of industrialization and would help in developing more efficient industrial programmes that would address the issues that affect production in the informal footwear industries.

5.1 Summary of the research findings

The main objective of the study was to assess the nature of production of footwear in Kariokor. It was established that the industry's growth is currently being driven by a relatively young group with a mean age of 38.5 percent and 47.8 having completed secondary schools. The system of production is also considered male dominated with 88.9 males against 11.1 females. The finding is contrary to the expectation that the population within the units would be more mature and older considering that the market has been in operation for very many years. The number of producers has increased significantly in the units and more shoes are currently being produced.

The industry enjoys the advantage of operation within a cluster. This is a quality that can easily enhance the transformation of Kariokor to an industrial district and enhance flexible specialization model of production. As a result, the manufacturers would make footwear which is highly competitive in terms of price and durability as compared to the cheap imports from China and other established enterprises. The production of highly affordable shoes is influenced by the availability of leather; soles and other accessories are being manufactured in Kenya and are also readily available within the market. Moreover, there is a ready local market caused by the huge deficit of shoes which has not been filled by the shoe imports. The changes that have taken place since 2010 are remarkably good as reported in the discussion section.

It was established that the findings clearly correspond with Marshall's (1890), idea on the formation of Industrial Districts. Kariokor market share special features with the industrial districts due to the nature and quality of local labour which is integral to the 'district.' Production is further enhanced when individuals can move from stall to stall and share information about new designs, tools and markets. The owners of businesses and workers seem to share the same norms and values of business and this further enhances commitment to the 'District.' In this regard, the community is seen as relatively stable and this enables evolution of strong, local cultural identity with shared industrial expertise. This characteristic has seen the industry at Kariokor develop various social institutions such as the Kariokor Footwear Manufacturers' Association,

the Kenya Cobblers Association to strengthen their course of production. These institutions are formed to enable producers share ideas that strengthen production resulting in physical presence hence innovate producers.

5.2 Machinery use and production

The first specific research objective assessed whether there are changes in the machinery that is used for production of footwear at Kariokor in the last five years. Contrary to the study expectation that there has been improved machinery use in the last five years, it was established that the industry still experiences major constraints regarding machinery use and this affects production. It was established that most of footwear makers at 52.2 percent, still operate with the basic machinery such as domestic sewing machines and rudimentary tools. As a result it has constrained the production, quality and durability of their products.

Even though the respondents considered the basic machinery that they own as ‘efficient’, they acknowledged that the lack of industrial machines highly affects faster production. Most firms counter this by employing between 4-5 workers who specialize in the handling of various parts of the shoes. There seems to be an increase in the number of producers and they would greatly be affected by loss of jobs to many if the process was mechanised. In so doing, they manage to make the target number of shoes by the end of each day. Evidence of growth and revival is realized from the increased number of employees and increased number of footwear produced weekly. The increase in the number of shoe traders could also be attributed to the demand that surpasses the supply of footwear.

From the findings it can be deduced that inadequate machinery gives an edge to the sandal producers since it is simple and can be made from the basic simple tools. This perhaps would explain why the sandal production at Kariokor is the most preferred type of shoes. The report however stated that new machinery acquisition is hindered by inadequate cash because they are expensive. In addition, the units of production are also small and cannot accommodate the industrial machines. Infrastructural challenge in regard to electricity and security were also identified as some of the factors that have hindered new machinery acquisition in the informal footwear industry at Kariokor.

5.3 Design development

The second objective of the study sought to find out whether there have been changes in regard to product design and how the changes determine production. From the study carried out, it was found that design development is enhanced through skill development. In order to further sought answers to this question, it was necessary to identify the producers who have received training in footwear production and those who have not. It was established that most producers gained their production skills through apprenticeship. From the data collected, only 34 percent of the respondents had received formal training in regard to footwear production and the rest at 66 percent were not aware of such training programmes. The study also identified the Animal Health and Training Institute (AHITI), Kenya Industrial Research and Development Institute (KIRDI), Kenya Leather Development Centre (KLDC), Kenya Industrial Training Institute (KITI) and Training and Production Centre for the Shoe Industry (TPSCI) as some of the institutions that offer training in footwear industrial development. It was found that these institutions offer little support to the footwear sector.

