UNIVERSITY OF NAIROBI

INSTITUTE OF DIPLOMACY AND INTERNATIONAL STUDIES

EUROPEAN UNION REQUIREMENTS ON HORTICULTURAL EXPORTS:

A CASE STUDY OF KENYAN HORTICULTURAL EXPORTS 1990 - 2010 *

BY JOYCE WANJIKU KIMEMIA

(REG. NO R50/714 67/2008)

SUPERVISOR:

MR. GERRISHON K.IKIARA

PROJECT PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE DEGREE

OF MASTER OF ARTS IN INTERNATIONAL STUDIES

DECLARATION

[r]> Joyce Wanjiku Kimemia hereby declare that this research project is my original work and has not been presented for a degree in any other University.

Signed. . . . . JMfcr?:. . . . . Date. I % / j j J I 9 ± o

This project has been submitted for examination with my approval as University supervisor;

Signed..... 0

Academic supervisor

DEDICATION

This project is dedicated to my sons Nick, Alfred, Andrew & Alex (the twins) who have bravely learned to live with a mobile and busy mother.

ACKNOWLEDGEMENT

I am grateful to the Almighty God for He is my strength and hope. He has made it possible for me to complete this research project which forms partial fulfillment of my MA degree programme.

I will forever be indebted to Mr. Gerrishon K.Ikiara my Academic Supervisor for his intellectual guidance and invaluable critique that shaped this study. I am grateful to Prof. Makumi Mwagiru, the Director of the Institute of Diplomacy and International Studies (IDIS) for giving me an opportunity to do my MA in the Institute. Special thanks go to Mina and Ngunga for their support during my visits to the institute in the course of writing this Research paper.

My deepest gratitude also goes to Joseph Kamau of Valentine Ltd for the invaluable material support he gave me. I cannot forget Murathi from the Ministry of Agriculture in Timau for his support during primary data collection. My special gratitude goes to Masaku from the Ministry of Agriculture headquarters and Kabole from KEPHIS for the material support they gave me. I cannot forget Wario of FPEAK for the enriching information he gave me.

Greatest gratitude to my niece Esther for watching over my sons during the period of my study. I cannot forget my friends and prayer partners, Margaret, Veronica, Minnie, Kirigo and Pastor Kioko for the moral support and encouragement they gave me.

To all my Lecturers at IDIS thank you for the different roles you played in the course of my study. God bless you all.

ABSTRACT

European Union is a major destination for Kenyan horticultural exports. The EU demands high standards for horticultural exports. It has laid down directives and standards concerning different types of crops and plants. There are additional private standards which are more stringent.

Using Kenyan horticultural exports as a case study, an analysis of secondary data, primary data and interactive interviews were used to analyze the negative effects brought about by the implementation of the EU market requirements by local exporters/farmers. Interactive interviews with government employees from the Ministry of Agriculture, KEPHIS, Export Promotion Council and FPEAK (private Institution in the horticultural sector) provided vital information which laid down a basis for analyzing the interventions provided for the exporters/farmers.

The results confirmed that, the implementation of EU market requirements negatively affects the exporters/farmers. They incur losses due to rejected produce which fail to meet the expectations and they incur high costs while setting up systems to help them cope with the EU demands.

WTO has been in the forefront campaigning against barriers to trade but EU continues to impose Technical barriers to trade inform of standards. The findings also confirmed that the role played by the'government and private institutions is a facilitative one and they do not in any way object to the demands imposed by the EU unless there is a very unique case in question.

The study concludes that, the exporters have no option but to form strong associations which can front their grievances/interests and form a platform for bargaining for favourable trading partnership if they are to survive in this sector which is highly competitive.

The study recommends various measures needed to ensure this sector continues to compete and survive in the international trading arena.

LIST OF ACRONYMS

HCDA	Horticultural Crops Development Authority.
GDP	Gross Domestic Product.
EU	European Union.
UK	United Kingdom.
IPPC	International Plant Protection Convention.
HCU	Horticultural co-operative Union
MRL	Minimum Residue levels
DSB	Dispute Settlement Body
KEPHIS	Kenya Plant Health Inspectorate Service
NPPO	National Plant Protection Organization
GMS	General Market Standards
SMS	Specific Market Standards

TABLE OF CONTENTS

CHAPTER THREE

CHAPTER FOUR

CHAPTER FIVE

CHAPTER SIX

CHAPTER SEVEN

List of Tables

List of Charts

CHAPTER ONE

1.0 Introduction

The government of Kenya has adopted a facilitative role in the Horticultural sector. Its establishment of Horticultural Crop Development Authority (HCDA) and other Institutions like KEPHIS has been a clear indication of its recognition of the horticultural sector as a major export earner and employer in the Kenyan economy.

The EU is a major destination of Kenya's horticultural exports inspite of its increasingly strict market requirements. The Market Access Requirements are mandatory for all exporters and any one targeting EU for business must be prepared to fulfill various legislative and non-legislative market requirements. An exporter is expected to meet the legislative market requirements and fulfill the private standards as well which are even more stringent. Private standards are additional requirements imposed by retailers, processors, importers and pressure groups.

Marketing of horticultural produce has to contend with a wide range of pressure groups such as human rights activists and the environmentalists who put demands for environmental friendly means of production for exports to European Union Market. The environmental activists today regularly campaign against buying horticultural products whose production enhances environmental pollution.

Human Rights activists and trade Unionists on the other hand demand worker friendly working environment and discourage customers from buying horticultural produce from firms/exporters who do not take care of their workers' welfare.

Inspections of horticultural produce are carried out in the country of origin followed by issuance of certificates for compliance. Exporters/producers are expected to comply with random inspections at certain entry points in importing countries. The costs of inspections and certification are met by the exporters/producers.

In case of non-compliant to the Market requirements, the cost of destroying the consignment or shipment to the country of origin is met by the exporter/producer.

Technical (non-tariff) barriers to trade (TBT) and in particular Sanitary and Phytosanitary (SPS) measures when used indiscriminately could become a major obstacle to trade in Agricultural products.[1] The SPS and TBT Agreements stipulate that, trading partners must accept control measures of their trading partners, when these are different from their own in the exporting country. The importing country has rights to on- site inspection and product analysis. This implies there is no room for non- compliance by exporting countries. A friendly export/import environment is crucial for trade to flourish.

Statement of the Research Problem

While there is considerable literature on agriculture and horticultural sectors in Kenya especially on the general trends of the sector over the years, there is limited literature focusing on challenges faced by exporters/producers with regard to meeting the European Union market requirements.

