AN ANALYSIS OF TRAINING ON THE DEVELOPMENT OF JUA KALI SECTOR.

A case of Karatina town

BY:

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Declaration

This project is my original work and has not been presented for a degree in any other University or any other University programme, either in part or as a whole.

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SEPTEMBER 2005
DEDICATION:

I dedicate this project to my son Dennis and daughter Dorris.
ACKNOWLEDGEMENT:

Firstly, and most importantly, I would like to thank Dr. Mark Ogutu of School of Business Kenyatta University for his supervision when writing this project. Also, I acknowledge my wife Beatrice, son Dennis and daughter Dorris for their patience and understanding during my studies.
ABSTRACT.

The global recognition of the importance of the informal sector in economic growth and development has called for viable intervention programmes aimed at enhancing the expansion of the sector, such as environment would be void without a serious look at the provision of sound managerial training background. The research study was intended to establish the various training methods influencing the growth and development of the informal sector. The Jua kali sector has emerged and established itself as a major producer and distributor of economic resources. Several assistance programmes have been directed towards Jua kali sector. This study highlighted some pertinent issues regarding the actual influence of education and training institutions and the managerial training. It also made efforts to quantify the contribution towards the business growth of each facility that provides training and business information. A sample population of 83 Jua kali entrepreneurs in Karatina town was selected through stratified sampling method. The respondents were engaged in different Jua kali businesses such as carpentry, mechanical, Plumbing, wielding and fabrications, bicycle repairs and painting.

A sample in each trade was questioned using questionnaires and interview guides to cater for those entrepreneurs who could not be able to
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CHAPTER ONE:

1.0 INTRODUCTION:

1.1 Background to the study

Kenya as a developing country is faced with many problems and challenges such as unequal distribution of income, Low per capital income, high rate of unemployment and provision of poor health services. These and many others contribute to the poverty facing Kenyan population (Necebere 2000). However, the informal sector as a major contributor to strengthening the economy was only highlighted by sessional paper No. 1 (G.O.K, 1986) and the 6th National Development Plan (GOK, 1993). From the early 1980’s the Government of Kenya has identified the informal sector as a primary tool to alleviate the problems facing the country. Hence the Government has drawn its attention to the development of both small and medium scale enterprises (GOK, 1992). It was expected that the informal sector could create about 31% of the total expected jobs between 1985 - 2000 (World Bank, 1996).

The term “Informal Sector” was understood to refer to very small-scale units producing and distributing goods and services and consisting largely of independent, self-employed producers in urban
areas of developing countries. Some of them employ family labour and few hired workers and apprentices. They are informal in the sense that they are for the most part unregistered and unrecorded in official statistics. They tend to have little or no access to organized markets, credit institutions, or to public services and amenities. The informal sector comprises all the enterprises employing between 1 – 50 employees and plays a major role in providing employment to the ever-increasing labour market.

The Jua kali sector has relatively lower ease of entries as compared to large industries. This creates more jobs and solves unemployment problem, alleviate poverty and inequality in resource distribution just as it did in Britain in the early 1960’s.

An enabling environment is necessary for sustainable growth and development of the informal sector. The government as a result of this realization has initiated several policy initiatives to that effect in sessional paper No. 2 (GOK, 1992) and the 7th National Development Plan (GOK 1994 – 1996). The prominent role that a small business plays in many economies where living standards are high including Japan, Switzerland, Germany, Denmark and Scandinavia belies the
image of small businesses as an alternative development strategy (Kubr, 1988).

The current National Development Plan (GOK, 1997 – 2001) cites education and manpower training as very necessary if Kenya had to be industrialized by the year 2020. This 8th National Development Plan emphasizes the need for education and manpower training because the newly industrialized countries like South Korea, Malaysia and others invested heavily on this area before their economies took off. Training is geared towards proper product or service design to suit demand and taste of the local and export market, improve the product, packaging, imparting of skills to employees in production management, planning, technology usage, material procurement, costing and pricing (Ncebere, 2000).

Kenya’s technical and vocational training system consists of five training levels namely: artisan; craftsman, technician; technologist and master of technology. Most training courses take 2-3 years and involve industrial apprenticeship (GOK, 1997 – 2001). A lot of apprentice training also takes place on-the-job. In Kenya the craftsman demonstrates desired quality of performance for the apprentices and coaches them through a task. Apprentices learn the
correct activities and procedures by observing and assisting the craftsman in providing a product or service that is sold to customers. Performing these tasks enables apprentices to acquire skills and knowledge of their trade. (King, 1987).

1.2 Statement of the problem.

Many small scales Jua Kali businesses were riddled with persistent constraints that hamper their development and eventual growth. For example, some of their most pressing technical training needs includes skills related to designing patterns and interpretation of drawings and major business management problems including poor record keeping and financial management, limited demand (Tomecko, 1991). There has been a conflict in the research findings of different researchers in the past.

Van Des Wees, (1987) and Oketch, (1992) concur that entrepreneurs should be imparted with the necessary skills to offer capable management. On the other hand, Abuodha, (1992) in his findings stated that there was no significance between a firm’s performances with primary school education level with those having secondary school education. Birks and Sinclair, (1989), also observed that to survive in the informal sector, school based education and long
training durations leading to globally recognized certificates is usually not what is needed.

From the above conflicting research findings it was necessary to further research on the impact of training on the performance of Jua Kali in Karatina Town.

1.3 Objectives of the study:

(i) To analyze the effect of training on performance of Jua Kali artisans in Karatina township.

(ii) To establish the background of the Jua Kali business in Karatina town.

(iii) To find out the difference in level of performance between skilled and unskilled Jua Kali businessmen.

(iv) To investigate impact of entrepreneurship training on quality of products.

(v) To analyze the effect of managerial training on increased sales productivity.

(vi) To find out the impact of training methods on ability of Jua Kali business to cope with new technologies.
1.4 Research questions.

The purpose of the study was to find out the effects of training and education given to Jua Kali Businessmen in Karatina Town on the performance of the Jua Kali. To address this, the researcher sought to answer the following questions.

(i) What effects has training had on the development of Jua Kali enterprise?

