

**GLOBAL GOOD AGRICULTURAL PRACTICES ADOPTION AND
COMPETITIVE ADVANTAGE BY KENYA FRUIT EXPORTERS**

ROBERT KAHOHI KIRAGO

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE
OF MASTER OF BUSINESS ADMINISTRATION (MBA) SCHOOL
OF BUSINESS, UNIVERSITY OF NAIROBI**

OCTOBER, 2015

DECLARATION

This research project is my original work and has not been presented for an award of degree in this or any other university.

Signature

Date

Kirago Robert kahohi

Reg. No. D61/60290/2013

This research project has been submitted for examination with my approval as the university supervisor.

Signature

Date

Mr Tom Kongere

Department of Management Science

School of Business

University of Nairobi

ACKNOWLEDGEMENT

I wish to appreciate all those have contributed to success of this research project.

Special thanks to my supervisor Mr Tom Kongere and my moderator Mr Chirchir who have guided me in the research project.

I also wish to thank Kenya Fruit Exporters who gracefully accepted to participate in completing the questionnaire and for the invaluable information provided by them. I am grateful for their cooperation during the period of my research.

DEDICATION

I wish to dedicate this work to my family, friends and colleagues. They have dedicated their energy, skills and time to make this project a success.

TABLE OF CONTENTS

DECLARATION.....	ii
ACKNOWLEDGEMENT	iii
DEDICATION	iv
TABLE OF CONTENTS	v
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATION AND ACRONYMS	xi
ABSTRACT.....	xii
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background	1
1.1.1 Global GAP	2
1.1.2 Competitive Advantage	4
1.1.3 Kenya Fruit Exporters	5
1.2 Problem Statement	6
1.3 Research Objective of the Study.....	9
1.4 Value of the Study	9
CHAPTER TWO: LITERATURE REVIEW	10
2.1 Introduction.....	10
2.2 Good Agricultural Practices and Global GAP Certification	10
2.3 Theoretical Literature Review	13

2.3.1 Diffusion of Innovation Theory	13
2.3.2 Club Theory.....	14
2.3.3 Resource Base Theory of Competitive Advantage	16
2.4 Empirical Literature Review	17
2.5 Summary of Literature Review and Knowledge Gap.....	20
2.6 Conceptual framework	21
CHAPTER THREE: RESEARCH METHODOLOGY	22
3.1 Introduction	22
3.2 Research Design	22
3.3 Target population	22
3.4 Data Collection	22
3.5 Data Analysis	23
CHAPTER FOUR: DATA ANALYSIS, FINDING AND INTERPRETATION	25
4.1 Introduction	25
4.2 Response Rate.....	25
4.3 Demographic Information.....	25
4.3.1 Respondent gender	26
4.3.2 Respondent Age	26
4.3.3 Respondent Department	28
4.4 Level of Practice of global GAP	29
4.4.1 Global GAP Practices	29

4.4.2 The Extent Company Implement Product Quality Practice	30
4.4.3 The extent company implement Technical Support and Training Practice	31
4.4.4 The extent company Implement Communication Practice	32
4.4.5 The extent company implements workers welfare Practice.....	33
4.4.6 The extent company implement Environment Practice	34
4.5 The impact of Global GAP practices to the company competitive advantage	35
4.5.1 The impact of product quality practices to the company competitive advantage	35
4.5.2 The Impact of Technical Support and Training Practices to the Company Competitive Advantage	36
4.5.3 The impact of Communication Practices to the Company Competitive Advantage	37
4.5.4 The impact of workers welfare practices to the company competitive advantage	38
4.6 Regression Analysis.....	39
4.7 Discussion of Results	43
 CHAPTER FIVE: CONCLUSION AND RECOMMENDATION 45	
5.0 Introduction.....	45
5.1 Conclusion	45
5.2 Recommendations	46
5.3 Limitations of the study	47
5.4 Suggestion for Further Research	47

REFERENCES	48
APPENDICES	i
Appendix I: Letter of Introduction	i
Appendix II: Questionnaire	ii
Appendix III: List of Kenya Fruit Exporters	ix

LIST OF TABLES

Table 4.1 Response Rate	25
Table 4.2 Respondent Age	26
Table 4.3 Respondent’s Relevant Work Experience	28
Table 4.4 The Extent Company Implement Product Quality Practice	30
Table 4.5 The extent company implement Technical Support and Training Practice	31
Table 4.6 The extent company Implement Communication Practice	32
Table 4.7 The extent company implements workers welfare Practice	33
Table 4.8 The extent company implement Environment Practice	34
Table 4.9 The impact of product quality practices to the company competitive advantage	28
Table 4.10 The impact of technical support and training practices to the company x	28
Table 4.11 The impact of communication practices to the company competitive advantage	37
Table 4.12 The impact of workers welfare practices to the company competitive advantage	38
Table 4.13 Model Summary	39
Table 4.14 ANOVA	40
Table 4.15 Coefficients Results	41
Table 4.16 Non-parametric correlation	42

LIST OF FIGURES

Figure 2.1: Conceptual Framework	21
Figure 4.1: Respondent Gender	26
Figure 4.2: Respondent's Level of Education.....	27
Figure 4.3: Respondent's Department	28

LIST OF ABBREVIATION AND ACRONYMS

ABD	-	Agricultural Business Development
AMAP BDS K&P	-	Accelerated Microenterprises Advancement Project Business Development Services knowledge and Practice.
BRC	-	British Retailers consortium
CBI	-	Central Bureau of Investigation
CPCC	-	Control Point and Compliance Criteria
EU	-	European Union
EUREP GAP	-	European Union Retail Good Agricultural practices
GAP	-	Good Agricultural Practices
GLOBAL GAP	-	Global Good Agricultural Practices
HCDA	-	Horticultural Crop Development Authority
IBIS	-	International Benchmarking Information society
KEPHIS	-	Kenya Plant Health Inspectorate Service
FPEAK	-	Fresh Produce Exporters Association Kenya

ABSTRACT

Global GAP certification was introduced by several European retailers and whole sellers. The aim was to ensure producers adhere to set regulation and meeting customer needs for quality and safe products. Kenya fruit exporters continue to implement global GAP practice despite certification process being costly to adopt and implement. The study investigated adoption of global GAP practices and its competitive advantage to Kenya fruit exporters.

The specific study objectives were to establish the levels of practice of global GAP by Kenya fruit exporters and determine the impact of global GAP competitive advantages. The research design used for the study was cross sectional survey among seventeen Kenya fruit exporters. The study used questionnaires in collecting data. The data was analyzed using descriptive statistic to summarize the results and presented using tables and figures.

The study revealed that Kenya fruit exporters implement global GAP practices to the great extent. These confirmed that global GAP is mandatory before being allowed exporting fruits to Europe. Global GAP practices being implemented were product quality, technical support and training, communication, workers welfare and environment conservation. The study found that the exporters gain competitive advantage by accessing new market, improved company image, improved productivity, market sustainability and reduced cost operation.

The study recommend use of global GAP practices as a tool of competitive advantage to Kenya fruit exporters. Despite the cost of implementing global GAP is high exporter it should not hinder them as benefits exceed the cost incur.

CHAPTER ONE: INTRODUCTION

1.1 Background

European Union (EU) is the largest market for fruits and vegetables in the world at an estimated 42.3 percent global market share (IBIS, 2015). Health has been major contributor of EU market growth as European consumers are more aware of nutritional value intake in their diet (AMAP, 2007). According to Henson, Masakure and Cranfield (2011) European market is main target for many developing countries due to high returns for their products. They compete for this market to export their free taxed produce. Exporters compete by ensuring good product variety, certification and sustainability (Punjabi, 2008).

According to HCDA (2013) 70-90 percent of the fresh product from Kenya and other sub-Saharan countries is exported to Europe. Retailers and supermarkets are responsible to ensure all fresh produce in their shelves meet specific quality and safety standard. They form regulation and policies of engagements with exporters of fruits and vegetables in developing countries (Humphrey, 2012). This gives them a lot of purchasing power due to flexibility in shifting from one supplier to another.

Entry to EU market is difficult due to stringent rules and regulations put in place (Henson and Humphrey, 2010). These rules and regulations are set by retailers and supermarkets that control EU fresh produce market (ABD 2010). They resulted from consumer sensitivity to quality and safety of fresh products. European consumers are looking for

food that is healthy, ethically sourced and traded. According to Humphrey (2006) retailers and supermarkets ensured product innovation, differentiation and just in time delivery to meet customer expectations. The exporters have to ensure the product quality and safety meet specified set standard.

Competition in EU market is high and exporters must be innovative to ensure premium quality, good taste and product differentiation to target specific customers (CBI, 2005). They also have to ensure fair pricing of the products. Exporters add value to product by ensuring sustainability of the product in the market and authenticity of product. Kenya is currently receiving competition from South Africa, Eastern Europe, North African countries like Morocco and Egypt (Mausch et al, 2009).With many exporters striving to get access EU market, getting Global GAP certification is mandatory. Certification helps the exporter to access new markets easily and to sustain it (Punjabi, 2008).