Even though it was found that majority of the footwear producers had never received any formal training and have never attended the training workshops organized by (KLDC), there was evidence of the initiative of the Kenyan government to establish the Leather and Leather Products Technology Institute in Thika to train footwear producers. Another achievement noticed from the key informants is empowering the KLDC in order to support the formation of already skilled labour force and the dissemination of advanced technologies. This is because it is evident that most of manufacturers have already acquired the basic skills that enable them to produce shoes through apprenticeship. They also learn about new designs from the internet. The study also listed the social institutions that support footwear productions which include the Kenya Association of Manufacturers (KAM), the Leather Articles Entrepreneurs Association (LAEA), which is a new movement in the leather sector, and universities which include leather training institutions.

These institutions enhance productivity because they provide the synergy with which the informal industries can be driven to become Industrial Districts. It can therefore be observed that skill development provides a platform for design development and enhanced by appropriate machinery. Most of the designs for the footwear industry are copied from other shoe designs in the market. This is done through a market survey to check on the trendy designs and reproduce it even though it hinders creativity and innovation.

5.4 Product quality and production

The third objective for this research was to assess the quality of the footwear produced at Kariokor market and to identify how it affects production of footwear. From the findings of this research, product quality is determined by the quality of raw materials in the market and the quality of machines being used. Considering that most shoes are produced using rudimentary tools and the singer sewing machine, the quality and productivity gets compromised. In order to counter the machinery deficit, most producers have resorted to producing less complex sandals which are enhanced by using intricate ornamental designs or by producing non leather shoes made from African print fabric.

The study also found that footwear production has evolved over the years and that the producers constantly change their product lines depending on market demand. The producers have devised methods of product designing depending on market trends. Revival of production in this regard has been reflected through the production of Kitenge shoes, a product line which has gained popularity. From the findings, Kitenge shoes is the fastest sold shoes and it generates the most income. This change of the line of production from Akala, to school shoes, to sandals and to Kitenge is evidence on the process of revival of the footwear industry. It is the flexibility of changing according to customer preference that keeps the footwear manufacturer at Kariokor in business. This new way of production can also be viewed as a way of countering the shoe influx in the market and enhancing flexible specialization in the process of production.

5.5 Access to market

The final research objective sought to identify the kind of markets that the footwear producers at Kariokor are able to access. The study found that the footwear market is very seasonal and that demand for school shoes increases rapidly during the beginning of the school term and during the festive seasons more shoes are sold. It was also established that the shoes from Kariokor are mostly sold in the domestic market and are not branded. The producers mainly target the local and the regional markets with many of the buyers being retail store owners who visit the market to place the orders that may range from 20-100 pairs weekly. Many producers are not aware of what happens once the shoes leave the market and according to them, there is no ‘challenge’ in regard to accessing markets because the local market is adequate. The respondent reports that the footwear market has expanded considerably in the past five years. This increase was measured by the frequencies of special orders that most producers receive in high season.

The study also found that, by the year 2010, the footwear products from Kariokor were mainly sold within the market and to the local markets across Kenya. The current situation indicates that there is ready local and regional market where most of the products are sold. Another indicator that production in informal footwear industry has increased is realized by expansion of the domestic which is done through the social media such as WhatsApp and facebook. It was however noted that the products from Kariokor are not channelled to the international markets, a factor which needs to be explored.