(ii) How have the Jua Kali changed in terms of production process and capacities as a result of training?

(iii) How has the quality of products changed with training of the Jua Kali artisans?

(iv) To what extent are the Jua Kali artisans able to cope with changing technology after training?

(v) What is the effect of training on management of Jua Kali enterprises?

1.5 Significance of the study.

The findings of this study could provide invaluable information to many interested parties. The findings might be vital in the formulation of programs and activities to support the development of informal sector training by curriculum developers. Secondly, the government
may use the findings to re-structure some of its policies on formal training for long periods of time with the resultant certification, which may be the solution to the development of the informal sector.

Institution that train craftsmen may lay more emphasis on field attachment so that trainees are attached to Jua Kali business men for longer periods of time than is usually the case today. On the other hand owner managers of the informal sector businesses may have a change of heart by employing institutionally trained graduates instead of training their own apprentices on-the-job. It is now widely acknowledged that the proportion of training obtained through informal means, far exceed that offered through formal or non-formal settings. (Hersh Bach, 1989). There was strong preference for wage employment among institutionally trained artisans and craftsmen, which may subside on realization that their training skill played a major role in self-employment (GOK, 1988, Yambo, 1986).

Other beneficiaries of this study may be aid agencies, non-governmental organization (NGO's) and small business centres (SBCs) attached to technical training institutes for planning intervention programmes geared towards improving training systems. The findings of this study may also provide support information for
scholars, researchers and students who are pursuing or may want to pursue studies in this field. Practicing entrepreneurs might also benefit from the findings by becoming aware on the development of their small businesses.

1.6 Limitations of the study.

The following problems were faced in the cause of the study.

(i) Lack of adequate funds to finance such study activities like traveling, typing, photocopying, stationery, printing and binding of the study materials. The research study tried to secure funds from the local authority and United Nations Development Programmes (UNDP).

(ii) The area of the study was on the slopes of Mt. Kenya; hence some areas were difficult to access due to extremely muddy roads. In some areas, there was no public transport making the areas difficult to access.

(iii) Some targeted respondents were not available due to the commitment. This necessitated substitution.

(iv) To the respondents where interview guides were used, some respondents stayed away and the researcher controlled them for fear that they withheld some vital information.
Some targeted respondents were unwilling to co-operate, demanding money in return for their information. Initial counseling of individuals was necessary before carrying out the interviews.

There was loss of questionnaires by the target respondents. This meant extra expenses to replace and in terms of duplication and traveling costs.

### 1.7 Assumptions of the study.

The researcher had the following assumptions.

(i) That the respondents interviewed provided honest and sincere views.

(ii) That the respondents were co-operative and availed the data during the data collection.

(iii) That training and educating the Jua Kali artisan was cost effective and that it stimulated growth and development of the Jua Kali sector.

(iv) That the information gathered from the field was of great help to the policy makers, and other stakeholders and implementers.
(v) That the variables of the study did not change in the course of the research study.
1.8 OPERATIONAL DEFINITIONS.

**Education:** the knowledge or skills obtained or developed by a learning process that brings about change in behaviour and attitude (The American heritage Dictionary).

**Training:** to make proficient with specialized instructions and practice. (The American heritage Dictionary).

**Informal sector:** refers to small-scale enterprises consisting of small units with 1-50 employees (GOK, 1989).

**Apprentice:** An inspected person learning a skill under a skilled worker (Bas, 1988).

**Apprenticeship:** It is simply defined as "the process of learning by doing" (Aboagye, 1986). The training process involves a craftsman providing guidance to an apprentice during the actual job performance (Bas, 1998, King 1997).

**Artisan:** A person manually skilled in making a particular product. (The American Heritage Dictionary).

**Craft:** Skill or ability in doing something especially in handwork or the arts. (The American Heritage Dictionary).
ABREVIATIONS:

CBS - Central Bureau of Statistics.
GOK - Government of Kenya.
HIT - Harambee Institutes of Technology
ILO - International Labour Organisation
NGO - Non Governmental Organisation.
NIC - Newly Industrialized country.
SBC - Small Business Centre.
SSE - Small Scale Enterprise.
TTI - Technical Training Institutes.
YP - Youth Polytechnics.
EDI - Enterprise Development Institute
CHAPTER TWO.

2.0 LITERATURE REVIEW:

2.1 Introduction.

The review of the related literature for this study was to inform the reader what other authorities and researchers have done in this area under study and what might not have been covered. The related literature for this study was based on several research papers, contributions of various authors in the development and training of entrepreneurs in the Jua Kali Sector, Government of Kenya sessional papers and other policy documents. The review focused on the effects of education and training managerial and technical information to the growth and development of Jua Kali enterprises in Karatina Town. This chapter covered different areas under importance and characteristics of Jua Kali Sector, Institutional training, Informal training, Entrepreneurship training, Management training and Summary.

2.2 Importance And Characteristics Of Jua Kali Sector.

The role and the contribution played by Jua Kali sector towards the Kenyan economy cannot be over-emphasized. The primary objective behind people developing their economies is to secure better
living conditions and living standards. People spend most of their time striving to reduce problems, which threaten their lives and comfort (Wanacott, 1979).

Since 1980s the Government of Kenya has been committed towards the Jua Kali promotion as spelt out in the policy documents (GOK 1986, 1992).

2.3 The concept of training

Training is important in any organization for improving the quality of work of the employees (job performance) at all levels, particularly in a world of fast changing technology, values and environment. Training was defined as a planned process to modify attitudes and knowledge, skills or behavior through having experience to achieve effective performance in an activity (Armstrong, 1991). It is a short-term process utilizing a systematic and organized procedure by which non-managerial personnel acquire technical knowledge and skills for a definite purpose. The fundamental aim of training is to help the organization achieve its objectives by adding value to its key resources (employees). It means investing in people to enable them to perform better and to empower them to make best use of their natural abilities. In order for the training to be beneficial, it must be in line
with the objectives of the organization. The degree of importance the organization attach to training was expressed in the training philosophy (Armstrong 1991)

The type of training programmes needed to ensure that employees meet performance targets depends on the outcome from training needs assessment. Determination of organizational and employee needs is a very important requirement because it enables the management to know what aspects of training are required. Training needs assessment points out an employees needs for additional training. Performance appraisal is commonly done to recognize training needs.