1.1.1 Global GAP

Global Good Agricultural Practices (Global GAP) is the global reference for the existing standard in food production value chain (Global GAP, 2008). It was established by horticulture industry as regulation mechanism with aim of linking both national and international safety and quality standard (Punjabi, 2008). The main aim is to meets dynamic needs and concerns of customer on food safety and quality. It mainly focuses on food safety, environmental protection, labour standard and animal welfare (ABD, 2010). In 2007 Global GAP was established to replace European Retail Produce Good Agricultural Practices (EUREPGAP).It gives guidelines and conditions of engagement

called control point and compliance criteria (CPCC).CPCC has three criteria; majority must, minority must and recommendation(Lind and Pederson,2011). Majority must are conditions that require 100 percent compliance, minority must require 95 percent compliance and recommendation does not have minimum compliance requirement. Its membership is voluntary but mandatory requirement to any exporter to Europe market (Humphrey, 2012).

Global GAP enhances coordination and communication between EU buyers and exporters (Henson et al, 2011). It gives a clear framework of engagement where exporter must adhere to. The exporters are certified once they fulfill all set condition. Certification is a clear demonstration of high quality products and safe for consumption. This gives the exporter chance to ensure their products are on every retail shop in Europe (Punjabi, 2008).Though certification is voluntary, Nadvi (2008) termed it ‘civil regulation’ where rule and regulation are not legally binding but violators usually face market restrictions and penalties.

There are cost associated with global GAP implementation which includes investments for safety handling materials, storage facilities, packaging facilities, provision of running water, transport facilities, sanitary facilities and farming equipment (Humphrey, 2009). The farmer must ensure all require facilities are in good working conditions. Graffham et al (2007) observed that the cost per farm of small scale farmer is over \$1000 which represents 36% of average production cost. Asfaw et al (2007) found that initial and recurrent cost of certification amount to a third of farmers’ annual income.

1.1.2 Competitive Advantage

According to Porter (1980) competitive advantage is uniqueness of the firm in comparison to its competitors. It can be strong market position, reputation, right to access superior market and quality products. Competitive advantage enables firms to generate greater sale and retain more customers than its competitors. Porter (1985) asserts that sustained competitive advantage requires effective control of cost drivers. Economies of scale, business linkages, learning and inter-relationship are important opportunities for creating competitive advantage.

Dube and Renaghan(1999) viewed competitive advantage as the value a firm can create to differentiate itself from other competitors. The value of a product is measured by the price the customers are willing to pay. If the customer benefits in using certain product they purchase the product regularly even at premium price (Wood, 2004). In order to create sustainable competitive advantage the firm requires product strategy, pricing strategy, positioning strategy and production strategy (Asker 2001).

According to Thompson (1997) good internal and external communication, strong technological competency and effective functional process facilitate competitive advantage. A firm should ensure good communication with stakeholders regarding strengths, achievements and successes. These will enable firms to have good reputation towards the customers and create brand loyalty. Kenyan fruit exporters' communication, relationship and business linkage with European retailers is through a guided frame work

contained in Global gap document. This informs the researcher how important is Global gap certification if a firm wants to gain competitive advantage.

1.1.3 Kenya Fruit Exporters

Kenya fruit exporters are one aspect of horticultural export industry in Kenya under the Ministry of Agriculture. Kenya is competing favorably in fruit exports due to ideal tropical and temperate climatic conditions, improved crop husbandry and well developed private sector (HCDA, 2013). Europe is the main market for fruit industry and the main countries importing under European Union are United Kingdom, Germany, France, Belgium, Holland and Italy (HCDA, 2013)

Fruit exports have been growing slowly but steadily. Kenya fruit exports grew by 9 percent every year from 1964 – 1974, and then it grew to 17 percent from 1974 -1984. The export slowed down to 4 percent in 1980's and 1990's (Minot and Ngigi 2002). By the year 2013, fruit export amounted to 17,109 metric tonnes with revenue of 2.13 billion. Major fruit export products include avocados, mangoes, pineapples, passion fruits, bananas, and strawberry (HCDA, 2013).

Kenya Fruit exporters are mainly dominated by small scale farmers due to inability by large commercial growers to maintain profits (Jaffee, 2003). Small scale farmers' account to 70 percent of total fruit exports in Kenya (FPEAK, 2015). Fruit exporters form alliances with small scale farmers for production of specific crop varieties in demand. Fruit Farming in Kenya is mainly done using rain water by small scale farmers and

irrigation by large commercial farmers (Jaffee, 2003).Kenya fruit export industry is regulated by government through Horticultural Crop Development Authority (HCDA). HCDA is government parastatal established under Agricultural Act 1972 with aim of developing and regulating horticultural industry.

Fresh Produce Exporters Association of Kenya (FPEAK) was established in 1975 to coordinate the activities of fruit exporters. Kenya's premier trade Association representing growers, exporters and service providers in the horticulture industry. FPEAK provides a focal and coordination point for the horticulture export industry. Its support growers and exporters by providing technical and marketing information and training, acts as information centre, and actively involved in lobbying and advocacy programmed to enhance the sector's competitiveness (FPEAK, 2015).

In fruit export industry, the exporters must fulfill the following prerequisite requirements: Export licence from HCDA ,Phytosanitary and conformity certificates from KEPHIS ,Euro 1 Certificate (For EU Market) ,Global GAP Certification ,MRL (Maximum Residue Levels) limit compliance (EU) and for UK supermarkets, they require BRC certification (HCDA,2013).

1.2 Problem Statement

Global GAP certification process requires an internationally recognized body to carry out audit of all exporters' farm activities during the entire production process. The main areas of focus are food safety, environmental protection, labour standard and animal welfare.

Global GAP set specific guidelines and regulations which all producers have to comply with before they access EU markets. It is a critical requirement for all in horticultural industry to implement. According to Henson et al 2011, Global GAP gives exporters opportunity to improve productivity and quality to meet customer's expectation thus ability to access markets easily.

Global GAP certification is mandatory for all Kenyan fruit exporters. Exporters incur high cost of implementing and managing global GAP certification process. Jaffee (2003), reported that large Kenyan exporters spend around 3 percent of total company turnover on certifications. Global GAP certification requires commitment of resources including finances, human resources, infrastructure and technical skills. As resources are limited there is need to determine the benefits arising from global GAP certification to justify the cost incurred. Apart from being a mandatory requirement for exporters, can exporters gain competitive advantage by having global GAP certification?

Several research studies have been carried out to determine the impact of Global GAP certification to exporters. The research studies so far carried out shows differing opinion in relation to the impact of global GAP certification. Humphrey and Henson (2010) indicated that cost of implementing Global GAP is high as it's incurred solely by the exporters. He observed that global GAP certification is a hindrance to many exporters in developing countries. Henson et al (2011) observed that lack of knowledge on benefits of global GAP impact as a tool of competitive advantage has led many exporters to shy away from export market. Lemeiller (2012) did study on impact of adopting global GAP

by small scale mango exporters in Peru. He observed that though the certification process was a challenge to many farmers, the benefits were greater than cost incurred.

In Kenya Minot and Ngigi (2004) did a study of impact of global GAP by small scale vegetable exporters and observed that global GAP may hinder many farmers to export their produce. Mwangi (2013) investigated the impact of private agri-food standards on smallholder incomes in Kenya. He observed that many smallholders were unable to meet Global GAP certification requirements which lock them out of export market. The results showed that farmers who are certified compete better for premium price than those uncertified. His finding suggested that smallholders' income from export is not reduced by private standard implementation costs. In contrast the income increased significantly. Karira, Mburu and Guthiga (2013) did a study of the environmental benefits of Global GAP standards among smallholder farmers in Kenya and observed that Global GAP compliance is found to have quantifiable environmental benefits to smallholder farmers as seen by the higher economic value of changes in soil quality hence increase productivity and farm yield.

Global GAP certification continues to attract debate, with no studies done on the benefits of global GAP certification to Kenyan fruit exporters. These create a knowledge gap which the paper seeks to establish the impact of adopting global GAP to Kenya fruit exporters. The proposed study aim to fill this gap of knowledge by answering the following questions: what are the levels of practice of global GAP to Kenya fruit exporters and what is the impact of global GAP certification to Kenya fruit exporters.

1.3 Research Objective of the Study

The objective of the study is to analyse the impact of global GAP certification to Kenya fruit exporters. The specific objectives are to:

- i. To determine the level of practice of global GAP to Kenya fruit exporters
- ii. Determine the impact of global GAP competitive advantage to Kenya fruit exporters.

1.4 Value of the Study

The study will help Kenyan fruit exporters to have insight of the benefits of global GAP certification and how to use it as a tool of competitive advantage.

The study will help the fruit exporter to know about global GAP as a tool of competitive advantage not hindrance in access market. The farmer will understand the benefit and impact these regulation have compared to the cost incurred.

The study will help academicians and researchers who would like to pursue further the study in the area of Global GAP certification, market competitive strategies to exporters.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents concepts, theoretical and empirical review. The chapter discusses concept of GAP and Global GAP certification. In the theoretical review, this chapter discusses theories that are related and guide the study. In the empirical review, it addresses empirical evidence of previous studies in the area of Global GAP certification.

2.2 Good Agricultural Practices and Global GAP Certification

Good agricultural practices (GAP) are practices that address concerns related to environmental sustainability, economic viability and social sustainability for on-farm processes and result in safe and quality food (FAO, 2003). GAP resulted from consumer concerns on food safety and that food commodities need to be produced in harmony with both environment and social values. GAP helps stakeholders including consumers, farmers, food retailing industries and the government to meet specific objective of food safety, food quality and environmental sustainability (Mushobozi, 2010).

According to Humphrey (2012) governments especially in developed countries have established rules and regulations on food safety and sustainability assessment schemes. Private sectors in food industry have also established food safety and quality standards, codes of practice and certifications programmes in agricultural food chain. Implementing GAP helps to reduce possible hazards associated with produce throughout the production and distribution chain (FAO 2002).

