



# Investigation of the Quality of Footwear produced by SMEs: Case study of Kariokor market, Nairobi

*Janet W. Mesa<sup>1</sup>, Douglas O. Onyancha<sup>1</sup>, and Paul K. Sang Magut<sup>1</sup>*

*<sup>1</sup>School of Science, Dedan Kimathi University of Technology*

## **Corresponding Author:**

*Janet W. Mesa*

*P. O. Box private bag, Nyeri, Kenya*

*Email : mesahj5@gmail.com, Tel: +254728978737*

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## **Abstract**

The increasing economic growth in Kenya has encouraged the growth of the leather sector. Kenya in its long-term vision to become an industrialized middle-income country by 2030, has identified the key role that the leather sector will play.

There is a growing number of SMEs engaged in leather goods and footwear manufacturing around the country. A large number is involved in footwear manufacturing especially school shoes. This has been encouraged by local demand for affordable footwear. Even though production of leather footwear in the informal industry has increased over the years, the country's local footwear has low market position both locally and internationally. The market share of the SME produced footwear has been attributed to low quality and poor workmanship of the products

A survey was carried out to assess the quality of leather shoes produced by SMEs in Kariokor market, Nairobi. Data was collected from 20 respondents who constituted owners and managers of footwear workshops to ascertain if they have adopted the use of quality standards in their footwear fabrication and if their products conform to any laid down quality standards. The survey was carried out using simple random sampling method. The findings showed that none of the SMEs had adopted the use of quality standards and none of them had adopted Kenya Bureau of Standards (KEBS) standards. As a consequence, there was no mechanism of ensuring and maintaining conformity to footwear quality. This study recommends increased sensitization of SMEs on the importance of quality standards and quality management system in shoe fabrication.

**Key words:** Footwear, Quality standards, SMEs, KEBS



## 1. Introduction

Kenya has embraced the goal of industrialization of transforming the structure of economy into a newly industrialized country by 2030 (Government of Kenya, 2002). In order to achieve this, its leather sector has been identified as a key driver towards achievement of Kenya's vision 2030 (Government of Kenya, 2002). The leather footwear subsector offers an important opportunity for industrialization since the country has a unique comparative advantage in terms of availability of raw hides and skins required for the footwear sector (World Bank Group, 2015).

The Kenyan leather footwear industry is still young and developing comprising of the informal and formal sectors. However, this industry is largely dominated by firms that target the domestic market through the artisanal production system (Mudungwe, 2012). Even though production of footwear in the informal industry has increased over the years, the country's local footwear has low market position both nationally and internationally, as it still seems to have unmet potential (Kinyua, 2014). Kenya's once vibrant footwear sector is now choked by cheap imports from abroad which have significant share of the domestic market and the leather shoe industry is facing stiff competition from china and others (Okello, 2010). Although Kenya's ability to run a successful leather footwear industry is enormous as it produces huge amounts of hides and skins, the success of the footwear industry largely depends on quality of footwear which unfortunately has been of great concern since the SME produced footwear has been attributed to the low quality of the products and most of the import shoes have attracted the local market (Muchie, 2000)

The second-hand market accounts for around 63% of footwear sold in Kenya (Baden and Barber, 2005). As a result, there is intense competition among the leather footwear industry players with emphasis laid on production of quality products in order to meet customers' satisfaction and be able to compete in the domestic and foreign market (Mwinyihija, 2014).

Research has shown that low price, high quality and attractive designs are strategies used by foreign competitors to influence the domestic footwear producers (Katende-Magezi, 2017). The domestic producers however, have considered competitive pressure from imports as an opportunity to improve performance. The toughness of the import competition can lead the domestic producers to upgrade quality (Katende-Magezi, 2017).

Product quality is the most critical element for market success (Devaraj et al. 2001). The quality of footwear is an important property and is evaluated based on whether the shoe meets set standards because a good quality shoe should meet the minimum quality requirements for it to compete favourably in the market (Goonetilleke et al, 2001). It is against this background that this study provides an understanding of how the quality of the locally produced footwear has influenced domestic market access for the import shoes.

The quality of footwear is greatly influenced by the quality of raw materials and the workmanship involved. Therefore, a good quality has to certify certain minimum quality requirements. It has to meet the requirements set by quality regulatory bodies (UNIDO, 1996). Such requirements include the chemical and physical properties of the shoes which include: Quality of raw materials and suitability of the materials for the product, quality of footwear accessories, quality of cutting patterns and lasting, quality of skiving and stitching, quality of sole attachment/ sole adhesion, finishing of the shoe, suitability of lining materials to its purpose, suitability of the insole, chemical composition of the shoe and fit for purpose( Motawi, 2017). Based on the quality of raw materials in the case of leather footwear, a good quality shoe is required to certify the following physical parameters; tensile strength of upper and sole. tear strength of the upper material, flex endurance, air and water vapor permeability, flex endurance, thickness of the sole, insole, lining, sock and upper material, adhesion of the sole, sole hardness, abrasion resistance among. Failure to



certify these requirements implies that the shoe does not conform to footwear quality (Footwear Distributors and Retailers of America, 2014)