Uoutrif, E & Pineiro M. (eds.) "*The New International Trade context for Developing countries: The impact of SPS and TBT Agreements* (FAO 2000).

Thorough investigation on the challenges and the remedial measures undertaken so far by the exporters/producers are both lacking to a considerable extent. There is need to examine and evaluate the impact of the efforts made by the Government and exporters to ease these challenges.

Documented evidence of frameworks formulated by exporters, producers and the government to counter the EU stringent market requirements and especially in form of negotiating for better terms in the implementation of the same is so far inadequate. There is therefore need for research on matters touching the implementation of the EU market requirements and the effects they are having on the local exporters/ producers. The need to have EU employing a friendly policy for all categories of exporters may they be small scale, medium or large scale cannot be under estimated. >

1.1 Objectives of the Research

This research project investigates;

(i) Challenges faced by Kenyan Horticultural exporters to European Union.

(ii) What the Kenya government is doing to ease the challenges faced by Horticultural exporters to European Union market.

(iii) Efforts made by horticultural exporters to overcome the challenges.

1.2 Justification of the study

The research findings are expected to trigger further research by other scholars and to fill existing academic gaps in this sector. The government is also expected to use the research findings to formulate frameworks for facilitating the exporters/producers in their implementation

of the EU market requirements and in negotiation for better trading terms. The research findings will benefit Policy makers in their policy formulation and especially on policies that are aimed at aiding the players in this sector. Institutions of the government like HCDA and KEPHIS will have enriched information to give farmers and exporters who are stakeholders or potential candidates in the horticultural sector.

Technical and operating personnel from institutions like HCDA and KEPHIS are also expected to benefit from the study in terms of their dialogue as the government policy makers in matters related to EU market requirements and the best agricultural practices that are preferred by the advocates of both legislative and the private standards.

Producers will also find the research findings useful as they try to come up with remedial measures such as negotiating with EU for flexible terms of trade and implementation of the market requirements. The study is expected to make farmers more informed in their decisions; for example in the preparation of farms, handling of produce to the point when it reaches the intended market. They will be informed in matters relating to handling the welfare of their workers as well. Issues relating to environmental friendly means of production will be addressed before decisions on mode of production are made. This will prevent massive losses incurred when wrong measures of production are taken. Conflicts with pressure groups such as human rights activists and environmentalists will be reduced. At the same time potential horticultural exporters targeting EU market will be well informed on what to expect and what to do when faced by certain challenges.

Literature Review

Karen and Anthony[2] trace the background of European Union market requirements to the aftermath of the Treaty of Rome in 1957. The EU had sought to create a market without frontiers' in order to stabilize the conditions for peace in a Europe which was warring. The need to establish the conditions for a robust economy with markets large enough to support efficient firms was identified. At the design, European Union set out the first principles of the European Union internal market which prohibited a nation or a citizen from profiting by imposing costs on another member nation or its citizens. However it has been observed that, once border barriers were lifted, some issues arose regarding different national regimes regulating a variety of conditions, such as product safety and the environment.

The European Union legislative requirements relate to quality standards fixed by EEC regulations among them'being regulations 315/68 and 316/68 which set quality standards for flowering bulbs, corns and tubers and for fresh cut flowers and fresh ornamental foliage. A product that fails to conform to the quality standards may not be held or transported with a view to sale, or be offered for sale, either be imported or exported within EU. Exports are inspected even after when an exporter has a record of previously complying with the requirements necessary to obtain the certificate.

HCDA, in its Newsletter observes that, whereas traceability may not pose a big constraint for large Kenyan exporters of green beans because they have computers which they use to register their production, the small and medium sized exporters face considerable challenges in their attempts to comply[3].

3 Karen, V. K. & Anthony, D. "*European Union Law Anthology*" (Cincinnati, Anderson Publishing Co. 1998). *Marketing Newsletter. November 2009 Edition Vol. 4 issue No. 1* (Horticultural crops Development Authority).

In their work, Nyangweso and Odhiambo[4] argue that standards, testing and certification rules in the EU are a major obstacle to horticultural exports, and especially as the European market becomes more environment conscious, insisting on standards, testing and certification procedures which have become more elaborate, comprehensive and dynamic. They further argue that, this presents difficulties to horticultural exporters who export their produce to the EU only to have their produce rejected due to their failure to meet new specifications which they may have been unaware of. There is lack of security in market access associated with frequently changing domestic regulations. With such unpredictable markets, it becomes difficult to have a plan in the production for the export market.

Other authors in this field like Ferry[5] view environmental protection as a responsibility of the community where the health and safety of individuals are as important as the well being of a nation.

Chilton and Warren'[1] observe a general concern of a host of health hazards associated with current production and lifestyles, including pesticide residues in food. The primary focus on much of the public's health concern is on use of chemicals in Horticultural produce.

Profound, Advisers in development[7] in their 1996 marketing survey pointed out that, producers who grow environmentally sound products may be able to create a competitive advantage in the

Nyangweso, P.M & Odhiambo, M. O. "*Exporting Kenya's Horticultural Products: Challenges and opportunities in the 2V century"* (Department of Agricultural Resource Economics and Management, Moi university, 2004).
6 p!"^' S "*Environmental Law: Examples and Explanations"* (New York, Aspen publishers, Inc,2001)
on >K & Warren, M "*Environmental Protection* (New York, Basic Books, Inc)

European market and more so when in their information to the general public, they have explained the environmental soundness of their products. They further argue that, environmentally sound production is likely to open up new market opportunities.

EU requirements have been observed to be too stringent and costly to apply[8]. European Union directives basically focus on SPS measures to ensure there is security for their citizens' health and the environment. The main SPS measures for flowers cover plant products, documentation requirements and inspections. In the area of green beans and green peas the measures purpose to ensure there is traceability of the products right from the farm.

The developing countries face challenges when required to respond to notifications within the 60 day period allowed. They also lack the expertise to carry out risk assessment when their own SPS measures are different from those of developed countries. The developing countries' participation in international standards setting bodies (Codex, IPPC, and OIC) is often limited both in quantity and quality and does not guarantee proper consideration of their concerns and interests.[9]

Profound, Advisers in Development, *"Cut Flowers and Foliage A survey and Marketing Guide on the Markets in the European Union"*1996.