According to Edward (2007) most of the Global GAP codes and standards put emphasis on process standards rather than product standards. Process standards refer to the way the products are made while product standards refer to the characteristics and specifications of a product. GAP encourages use of technologies that are most effective for the optimal management of crops, livestock production, water and soil (Poisot, Speedy and Kueneman 2004).

GAP offers benefits to farmers and consumers to meet specific objectives of food security, food quality, production efficiency, social and environmental protection (Mushobozi, 2010). Farmers sell their produce at a premium price for complying with GAP rules and regulation. GAP certification translates to label designed influence customers due to specific product attributes. Most products are labelled 'organic' meaning they are certified. GAP critics term the process expensive especially certification and implementation cost and may hinder small scale farmers access to export market.

Global good agricultural practice certification is a global quality assurance standard concerning food quality, environment protection and social welfare in relation to agricultural activities (Casey, 2009). It was started in 1997 with name EUREPGAP by thirteen major European supermarkets and is managed by FoodPlus Gmhh (Humphrey, 2008). Global GAP has worldwide acceptance with current number of 123,000 certified

producers since 2001 in the world and being implemented in 80 countries (Campbell, 2006).

Vorley (2007) termed Global GAP as private, retailer-driven, business-to-business third party certification standard. In addition to Global GAP being certification standard, it's also an organisation comprising alliance of retailers, NGOs, producer organisation, consumer groups and agri-industry (Campbell, 2005). Nadvi (2008) stated that Global GAP is widely accepted benchmark in agri-food business and is used to give information to buyer about product technical specification and product safety. Global GAP aim is to ensure food produce is handled with utmost safety, improve reputation and avoid risk related blame.

To obtain Global GAP certification a producer must be audited by a certification body. Producers willing to be certified are given Global GAP document. This document contains a list of control points, compliance criteria and checklist for the auditors. Control point has three categories; major must, minor must and recommendations. Majority must are conditions that require 100 percent compliance, minority must require 95 percent compliance and recommendation does not have minimum compliance requirements. Global GAP currently has 95 major must, 117 minor must and 22 recommendations. To be certified, producers must fulfill all the major must and 95 percent of minor must (Humphrey, 2008).

2.3 Theoretical Literature Review

This study of global GAP certification is based on two theories; diffusion of innovation theory and clubs theory.

2.3.1 Diffusion of Innovation Theory

Diffusion of innovation theory started in 1920's and 1930's by sociologists Gabriel Tarde and Georg Simmel (Roger 1962). It was first practiced in 1943 to determine rate of innovation adoption by hybrid seed corn farmers in Iowa communities U.S.A (Ryan and Gross, 1943). Roger (1962) defines diffusion as the process in which an idea is communicated through certain channels over time among members of a social system. The theory explains how ideas, beliefs, knowledge, practice and technology gain popularity and spread through specific social system. He stated that diffusion process involves; knowledge, persuasion, decision, implementation and confirmation. He also added that for innovation to reach critical mass it must be voluntary. It must also be adopted first by opinion leaders in the social system and provide benefits to early adopters.

Ryan and Gross(1943) made a contribution to the theory by identifying stages of adoption which are: awareness of need to change, decision to adopt the change by early adopters, initial use by opinion leaders and continued use by opinion followers. Coleman, Katz, and Menzel (1966) conducted a study on the diffusion of tetracycline, a new medical drug. The Pfizer drug company wanted to investigate the effectiveness of their tetracycline advertisements, which were placed in medical journals. Diffusion of

innovation theory continues to be relevant in this present age. This is because innovators continue to diffuse new ideas to the people to adopt. The theory is used to provide practical guide for information campaigns in United State and as strategy to spread agricultural knowledge to farmers in developing countries (Karch, 2006).

The theory brings clarity on this study by enabling us to understand diffusion process of Global GAP adoption by Kenyan fruit exporters. According to the theory of diffusion Global GAP is termed as idea or innovation that flows from innovators to end users over a period of time. The adoption process has different stages of implementation. First stage is information stage where exporter becomes aware of Global GAP certification process, benefits and the challenges. The exporter then makes decision to implement the idea. The decision to adopt the idea of Global GAP is mainly influenced by opinion leaders who in this study are EU supermarkets and the early adopters. Early adopters are first Kenyans to implement the idea of global GAP. They spread the idea to other exporters based on benefits they gained by implementing the idea. Over the years Kenyan fruit exporters continue to voluntary join Global GAP despite high cost incurred expecting to gain benefits. The study seek establish the impact of implementing Global GAP by Kenya fruit exporters.

2.3.2 Club Theory

A club is a voluntary group deriving mutual benefits from sharing on production cost, members' characteristics or a good characterised by excludable benefits (Sandler and Tschirhart, 1980). In this theory clubs are institutions for producing and allocating goods that are neither fully private nor fully public. Buchanan (1965) viewed club goods as

excludable benefits that are only given to those who join the club and are withheld from others. McGurie (1974) indicates that the club must be voluntary and members choose to belong because of anticipated net benefit. He said club goods are non-rivalrous in that the benefits are available to all in that group. Buchanan gave example of a movie theatre where only those who have ticket are allowed to watch the movie and all those in movie theatre enjoy the same benefits.

Drawing on Buchanan's economic clubs theory, voluntary clubs were established whose central purpose was to produce positive social benefits (Prakash and Potoski, 2007). Voluntary clubs provided positive benefits beyond what government regulations required. Voluntary clubs membership cost was not directly paid unlike traditional economic clubs. Membership cost was monetary and non monetary cost by adopting and adhering to the club membership requirements (Cashare, auld and Newsom, 2004). Voluntary clubs were involved in environmental programmes, policies and performance which were valuable to stakeholders. They provided positive social benefits by obligating participating firms to pay their workers higher wages, to lower air pollution in their firms and environment conservation (Porter and Van der linde, 1995). The benefits voluntary club members received by producing positive social benefits were positive brand reputation to customers, good relationship and interactions with stakeholders (Carpenter, 2001).

According to the economic club theory Global GAP can be termed as a voluntary group where members enjoy specific benefits which are not available to others. The purpose of Global GAP is to provide social benefits beyond government regulation. They obligate

members to ensure environment conservation, quality products void of health risk, worker and animal welfare in the farms. There is no fee paid to join Global GAP but members incur huge cost to implement it. The theory enabled researcher to understand there are benefits gained by stake holders and firms that join voluntary programmes like Global GAP. Theory stated benefits like positive brand reputation and good customer relationship among others. The study seeks to establish impact of Global GAP by Kenyan fruit exporters by adopting Global GAP.

2.3.3 Resource Base Theory of Competitive Advantage

Grant (2001) defined competitive advantage as ability of an organization to match internal resources and skills with opportunities and risks created by external environment. Firm's ability to earn profit depends on its attractiveness to consumer and its establishment of competitive advantage over rivals. Johnson and schools (1999) stated that superior performance which create competitive advantage depend in which ways resources are utilized. Thompson, Strickland and Gamble (2007) stated firm resources include all physical, human, financial and organization assets used by the firm to deliver goods and services.

International competition, technological change and product diversification has subjected firms to vigorous competition (Grant, 2001). Firm competitiveness requires having efficient production system and being innovative. Firm is also required to have brand reputation, market share and good marketing and distribution systems. These create

strong buyer preferences translating to higher sales volumes and ability to command higher prices.

Global GAP was established to provide optimal farm productivity by using resources available. The theory enables us to understand there are always changes in external environment and firm must utilize its resources efficiently to gain competitive advantage. Global GAP is an external environmental change to Kenya fruit exporters being established by EU supermarket. Global GAP is important certification document to all fruit exporters to Europe as it's a crucial requirement to access Europe market. Kenya fruit exporter must adapt to changes Global GAP brought to the industry regulation for them to remain competitive. The theory prompts us to investigate impact of Global GAP to Kenya fruit exporters and analyse how exporter will gain competitive advantage by adopting it.

2.4 Empirical Literature Review

Several studies have been done on Global GAP certification but reported contradictory observations. Some studies indicating benefits firms obtain by Global GAP certification while other terming it expensive with no value to the exporters.

Lind and Pederson (2011) carried out a study on qualitative impact of private regulation mechanism on small Kenyan exporters. They observed that Global GAP certification facilitated easier coordination and communication between European buyers and the exporters. Certification demonstrates quality of produce thus attracting new European

buyers. They also observed that certification process hinder many farmers in export business due cost incurred to obtain and maintain certification.

Gay and Scheider (2007) indicated possibilities of gaining market access, reduced market loss risk and better export revenue through global gap certification. They noted that certification led to a higher quality product, environmental sustainability and improved workers welfare. They however stated that small scales farmers in developing countries experience difficulties in global gap certification and implementation due to cost. Though they noted that certification led to a higher quality product, environmental sustainability and improved workers welfare.

Ardiel (2008) did a case study of the impact of private standard on cherry growers in the Southern Interior of British Columbia. Empirical results showed that farmers with limited access to information and services are less likely to adopt standards. While compliance cost is high there is no commensurate price increase for their produce. Though farmer enjoys substantial income, she wondered whether the benefits are sufficiently large to cover the recurring and non-recurring cost and render the investment profitable.

Graffham and cooper (2008) conducted a survey on impact of Global GAP to smallholder farmers. They reported that all farmers interviewed participated in Global GAP certification process but majority subsequently dropped out of the process. They cited high investment cost and running cost, inadequate support from buyer, low prices and

complexities in implementing Global GAP. They recommended that global GAP certification cost should reduce with 45 percent to enable farmer enjoy better returns.