2.4 The training process

The assessment phase identifies what is needed (training content) at the organizational group and individuals levels. The assessment phase thus involves identifying training needs by assessing the gap between the requirements of a job and the current skills, knowledge or attitudes of the person in the job. So the organization looks at what is presently happening and what should be happening. Any differences between the two will give some indications of training needs (Sparrow & Pettigrew, 1987).
The planning or designs phase identifies who were trained, competencies required, the length of the training, where and when the training will take place and what resources are needed.

The implementation phase involves the actual delivery of the training. This might be on site or away from the premises and will include training techniques, simulation, business games, case study, coaching and mentoring, planned experience and computer assisted instruction. Demonstration or sitting next to Nellie is also a commonly used training process. In this phase the overall effectiveness of training is evaluated and this provides feedback for the trainees for future improvements to the programmes for senior managers and the trainees themselves. Providing trainees with a set of training objectives will help them know feedback on their progress. This will then influence their attitudes towards future training and even the company itself (Taylor 1989).
2.5 Training methods

There are two broad types of training available namely on-the-job and off-the-job techniques. The method to be used is determined by who, what and why of the training programme (Zero million .com newsletter, 2004)

- **On-the-job training** is delivered to employees while they perform their regular jobs. In this way they do not waste time while they are learning. On the job training includes.

  Orientations are run for new employees. The first several days on the job are crucial in the success of new employees. Orientation training should emphasize the following topics. The organizations history and mission, the key members in the organization, the key members in the department and how the department helps fulfill the mission of the company, and the personnel rules and regulations.

- **Job rotation**: involves moving an employee through a series of jobs so that he or she can get a good feel for the tasks that are associated with different jobs.

- **Apprenticeship**: develop employees who can do many different tasks. They usually involve several related groups of skills that allow the apprentice to practice a particular trade and
they take place over a long period of time in which the apprentice works for the senior skilled worker. Apprenticeship is appropriate for jobs requiring production skills. Off-the-job training includes:

- **Lectures**, present training material verbally and are used when the goals to present a great deal of material to many people. It is more cost effective to lecture to a group than to train people individually.

- **Role-playing** is a training technique that attempts to bring realistic decision making situations to the trainee. Likely problems and alternative solutions are presented for discussion.

- **Programmed learning** Allows the trainee to learn at his own pace. Once the introduction is made, the instructor does not need to be present and the trainee can learn as his time allows.

### 2.6 Employee work performance

The organizations overall performance was affected by the individual performance of its employees. Performance can be defined as how well you do something (Oxford learners dictionary(2000). Performance also describes the degree of accomplishment of tasks in an individuals job and it indicates how well the person is fulfilling the
requirement of his position on the basis of results achieved. It is therefore important that organizations invest in employees to ensure positive performance (Sparrow & Pettigrew, 1987).

2.7.0 Performance appraisal

Performance appraisal system is an important tool that evaluates an employee's performance achievements over a period of time. Performance appraisal relates to the formal process of assessing and measuring employee performance against agreed objectives and goals of the organization (Corbridge and Philbearn, 1998). The appraisal is conducted between the supervisor and the employee.

2.7.1 Methods of performance appraisal.

- Essay appraisal technique asks the rater to write a paragraph or more covering individuals strength, weakness, potentials, etc.

- Graphic rating scale technique assesses a person on the quality and quantity of his work and on a variety of other factors that vary with the job but usually include personal traits like reliability and co-operation, oral and written communication are also assessed (Sparrow and Pettigrew, 1987).
• **Critical incident technique** gives a supervisor actual factual, incidents to discuss with an employee. Supervisors keep a record on each employee and records actual incidents of position and negative behavior for further discussion.

• **Ranking methods** compares people in different units for the purpose of say choosing a service supervisor or determining the relative size of salary increase for different supervisors, required subject judgment not statistics. The two most effective methods are alternative ranking and paired comparison ranking.

Performance appraisal helps supervisors to observe their subordinates more closely and to coach them better. It motivates the employees by providing feedback on how they are doing. The performance appraisal system assists management in decision concerning merit increases transfers dismissals by providing back up data. It improves organization development by identifying people with promotion potential and pinpointing development needs (Oberg, 1999).
2.8 Employee morale

Employee morale creates a unified and functional environment. Morale influences the beliefs and actions of an individual as well as dictating the environmental factors. Morale is defined as the spirit of a person or group as demonstrated by confidence, discipline and willing roll to perform assigned tasks (Dictionary.com 2003). It also symbolizes a dictated spirit which unifies individuals towards a common goal (Freeman 1999). Negative morale may lead to complacency and lack of attention to duties which is dangerous facing employees (Vellain 2001) other negative effects of lack of morale include increased turnover, fatigue, absenteeism and abuse of sick off. Proper training is one of the most aspects that raise the morale of employees (Hill 2002). Accurately trained employees react more confidently and are prepared to deal with stressful situations. (Realey turner 2002) providing employees with desirable and informative training will improve employee job perception. Training provides access to information assisting staff to act responsibly. Employee training reflects positively upon employee morale (Garland 2002).
2.9.0 Increased productivity

The business environments are always dynamic changes in methods of production call for a workforce that is continuously updated in terms of skills and knowledge. Employees therefore need to be trained and developed to keep abreast with environmental changes which if not well managed could be detrimental to organization performance (Sparrow and Pettigrew, 1987). Training development ensures that employees are imparted with skills, knowledge and beliefs that enable them to be well equipped to adopt to changes within or outside their organizations. Training and development also has positive impacts on the employees creativity and innovativeness in the key areas of production (Sparrow and Pettigrew1987).