Price Water House Coopers; *Sustainability Impact Assessment (SIA) sustainable Business solutions of the EU-LP Economic Partnership Agreements Phase three. Horticulture in Eastern and Southern Africa.* (ESA)

Doutrif, E. & Pineiro, M. "The New International Trade context for Developing countries: The impact of SPS and **1BT Agreements"**

Drogue and Gozlan[10] in their work state that, the essence of Directive 2000/29/CE of the council is on protective measures against the introduction into the community of organisms harmful to plants or plant products and against their spread within the community. For all commodities exported to the EU requiring Phytosanitary certificates, there is a maximum pest Limit (MPL) which is 0.5% for quarantine pests and 25g/600 units for soil. All consignments may be subject to inspection, performed on arrival at the point of entry into the EU at the member states' border inspection point. They have argued that, this directive allows for inspection fees (even though their actual implementation depends upon individual countries). These authors further point out that, the European plant Health requirements are basically in line with the international standards of the International Plant Protection Convention (IPPC) meaning they are not subject to challenges by trading partners. They further state that, in addition to plant Health measures, imports are required to comply with the market standards prevailing in EU. A wide range of organisms are highlighted such as insects, mites, bacteria, fungi, viruses and parasite plants. There are documentary checks, identity checks and plant- health checks for vegetables and flowers.

They further argue that, the general rule is, all producers/ exporters have their consignments inspected even when they have a reputation for compliance. There is no distinction between exporters based on individual records. The inspections are said to be costly and intrusive.

Drogue and Gozlan state that, Kenya, in 2005 alone, witnessed 15 interceptions of Kenyan consignments world-wide. That was in comparison to 128 interceptions witnessed in 2003.

Drogue', S. and Gozlan, E *"Trade - distorting SPS and TBT regulations in the EU? A qualitative assessment from the market for live plants and cut flowers working paper 07/13"(Paris, INRA, UMR Economie Publique-Agroparistech, July 2007)*

Between 1999 **and** 2004 **over** 60% **interceptions were recorded for flowers while vegetables accounted for 17%.**

Cassen[1]'highlights the European Community's efforts in negotiating Tariffs, preferences, quotas, anti-dumping procedures and farm levies. The European Economic Community made efforts to restrain Britain from pushing too strenuously for restrictions against Less Developed Countries' products except in Agriculture. This is because economic exchange is viewed in the interest of both partners.

Yeats[12] argues that, though developing countries have a substantial expansion in their exports, a variety of non-tariff barriers curtail this. He further states that, agricultural exports from developing countries are .often severely curtailed by complicated systems of non-tariff barriers. He particularly refers to a study of European Economic Community system that found domestic farmers to be protected from foreign competition by at least 15 different kinds of non-tariff measures. He argues that, Non-tariff measures applied to Horticultural fanners are designed to deal with problems not directly related to commercial policy questions but which are from time to time intentionally employed to restrict imports or to stimulate exports. This can be measures operating through costs and prices e.g. Health and sanitary regulations, quality standards, packaging and labeling regulations including mark-of-origin rules. He further argues that, these kind of barriers (inform of restrictions) tend to raise price -margin of foreign firms. Market regulations have the tendency of restricting imports.

' Cassen> R- Jolly, R., Sewell, J. & Wood, R (Eds) " *Rich Country Interests and Third World Development"* tLondon, Croom Helm Ltd, 1982)

Yeats, A.J. " *Trade barriers facing developing countries"* (New York, St.Martins Press, Inc. 1979)

Sklair[1] argues that, exporters to EU need to deal with the consumers' desire to know how products are produced and who produces them. He gives an example of the Green or Environmentalist movement as the greatest contemporary challenge to the global capitalist system. The key threat that Green Politics poses to the capitalist global system is in the area of the consumption of non-renewable resources. Green politics are based on the belief that the resources of the planet are finite and have to be carefully tended.

Exporters in the flower sector consider environmental and social standards an additional barrier. The adoption of a directive on protective measures against the introduction into and spread within the EU of organism harmful to plants or plant products is a trade barrier on exports of cut flowers from developing countries. The implication of this Directive on the exporters from developing countries is the need for improved Phytosanitary control organizations in the flower sector.

The need for safe food and the challenge posed by global terrorism has led many governments to increase control over all stages of food production, processing and distribution to protect consumers against the risks of biological contamination of food.[14]

1.3 Theoretical Framework - Protectionism

Protectionism forms the framework for this study. European Union market requirements form a **barrier** to trade. By insisting on total compliance by the exporters of horticultural products to EU, **the** local producers are at an advantage over the importers. Though the EU insists that market

14 air> L " *Sociology of the global System" (*New York, Harvester Wheatsheaf, 1991)
oulibaly, A. L. & Liu, P. "Regulations Standards and Certification for Agricultural Exports. A practical Manual or producers and Exporters in East Africa" (FAO 2006).

regulations are meant to ensure safety of consumers and the environment, they equally serve another purpose which is protection of the local farmers.

Ball" refers to all non- tariff barriers as a form of discrimination against imports other than the import duties. Protectionism falls under the class of non- tariff barriers. A government requirement on testing and certification is a form of protectionism for the local produce. Some standards applied by both government and private sector to protect the health and safety of a nation's citizens can be discriminatory. Many market standards are complex and discriminatory.

Lipsey"' states that protectionism reduces overall economic welfare. It also increases cost to consumers hurting most those with lowest incomes. Protectionism penalizes successful enterprises; it harms exports, encourages tariff barriers, and harms developing countries' trade and increases the pressure for international migration. Protectionism encourages domestic monopolies while cutting the economy off from mainstream developments in the world outside.

Sklair[17] argues that, protectionism is not a new phenomenon. It is associated with the great depression of the 1930s. It acts as a bargaining counter for the rich, and a bluff for the poor and it is usually used as a devise to satisfy domestic constituencies. Desperate politicians will for example tend to fall back on protectionism to appease working class voters.

Call, McCulloch Geringer, Minor & McNett"*International Business the challenges of Global competition "* (New York, McGraw-Hill, Irwin, 2008

17 Lipsey & Chrystal, *"Economics"* (New York, Oxford University Press, 2007).
°P Cit pp.10

The EU stringent and costly market access requirements add extra cost to horticulture exporters/farmers targeting that market. As a result, the extra cost is transferred to the customers. This aspect creates an unfair advantage for local producers over importers of similar products.

Songa and Gikonyo in their paper stated that, one of the challenges horticultural exporters have to contend with is the high cost of certification for EUREPGAP standards.[18] They further state that, these standards are too strict on food safety, traceability and good agricultural practice.

1.4 Hypotheses

The following is the hypotheses which the study seeks to test;

1. European Union requirements on horticultural exports have negatively affected Kenyan Horticultural exports.
2. The Government of Kenya has not addressed the effects of European Union market requirements on Kenyan Horticultural exporters.