Peris and Juliá (2007) noted that group certification and agricultural cooperation reduces costs regarding private certificates. Their study about citrus fruit produced under Global GAP shows that producers benefit from management and technical assessment skills. Moreover, the production of citrus fruit using set standards reduces cost compared to the conventional system. Regulation helps to avoid double audits and thus save time and costs.

Mwangi (2013) investigated the impact of private agri-food standards on smallholder incomes in Kenya. He observed that many smallholders were unable to meet Global GAP certification requirements which lock them out of export market. The results showed that farmers who are certified compete better for premium price than those uncertified. His finding suggested that smallholders' income from export is not reduced by private standard implementation costs. In contrast the income increased significantly.

Wandera et al (2013) did empirical analysis of the environmental benefits of compliance with Global GAP standards among smallholder farmers in eastern and central Kenya. They observe that apart from farmers gaining market access there were quantifiable health benefits for the workers. They also noted that Global GAP improves productivity due to improved soil quality .They concluded that agri-regulation is useful tool that can be applied to enhance agricultural sustainability.

2.5 Summary of Literature Review and Knowledge Gap

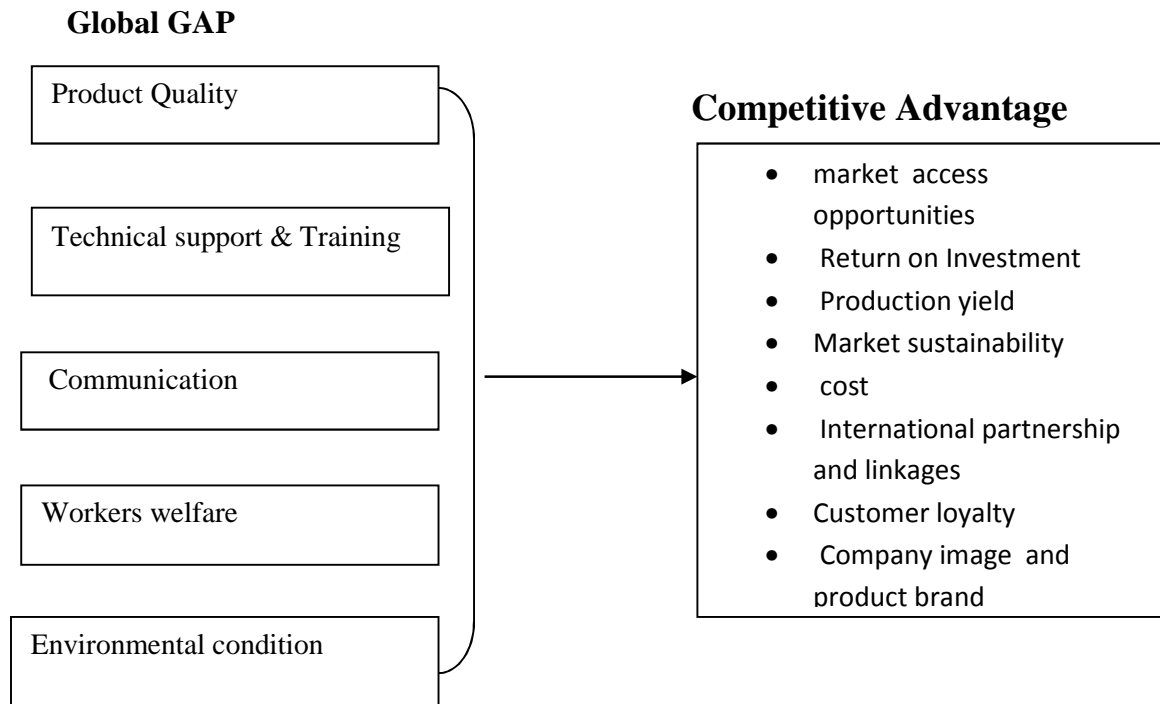
The theories gave researcher insight on how Global GAP being voluntary and costly to many farmers but they are still attracted to it. According to diffusion theory Global GAP is termed as innovation or idea that flows from innovator to producers or exporter. The theory clearly states that there are benefits that attract people to adopt certain idea or innovation. The idea or innovation must be implemented voluntarily by those willing to join voluntary clubs. The theories enabled researcher to understand there are benefits for joining specific voluntary programmes. Global GAP was an idea started by European Union supermarkets. The idea has spread and is implemented in all countries exporting fresh produce to Europe. Therefore the study seeks to establish benefits gained by adopting Global GAP by Kenyan fruit exporters.

The empirical review indicated there are several studies done on Global GAP certification both by international and local researchers. The study attracted many researchers but with no agreeable conclusion on issue of Global GAP. The researcher observed contradictory results some stating benefits while others terming certification a hindrance to exporters. Researchers also did little to analyse benefits gained by adopting Global GAP with majority stating access to European market as only benefit. Market access cannot be only benefit that attract exporter to Global GAP, there should be other benefits that this study seeks to establish. There are also no researches done to establish how Global GAP can be used as a tool of competitive advantage. These have left a knowledge gap that needs to be filled by analysing Global GAP benefits and as tool of competitive advantage to Kenya fruit exporters.

2.6 Conceptual framework

Independent variables

Dependent variable



Source: researcher (2015)

Figure 2.1 Conceptual framework

Independent variables are product quality, technical support, training, improved communication, improved welfare and improved environmental conditions. They are as a result of implementing Global GAP set standards. Once exporters fulfill set standards and certified they are expected to benefit by having new market opportunities, high income returns, improve yield, market sustainability and reduced cost.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter dealt with research methodology to explore how research was carried out. Research methodology involved research design for the study, data collection method and data analysis method.

3.2 Research Design

The research design that was employed in this study is a cross-sectional survey. This research design enabled researcher to capture a population characteristic at single point in time in order to make generalization about the phenomenon. According to Mugenda (2003), cross sectional study is suitable for studies that aim to analyse a phenomenon, situation or issue by considering a cross-section of a population at one point in time. The research was to establish the impact of Global GAP to Kenyan fruit exporters.

3.3 Target Population

The target population comprised seventeen (17) fruit exporters company in Kenya (appendix III). Since study population was small the researcher conducted a census.

3.4 Data Collection

Primary data was collected using a questionnaire. The questionnaire formulated questions designed to provide sufficient information for the study. Each item on questionnaire was developed to address specific objective. It had both open and closed ended questions. The

closed ended questions were used to test rate various attributes. The interviewee responses were assigned specific rates within the scale to bring out expressed opinion on the subject of study. The open ended questions were used to provide information that were not captured in closed ended questions. Rating scales such as Likert Scales was used to collect the data. The respondents were Managing Director and Head of Operation or someone equivalent to that position in every company who were considered to be key informants for this research.

The questionnaire had three sections; Section A of the questionnaire gathered respondent bio data, section B assessed level of practice of Global GAP and section C assessed impact of Global GAP competitive advantages. The researcher primarily conducted direct interviews to top management in the company as guided in the questionnaire. In situation where the respondents were not available for direct interview the questionnaire were administered using “drop and pick later” method.

3.5 Data Analysis

The complete questionnaire were received from the respondents. Errors and omissions were checked to ensure consistency. Data was assigned with numerical codes to various close ended responses. Descriptive statistics was used to analyse data and give a summary of findings of bio data and level of Global GAP practices .The result of descriptive analysis was presented using text and tabular form. Correlation and regression analysis were used to analyse the impact of Global GAP competitive advantage, the

relationship between independent variables and dependent variables and will have the following model:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Where: Y= competitive advantage

X₁= Product quality

X₂= Technical support & Training

X₃= Communication

X₄= Workers welfare

X₅= Environmental condition

α = constant

ϵ = error term

CHAPTER FOUR: DATA ANALYSIS, FINDING AND INTERPRETATION

4.1 Introduction

This chapter presents an analysis of the research data using various statistical techniques, research findings and data interpretation. The returned questionnaires were first edited for completeness and coded. The data was then analyzed using statistical tools and presented in form of tables and figures.

4.2 Response Rate

A total of 13 out of a sample size of 17 respondents filled in and returned the questionnaires implying a response rate of 76%. According to Mugenda and Mugenda (2003), a response rate of 50% is adequate and 75% rate is good.