2.9.1 Career development

Career development is the ongoing acquisition of skills and knowledge, including job mastery and professional development coupled with carrier planning activities. (Oxford advanced learners dictionary 2000). Career development consists of activities of assisting employees in assessing their own internal career needs to do their own planning. The management specifically has the
responsibility of charting career patrons through the organization and of informing the employee. (Sparrow and Pettigrew, 1987)

2.9.2 Succession planning

Succession planning establishes a process that recruits employees, develops their skills and abilities and prepares them for advancement all while retaining them to ensure a return on the organizations training investment. Before succession planning takes place an assessment must be done of the current workplace such as performance appraisal identifying future needs and formulating strategies to meet needs. Successful organizations use succession planning to develop and maintain strong leadership and to ensure that they address all the skills and competencies required for the current business environment. (Butter and Roche Tarry 2002).

2.9.3 Summary of literature review.

In conclusion, studies show the need for staff training and development in organizations. Training and development improves an employee performance, develops teamwork spirit needed to achieve organization goals, motivates employees to reach high standards, increases overall efficiency and prepares employees for promotional opportunities. It prepares employees to accept greater challenges and
contributes to the achievement of organizational goals and objectives (Sparrow and Pettigrew, 1987).

Figure 1: Conceptual Frame Work.
CHAPTER THREE.

3.0 METHODOLOGY:

3.1. Research Design.

This Chapter described the methods and procedures, which were to be used to collect data on the contribution and effects of training on the performance of Jua Kali Sector in Karatina Town. The research study was a descriptive survey type involving informed and desirable persons and business owners. They were questioned using a set of standard questions of a questionnaires and semi-structured interview guide/schedule. The techniques enabled collection of information from a representative sample of the Jua Kali operators.

These methods of survey were chosen to assist in securing both qualitative information directly from the operators. The methods chosen were to identify salient characteristics and unique features of the target population to very acceptable degree. The methods assisted in collection of useful information, which facilitated in decision-making, planning and training needs assessment. Interview schedules were flexible in data collection. The technique facilitated to gauge the attitudes and motivations of the operators as well as overcoming illiteracy barriers and attitudes formed.
3.2 Populations and Sample:

The target populations for this study were all the Jua Kali businessmen in Karatina town who operate in the Jua Kali sheds. Majority of the owner managers who were interviewed operate in unattractive semi-permanent structures they have rented from the local authority. Most of them were not registered or recorded in any formal way.

However four craftsmen have structured their own business premises permanently. There were about six hundred Jua Kali operators engaged in both production and service industries. Production enterprises included activities such as fabrications, tailors, blacksmiths, carpenters, plumbers, masons, electricians and welders. Service enterprises involved kiosks operators, hotels and second hand cloth dealers, mechanics, bicycle repairers, radio repairers and TV repairers.

Given this diversity, stratified sampling was most appropriate, where comparisons of male and female entrepreneurs, trained and untrained, educated and illiterate entrepreneurs was done. Stratified sampling procedure assured the researcher that the sample was representative of the population in terms of the factors that have been
used as a basis for stratification. It also ensured that there were adequate cases for sub-group analysis.

Table 1: The following categories of Jua Kali operators was considered.

<table>
<thead>
<tr>
<th>Category</th>
<th>TOTAL POPULATION</th>
<th>SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Eight Leavers</td>
<td>80</td>
<td>9</td>
</tr>
<tr>
<td>Form Four leavers</td>
<td>140</td>
<td>22</td>
</tr>
<tr>
<td>Youth polytechnic Grade test holders</td>
<td>50</td>
<td>8</td>
</tr>
<tr>
<td>Technical institutes craftsmen</td>
<td>200</td>
<td>32</td>
</tr>
<tr>
<td>Diploma holders from National Polytechnics</td>
<td>120</td>
<td>8</td>
</tr>
<tr>
<td>University Graduates</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Population</strong></td>
<td><strong>600</strong></td>
<td><strong>83</strong></td>
</tr>
</tbody>
</table>

The sample population targeted included eighty three (83) participants.

The sample frame was obtained from Karatina Town offices and then tailored. The other information was available from K.I.E offices in
Karatina. This ensured objectivity, reliability and validity of the results. It allowed accurate representation of the population and every informer was given equal chances to contribute to the study.

3.3 Data Collection Procedures.

The researcher used both the questionnaire and interviews as instruments of data collection. A structured questionnaire and semi-structured interview guide was used. Due to the diversity of the respondents both in literacy level and type of business, the two methods were complimentary and appropriate to the study. The questionnaires were used for those respondents who understandably had some difficulties in educational background. The researchers anticipated illiterate and semi-illiterate entrepreneurs, needed interviews guide formulated with highly related questions and of similar frame.

They were designed to serve the purpose of the study. The questions were logically arranged. They were short, simple and well phrased, easy to understand without being vague. The Jua Kali operators were expected to give definite answers. The instructions and arrangements were to elicit co-operation and seriousness among the respondents. The necessary data was collected by use of
questionnaires and interview guides already prepared in advance. The researcher distributed the questionnaires himself to the various selected Jua Kali operators. Those perceived to have difficulties in filling the questionnaires due to illiteracy or any other reason; the researcher used interview guides. The questionnaires were collected later at an agreed date.

The interview guide was put into use through casual discussion but the researcher had to caution the selected respondents in order to acquire approval from him. Included in this preparation, the necessary permission from the provincial administration to collect data was sought. The district Officer, Mathira Division was approached for permission. The college letter of identification was produced for introduction purposes.

3.4 Data Analysis.

Once the questionnaires have been administered the data collected was systematically organized in a manner that facilitated analysis. If quantitative analysis was anticipated the responses in the questionnaire were assigned numerical values. Yes responses were assigned I and no responses were assigned symbol 0. This assigning
of numbers to questionnaires were easily accomplished if the questions were close ended. This was called coding.

The first step in data analysis was to summarise the data using descriptive statistics. These included using mode, median and mean. The mode was the most commonly attained measurement or value among a sample of subjects. The median was the score that divides ranked scores into two equal parts, such that half of the scores were larger than the median and the other half are smaller. The mean was the average of a set of scores or measurements. Correlation technique was used to analyse the degree of relationship between two variables, the independent variable and the dependent variables.
4.0 DATA ANALYSIS AND PRESENTATION

4.1 INTRODUCTION.

The purpose of this study was to analyze training on the development of Jua Kali sector in Karatina town. The study investigated the strengths and weaknesses of training of entrepreneurs and Jua Kali artisans.