1.5 Methodology of the Research

This study employs both primary and secondary Data. Primary data was collected through the **use** of open-ended and closed -ended questionnaires with provision for extra information/ comments where necessary. Collection of primary data employed random sampling through the use of self administered questionnaires. The open- ended questions had room for a lot of information. The questionnaires were administered to senior workers, middle level and general

[18] Songa, W & Gikonyo, A. *Paper for the workshop on the theme "Value added Food Exports & Investment "Opportunities' 3rd and 4th march 2005, at the Grand Regency Hotel Nairobi* (Horticultural Crop Development Authority HCDA)

workers in the Horticultural farms, institutions dealing with general and horticulture exports and staff from the Ministry of Agriculture. Interactive interviews were also conducted.

There was random sampling of 20 respondents; 12 Horticultural staff from Nanyuki and Timau. **Random** sampling of farms was **done and** there were 5 medium size farms, 3 from large size farms and 4 from small size farms. Two of the large size farms are specializing in production of flowers. The rest of the farms are producing vegetables mainly; snow peas, snap peas, French beans and runner beans. I sampled four agriculture officers from the ministry of agriculture; 2 from Timau area, 1 from Nanyuki and 1 from the ministry headquarters who was the contact **person** during the initial days of the implementation of EU market requirements (EUREP-GAP) for horticulture exports (EUREP-GAP has been upgraded and is now referred to as Global-GAP) among the ministry staff and the local farmers/exporters. I added three more samples from institutions that are dealing with horticulture produce/ export. These are mainly FPEAK (Private institution involved in export of horticultural produce), Export Promotion Council (EPC), which deals with exports of different kinds and KEPHIS the last two are government agencies. I lastly sampled I officer from UNIDO (United Nations Industrial Development Organization) who **worked** closely with the ministry of agriculture in the Implementation of EUREP- GAP.

Primary data is used to provide information concerning the effects of implementation of EU regulations on horticultural exporters/ producers from Kenya. It also seeks to identify efforts undertaken by the stakeholders in their attempts to deal/ cope with the negative effects of the EU regulations on the Kenyan Horticultural exports. The stakeholders include government officers.

Factual questions were asked relating to EU requirements, Government interventions and the efforts which the stakeholders are making to ease their challenges. Simple and short

questionnaires were used. The research work covered horticultural farms around Nanyuki and Timau areas near the Mt. Kenya region.

The study also utilizes Secondary data. Data from published and non- published works, information from magazines, research projects, internet and scholarly articles was reviewed. Information collected mainly focuses on EU requirements and Horticulture in Kenya.

Chapter Outline

The rest of the study is organized as follows;

Chapter two: An overview of Horticultural Sector in Kenya

Chapter three: Market conditions

Chapter four: An analysis of European Union Market Requirements

Chapter five: Kenyan Institutions dealing with legal and regulatory framework for Horticultural Sector

Chapter six: Analysis of Challenges faced by the Kenyan Horticultural exporters to European Union.

Chapter seven: Summary, conclusion and recommendations.

Appendix

CHAPTER TWO

2.1 A Historical overview of Horticultural sector in Kenya

This chapter explores the history of Kenya's Horticultural subsector over the years. The general trend in production, horticultural varieties, exports and income from the sub-sector are described. This chapter has equally looked at the challenges faced by local producers. The horticulture sector has emerged as one of the most important sector in the Kenyan economy for a wide range of perspectives. Its promotion by government aims at increasing foreign exchange earnings through exports, promotion of better living standards for farmers, creation of employment and provision of a balanced diet for the local people.

Some authors trace Kenya's horticultural export trade to the year 500 AD when traders in the coastal ports of Kilwa and Malindi provided fruits and vegetables to Portuguese ships sailing to and from India. This trade has continued to expand and more recently in 1800, Arab and Indian traders along the coastal towns traded in fruits and vegetables among other agricultural commodities, which were exported to Zanzibar[19].

Large commercial horticultural production expanded even further after the arrival of European settlers who supplied horticultural produce to hospitals, schools, hotels and prisons[20]. The three East African countries, namely Kenya, Uganda and Tanganyika (now Tanzania) carried out small scale business related to horticulture among themselves. The main buyers then were city wholesalers, retailers and Horticultural co-operative Union (HCU) which was the earliest

^Opcit, pp 6.

ge the, M. G. "*Decision Making Among small scale women Horticultural Farmers in Limuru Location of lambu District, Kenya"* (Thesis for masters, Institute of African Studies, University of Nairobi, 1995).

marketing body at the time. Since independence, the Kenya Government has taken measures to promote the horticultural industry by establishing HCDA in 1967. The reason for this decision can be explained in terms of what was happening to the country's traditional exports like sisal and pyrethrum. There was need to diversify sources of foreign exchange because some traditional export crops like sisal were experiencing severe competition from synthetic products in the world market. There was over supply of crops like coffee and tea in the world market and the result was fluctuation of prices. This therefore meant Kenya could no longer count on coffee and tea to earn foreign exchange and create employment and incomes within the domestic economy to address the pressing concerns of poverty, unemployment and inequality.

The Kenya government began to allocate resources for research and export promotion programmes in the late 1960's. HCDA has been credited with much of the great achievements in terms of increased production witnessed in this sub-sector and especially since 1970[21].

2.2 Production and structure of the Horticultural industry

Kenya's horticulture is predominantly privately owned. There are more than 60 companies dealing with fresh vegetables, fruits and cut flowers both for export and domestic consumption.[22] These companies are all privately owned and adhere to very high standards in handling their products.

There has been minimal government intervention except in facilitation of the sectoral growth through infrastructure development, incentives and support services. The Kenya's horticultural

22 ^*entral* *Bureau of Statistics Ministry of Economic Planning and Development, " Economic Survey* 1982" **International** Research Network, PKF consulting Ltd "*Horticulture Industry in Kenya 2005"* (Export processing ^**nes Authority)**

sector is not only a major foreign exchange earner and employer; it is also a major contributor to food needs in the country.[23] Kenya with her ideal climate for the production of horticultural products produces a wide range of vegetables, fruits and cut flower products for both local and international markets. At present Horticultural sector is ranked third as the fastest growing agricultural sub-sector in the country and its also ranked third in terms of foreign exchange earnings from exports after tourism and tea. Horticultural sub-sector is gradually overtaking Kenya's leading export crops mainly tea and coffee.[24]

Dijkstra and Magori[25] observe that, by 1991, about 212,000ha of land was under the production of fruits and vegetables for both the local and export market. By 1994, horticultural crops occupied an estimated 250,000 hectares with a total annual production of 3 million metric tonnes. Out of this, 2, 66-million tonnes were sold locally, while 250,000 tonnes were processed into canned products like juice and sauces.