Table 4.1 Response rate

Response	Frequency	Percentage
Respondent	13	76
Non respondent	4	24
Total	17	100

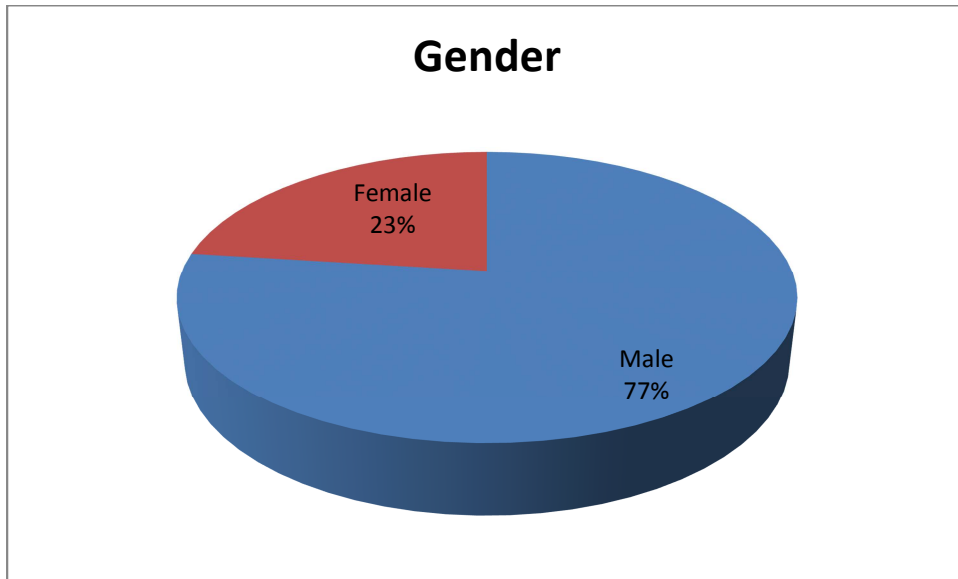
Source: Survey data (2015)

4.3 Demographic Information

This section presents respondent bio data analysis which includes gender, education level, respondent department and work experience

4.3.1 Respondent gender

Figure 4.1: Respondent gender



Source: Survey Data (2015)

Figure 4.1 shows that 77% of the respondents were male and 23% of the respondents were female. The findings indicate that there were more male than female however gender does not have any significance to the study.

4.3.2 Respondent Age

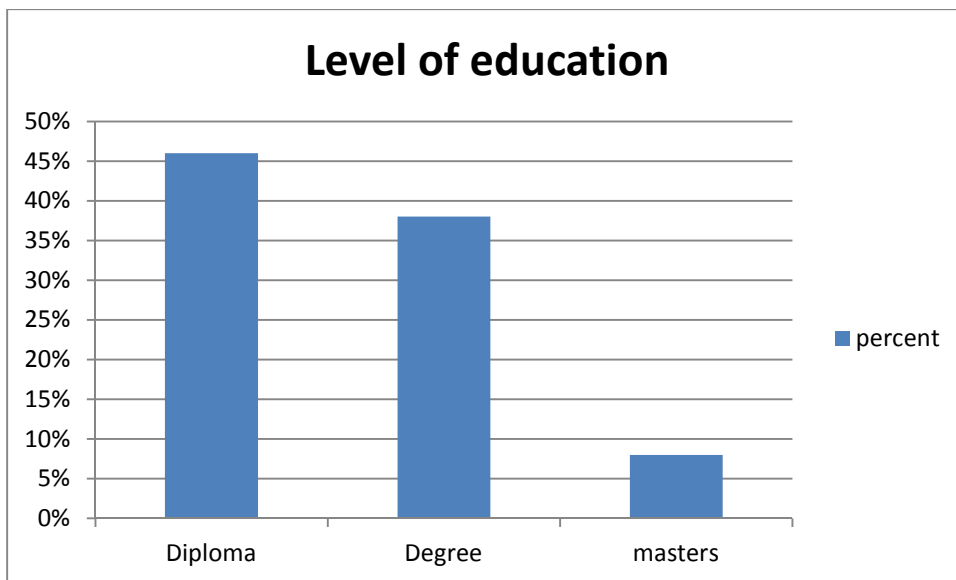
Table 4.2 Respondent Age

Age	Frequency	Percentage
18-26 years	2	15
27-35 years	7	53
36-45 years	4	28
Total	13	100

Source: Survey data (2015)

Table 4.2 shows majority of respondents are within the 27-35 years category with 53%, followed by 36-45 years category which has 28%. Only 15% of the respondents are within 18-26 years category. The study thus reached respondent across the age brackets hence a possible diversity in experiences. However diversity in age does not have any significance to the study

Figure 4.2 Respondent’s Level of Education

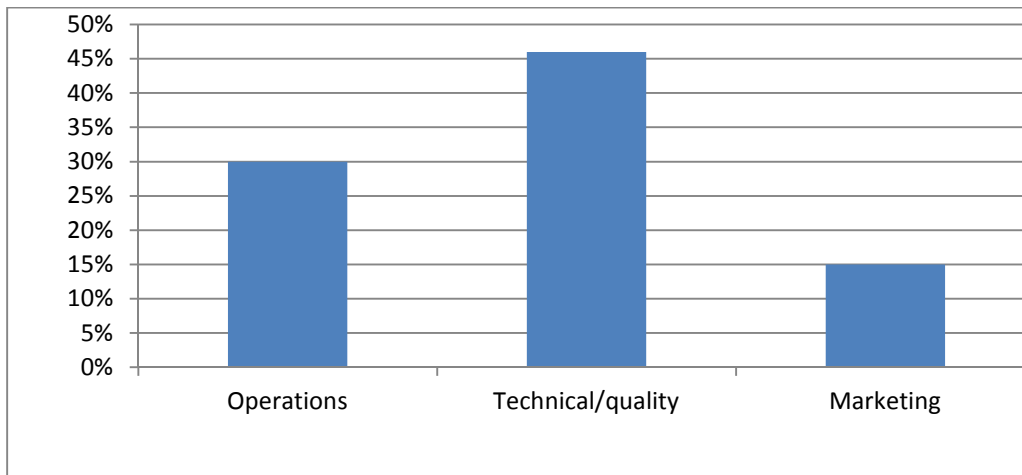


Source: Survey data (2015)

Figure 4.2 indicates 46% of respondents were diploma and higher diploma holders, 38% were degree holders while 7% were master’s holders. This show Kenya fruit exporters has well educated people who can effectively understand and implement Global GAP.

4.3.3 Respondent Department

Figure 4.3 Respondent's Department



Source: Survey data (2015)

Figure 4.3 indicates that 46% of the respondents who are majority are in technical and quality department, 29% are in operation department and 15% are in marketing and administrative department. The finding shows that the respondent were well informed about Global GAP practices and its competitive advantage to Kenya fruit exporters.

4.3.4 Respondent's relevant work experience

Table 4.3 Respondent's Relevant Work Experience

Years of Experience	Frequency	Percentage
1-5 years	4	31%
5-10 years	3	23%
Above 10 years	6	46%

Source: Survey data (2015)

Table 4.3 indicates that 46% of the respondents had more than 10 years of relevant work experience, 23% had 5-10 years of work experience and 31% had 1-5 years work

experience. The findings show that the respondents were well informed and experienced in Global GAP practices.

4.4 Level of Practice of global GAP

This section aim at establishing the level of practice of Global GAP to the respondents and a scale of 1-5 was used. Where 1 No extent, 2 Little extent, 3 Moderate Extent, 4 Great extent and 5 very great extent. The scores “very great extent” and “great extent” were represented by mean equivalent to 3.6 to 5.0 on the continuous Likert scale (3.6<very great extent<5.0). The scores of “Neither agree nor disagree” were equivalent to 2.6 to 3.5 on the likert scale (2.6<neither agree nor disagree<3.5). The score of “No extent” and “Extremely no extent” were equivalent to 1.0 to 2.5 on the likert scale (1.0<No extent <2.5)

4.4.1 Global GAP Practices

The study aimed at investigating Global GAP practice implemented by fruit exporters. respondents indicated the cost of implementing Global GAP for one farm is an average of ksh five hundred thousand (500,000) per year. This show that exporters incur a lot of cost in implementing Global GAP though many were reluctant to reveal total export revenue. The respondents also indicated that they supply to an average of three (3) clients in Europe. The respondents listed traceability, environment conservation, workers hygiene, waste management and risk assessment for site as some of Global GAP practices.

4.4.2 The Extent Company Implement Product Quality Practice

Table 4.4 The Extent Company Implement Product Quality Practice

Global GAP practices	Mean	Std. Deviation
Just in time product delivery	4	1.24722
Proper transport facilities for the produce	4.5	0.70711
Product innovation	4.3	0.82327
Use of certified planting materials	4.5	0.84984
Use of certified pest control products	4.6	0.84327
Total	21.9	4.47071
Mean	4.3	4.47071

Source: Survey data (2015)

Table 4.4 shows the extent company implement product quality practice which was found to be to a great extent as shown by a mean score of 4.3 in that, Just in time product delivery practice was implemented to a great extent of 4.0 as shown , Proper transport facilities for the produce and use of certified planting materials were implemented by great extent as shown by a mean score of 4.5 respectively, Product innovation was also implemented to great extent by a mean score 4.3, Use of certified pest control product had the highest mean score of 4.6 great extent implementation. The result shows that all these Global GAP practices are implemented by Kenya fruit exporters to a great extent for good product quality.

4.4.3 The extent company implement Technical Support and Training Practice

Table 4.5 The extent company implement Technical Support and Training Practice

Global GAP practices	Mean	Std .Deviation
Product handling training	4.8	0.42164
Employee training on planting and harvesting procedures	4.8	0.42164
Employee training on proper sanitation and hygiene	4.8	0.42164
Training on Global GAP requirements	4.7	0.67495
Mean	4.775	0.48497

Source: Survey data (2015)

Table 4.5 shows that technical support and training practice was found to be implemented to a great extent by the exporters with a mean score of 4.775. Employee training on planting and harvesting procedures, employee training on proper sanitation and hygiene and product handling training were found to be implemented to a great extent as shown by a mean score of 4.8. Training on Global GAP requirements was also implemented to a great extent with a mean score of 4.7.