The study was guided by the following research questions.

i) What effects has training had on the development of Jua kali enterprises?

ii) How have the Jua Kali changed in terms of production processes and capacities as a result of training?

iii) How has the quality of products changed with training of the Jua Kali artisans?

iv) To what extent are the Jua Kali artisans able to cope with changing technology after training?

v) What is the effect of training on management of Jua Kali enterprises?

To obtain the results of this study, stratified sampling was the most appropriate. Interview guides and questionnaires were administered.
on 83 Jua Kali operators in the selection of the respondents from the target population. A sample of respondents was drawn from the selected areas, which included Karatina town.

Tables and pie charts were used to present the data while data collected in the study was analysed by descriptive statistics visa-vis frequency distribution tables, mean, median, mode, percentages and rankings.

Section A

4.2 Personal Information

The aim of this section was to establish the gender of the respondents, their ages and marital status. The results of each aspect were tabulated as follows: -

4.3 Gender of Jua Kali Business persons.

Table 2

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Male</td>
<td>60</td>
<td>72.3%</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>24.1%</td>
</tr>
<tr>
<td>Non respondents</td>
<td>3</td>
<td>3.6%</td>
</tr>
</tbody>
</table>
From table 2, 60 respondents were male who operated Jua Kali businesses in Karatina according to the findings. This represented 72.3% of the total businesspersons. This was therefore a male dominated business undertaking perhaps due to lack of occupational choices which limits women’s access to the manufacturing industry. It was also observed that 3 businesspersons did not respond because their businesses remained closed and the individuals could not be reached for response. Most of the women were housewives while others preferred white-collar jobs such as banking, clerical works, Secretarial jobs and beauty therapy.

4.4 **Education level of Jua Kali businesspersons.**

**Table 3**

<table>
<thead>
<tr>
<th>Education level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Primary</td>
<td>60</td>
<td>72</td>
</tr>
<tr>
<td>Secondary</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Post Secondary</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>
None represented those who have never gone to any school including nursery schools.

From table 3, no respondent in the Jua Kali businesses who missed education. Post-secondary meant all those who joined Diploma Colleges and Universities. 72 percent of the respondents had a primary level of education. 18 percent of the respondents had secondary level of education. This was perhaps due to lack of school fees to join secondary and post secondary schools and colleges.

![Pie chart](image)

**Fig 2: Pie chart**

From the pie chart, the biggest portion was represented by primary level of education while no portion was found for illiterate respondents. Some education is necessary because measurements and drawings are common in Jua Kali businesses.
4.5 **Age of Jua Kali businesspersons**

Table 4

<table>
<thead>
<tr>
<th>Age-group (Yrs)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>21-30</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>31-40</td>
<td>52</td>
<td>63</td>
</tr>
<tr>
<td>41-50</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>51-60</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Calculations**

For ease of calculations, it was necessary to construct a frequency distribution table as follows. A column of mid-point was added along with columns for it products.
4.6 Frequency distribution table.

Table 5

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Mid-point (x)</th>
<th>Frequency (f)</th>
<th>Fx</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-20</td>
<td>11.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>21-30</td>
<td>25.5</td>
<td>15</td>
<td>385.5</td>
</tr>
<tr>
<td>31-40</td>
<td>35.5</td>
<td>52</td>
<td>1846.0</td>
</tr>
<tr>
<td>41-50</td>
<td>45.5</td>
<td>14</td>
<td>637.0</td>
</tr>
<tr>
<td>51-60</td>
<td>55.5</td>
<td>2</td>
<td>11.0</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>83</td>
<td>2976.5</td>
<td></td>
</tr>
</tbody>
</table>

Solutions

\[
\text{Mean} = \frac{\sum fx}{f} = \frac{2976.5}{83} = 35.86
\]

Standard deviation for this case shall be denoted by

\[
= \frac{\sum fx}{f} = \frac{2976.5}{83}
\]
According to Table 5, it was found that 98 percent of the respondents were below 50 years while 2 percent were above 50 years. No respondent was below 21 years. Majority of the respondents were in their middle ages between 31-40 years. The results showed that very few people joined Jua Kali businesses after retirement. Most of the middle-aged businessmen joined Jua Kali after finding nothing better to do. However, their business establishments have become their source of daily bread.

**Section B: Training background of Jua kali Businesspersons.**

This section was specifically designed to establish the training skills acquired, levels of skills and level of Institutions attended

**4.6 Technical skills acquired by Jua Kali business persons**

**Table 6**

<table>
<thead>
<tr>
<th>Technical skills</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpentry</td>
<td>70</td>
<td>84</td>
</tr>
<tr>
<td>Masonry</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Mechanical</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Wielding</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Table 6 showed that 84 percent of the respondents were skilled carpenters while Masons, Mechanics and wielders had 3 percent, 7 percent and 6 percent respectively. The skills were approximately uniformly distributed. The low percentages in skills in masonry, mechanical and wielding was perhaps due to the fact that the skills can easily be learnt on-the-job. These were simply represented on pie chart as follows:

![Pie Chart]

Fig: 3 Pie Chart
The information was then represented on bar charts.

### 4.7 Level of training of Jua Kali businesspersons

**Table 7**

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Artisans</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Certificate</td>
<td>55</td>
<td>65</td>
</tr>
<tr>
<td>Diploma</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Degree</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

![Bar Chart](image.png)

Fig: 4 Bar Chart

Table 7 shows that 65 percent of the represents had certificate level of technical skills. This is also shown on the bar chart as the highest bar. 26 percent had very low levels of technical training in grade and artisan levels. The remaining 9 percent were highly trained at
Diploma and Degree levels as shown by the table. The degrees and diploma levels were probably too high to participate in Jua Kali businesses.