The remaining 90,000 metric tonnes were exported as fresh products.[26] About 175 hectares were under rose flowers. This figure rose to 210 hectares inl995, 225 hectares in 1996, and 240 hectares in 1997 progressively. A popular flower crop known as Statice (limonium) occupied only 220 hectares in 1994 the area was expanded to 225 in 1995, 230 hectares in 1996, and 240 hectares in 1997.

>id-

25 **Horticultural** News "*The Official Journal of HCDA October/November 1998"*

i·[lor,tc"ltural Production and Marketing in Kenya: Part 5: Proceedings of a dissemination seminar, Nairobi, 16-Nov, 1994 (African Studies Centre, Leiden Egerton University, Njoro)

26 Ibid

Dijkstra and Magori (1994) further state that some of the horticultural produce is used as staple food (potatoes, bananas) while others are used as supplements with other foods such as tomatoes, onions, carrots and cabbages. The produce is basically used either for domestic consumption or exports and especially French beans, capsicums, mangoes and avocados among others. Some of these products were known in Kenya before the colonial era, while others were introduced by the British colonialists especially the potatoes and cabbages. Others like apples and strawberries were introduced by the Kenyan research institutes.

By 1998, 80 percent of the area used for horticultural produce was cultivated by small scale farmers, while 20% involved production on large-scale estates. The large-scale entrepreneurs concentrated mostly on the export market while the small- scale farmers focused on domestic market. Approximately 9-5% of the horticultural produce ended up in the domestic market. The value of the exported commodities put together was over 5%.

Horticultural production areas are spread throughout the country with the exception of the Northern part. Availability of surface water is one of the determing factors on whether an area is suitable for cultivation and especially for irrigation purposes. Rain-fed vegetables and fruits are normally harvested during one or two periods a year, but some of them are available the whole year round (bananas, kale). In the case of irrigation, harvesting depends on the length of the growth cycle and at times on the seasonality of water supply.

2.3 Floriculture

pata from HCDA shows the Floriculture sub-sector as a highly specialized industry and capital intensive. Trade in cut flowers has become an important part of international trade in horticultural products. Flowers account for about half of Kenya's fresh horticultural exports. **Kenya** has witnessed **a** tremendous growth in its exports of cut flowers in spite of the amounting competition from Colombia, Ecuador, Israel, Zimbabwe, Zambia and Uganda. Kenyan flower industry is expanding with roses continuing to dominate the export market with sales up from **24.6** million kilograms in 1999 to 28.4 million kilograms in 2003, which witnessed **a** 15% increase.

The flower Council of Kenya (KFC) is one of the members' bodies that supports and lobbies particularly for the flower-'growers and exporters.

The main cut flower growing areas include Naivasha, Thika and Kiambu/Limuru regions. Most of the flower production companies have their own flower farms. These companies grow, harvest, pack and transport cut flowers to airports for export. Flower farms are labour intensive and mostly use green houses for cultivation.

2.4 Range of products

Fruits, vegetables and cut flower produces are the main aspects of horticultural production in Kenya.

Kenya remains a major exporter of sweet peas, runner beans, Asian vegetables, avocados, mangoes and some of the highest quality green beans in the world. Avocados are Kenya's dominant export fruit followed by mangoes and passion fruits. (See appendix 1 for a list of products).

2.5 Production areas

Major production areas for vegetables in Kenya are spread out in different areas mainly in Kiambu, Machakos, Baringo, Nyandarua, Nakuru, Nyeri, Meru, Murang'a and South Nyanza. (See appendix 4 for a list of production areas)[27].

See table 2.1 for a general trend of exports of fresh horticultural produce from 1970-2003.

Table 2.1 Export of Fresh, Horticultural Produce 1970-2003

Year	Volume (metric tons)	%volume (Tonnes)	value
1970	3.2	0.29	3.4
1977	18.8	1.73	6.4
1978	21.0	1.93	8.0
1979	21.3	1.96	9.7
1980	22.3	2.05	11.3
1981	23.4	2.15	12.6

Horticultural Crops Development Authority, 2003

1990	49.2	4.52	71.6
1991	50.6	4.65	86.6
1992	57.3	5.27	2.5
1993	62.1	5.71	4.7
1994	13.0	1.19	5.0
1995	13.9	1.27	6.5
1996	16.9	1.6	7.7
1997	84.1	7.73	8.8
1998	78.3	7.20	9.7
[1999	99.0	9.11	9.7
2000	99.2	9.12	13.6
2001	98.8	9.09	20.2
2002	121.1	11.14	26.7
2003	133.2	12.25	28.8
[Total	1086.7		

Source: HCDA

Kenya's horticultural export expansion has also been aided by the country's preferential duty-free access to EU markets under the Lome Agreement. In the period 1975-2000, the relations between the European Community (EC) and the African states, Caribbean and the Pacific (ACP) were governed by the Lome Conventions (Lome 1-Lome IV). However some important developments on the international stage mainly socio-economic and political changes in the ACP

states prompted the need to review the ACP-EC cooperation. In 1996, there was launching of a "green paper" (COM (96)570 final of 20 November 1996) in regard to the EC and ACP countries' relations. It attracted intense public debate regarding the issue and in September 1998, there was commencement of negotiations which aimed at revising the ACP-EC relations. These negotiations were concluded in early February 2000 leading to the Contonou Agreement[28]. The principles which were recommended by the Contonou Agreement were: equality of the partners and ownership of the development strategies, as regards participation. Central governments are the main actors but other non-state actors like trade unions, organizations of states at local, national and regional level, civil society, economic and social partners, are allowed to join. There is encouragement of dialogue and fulfillment of mutual obligations by partners and lastly the principle of differentiation and regionalism. This therefore exposed the ACP countries like Kenya to open competition. Kenya currently faces major competition in its horticulture industry from Cote d'lvore, Morocco, Zimbabwe, South Africa, Ethiopia and Cameroon.