5.7 CONCLUSION

From the discussion on the nature of production of footwear in Kariokor market, the following conclusions can be drawn. Kariokor market forms an integral part of Kenya’s footwear industry and this reason, the producers have an opportunity for improving and expanding this industry to promote economic growth and take hold of emerging opportunities in the footwear industry. It was also established that the industry has the ability to produce low-cost footwear as a tradable commodity and that with adequate support from institutions within the production community; Kariokor can be uplifted to an Industrial District.

Factors such as availability of a strong and specialized labour force, production stalls working in close proximity, availability of strong welfare associations such as the Kenya Footwear Manufacturers Associations were identified as crucial to spearheading the production community into an Industrial District. Despite having abundant raw materials and a young and growing workforce, there are a number of factors that still hamper production and prevent the Kariokor footwear industry from fulfilling its potential. The market is currently experiencing infrastructural challenges caused by inadequate space in the stalls and insufficient storage facility because of increased number of traders who are double the number of stalls.

From the discussion on machinery use, the study concludes that the producers generally still rely on their rudimentary tools which are reported to be ‘efficient’ by the local standard but inappropriate by the international standards. It was found that financial and infrastructural factor hinder acquisition of the new machines and tools. However, this problem has been countered by employing more people to produce footwear to meet market demand especially in the peak seasons. Evidently lacking in the units are industrial machines to enhance mass production and to enhance the quality of the products. It is also clear that these units cannot work in isolation and needs to get support from the government and other stake holders.

Concerning design development and product quality, it was found that there has been a considerable change in design as the producers strives to satisfy customer need. Even though production is based on customer preference it is also noted that the type of machinery owned also influence the type of shoes to be produced. This has explained why sandals are the most produced in most units. The type of footwear to be produced is also seasonal and depends on the market demand. The study found that the footwear produced at Kariokor is made from wet blue and relatively more durable as compared to the cheap imports from China. There is also a new trend of products that utilize the African print fabric and is regarded as trendy. The products are however not branded and are made with undifferentiated designs.

The final conclusion drawn is in regard to market demand. The study found that the production at Kariokor target the domestic market. None of the producers has accessed the international market because they consider the domestic and regional market as

adequate for their products. Even though some respondents reported that the market for their products is ‘sufficient’ and that they are not able to exhaust the market, there is need for them to increase competitiveness in order to fill the shoe deficit gap in the country and export the surplus to the regional and international market.

5.8 Recommendations

Considering the findings and conclusions made from the study, the following recommendations are suggested. The government should strengthen and position the KLDC as a driving institutional vehicle to enhance industry competitiveness. There should be considerable support given to informal footwear manufacturing industries in regard to training in leather and leather product development through apprenticeships and short-term training workshops organized by (KLDC). Capacity building in terms of skill and design development should be extended to these enterprises and investments in technology improvement be made. Since most of the producers are not aware of the existence of training programmes, the Kenya Leather Development Council (KLDC) and other development partners should sensitize the informal footwear producers on the importance of technological upgrading and provide the necessary machines at the production units that would match the training offered.

Secondly, upgrading of machinery and tools (technological capital) can be done by providing more machinery like the sole pressing machine in Thika at accessible locations for use or rental on an as-needed basis. Because supportive infrastructure is an important prerequisite for successful production system, the county government infrastructural committee should look into regenerating the industrial space at Kariokor and provide adequate working space and storage for the footwear. In addition, an electrical system in the industry should be a three phase structure to accommodate industrial machines should they be acquired.

The final suggestion provided is based on information regarding access to market. Increasing access to markets for Kenyan leather is the key ingredient for the success of the footwear industry and this can be done by developing a footwear marketing entity to increase domestic and international awareness of Kenyan footwear products, coordinate the branding of informal footwear products and promote exports. The buy Kenya sell

Kenya initiatives should be enhanced to create public awareness on the local footwear products. Additionally, the Kenya Bureau of Statistics (KEBS) should set design and construction standards for footwear that are imported into the country and relate the minimum flexibility and minimum leather grade that the imported shoes should have. This measure would increase competitiveness of the locally manufactured footwear.