4.8 Qualifications attained in technical Institutions

Table 8

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade III</td>
<td>2</td>
</tr>
<tr>
<td>Grade II</td>
<td>5</td>
</tr>
<tr>
<td>Grade I</td>
<td>8</td>
</tr>
<tr>
<td>Craft I</td>
<td>18</td>
</tr>
<tr>
<td>Craft II</td>
<td>40</td>
</tr>
<tr>
<td>Craft III</td>
<td>10</td>
</tr>
</tbody>
</table>

It was importantly noted that Grade III was the lowest grade while craft III was the highest grade. Being very basic, grade III had very few respondents. Craft II had a frequency of 40, which was actually the highest. This was the highest because it involved almost all the skills in a given trade. These include drawing, applied mathematics, applied sciences and practicals. Grade III has very few subjects namely practicals, theory and general subjects. Grade I is a
little bit wide as it has Technical drawing, theory, practicals, Science and mathematics and support subjects. Craft I, II and III Certificates, have theory, Applied Science Technical Drawing, Practicals and Entrepreneurship Development. It was observed that Jua Kali businesspersons preferred the more detailed subjects to the lower grade certificates.

4.9.0 Institutions attended by Jua Kali businesspersons

Table 9

<table>
<thead>
<tr>
<th>Institution</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Polytechnic</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>Technical Training Institutions</td>
<td>55</td>
<td>65</td>
</tr>
<tr>
<td>National Polytechnics</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>

From table 9, it was seen that 65 percent of the respondents attended Technical institutes for certificate courses as earlier indicated in table 7. The table revealed that 26 percent attended Youth Polytechnics for both grade and artisan courses. The remaining 9 percent attended National Polytechnics for Diploma courses. It could easily be seen that the Jua Kali artisans did not go for very high skills acquired in National Polytechnics which was only represented by 9 percent of the total respondents.
4.9.1 On-the-job training methods Jua Kali employees

Table 10

<table>
<thead>
<tr>
<th>Methods</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Rotation</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>Demonstration</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Role Playing</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>50</td>
<td>60</td>
</tr>
</tbody>
</table>

These were the various methods used to train employees by Jua Kali businesspersons on-the-job. This meant that the employees acquired the skills and developed the acquired skills in real job situations. The owner manager benefited due to increased productivity and improved quality.

From table 10, it was seen that 60 percent of respondents gained and developed their skills through apprenticeship. Apprenticeship involves training of employees by senior skilled supervisors. Role-playing was the least used method of training as it represented 4 percent. Job rotation involves frequent shifting of employees from one trade to
another so that each of them is equipped with many skills. This was represented by 24 percent of the total respondents.

**Section C**

**Business information**

This section was used to provide the information regarding the various Jua Kali businesses. The areas covered included years of establishment of the business, nature of business (Manufacturing or service) types of products, quality of products, level of performance, number of employees and nature of skills of employees.

**4.9.2 Years of business establishment**

**Table 11**

<table>
<thead>
<tr>
<th>Years</th>
<th>Class mid point (x)</th>
<th>Frequency</th>
<th>Fx</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>3</td>
<td>5</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>6-10</td>
<td>8</td>
<td>48</td>
<td>384</td>
<td>58</td>
</tr>
<tr>
<td>11-15</td>
<td>13</td>
<td>20</td>
<td>260</td>
<td>24</td>
</tr>
<tr>
<td>16-20</td>
<td>18</td>
<td>10</td>
<td>180</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>f 83</td>
<td>fx = 839</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Calculations

\[
\text{Mean } (x) = \frac{\Sigma fx}{f} = \frac{839}{83} = 10
\]

\[
f = 83
\]
Therefore the calculations showed that the mean years of establishment was 10 years. From the distribution table above the modal class was found to be 6-10 with the highest frequency of 48. The table also revealed that 58 percent of the respondent businesses were established 10 years ago. This showed that very few businesses were very new and perhaps school leavers were no longer interested in Jua Kali businesses. Very few businesses had more than 15 years. Probably, the businessmen advanced their businesses to new ones after gaining capital.

4.9.3 Nature of business

Table 12

<table>
<thead>
<tr>
<th>Business Type</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>75</td>
</tr>
<tr>
<td>Service</td>
<td>8</td>
</tr>
</tbody>
</table>

Manufacturing businesses were businesses, which use raw materials to make new products after undergoing a production process. Service businesses included businesses that provide service to customers.
From table 12 it was shown that 75 respondents engaged in manufacturing businesses while 8 businesses were in service industry. Service industry perhaps required high skills of employees while production required practical skills.

4.9.4 Types of products

Table 13

<table>
<thead>
<tr>
<th>Products</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood work</td>
<td>68</td>
</tr>
<tr>
<td>Concrete blocks</td>
<td>10</td>
</tr>
<tr>
<td>Metal Fabrications</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 13 showed that there were three types of products. These included wood products. But woodwork represented the highest frequency meaning that most of the Jua Kali businesses required a shorter period of time to acquire them and could easily be acquired through apprenticeship.
4.9.5: Level of Business performance

Table 14

<table>
<thead>
<tr>
<th>Performance Level</th>
<th>Responses</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Fair</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Average</td>
<td>62</td>
<td>75</td>
</tr>
<tr>
<td>Good</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 14 showed the performance standards of the respondents according to their skills. To supplement the data, the information was further represented in form of a bar chart.

Fig:5 Bar Chart

From Table 14 it was seen that 75 percent of the respondents had average performance 6 percent of the business performed poorly
while only 7 percent had good performance. The poor performance was attributed to the skills level of the respondents. The high performance was linked to the skills acquired by the carpenters. The performance standards were directly related to the quality of products.