The year 1994 was favourable for the horticultural exporters in Kenya after the government took crucial steps to promote this sub-sector of Agricultural. The government announced several production incentives which included duly free importation of fertilizers and some materials for green houses. There were other tax exemptions especially for tools and inputs used in the industry '. The measures taken by the government enhanced the performance of the sector. (See table 2.2)

28, M n?eceuropaeu/development/geographicaVcotonouintro_en.cfm
nee of the Vice-president and Ministry of planning and National Development, "*Economic survey 1995'*

Table 2.2 Export volume for Fresh Fruits, Vegetable.•? Cut flowers 1992-2003 (Tons)

Year	Fruits	Vegetables	Cut flowers	Total
1992"	11,232.90	26,323.60	19,806.00	57,363.00
199T	11,697.40	26,785.70	23,635.90	62,119.00
1994~	13,079.00	26,978.00	25,121.00	65,178.10
1995	13,865.00	32,126.30	29,373.50	71,758.50
1996	16,869.40	32,742.00	35,212.25	84,523.00
1997	17,450.00	30,880.00	35,850.00	84,180.00
1998	11,350.00	36,800.00	30,220.00	78,370.00
1999	15,595.00	46,377.00	36,992.00	98,964.00
2000	15,415.80	45.038.72	38,756.66	99,211.20
2001	22,595.45	34,770.88	41,396.01	98,762.35
2002	22,482.26	46,479.47	52,106.70	121,068.42
2003	23,575.47	48,674.16	60,982.89	133,232.52

Sources: HCDA

However occasional decrease in the export volume of horticultural produce has been witnessed in some years. For example there was a decrease in 1997 from 84,190 tonnes to 78,373 tonnes in 1998[J]. However an overall increase in value by 11.0 percent from K£ 450.0 million to K£499.5 million was realized.

Office of the Vice-president and Ministry of planning and National Development, *"Economic survey 1999"*

The drop witnessed in that period was attributed to adverse weather conditions, unpredictable market for some of the produce, competition from other producing countries, and the break-down of Nairobi-Mombasa road and port congestion which ed to suspension of the export of avocados by sea.

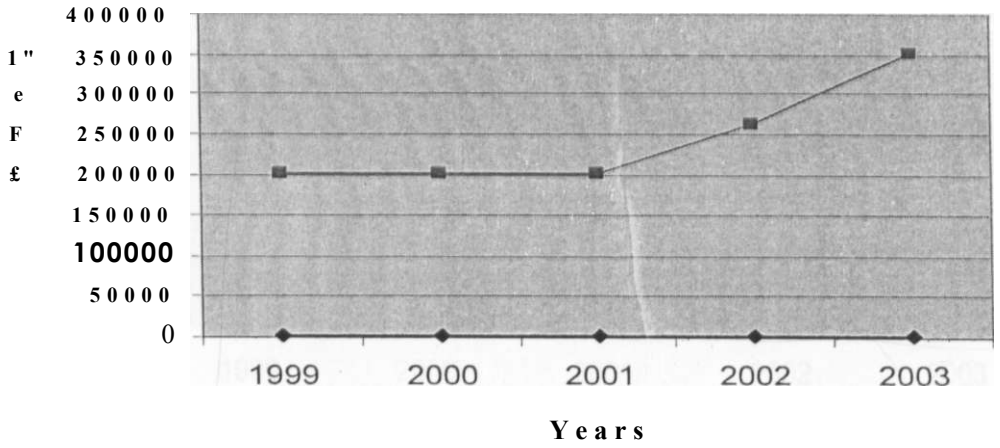
In the year 1998, the percentage in volumes of exported horticultural products in form of French beans and cut flowers were as follows; cut flowers accounted or 39.0 per cent and 18.0 per cent for the French beans.

A close look at the general trend of Horticultural exports since 1973 shows an increase of nearly five - fold in volume and thirty six- fold in dollar value. The rise in value of horticultural exports was more pronounced between 1991 and 2003 due to the exchange rate devaluation and removal of other exchange rate restrictions which led to the weakening of the local currency and a favourable regime for exporters.

Improved crop husbandry and good weather also contributed to the increase witnessed in that period. Horticultural exports from Kenya increased from 200.6 thousand tonnes in 2003, earning the country about KSh 17.6 billion and KSh 36.5 billion, respectively.

Chart 1 portrays the quantities of principal horticulture exports.[1]

Chart 1: Quantities of principal horticulture exports, 1999-2003 (Tonnes)



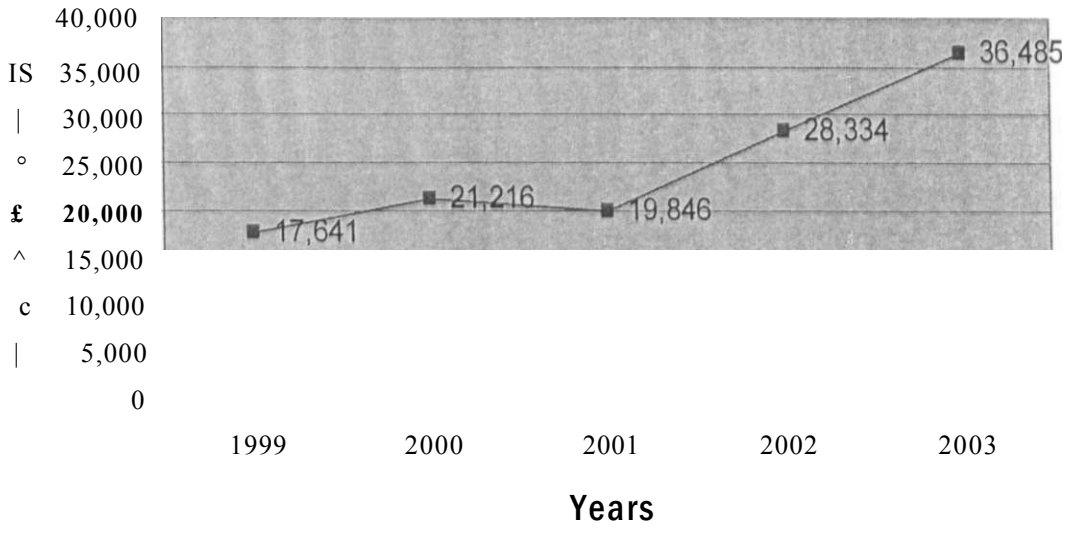
Source: Export processing Zone

As can be seen in table 2.2, in the year 2000, the volume of horticultural exports decreased by **4.0** per cent from 99.2 thousand tones to 95.2 thousand tonnes in 2001. However there was an increase in the value of horticultural exports by 69.1 per cent from the previous year. The phenomenal increase witnessed in the value of horticultural exports was as a result of various **factors** such as improved packaging.

High returns were realized through direct sales as opposed to auctions and especially in the sale **of cut** flowers[32].