5.9 Suggestions for further research

The footwear producers at Kariokor had not only reported that the market is sufficient and that the tools they use are efficient, but also that the informal footwear industry has a great potential. However, despite the sufficiency of the market and the efficiency of the tools used, there is still a shoe deficit in the country. More research should be done on why the industry has not exhibited their full potential to help fill the shoe deficit in the country.

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APPENDIX I

THE LETTER OF INTRODUCTION

University of Nairobi,
Institute of Development Studies

NAIROBI.

Dear Respondent,

REF: REQUEST FOR RESEARCH DATA COLLECTION

My name is **Easter Elizabeth Okello**. I am a post graduate student at the University of Nairobi, pursuing a masters' degree in development studies at the Institute of Development Studies. I am conducting research on “The footwear industry revival and productivity in Kenya: The case of Kariokor market” I request you to assist me by filling the attached survey document as honestly as possible. The document is meant for

the purpose of this research only. Your identity was confidential. No name of the respondent or institution is required.

Thank you in advance.

Yours faithfully,

Easter Elizabeth Okello

FOOTWEAR MANUFACTURERS QUESTIONNAIRE

Please indicate the correct option as honestly as possible by ticking one of the options and where explanations are required, use the space provided.

SECTION A:

I. Background information (*Tick appropriately*)

1. (a) Please indicate your gender Male () Female ()

(b) Please indicate your Age

2. What is your level of education?

i. No formal Education ()

ii. Pre-primary Only ()

iii. Primary

a. Completed ()

b. Not completed ()

iv. Secondary

a. Completed ()

b. Not completed ()

Tertiary college ()

University ()

Others (please specify).....

II. Employment status of the footwear manufacturer

3. What is your position in the enterprise?

Status (*tick appropriately*)

- i. Employer/ Owner ()
- ii. Partner ()
- iii. Full-time employee ()
- iv. Part-time employee ()
- v. Casual worker ()
- vi. Trainee/ Apprentice ()
- vii. Other

(*Specify*)

SECTION B

Business characteristics (*Tick appropriately*)

4. How many workers does this enterprise have?

- i. Employer/ Owner ()
- ii. Full time employees ()
- iii. Part-time employees ()
- iv. Casuals ()
- v. Trainees/apprentices ()
- vi. Other

(specify).....

5. Which footwear line do you make?

	Mostly	Rarely
i. Akala (<i>Afrikan Reebok</i>)	()	()
ii. Beaded sandal	()	()
iii. Straps	()	()
iv. African boots	()	()
v. Officeman	()	()
vi. Back to school	()	()
vii. Kitenge shoes	()	()

viii. Others
(specify).....

6. For how long have you been in this line of production? Between 1-4 year () , above 5 years ()

7. Do you have any special preference for the type of shoes you produce? Yes () No ()

Please indicate which one.....

Please explain the reason for preference
.....

8. Do you have any previous experience in footwear production before coming to Kariokor? Yes () No () If yes, please indicate the number of years.

- i. 1 year ()
- ii. 2 years ()
- iii. 3 years ()
- iv. 5 years and above ()

SECTION C

I. Innovation through technology: Machinery used in manufacturing

(Tick appropriately)

9. Machines owned

- i. Stippling machines ()
- ii. Sewing machines ()
- iii. Folding machines ()
- iv. Cutting machines ()

Other (specify)

10. When did you acquire the machines used?

.....

11. Have you acquired any new machines in the past five years? Yes () No ()

If yes, how can you rate the machinery used in your firm now as compare to five years ago?

Very efficient () Efficient () Inefficient ()

12. Please indicate machinery that you prefer most in the order of preference.

I.

ii.

iii.

13. Which machine would you recommend not appropriate in increasing production of shoes?

Please explain why

14. Does the footwear manufacturers association give priority in helping members in the purchasing the recommended machines whenever required? Yes () No ()

If no, please elaborate.....