4.9.6 Number of employees in Jua Kali businesses

Table 15

<table>
<thead>
<tr>
<th>Number</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>18</td>
</tr>
<tr>
<td>6-10</td>
<td>52</td>
</tr>
<tr>
<td>11-15</td>
<td>10</td>
</tr>
<tr>
<td>16-20</td>
<td>3</td>
</tr>
</tbody>
</table>

For ease of calculations a frequency distribution table was drawn as follows.
### Frequency Distribution Table

Table 16

<table>
<thead>
<tr>
<th>Number</th>
<th>Class mid-point (x)</th>
<th>F</th>
<th>Fx</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>3</td>
<td>18</td>
<td>54</td>
<td>22</td>
</tr>
<tr>
<td>6-10</td>
<td>8</td>
<td>52</td>
<td>416</td>
<td>63</td>
</tr>
<tr>
<td>11-15</td>
<td>13</td>
<td>10</td>
<td>130</td>
<td>12</td>
</tr>
<tr>
<td>16-20</td>
<td>18</td>
<td>3</td>
<td>54</td>
<td>3</td>
</tr>
</tbody>
</table>

\[ f = 83 \quad fx = 654 \]

From the calculations it was established that the mean number of employees was 8 persons. The modal class was found to be 6-10 which had the highest frequency of 52. This meant that most of the Jua Kali businesses employed 8 persons. This was an indication of under development of Jua Kali businesses.
4.9.7 Entrepreneurial skills acquired by Jua Kali business owner managers.

Table 17:

<table>
<thead>
<tr>
<th>Entrepreneurial skills</th>
<th>Percentage ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing money</td>
<td>15</td>
</tr>
<tr>
<td>Managing people</td>
<td>12</td>
</tr>
<tr>
<td>Establishing a business</td>
<td>68</td>
</tr>
<tr>
<td>Marketing</td>
<td>5</td>
</tr>
</tbody>
</table>

From table 17, a pie chart was drawn to represent the percentage of entrepreneurial skills.

Fig 6: Pie chart.
Managing money skills included bookkeeping, accounting and clerical work. Managing people includes recruitment of personnel, salary administration, promotions, training and development. Marketing included advertisements, products design, pricing and distribution. Establishing a business involved identifying business opportunities, obtaining start up capital, gathering business information and identifying source of raw materials. All these were expected of entrepreneurs.

From table 17 and figure 5, it was found that the Jua Kali artisans lacked entrepreneurial skills that are vital to their businesses. The highest ability in terms of percentage ability was establishing businesses but failed to manage money, people and marketing their products. This was perhaps as a result of failing to attend technical training institutions where the skills were acquired.
4.9.8 Managerial skills acquired by the Jua Kali businesspersons.

Table 18:

<table>
<thead>
<tr>
<th>Managerial Skills</th>
<th>Percentage ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Management</td>
<td>25</td>
</tr>
<tr>
<td>Financial Management</td>
<td>12</td>
</tr>
<tr>
<td>Production management</td>
<td>45</td>
</tr>
<tr>
<td>Marketing Management</td>
<td>18</td>
</tr>
</tbody>
</table>

The results of table 16 were represented on a bar chart as follows:

![Bar Chart]

**Fig 7: Bar Chart**

Managerial skills were those that were necessary for management of business activities. A good owner manager is one who is able to plan, co-ordinate, direct, organize and control all the business activities and resources.
Personnel management involved planning the human resources required in the business. Financial management involved determining the sources of capital to start up businesses, control the finances and preparing budget, balance sheet and projected cash flows. Production management involved product design, product development, planning the production process and facilities, product life cycles and responding to it.

Marketing management involved advertisement, sales promotions, products quality, pricing the products and distributing the products to reach their customers at the right time and right place.

From table 18 and the bar chart, it was observed that production management ranked highest as it represented 45 percent.

The reason for this high ability in managerial ability was linked to the technical skills acquired in technical institutions.

A trained employee had high production level. Financial management ranked the lowest percentage in ability. The financial management surveyed included book keeping, accounting, auditing, e.t.c. Personnel management and Marketing management together had 43 percent. These were skills which were acquired at high level National Polytechnics and public universities. Managerial skills were normally
meant for the management team and were acquired on-the-job through seminars, workshops, conventions, e.t.c.
CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS.

5.1 Introduction

There are three sections in this chapter. While section one summarizes the problem, purpose of study and the methodology, section two provides the conclusions based on the research findings with section three presenting the recommendations based on the research findings.

5.2 Summary of findings

The research study was aimed to establish the impact of training on the development of Jua Kali sector in Karatina town. The study also investigated and determined the processes and methods of training acquired by the Jua Kali businesspersons. The purpose of the study was to establish the benefits of training Jua Kali entrepreneurs. The benefits included improved product quality increased production, coping with new technology, improved management skills and enhanced firm’s performance.
The target population consisted of Jua Kali businesspersons in Karatina town. These were businesses operated in the open air or makeshift sheds.

To collect data, questionnaires and semi-structured interview guides were used to cater for both literate and illiterate candidates. The data was then analysed using frequency distribution tables, pie charts and percentages.

5.3 Conclusion.

The research findings of this study revealed that Jua Kali businesses in Karatina were male dominated. Sixty respondents out of the eighty three respondents were males. This concurred with Tomecko (1991), who observed in his study that many informal sectors were male dominated.

The results of this study also revealed that majority of the Jua kali entrepreneurs had primary level of education with a percentage of 72 percent. These findings were consistent with those of Mc Cormick (1990), who stated that formal education beyond the basic literacy make little difference for self-employment on a small scale. High level of education was not what was required to survive in Jua Kali businesses. Technical skills were important for efficient and improved
performance in Jua Kali businesses. These were basically acquired in technical institutions. Some skills were seen to be acquired on-the-job through apprenticeship. Most of these skills were at certificate levels, called craft certificates. However the highly skilled diploma holders preferred being employed by private companies where they could earn high salaries.

It was revealed from the study that most of the businesses were manufacturing of households such as furniture. The businesses had short-term establishments because some businesses collapsed before they were developed.

The performance of Jua Kali entrepreneurs was average in accordance with the skills acquired. It was seen that the growth and development of Jua Kali businesses was very slow. This was indicated by the low number of employees engaged in the businesses.

Business management skills were not taught to the Jua Kali entrepreneurs and therefore had no competence in financial management, human resource management and marketing. For this reason there was a lot of duplication of products due to lack of diversification.

Lack of diversification was due to inadequate technical skills.
5.4 Recommendations and suggestions for further research

A number of recommendations were made using the findings and conclusions of this study. These recommendations can then be used to foster the development of Jua Kali businesses.