Chart 2: Value of principal horticulture exports: 1999-2003(KSh million)

[1] *Economic Survey,* Central Bureau of Statistics,2004
[32] HCDA 2004



Source: HCDA

During the periods 2004-2008, the horticulture sub-sector continued to play a crucial role in the domestic economy, thereby earning the country a substantial amount of foreign exchange from the export of flowers, vegetables and fruits. In the year 2008, the volume of exports increased marginally to 193.1 thousand tonnes from 192.2 exported in 2007. At the same period, the value of fresh horticultural exports decreased by 13.8 per cent to KSh 58.0 billion in 2007 compared to the previous period[33]. The decrease in export values was attributed to low prices fetched in the international market. However the volume of fruits exported increased by 9.3 per cent to 17,123 metric tonnes in 2008. The Economic survey further indicates that, during the same period, the volume of flowers exported increased by 2.6 per cent from 91,193 metric tonnes to 93,639 metric

33 Kenya National Bureau of statistics, "Economic Survey 2009"

tonnes while the volume of vegetables exported decreased by 3.5 per cent from 85,323 metric tonnes to 82,358 metric tonnes.(see table 2.5)

In 2009, the horticulture sector produced 90,000 tonnes of flowers. Export earnings from horticulture exports during the year totaled up to 71.6 billion shillings (594 million pounds)[34].

Table 2.3 Exports of Fresh Horticultural produce; 1973-2008

Year	Volume (.000 Tonnes)	% of volume(Tonnes)	Value (Ksh billion)
1973	27.4	1.68	0.072
1976	47.3	2.90	0.3
1980	66.3	4.07	0.5
1984	90.0	5.52	1.1
1988	111.1	6.82	2.0
1991	125.1	7.68	3.7
1995	71.1	4.36	6.4
1999	99	6.08	14.2
feoT	133.2	8.18	29.0
2004	145.6	8.94	32.6
^005	163.2	10.02	38.8

HCDA Marketing News May 2010

2006	163.2	10.02	43.
2007"	192.2	11.8	67.3
2008"	193.1	11.86	58.0
Total	1627.8		

Sources: HCDA

2.6 Opportunities brought about by Horticulture Exports

The last three decades have witnessed the horticultural export sub-sector become a key component of the Kenyan economy, providing foreign exchange earnings, farm income opportunities and a good number **of** employment opportunities[35]. During the period, the **aggregate** volume and value of horticultural exports increased substantially as shown in table 2.4. **As** this sub-sector of agriculture continued to expand, it created job opportunities. By 1994, this **sector** was able to offer job opportunities in Kenya's flower sub-sector alone a total of between **40,000** - 70,000 people.[36]

2.7 Cross cutting challenges experienced in the horticulture sector

This sector, like any other, has its own challenges which reduce the producers' competitiveness in the world market. These include limited access to high quality seeds, lack of market 'nformation and research and limited extension services. Small scale farmers have limited access to high quality improved vegetable seeds and fruit tree seedlings. Since locally available seeds are of poor quality, farmers resort to using their own seeds eventually leading to low yields, poor

*S a P u cit PP, 15 y. S. "*Ethical Trade in African Horticulture; Gender Rights and Participation, March 2004*"

quality produce and high susceptibility to diseases and pests. Such produce cannot easily penetrate the EU market.[37]

Lack of market information hinders free flow of horticultural produce from the producer to the export market. Research on exported horticultural commodities is limited. Lack of research trials on many vegetables and fruits has impacted negatively on the production of high quality fresh horticultural produce. Sufficient research could have led to reduced costs. The most affected category of producers are the small-scale and medium -scale farmers.

Inadequate extension services on horticultural crops have hindered expanded export of horticultural produce. Some crops that used to produce high yields are no longer in production in certain areas because there has been a decline due to build up of pests. Extension services on flower production for medium -sized and small-scale fanners are limited due to lack of information on floricultural production techniques.

Exporters face challenges in packaging their produce due to the poor quality of packaging paper and the high cost involved.[38] The paper used in making carton for packaging is very expensive, weak and in some cases has been recycled.

Once a crop has been established, the grower is threatened with crop losses due to a variety of pests. Pests are often controlled by a chemical pesticide, particularly herbicides (for weed control) and insecticides. The use of pesticides may unintentionally lead to pollution of soil, water, air and has effects on flora and fauna. Opponents of pesticide use argue that pesticides can

"8Wabu tPP8'

.10d, U e' ^ Pungoh.P. O & Njoroge, I. (eds.) "National Horticulture Research. Review workshop proceedings 5th ay 1991- Thika (Kenya Agricultural Research Institute Information Technology Unit, 1991)

be replaced by non-chemical methods. These non-chemical methods are for instance, use of natural predators, parasites and pathogens. The challenge is, such methods can control only a small percentage of insect pests out of about 10,000 known species. Such methods are not effective in combating fungal, bacterial, nematode and viral diseases. Highly sophisticated insect-control measures involving the release of large quantities of sterile males, the use of sex-attractant pheromones and the application of physiologically disruptive pest hormones show some positive results. However they are highly specific, limited in number and often expensive and must be applied continuously over broad geographical areas to be fully effective.[39]

For an exporter to be issued with a standard label, an audit on the farm where the produce originates from has to be carried out. Audits conducted by international consultants cost about US $400 per day, excluding air fare, transport and accommodation. It would at least take three days. When a single farm undergoes a minimum of six audits, the cost ranges from about KSh 400,000 - KSh 1 million ($5,333-13,000) for a single audit.[40] This is quite expensive especially for small scale and medium scale farmers.

The seasonality of some horticultural produce like flowers is another challenge. During the months of summer, EU growers can satisfy most of the demands for flowers quantitatively as well as in terms of product range/Imports are consequently of less importance.[41]

[40] Profound Advisers in Development "Cut flowers and Foliage. A survey and Marketing Guide on the major Mark thC Eur o pean Union"

[41] cm e"n g Newsletter - November 2009 Edition Vol. 4 issue No. 1 (Horticultural crops Development Authority). market survey: The Cut flowers market in the EU

The use of cheap labour with low educational levels can lead to challenges when companies attempt to implement changes in their production. The long distance from the market makes niany exporters to be unaware of the business culture in the EU.

There is fierce competition and low price, particularly in the market for Rosa and Dianthus. Exporters need to be able to offer very low prices or be in a position to distinguish their produce. Over supply and high transportation costs tend to impose a limiting effect on imports of tropical flowers from LDC.