## **2. Research Methodology**

### **2.1 Population**

In this study, the informal footwear industry was the population whereby the key respondents were footwear artisans in Kariokor market, Nairobi. The study targeted the back to school shoe makers. The sample size of 20 SMEs who were randomly drawn. Data collection instruments were questionnaires. The consent of the interviewee was sort before they were interviewed and were explained the purpose of the research and the use of the data obtained

### **2.2 Primary data collection**

The researcher used field survey to collect the data used for analysis. To carry out the study, simple random sampling technique was employed to collect data (Creswell, 2009). The study targeted small and medium enterprises in the leather footwear at Kariokor market. During the sampling process, 20 questionnaires were administered whereby the key respondents were interviewed.

### **2.3 Characteristics of the Respondents**

The study sought information from the owners of the footwear production units and the producers of footwear in Kariokor. The questionnaire was developed to look into various aspect in the fabrication of school children's shoes produced by SMEs in Kariokor market, Nairobi.

### **2.3 Secondary data collection**

The secondary data was obtained from published and unpublished bibliographies, academic journals, conference proceedings, government reports and related studies.

## **3.0 Results and Discussion**

### **3.1 General Information of the Respondents**

In accordance with the objectives of the research

which include; to assess the quality of footwear produced by SMEs in Kariokor market and to evaluate adoption of and use of standards by the SMEs in shoe fabrication. Data was collected in six major thematic areas; -

General/ demographic information; owners/managers education, skills and training in leather/footwear technology; raw materials and sources, footwear quality standards, adoption and use of KEBS standards by SMEs, KEBS certification and consumer complaints

### **3.2 Training in leather related course (owners and managers)**

Training in leather/footwear technology is shown in Table 1. 10% of the owners/ managers had acquired training at craft in leather/footwear related field at KLDC. This is similar to China where industrials establish training centers for their trainees on leather courses upon attaining the basic education (Goel and Vijay, 2017). 5% had attained diploma in leather/footwear with a bias towards basics of leather and footwear manufacture. However, majority of the respondents (85%) had not attained formal training in leather and footwear related field. A large number had worked with BATA Shoe Company and had acquired the training through on job training. This implies that majority of the owners of leather footwear units had not acquired formal training in leather and footwear technology to enhance production and quality of the shoes. This is in agreement with the results obtained earlier which pointed out that most owners of the MSMEs operating footwear clusters in Kenya used to work for established footwear companies and are seasoned footwear makers. Majority of them have received on the job structured training in footwear and leather products from their previous employers (Mudungwe, 2012)

Table 1: Education in leather related courses

Training in leather related course	Frequency	Percentage
Degree in leather related course	0	0
Diploma in leather related course	1	5
Craft in leather related course	2	10
No training in leather related course	17	85
<b>Total</b>	<b>20</b>	<b>100</b>

### 3.3 Main raw materials and sources of local leather

From the respondents, it was noted that leather and PVC were the main raw materials used in the production of school shoes as shown in Table 2. From the 20 units studied, 100% rely on the local leather as their main raw material. The findings concur with that of (Mudungwe, 2012) which revealed that the inputs used in the production of footwear are leather, soles, glue and other accessories. It was also noted that the producers sought for PVC soles because they are locally available and affordable. It was necessary to understand the type and source of raw materials used by footwear SMEs in Kariokor because the quality of raw material has a direct link on the overall quality of the final product (UNIDO, 1996). PVC soles have poor wear resistance, poor breathability and they do not absorb shock (Motawi, 2017). Thus, the

Table 3: Footwear Quality

Quality Test	Frequency	Percentage
Test for fit	0	0
Tensile strength (leather)	0	0
Flex endurance (leather)	0	0
PH of leather	0	0
Thickness: leather, sole, lining, insole	0	0
Air and water vapour permeability	0	0
Sole hardness (PVC)	0	0

overall quality of the shoe can be affected as each shoe component plays a vital role in the overall performance and hence quality. Failure of one component can affect the overall performance of the shoe.

Table 2: Main raw material for footwear

Raw material	Frequency	Percentage
<b>Shoe Upper</b>		
Leather	20	100
Synthetic	0	0
<b>Total Sole</b>		
PVC	20	100
Leather	0	0
Rubber	0	0
PU	0	0
<b>Total</b>	<b>20</b>	<b>100</b>

### 3.4 Footwear quality and standards

Based on assessment of the quality tests and quality conformity of the shoes, the study revealed that none of the firms subject their products to quality testing (Table 3), and they have no laid-out quality management systems for ensuring quality is achieved and maintained. Lack of quality testing and certificates of conformity to certain standards makes it impossible for the products to compete with other shoes both in the local or foreign markets.