The government of Kenya in conjunction with curriculum developers and trainers should ensure that owner managers and their employees were imparted with the relevant technical, managerial and entrepreneurial skills. Non-Governmental organizations should also be encouraged by the government to do the same. Jua Kali entrepreneurs should be sensitized to form their own associations. Such organizations should organize forums through which small groups of their own can be taught skills relevant to their trade. Exhibitions can also be organized by these associations during trade shows to encourage competitiveness in different designs.

Trainees in youth polytechnics, technical institutes and National polytechnics should be subjected to lengthy attachment periods, at least one year. The attachment should be with Jua Kali businesses to get exposure to the real world of work.
The Ministry of education should put more emphasis on teaching business management skills in all technical institutions. Further research should be conducted to determine the training needs of the Jua Kali businesspersons. This is important because the entrepreneurs do not know their strengths and weaknesses when they first establish their businesses. Further research should be conducted to investigate the possibility of training on-the-job rather than training in technical institutions where educational background is a pre-requisite. Also a lot of time is wasted in learning irrelevant support subjects like languages, Biology and Social studies. Researchers should investigate the effects of learning theory and how it impacts on the performance of tasks in Jua Kali businesses.
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APPENDIX 1.

QUESTIONNAIRE.

To be used by the interviewer.

SECTION A: Entrepreneur's Personal Details.

1. Name: ............................................................

2. Sex: Male: [ ] Female: [ ]

3. Age: Less than 20 yrs [ ] 21 – 30 yrs [ ] 31 – 40 yrs [ ] 41 – 50 yrs [ ] Over 50 yrs [ ]

4. Marital Status: Single [ ] Married [ ]

SECTION B: Training.

5. Technical skills
   Carpenter [ ]
   Masonry [ ]
   Mechanical [ ]
   Wielding [ ]
6. **Level of Skills**
   - Grade [ ]
   - Artisan [ ]
   - Certificate [ ]
   - Diploma [ ]
   - Degree [ ]

7. **Institutions Attended:**
   - Youth Polytechnic [ ]
   - Technical Training Institutes [ ]
   - Harambee Institutes [ ]
   - National Polytechnics [ ]

8. **Name of Institution:**
   .................................................................

9. **Year of Completion:**
   .................................................................

SECTION C: Business Information.

10. **Name of Business:** ......................................................

11. **Year when Business was established:** ............................

12. **Level of Performance of Business:**
   - Poor [ ]
   - Fair [ ]
   - Average [ ]
   - Good [ ]
### Appendix 2

13. **Number of Employees:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 5</td>
<td>[ ]</td>
</tr>
<tr>
<td>6 - 10</td>
<td>[ ]</td>
</tr>
<tr>
<td>11 - 15</td>
<td>[ ]</td>
</tr>
<tr>
<td>15 - 20</td>
<td>[ ]</td>
</tr>
<tr>
<td>Over 20</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

14. **Number of Skilled Employees:** [ ]

15. **Number of Semi-Skilled Employees:** [ ]

16. **Number of Unskilled Employees:** [ ]
# APPENDIX 2.

## INTERVIEW GUIDE.

**Particulars of Respondents.**

<table>
<thead>
<tr>
<th>Name:</th>
<th>..........................................................</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex:</td>
<td>Male: [ ] Female: [ ]</td>
</tr>
<tr>
<td>Age:</td>
<td>10 - 20 yrs [ ] 21 - 30 yrs [ ] Over 30 yrs [ ]</td>
</tr>
</tbody>
</table>

**The Highest level of Training:**

- Grade [ ]
- Artisan [ ]
- Craft Certificate [ ]
- Diploma [ ]
- Degree [ ]

**Particulars of the Business:**

<table>
<thead>
<tr>
<th>Type of the Business:</th>
<th>Manufacturing [ ] Service [ ]</th>
</tr>
</thead>
</table>

**Name of the business:** ..........................................................

**When was the Business started?** ...........................................

**How many employees does the business have?** ...........................

**How many of your Employees are Trained?** ...............................
What Skills do they have?

Where did they acquire the skills?

What Entrepreneurial Skills do they have?

What Managerial Skills do the Employees have?

Do you offer them any Training?

How often do you take them for Apprentice Training?
## APPENDIX 3.

**BUDGET FOR THE PROPOSED RESEARCH**

<table>
<thead>
<tr>
<th>ASSUMPTIONS</th>
<th>INPUTS (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>800.00</td>
</tr>
<tr>
<td>Photocopying</td>
<td>1,200.00</td>
</tr>
<tr>
<td>Stationary</td>
<td>1,500.00</td>
</tr>
<tr>
<td>Secretarial Services</td>
<td>1,500.00</td>
</tr>
<tr>
<td><strong>Piloting and data collection</strong></td>
<td></td>
</tr>
<tr>
<td>Field work 43 days @ Kshs. 350</td>
<td>15,050.00</td>
</tr>
<tr>
<td>Data processing and analysis</td>
<td></td>
</tr>
<tr>
<td>21 days @ Kshs. 300</td>
<td>6,300.00</td>
</tr>
<tr>
<td><strong>Report writing and printing</strong></td>
<td></td>
</tr>
<tr>
<td>Computer Services &amp; Production</td>
<td>3,500.00</td>
</tr>
<tr>
<td>Binding 3 copies</td>
<td>300.00</td>
</tr>
<tr>
<td>Contingencies</td>
<td>2,000.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32,150.00</strong></td>
</tr>
<tr>
<td>Activity</td>
<td>April</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Sampling</td>
<td></td>
</tr>
<tr>
<td>Piloting of questionnaires</td>
<td></td>
</tr>
<tr>
<td>Data collection</td>
<td></td>
</tr>
<tr>
<td>Data analysis</td>
<td></td>
</tr>
<tr>
<td>Writing Report</td>
<td></td>
</tr>
<tr>
<td>Compiling</td>
<td></td>
</tr>
<tr>
<td>Printing</td>
<td></td>
</tr>
<tr>
<td>Binding</td>
<td></td>
</tr>
<tr>
<td>Submission</td>
<td></td>
</tr>
</tbody>
</table>