15. Do you feel that production of footwear is affected by the type and efficiency of the machines used?

Yes () No ()

Please elaborate.....

II. Product quality: Main raw materials and sources (Tick appropriately)

16. What are the main raw materials mostly used in footwear production?

	Mostly	Rarely
i. Soles	()	()
ii. Local leather	()	()
iii. Imported leather	()	()
iv. Own leather	()	()
v. Fishing lines	()	()
vi. Vehicle tyres	()	()
vii. Beads	()	()
viii. Mocket/Rexin	()	()

Other accessories (specify)

17. Where do you get the raw materials?

18. How would you rate the quality of the raw materials that you use now as compared to the ones used five years ago?

Very good () Good () Average () Poor () Very poor

19. How long does it take to sell a shoe?

Type of shoe	1 week	2 weeks	3 weeks	4 weeks
Akala				
Beaded sandal				
Back to school				
African boots				
Office man				
Kitenge				

20. On average how many shoes do you sell per week?

a) High season

Type of shoe	
Akala	
Beaded sandal	
Back to school	
African boots	
Office man	
Kitenge shoes	

b) Low season

Type of shoe	
Akala	
Beaded sandal	
Back to school	
African boots	
Office man	
Kitenge shoes	

21. What is the average weekly profit margin for the type of shoe you produce?

Type of shoe	
Akala	
Beaded sandal	

Back to school	
African boots	
Office man	
Kitenge	

22. Have ever attempted to distinguish your products from other products in the market?

Yes () No ()

If yes please explain how it is done

.....

23. How do you ensure that product quality is maintained?

.....

.....

.....

24. How do you counter competition from other shoe manufacturers within Kariokor?

.....

.....

III. Skill development and production (Tick appropriately)

25. Have you received any formal training on skill development? Yes () No ()

26. If yes, please indicate the service provider for the training you received

.....

27. What type of training did you receive?

- i. Design development ()
- ii. Leather technology ()
- iii. Market access ()
- iv. Networking ()

28. Did the workshop/seminar/course enhance your skill development? Yes ()
No ()

Please

elaborate.....

29. How long did the training take?

.....

30. From the training you received, has there been any improvement in production of footwear?

Yes () No ()

31. If yes, to what extent do you feel the skill development training programme has contributed to the increased production of shoes?

Great extent () Minimal extent () No extent ()

IV. Product Design Development and Revival of production (Tick appropriately)

32. Have you had a change of designs for the past five years? Yes (), No ()

If yes, briefly explain how this has been done.

.....
.....

33. How do you ensure that the customers get the latest designs?

.....

34. What design techniques do you use in your shoes?

African Culture oriented () Oriental origin () Copying from others' designs

35. Please explain why you prefer these design techniques.

.....

36. In your opinion, do design techniques affect production? Yes () No ()

If yes please explain how.

.....

37. Do you encounter any problems in developing designs for the shoes?

Yes () No ()

38. The following are some techniques used by footwear producers to make shoes.

Please indicate the method you use by ticking in the space provided

Technique	Very often	Often	Rarely
Beadwork			

stippling			
stitchery on straps			
Strung beadwork			
Fabric designs			

- (a) Any other.....
- (b) Give reasons for using the method(s) you use most often
.....
- (c) Does the technique employed influence customer preference. Yes () No ()

V. Section Access to market

39. How do you reach out to your customers across markets?

- | Mode of Access | Mostly | Rarely |
|--|--------|--------|
| i. They come to buy from the premise | () | () |
| ii. I hawk the products across markets | () | () |
| iii. I reach out through face book | () | () |
| iv. I reach out through whatsapp | () | () |
| v. Other
(specify).....
..... | | |

40. For how long have you employed the mode mentioned in the above question?

.....

41. What is the most effective way of reaching out to customers that you have used in the last five years?

42. In your opinion, how would you rate the means of access to market used now as compared to what was used five years ago.