Therefore, it is difficult to tell if the SMEs produced shoes conform to quality as they have no standard of measuring quality.



Specific gravity (PVC)	0	0
No quality tests	20	100
Sole adhesion (PVC)	0	0
<b>Total</b>	<b>20</b>	<b>100</b>

### 3.5 Awareness of, adoption and use of footwear standards

In trying to further understand the quality of shoes, the study sought to assess the adoption and use of quality standards by footwear producers in Kariokor market.

From the respondents in Table 3, 25% were aware of the quality standards. However, none of them had adopted the standards. Majority of the respondents, 72% were not aware and hence not adopted the standards. Lack of awareness implies that the artisans were not knowledgeable and unable to use the standards in their shoe fabrication. Lack of conformity to quality standards could be the key reason why most firms did not produce quality footwear that can compete in the market favourably (Okello, 2010). It is known that product quality attracts market access, this could also be seen as the main reason as to why most of the Kenyan leather footwear from the informal industry are not exported. Consequently, this could also be linked to the reason why the local consumers prefer second hand shoes at the expense of the locally manufactured shoe. This finding concurs with one conducted by Mudungwe (2012) which pointed out that most footwear MSMEs products fail to reach formal retail outlets because of quality and supply inconsistency which footwear manufacturers in Kenya are very good at.

Table 4: Adoption and use of footwear quality standards

Characteristics of Respondents	Frequency	Percentage
Aware of existing quality standards	4	18
Aware and adopted existing quality standards	0	0
Aware, adopted and conform to quality standards	0	0
Not aware, not adopted, not conform to quality standards	16	72
<b>Total</b>	<b>20</b>	<b>100</b>

### 3.6 KEBS and ISO certification

Further analysis done was to determine the ISO certification status of the enterprises. As shown In Table 5, none of the firms was ISO certified and none of them had KEBS certificate. Also, the study revealed that most of the enterprises did not have certificates of quality conformity from any established organization. It was established that 100% of the firms did not have such said certification. According to the respondents, it was so expensive for them to acquire certification from regulatory bodies since their businesses did not have high yields. In addition, some of the respondents considered it not important and necessary to have such certification. Lack of certification implies that the SMEs produced shoes do not conform to any established quality regulatory body and the quality of their products is unknown. This information is also in agreement with results obtained by Mudungwe (2012).



Table 5: KEBS and ISO certification

Certificate	Frequency	Percentage
Have ISO certificate only	0	0
Have KEBS certificate only	0	0
Have both ISO and KEBS	0	0
Have no certificate at all	20	100
<b>Total</b>	<b>20</b>	<b>100</b>

### 3.7 Consumer complaints

The result for consumer complaints is shown in Table 6. According to respondents, majority of their consumers raised complaints on the quality of soles. That the soles wear out easily and do not absorb shock. Previous studies indicate that the lifespan of PVC soles is about 5- 6 months (Ganguly, 2013). Some of the consumers complain about poor sole adhesion which means the bond between the sole and upper material is weak. This can be linked to poor stitching/ poor quality adhesive or inappropriate adhesive. Some of the consumers had complained about their shoes not fitting them properly. This is due to either they are too large or small. This can result from poor workmanship, poorly defined number system or non-standardized lasts. The findings on ill-fitting shoes suggest non conformity to footwear standards. The workmanship involved in SME shoe fabrication is questionable and the overall quality of SME produced shoe does not conform to quality

Table 6: Key consumer complaints

Characteristic of Respondents	Frequency	Percentage
ill-fitting shoes	4	20
Non-durable soles	11	55
Weak sole attachment	3	15
No complaints	2	10
<b>Total</b>	<b>20</b>	<b>100</b>

### 4. Conclusion

This study revealed that the leather footwear SMEs in Kenya haven't adopted the use of quality standards and quality management systems, hence they have no mechanism of ensuring quality is achieved and maintained. Lack of awareness was the main reason as to why the producers do not have quality standards. In order to withstand stiff competition in the market, firms should use quality control standards to improve their products so as to attract more sales and to achieve superior performance. Having KEBS certification is considered the best way to achieve this. With regard to human resource skills, it is known that human resource technical skills have significant effect on overall quality of the product. The footwear artisans need to be trained on basic shoe fabrication techniques. Availability of staff with these necessary skills may influence a firm's decision to adopt the use of quality standards. Further research calls for laboratory analysis of the shoe samples to ascertain if they meet the minimum required quality standards set by the regulatory body

### 5. Recommendation

There is need for increased sensitization of SMEs on the importance of quality standards and quality management system in shoe fabrication.

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