4.4.4 The extent company Implement Communication Practice

Table 4.6 The extent company Implement Communication Practice

Global GAP practices	Mean	Std .Deviation
Product training documents	4.7	0.48305
Constant communication with buyer	4.8	0.42164
Pre- harvest assessment document	4.7	0.48305
Employee working policy	4.8	0.42164
Audit documents	4.7	0.48305
Mean	4.74	0.45848

Source: Survey data (2015)

Table 4.6 shows that communication practices was implemented to a great extent as shown by a mean score of 4.74. Product training documents, Pre- harvest assessment documents and Audit documents were implemented by fruit exporters to a great extent as shown by a mean score of 4.7 respectively. Constant communication with buyer and employee working policy were also implemented to a great extent of as shown by a mean score of 4.8 respectively.

4.4.5 The extent company implements workers welfare Practice

Table 4.7 The extent company implements workers welfare Practice

Global GAP practices	Mean	Std .Deviation
Clean water for workers	4.8	0.42164
Proper sanitation facility	4.8	0.42164
Well-equipped working equipment and facilities	4.6	0.51640
Employee facilities example locker room, break and lunch areas	4.5	0.70711
Mean	4.675	0.51669

Source: Survey data (2015)

Table 4.7 shows that workers welfare practice was implemented to a great extent as shown by a mean score of 4.675. Clean water for workers and Proper sanitation facility were implemented to a great extent as shown by a mean score of 4.8 respectively. Well-equipped working equipment and employee facilities were also implemented to great extent as shown by a mean score of 4.6 and 4.5 respectively

4.4.6 The extent company implement Environment Practice

Table 4.8 The extent company implement Environment Practice

Global GAP practices	Mean	Std .Deviation
Proper sanitation	4.6	0.51640
Proper sewage system	4.5	0.52705
Proper drainage system	4.6	0.51640
Use of certified pest control products	4.6	0.51640
Proper waste disposal methods	4.5	0.52705
Mean	4.56	0.51266

Source: Survey data (2015)

Table 4.8 shows that environment practice was implemented to a great extent as shown by a mean score of 4.56. Proper sewerage system and Proper waste disposal methods were implemented to a great extent as shown by a mean score of 4.5 respectively. Proper sanitation and Proper waste disposal methods were also implemented to great extent as shown by a mean score of 4.6 respectively.

4.5 The impact of Global GAP practices to the company competitive advantage

4.5.1 The impact of product quality practices to the company competitive advantage

Table 4.9 The impact of product quality practices to the company competitive advantage

Impact of product quality on	Mean	Std .Deviation
Creating new market opportunities	4.6	0.6991
Improved company image and product branding	4.6	0.60769
Improved productivity	4.3	0.67495
Market sustainability	4.3	0.51640
Reduced cost of operation	4.0	0.66667
Customer loyalty	4.5	0.70711
Mean	4.38	0.64532

Source: Survey data (2015)

Table 4.9 shows product quality was found to impact company competitive advantage to a great extent as shown by a mean score of 4.38 in that; quality product impact to creating new market opportunities was to a great extent as shown by mean score of 4.6, quality product impact to improved company image and product branding was to great extent as shown by mean score of 4.6, Product quality impact to improved productivity and market sustainability was to a great extent as shown by mean score of 4.3 respectively. Product quality impact to reduced cost of operation was to a great extent as shown by mean score of 4.0 and customer loyalty to great extent as shown by mean score of 4.5.

4.5.2 The impact of technical support and training practices to the company competitive advantage

Table 4.10 The impact of technical support and training practices to the company competitive advantage

Impact of technical support and training on	Mean	Std .Deviation
Improved company image and product branding	4.5	0.97183
Improved productivity	4.7	0.67495
Reduced cost of operation	4.5	0.84984
Creating new market opportunities	4.5	0.84984
Improved company international partnership and linkages	4.7	0.67495
Increase market access	4.6	0.84327
Mean	4.58	0.64532

Source: Survey data (2015)

Table 4.10 show technical support and training was found to impact company competitive advantage to a great extent as shown by a mean score of 4.58 in that; technical support and training impact to creating new market opportunities and reduced cost of operation were both to a great extent as shown by mean score of 4.5, technical support and training impact to increase market access was to great extent of mean score 4.6, technical support and training impact to improved company image was to great extent as shown by mean score of 4.5, it also impacted to improved productivity and improved company international partnership and linkages was both to a great extent as shown by mean score of 4.7 respectively.

4.5.3 The impact of communication practices to the company competitive advantage

Table 4.11 The impact of communication practices to the company competitive advantage

Impact of communication on	Mean	Std .Deviation
Creating new market opportunities	3.9	1.19722
Improved productivity	4.3	0.67495
Improved company image and product branding	4.1	0.87560
Reduced cost of operation	4.3	0.67495
Market sustainability	3.8	0.91894
Improved company international partnership and linkages	4.7	0.67495
Mean	4.18	0.65323

Source: Survey data (2015)

Table 4.11 show communication impacted company competitive advantage to a great extent as shown by a mean score of 4.18 in that; communication impact was to a great extent helpful in creating new market opportunities as shown by mean score of 3.9, communication impact to improved productivity was to a great extent as shown by mean score of 4.3, communication impact to improved company image and product branding was to a great extent as shown by mean score of 4.1. Communication impact to reduced cost of operation was to a great extent as shown by mean score of 4.3 and improved company international partnership and linkages to great extent as shown by mean score of 4.5

4.5.4 The impact of workers welfare practices to the company competitive advantage

Table 4.12 The impact of workers welfare practices to the company competitive advantage

Impact of workers welfare on	Mean	Std .Deviation
Creating new market opportunities	3.3	1.19722
Improved productivity	4.5	0.67495
Improved company image and product branding	3.7	0.87560
Reduced cost of operation	4.1	0.67495
Market sustainability	4.3	0.91894
Improved company international partnership and linkages	4.7	0.67495
Mean	4.1	0.64733

Source: Survey data (2015)

Table 4.12 shows workers welfare was found to impact company competitive advantage to a great extent as shown by a mean score of 4.1 in that; respondents were neutral on workers welfare impact to creating new market opportunities as shown by a mean score of 3.3 , workers welfare impact to reduced cost of operation was to a great extent as shown by mean score of 4.1, workers welfare impact to improved productivity was to great extent of mean score 4.5, workers welfare impact to improved company image was to great extent as shown by mean score of 3.7, workers welfare impact to market sustainability was to a great extent of mean score 4.3 and Improved company international partnership and linkages was both to a great extent as shown by mean score of 4.7 respectively

4.6 Regression Analysis

The study conducted a multiple linear regression analysis to determine the relationship between Global GAP practices and Competitive advantage. The five independent factors of Global GAP practices are: Product quality, Technical Support and Training, Communication, workers welfare and Environment conservation.

The regression equation was of the form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Where by Y= competitive advantage

X₁= Product quality

X₂= Technical support and Training

X₃= Communication

X₄= Workers welfare

X₅=Environment conservation

Table 4.13 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.672 ^a	.452	-.234	.74377

a) Predictors: (Constant), Environmental Condition, Technical Support and Training,

Communication, Product Quality, Workers Welfare

b) Dependent variable: Competitive advantage

The R Square, called the coefficient of determination, tells us how competitive advantage varied with Environmental Condition, Technical Support and Training, Communication, Product Quality, Workers Welfare. The five independent variables explain 67.2% of the

factors affecting competitive advantage as represented R Squared (Coefficient of determinant). This means that there are other factors not included in the study which contribute 32.8% of the variation in company competitive advantage.

Table 4.14 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1.823	7	.365	.659	.675^b
Residual	2.213	6	.553		
Total	4.036	13			

a) Dependent Variable: Global Gap competitive advantage

b) Predictors: (Constant), Environmental Condition, Technical Support and Training, Communication, Product Quality, Workers Welfare

The study used ANOVA to establish the significance of regression model from which an f-significance value of p was 0.675. The model is not statistically significant in predicting how Environmental Condition, Technical Support and Training, Communication, Product Quality, Workers Welfare affect fruit exporters competitive advantage. There are other factors that may contribute to competitive advantage which are not listed. Further research work need to be done to establish other factors that affect global gap competitive advantage.

Table 4.15 Coefficients Results

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	1.560	3.439		.454	.674
	Product Quality	-.016	.108	-.063	-.151	.887
	Technical Support and Training	.287	.401	.287	.716	.514
	Communication	-.322	.544	-.243	-.591	.586
	Workers Welfare	-.067	.546	-.068	-.122	.909
	Environmental Condition	.710	.558	.657	1.271	.273

a. Dependent Variable: Global Gap competitive advantage

The study established regression equation as

$$Y = 1.560 - 0.016X_1 + 0.287X_2 - 0.322X_3 - 0.067X_4 + 0.710X_5$$

The regression equation has established that holding all factors (product quality, technical support and training, communication, workers welfare and environmental conservation) constant, factors affecting competitive advantage will be 1.560. The finding also shows that taking all other independent variables constant, a unit increase in product quality will lead to a 0.016 decrease in these score of competitive advantage. A unit increase in technical support and training will lead to 0.287 increases in the score of competitive advantage. . A unit increase in communication will lead to 0.322 decreases in the score of competitive advantage. A unit increase in workers welfare will lead to 0.067 decreases in the score of competitive advantage. . A unit increase in environmental conservation will lead to 0.710 increases in the score of competitive advantage. This implies environmental conservation and technical support and training perform significantly for the coefficient of the company competitive advantage.