Very effective () Effective () Less effective ()

43. Which types of customers buy these products?

- i. Wholesalers ()
- ii. Retailers ()
- iii. Individuals ()
- iv. Other (specify).....

44. Indicate the locations where you sell your products

	Mostly	Rarely
i. Within the Kariokor	()	()
ii. Main markets:		
a. Maasai market	()	()
b. Village market	()	()
c. City market	()	()
d. Regional markets across the border	()	()
e. International markets	()	()
f. Local markets within Kenya	()	()

APPRENTICE/ TRAINEES QUESTIONNAIRE

Please indicate the correct option as honest as possible by ticking one of the options. Kindly respond to all the questions.

45. Please indicate your gender, Male () Female ()

46. How long have you undergone training?

- i. One month ()
- ii. Three months ()
- iii. Six months ()
- iv. One year ()
- v. Others ()
- vi. Please specify.....

47. Do you have training sessions every day?

- i. Yes ()
- ii. Sometimes ()
- iii. No ()

48. Did your trainer give you ideas on how to be innovative?

- i. Yes ()
- ii. No ()

If yes please elaborate on how this is done

.....
.....
.....

49. Are you related to your trainer in any way? Yes () No ()

If yes, please tick the relation. Child () Nephew () Niece () Spouse () Friend ()

Other (please specify).....

SECTION B: Apprentice/ Trainees attitude towards skill development and production

50. Express your responses to each of the following statements by simply ticking the box against response that best describes your feelings.

KEY

Response	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Abbreviation	SD	D	UD	A	SA
	1	2	3	4	5

Statement	Responses				
	SD	D	UD	A	SA
The skill development training was helpful.					
There is a change of designs of shoes since the on-sta training					
I have improved on my footwear designs					
I like changing designs often to keep in business					

The current trendy designs are of no use anymore					
There is an improvement in machinery use					
The KLDC has been very helpful in skill development					
The industry will grow faster					

51. The footwear producer's assessment on performance for the last five years

Description	Increase	% Increase	Decrease	Decrease
Production volume (units per day)				
Temporary employment (number of employees)				
Permanent employment (number of employees)				
Sales volume (Kshs)				
Profit level				
Number of markets covered				

52. DOCUMENT ANALYSIS GUIDE

Documents to be checked	Sales Diary	Book Keeping Records	Album of Designs	Record of shoes sold weekly

The document is available				
The document is consistently prepared				
The document is updated to the latest date				

INTERVIEW GUIDE FOR THE KEY INFORMANTS

My name is **Easter Elizabeth Okello**. I am a student at the University of Nairobi, pursuing a master's degree in Development Studies at the Institute for Development Studies. I am conducting a research on the Footwear Industry Revival and production in Kariokor market in Kenya. I assure you that the information collected will purposely be used for research. I will highly appreciate your time.

Date/...../..... **Time of the interview**.....

Venue..... **Language of the interview**.....

Name of the interviewee..... **Position**.....

Contact: **phone**..... **e-mail**
address.....

Please answer the questions as honestly as possible

1. What are your perceptions of revival of footwear manufacturing at Kariokor market?
2. In your experience as the Chairman of cobblers association in Kenya, how would you describe skill development to enhance production?
3. In your opinion how does cooperation between footwear producers in Kariokor market enhance production?
4. What follow up do you make to ensure that skill development programme is implemented where necessary?

5. In your view, do you think the footwear industry has grown based on the initiated programmes?
6. Comment on the utilization of technology to enhance production in the footwear industry.³
7. What efforts do you make to ensure market access is achieved?
8. What do you think are the major factors that have contributed to the inability of the industry to fill the deficit despite the ready market?
9. What is your role in enhancing effective implementation of innovative initiatives in the footwear industry?
10. What is your role in enhancing production in informal footwear industries such as Kariokor?