Table 4.16 Non-parametric correlation

		Global Gap	Product Quality	Technical Support and Training	Communication	Workers Welfare	Environmental Condition
Global Gap	Pearson Correlation	1	-.125	.286	-.082	.286	.551
	Sig. (2-tailed)		.730	.424	.821	.422	.099
	N	13	13	13	13	13	13
Product Quality	Pearson Correlation	-.125	1	-.352	-.236	-.203	-.050
	Sig. (2-tailed)	.730		.319	.511	.574	.891
	N	13	13	13	13	13	13
Technical Support and Training	Pearson Correlation	.286	-.352	1	.060	-.049	-.018
	Sig. (2-tailed)	.424	.319		.870	.893	.961
	N	13	13	13	13	13	13
Communication	Pearson Correlation	-.082	-.236	.060	1	.399	.237
	Sig. (2-tailed)	.821	.511	.870		.254	.510
	N	13	13	13	13	13	13
Workers Welfare	Pearson Correlation	.286	-.203	-.049	.399	1	.689*
	Sig. (2-tailed)	.422	.574	.893	.254		.028
	N	13	13	13	13	13	13
Environmental Condition	Pearson Correlation	.551	-.050	-.018	.237	.689*	1
	Sig. (2-tailed)	.099	.891	.961	.510	.028	
	N	13	13	13	13	13	13

Table 4.16 shows there are significant positive correlation between global work practices and competitive advantage where product quality has 0.73, technical support has 0.424, workers

welfare has 0.422 and environmental condition has 0.551. However there is no significant correlation between communication practices and Global GAP competitive advantage

4.7 Discussion of Results

The findings of the study show that product quality, technical support and training, communication, workers welfare and environmental conservation impact positively on competitive advantage to the Kenya fruit exporters company. The study revealed that environmental conservation had positive impact on competitive advantage. These findings were in line with Karira, Mburu and Guthiga (2013) who found that environment conservation improves productivity and firm yield. One of the respondents quoted that environment conservation and agriculture are inseparable things as both affect each other directly. The findings were also in line with Henson et al (2011) who indicated that technical support and training improve productivity and quality to meet customer's expectation thus ability to access market easily.

The study indicated that the cost of implementing Global GAP was high as exporters incur huge cost per year. In contrast benefits are sufficiently large to cover the recurring and non-recurring cost and render the investment profitable. These findings were similar to that of Humphrey and Henson (2010) who found that the cost of implementing global GAP certification is high, but certification increases market access and sustainability.

The study was also in line with Gay and Scheider (2007) who indicated global GAP enhances possibilities of gaining market access, reduced market loss risk and better export revenue through global gap certification. They noted that certification led to a higher

quality product, environmental sustainability and improved workers welfare. Kenya fruit exporters have to ensure they implement global GAP practices to gain competitive advantage.

According to Grant (2001) competitive advantage is ability of an organization to match internal resources and skills with opportunities and risks created by external environment. Firm's ability to earn profit depends on its attractiveness to consumer and its establishment of competitive advantage over rivals. Global GAP certification was an external change and Kenya fruit exporters have to ensure product quality, technical support and training, communication, workers welfare and environmental conservation are implemented to gain competitive advantage.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

5.0 Introduction

The chapter provide the summary of the findings from the data collected. It gives a conclusion and recommendation of the based on the objective of the study. The objective of the study was to determine the extent of Global GAP practices and the impact of Global GAP to Kenya fruit exporter.

5.1 Conclusion

The study fulfilled the objective of determining the extent of global GAP practices are being implemented by Kenya fruit exporters. The study found that the exporters implement to a great extent all global GAP practices as they are mandatory before being allowed to export to Europe. The practices were product quality, technical support and training, communication, workers welfare and environmental conservation. All these practices impact how exporters access market, market sustainability, cost reduction, productivity and company image. The practices were also interrelated. Product quality is being affected by how company implement technical training and support, communication and environmental conservation. Environment conservation is likewise affected by communication, product quality, technical support and training and workers welfare.

The study indicated that global Gap practices influences positively company competitive advantage. Environmental conservation and technical support and training impacted exporters most in terms of competitive advantage. The study found that exporters

compete competitively by ensuring they meet all specifications provided in the Global GAP document. These specifications were majority must, minority must and recommendations. Majority must are conditions that require 100 percent compliance, minority must require 95 percent compliance and recommendation does not have a minimum compliance requirement.

The study concluded that the cost of implementing Global GAP is high but exporters gain by reducing cost of production, improved productivity, increased market access and customer loyalty. There is a dependency between global GAP competitive advantages and practices as adopting them will enhance exporters' ability to compete.

5.2 Recommendations

The study recommends that Kenya fruit exporters adopt Global GAP with the aim of gaining a competitive advantage. Global GAP practices like quality product, technical support and training, communication, workers welfare and environmental conservation are key for exporters to implement for a competitive advantage. The exporter should put more effort on environment conservation and technical support and training as they significantly impact Global GAP competitive advantage. Further research work needs to be done to establish other factors that affect global GAP competitive advantage.

Cost of implementing Global GAP which includes investments for safety handling materials, storage facilities, packaging facilities, provision of running water, transport facilities, sanitary facilities and farming equipment should not hinder exporters from

adopting it. The benefits of adopting Global GAP are sufficiently large to cover the cost and render the investment profitable.

5.3 Limitations of the study

Reluctance of some respondent to complete and return the questionnaires limited the number of expected respondent. Delay in completing the questionnaires by the respondents on time was a hindrance to the study due limited time frame given for project submission.

5.4 Suggestion for Further Research

The study aim was to investigate Global GAP adoption and its competitive advantages to Kenya fruit exporters. In Kenya there other exporter like vegetable and flower who also us Global GAP. There is need for another study focusing on vegetable and flower exporters in Kenya. Secondly, a study should be conducted to investigate challenges exporters face when adopting and implementing Global GAP in Kenya.

REFERENCES

- ABD (2010), Export-Vegetable value chain analysis: Lower Easter region (Machakos, Makueni and Kitui) Kenya.
- Asfaw, S., Mithöfer, D. and Waibel, H. (2007), 'What Impact Are EU Supermarket Standards Having on Developing Country Exports of High-Value Agricultural Products? Evidence from Kenya'. '105th EAAE Seminar 'International Marketing and International Trade of Quality Food Products', Bologna, 8-10 March.
- British Retail Consortium Global Standards:
<http://www.brc.org.U.K./standards/default.asp>
- Campbell, H., (2005), The rise and rise of Eurep GAP: European (re) Invention of Colonial Food Relations. *International Journal of Sociology of Agriculture and Food*, 13(2), 130.
- Campbell, H., Lawrence, G. & Smith, K. (2006), Audit Cultures and the Antipodes: The Implications of EurepGAP for New Zealand and Australian Agri-Food Industries. In T. Marsden & J. Murdoch, eds. *between the Local and the Global: Confronting Complexity*.
- CBI: *EU Market Survey (2005), Fresh Fruit and Vegetables* www.cbi.nl.
- Colman, G.P., (1968). Innovation and Diffusion in Agriculture. *Agricultural History*, 42(3), 173-188.
- Delmas, M. & Montiel, I., (2008). The Diffusion of Voluntary International Management Standards: Responsible Care, ISO 9000, and ISO 14001 in the Chemical Industry. *Policy Studies Journal*, 36(1), 65-93.
- Delmonte (2015): <http://www.delmonte.com> (accessed in June 2015)
- Dimitri, C., 2003. Agricultural Marketing Institutions: A Response to Quality Disputes. *Journal of Agricultural & Food Industrial Organization*, 1(1), 17.
- Dolan, C. and Humphrey, J. (2000). Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticulture Industry. *Journal of Development Studies* 37 (2): 147-176.
- Edwards - Jones, G. (2007), Modelling Farmer Decision-Making: Concepts, Progress and Challenges. *Animal Science*, 82(06), 783-790.
- EurepGAP, (2004), *Eurepgap Control Points & Compliance Criteria. Fruit and Vegetables. (Version 2.0-Jan 04)*, Cologne: FoodPLUS GmbH.
- FPEAK (2015):<http://www.fpeak.org>(accessed in June 2015).

- Fulponi, L. (2006), Private Voluntary Standards in the Food System: The Perspective of Major Food Retailers in OECD countries. *Food Policy*, 31(1), 1-13.
- Fulponi, L. (2007), Market Access and Private Standards: Case Study of the Peruvian Fruit and Vegetable Markets, Directorate for Food, Agriculture and Fisheries Committee for Agriculture, Working Party on Agricultural Policies and Markets. OCDE Report.
- Global GAP website: www.GlobalGAP.org (accessed in June 2015)
- Global GAP, (2007), *General Regulations Integrated Farm Assurance*, FoodPlus: Cologne.
- Graffham, A. & Cooper, J. (2008), *Making GLOBALGAP smallholder friendly*, London.
- Graffham, A., Karehu, E. and Macgregor, J. (2007), *Impact of Eurep GAP on Small scale Vegetable Growers in Kenya*, *Fresh Insights 6*. Greenwich: Natural Resources Institute.
- Hatanaka, M., Bain, C. and Busch, L. (2005), *'Third-Party Certification in the Global Agrifood System'*, *Food Policy*.
- HCDA (2013), Role of Horticultural Crops Development Authority and Horticulture Sector performance report.
- HCDA website: [http:// www.hcda.or.ke](http://www.hcda.or.ke) (accessed in June 2015)
- Henson, S. and Jaffee, S. (2006), Food Safety Standards and Trade: Enhancing Competitiveness and Avoiding Exclusion of Developing Countries. *The European Journal of Development Research* 18(4): 593-621.
- Henson, S. and Jaffee, S. (2008), Understanding Developing Country Strategic Responses to the Enhancement of Food Safety Standards. *The World Economy* 31(4): 548-568
- Henson, S. & Humphrey, J. (2010), 'Understanding the Complexities of Private Standards in Global Agri-Food Chains as they Impact developing countries', *The Journal of Development Studies*.
- Henson, S.; Masakure, O. & Cranfield, J. (2011), 'Do fresh produce exporters in Sub-Africa benefit from GlobalGAP Certification?', *World Development* 39(3).
- Humphrey, J. (2008), *Private Standards, Small Farmers and Donor Policy: EUREPGAP in Kenya*, IDS Working Paper 308, Brighton: Institute of Development Studies.
- Jaffee, Steven. (1994), "Contract Farming in the Shadow of Competitive Markets The Experience of Kenyan Horticulture." In P. Little and M. Watts, eds., *Living Under*

Contract: Contract Farming and Agrarian Transformation in Sub-Saharan Africa. Washington, D.C.: World.

Jennifer Ardiel, (1995), *The Introduction of Safe and Sustainable Agriculture Certification: A Case Study of Cherry Growers in the Southern Interior of British Columbia*.

Karch A. (2006), National Intervention and the Diffusion of Policy Innovations.

Korathi, C.R. (2004), *Research Methodology: Method and Techniques (2nd Edition)*, New Age International (P.) Limited, New Delhi

Mausch, K.; Mithofer, D.; Asfaw, S. & Waibel, H. (2009), 'Export Vegetable Production in Kenya under the Eurep GAP Standard: Is Large More Beautiful than Small?', *Journal of Food Distribution Research* 40(3).

Mugenda, O.M & Mugenda, A.G (2003), *Research Methods: Quantitative and Qualitative Approaches*.

Nadvi, K. (2008), Global Standards, Global Governance and Organisation of Global Value Chain. *Journal of Economic Geography*.

Okello, J.J. (2005), Compliance with International Food Safety Standards: The Case of Green Bean Production in Kenyan Family Farms. Michigan State University.

Punjabi, M. (2008), Grape Exports with GLOBALGAP Certification: Case Study of Mahindra & Mahindra Initiative in India, Food and Agricultural Organization of the United Nations New Delhi, January.

Rogers, E.M. & Ban, A.W.V.D., (1963), Research on the Diffusion of Agricultural Innovations in the United States and the Netherlands. *Sociologia Ruralis*, 3(1), 38-49.

Rogers, E.M., (2004), A Prospective and Retrospective Look at the Diffusion Model. *Journal of Health Communication*, 9(Supp 1), 13-19.

Ryan R, Gross N. (1943), The Diffusion of Hybrid Seed Corn in Two Iowa communities. *Rural Sociol*, 8(1):15–24.

Vorley, B., (2007), Supermarkets and Agri-food Supply Chains in Europe: Partnership and Protest. In D. Burch & G. Lawrence, eds. *Supermarkets and Agri-food Supply Chains. Transformations in the Production and Consumption of Foods*. Cheltenham.

APPENDICES

APPENDIX I: LETTER OF INTRODUCTION



UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 3019
Nairobi, Kenya

DATE 7/9/15:

TO WHOM IT MAY CONCERN

The bearer of this letter ROBERT. KAHOH. K


Registration No. 061/60290/2013

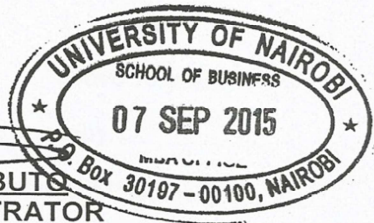
is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.


PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS



APPENDIX II: QUESTIONNAIRE

The questionnaire is designed to obtain information for academic research on impact of Global GAP to Kenyan fruit exporters. The accuracy of information you provide will be crucial to attaining the objective of the study. The questionnaire has three (3) sections. Kindly respond to each of the item in the questionnaire. The information you provide will be used for this academic purpose only and with utmost confidentiality.

SECTION A: Demographic information

Instruction: Tick where appropriate

1. Gender:

Male Female

2. Age

18-26 years 27 – 35 years

36 - 45 above 46 and above

3. Education level

Diploma Degree

Masters other (please specify).....

4. Department.....

5. Number of Years of relevant work experience

Less than 1 year 1 – 5 years

5 – 10 years above 10 years

6. Total company export revenue annually

7. Total cost for implementing Global GAP annually

8. Number of employees the company have

9. Number of clients your company supply to in Europe.....

SECTION B: Level of practice of Global GAP

10. How long has the company practiced Global GAP?

Less than 1 year [] 1 – 5 years []

5 – 10 years [] above 10 years []

11. What are some of the Global GAP practices implemented in your firm? List if possible

.....

.....

.....

.....

12. Rate the extent your company implement the following Quality product practice? Use the scale of 1-5 and tick, where

5 = Very great extent 4 = Great extent 3 = Moderate extent

2 = Little extent 1 = No extent

Quality Product Practices	1	2	3	4	5
Just in time Product delivery					
Proper transport facilities for the produce					
Product innovation					
Use of certified planting materials					
Use of certified pest control products					

13. Rate the extent your company implement the following Technical and Training practice? Use the scale of 1-5 and tick, where

5 = Very great extent 4 = Great extent 3 = Moderate extent
 2= Little extent 1 = No extent

Technical and Training Practices	1	2	3	4	5
Have product handling training					
Employee training on planting and harvesting procedures					
Employee training on proper sanitation and hygiene					
Training of Global Gap requirements					

14. Rate the extent your company implement the following communication practice? Use the scale of 1-5 and tick, where

5 = Very great extent 4 = Great extent 3 = Moderate extent
 2= Little extent 1 = No extent

Communication Practices	1	2	3	4	5
Have training documents					
Constant communication with buyer					
Documented pre-harvest assessment					
Employee working policy					
Audit documents					

15. Rate the extent your company implement the following Workers welfare practice?

Use the scale of 1-5 and tick, where

5 = Very great extent 4 = Great extent 3 = Moderate extent
 2= Little extent 1 = No extent

Workers welfare Practices	1	2	3	4	5
Clean water for workers					
Proper sanitation facilities					
Well equipped working equipment and facilities					
Employee facilities example locker room, break and lunch areas					

16. Rate the extent your company implement the following environment practice? Use the scale of 1-5 and tick, where

5 = Very great extent 4 = Great extent 3 = Moderate extent
 2= Little extent 1 = No extent

Environment Practices	1	2	3	4	5
Proper sanitation facilities					
Proper sewage system					
Proper drainage systems					
Use of certified pest control products					
Proper waste disposal methods					

SECTION C: Impact of Global GAP certification to the company competitive advantage

17. Kindly rate the impact of product quality to the company competitive advantage. Use a scale of 1-5 and tick, where

1= No extent 2= little extent 3= moderate extent 4=great extent
 5= very great extent

Impact of Product quality on	1	2	3	4	5
Creating new market opportunities					
Improved company image and product branding					
Improved productivity					
Market sustainability					
Reduced cost of operation					
Customer loyalty					

18. To what extent the impact of technical support and training to the company competitive advantage. Use a scale of 1-5 and tick, where

1= No extent 2= little extent 3= moderate extent 4=great extent

5= very great extent

Technical support and training impact on	1	2	3	4	5
Improve Company image and product branding					
Improved yield					
Reduced cost of operation					
Create new market opportunities					
Improved company international partnership and linkages					
Increased market access					

19. How can you rate the impact of communication to the company competitive advantage? Use a scale of 1-5 and tick, where

1= No extent 2= little extent 3= moderate extent 4=great extent

5= very great extent

Impact of communication on	1	2	3	4	5
Creating new market opportunities					
Improved productivity					
Improve company image and product branding					
Reduced operation cost					
Market sustainability					
Improve company international partnership and linkages					

20. How can you rate the impact of workers welfare to the company competitive advantage? Use a scale of 1-5 and tick, where

1= No extent 2= little extent 3= moderate extent 4=great extent

5= very great extent

Impact of workers welfare on	1	2	3	4	5
Creating new market opportunities					
Improved productivity					
Improve company image and product branding					
Reduced operation cost					
Improve company international partnership and linkages					

21. How can you rate the impact of environmental condition to the company competitive advantage? Use a scale of 1-5 and tick, where

1= No extent 2= little extent 3= moderate extent 4=great extent

5= very great extent

Impact of environmental condition on	1	2	3	4	5
Creating new market opportunities					
Improved yield					
Improve company image and product branding					
Reduced operation cost					
Improve company international partnership and linkages					

22. How can you rate the impact of Global GAP to the company competitive advantage?

Use a scale of 1-5 and tick, where

1= No extent 2= little extent 3= moderate extent 4=great extent

5= very great extent

Impact of global gap on	1	2	3	4	5
Cost reduction					
Increased company export earning					
Operation cost					
Product pricing					
Increased company revenue					

APPENDIX III

LIST OF KENYA FRUIT EXPORTERS

1. Fresh produce exporters Kenya
2. Sunripe (1976) limited
3. Wilham kenya limited
4. Kenton Kenya limited
5. Home fresh growers limited
6. Premier fresh limited
7. Makindu Kenya limited
8. Value pak limited
9. Fresh approach limited
10. Global Fresh Limited
11. EastAfrica Growers Limited
12. Homegrown Kenya limited
13. Avo health EPZ limited
14. Kenya Horticultural exporter(1997) limited
15. Keitt limited
16. Mboga Tuu limited
17. Planet Fresh limited

Source: FPEAK, 2015