CHAPTER THREE

3.1 Market conditions for horticultural products

The EU remains Kenya's principal market in horticultural export produce with United Kingdom, Netherlands and France being the main market. Other important markets of the EU are Germany, Switzerland, Belgium and Sweden. The Middle East and South Africa are also vital markets outside the EU. Currently, the UK is the principal market, taking a 34% share of total exports, followed by the Netherlands with 31% and France with 15% and Germany taking 5%. Within Sub-Sahara Africa, Kenya is the largest exporter of cut flowers and fresh vegetables to the European market[42]. Kenya and Netherlands established a bilateral partnership on international market access. The general objective of the partnership programme is the improvement of access for food and agricultural products from Kenya to the Markets in Europe particularly in the field of plant health and food safety.

The UK and France are the primary markets for fresh vegetable produce from the country, with a share of over 80%. Volume sales of Kenya based pre- packed high quality vegetables have been increasing annually and particularly snow peas, sugar snaps, baby vegetables, runner beans and French beans. The Kenyan produce sales for French beans (Haricot verts) and avocados enjoy a good market in France. Supplies from Kenya are normally in demand in the months of April/May or August/September.

Germany is one of the emerging markets, for vegetables and Fruits, especially due to its good airfreight connections. Its central location in Europe, centered on Frankfurt gives it a focal Positioning across the European continent.

[42] Mbiti, S and Karuri, C (eds), "*Horticultural Insight Issue No. 7 Sep-Dec 2009*"

Currently Kenya has three types of export platforms out of which two target export dedicated businesses to manufacturing under Bond (MUB), and the Export processing Zone (EPZ) while the third one is a generalized and flexible export support program providing import duty exemptions for imported inputs into the production of exports and duty free goods for the domestic market (TREO- Tax Remission for Export Office).

The local horticultural market enjoys an open market with prices determined by supply and demand factors. The domestic market has concentrated on vegetables and fruits, such as cabbages, kale, bananas, avocados, coconuts, citrus, mangoes, pineapples, plums and paw paws among many others. Cut flowers are mainly for export and only a small percentage ends up in the local market.

A campaign that has been urging European consumers to shun Kenyan fruits, vegetables and flowers because of the carbon foot print caused by air freighting has been suspended. In the past, the European food miles campaign fronted by human rights and environmental lobbyists argued that, buying locally produced vegetables, fruits and flowers is better for the environment because it reduces carbon emissions associated with transporting the goods.

Opportunities for Kenyan flowers exist in the world market and especially the roses that are 'increasingly establishing a favourable niche in the US market.[43] They are basically smaller bulbs and shorter stems than the Columbian ones, which are also exported to US. Kenyan roses Particularly the ones referred to as 'sweethearts' have vibrant colours and a much long shelf life (at least 14 days). This is especially so because they are lighter and therefore take much longer to

[43] Albithi, S. & Karuri, C(eds)"Horticultural insight, issue No. 7 Sept - Dec 2009" (Fresh produce Exporters)

wilt and bend. Since they are lighter in weight, a banquet contains much more stems making them a better value for money.

Recent research shows that flowers flown from Africa can use less energy overall than those produced in Europe because they are not grown in heated greenhouses. This therefore gives them an edge over the food miles campaigns fighting airlifted horticultural products.[44]

Kenyan flower exporters at present are advantaged by the fact that, the Kenya flower council has become the first growers' association to be certified to audit flower farms. This has been in the past a preserve of highly skilled personnel contracted by western based international inspection firms.[45]

Another positive signal reported by HCDA is the approval by the cabinet in Kenya of a Bill seeking to grant autonomy to the Kenya Plant Health Inspectorate Services (KEPHIS), raising hopes for enhanced research and financing partnership by international peers.

There is a current rise in direct export of horticultural exports to Japan as opposed to the earlier process of going through European auctions. This has led to an increase in exports of roses to Japan by more than 200 per cent especially as observed in the period between October 2005 and October 2006. This rapid increase is attributed to the superior quality of the Kenyan roses as compared to those originating from elsewhere.

[44] Author & Wamalna A. (Eds) Marketing Newsletter (Horticultural Crops Development - Floriculture March - April 2009" (Nairobi, Scoop communications, 2009).

I here are new windows of opportunity in countries such as Spain. It has been observed that, Spanish imports are increasing at a high rate (14% annually) due to the overall growth in flower consumption in the country. There is available market for non - EU cut flowers especially in the European autumn, winter and spring months. Exporters from developing countries enjoy a favourable climate and the relatively low costs of labour. During the summer months, the main products which are of interest to importers of cut flowers from developing countries are mainly species not cultivated in the EU.[46]

Exporters from the developing countries are currently in a position to use advanced Technology to explore new markets and to access accurate information on their supplies. Another hope for producers from developing countries is due to the fact that, there is a decline in the number of European growers. This is due to increased shortage of land and high costs of land in main European production area&,

A new scenario is coming up with growers from the developed countries like the Dutch searching out for opportunities to set up or take over flower farms in developing countries in order to benefit from the better production conditions. This will not only enhance transfer of technology but on a negative note the exporters from developing countries are likely to face stiffer competition.

The Kenyan horticultural sector has profited as a result of marketing a wide range of products to diverse international markets. Marketing of Kenyan horticultural products has generally been

[CB1] Market survey: The cut flowers market in the EU www.cbi.eu(assessed5/62010")

free of direct government interventions.[47] The government has not been directly involved in the pricing or performance of physical functions of horticultural marketing. The role played by the government has been minimal mainly confined to regulatory and facilitative functions. The remarkable performance of the industry has been ascribed to this policy, which enhanced autonomy in production and marketing decisions thus fostering significant local private initiatives and dynamism within the industry.

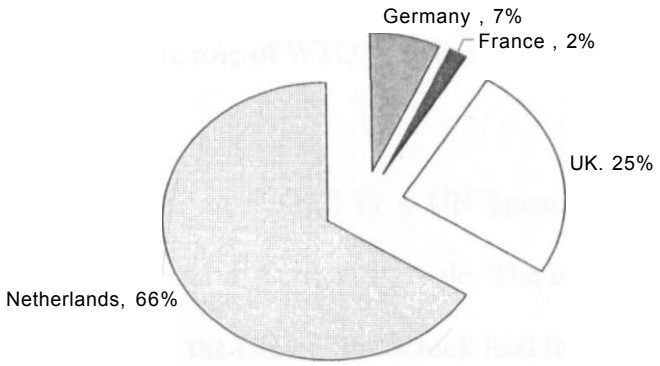
Exports to areas outside EU like Dubai are mainly mangoes (varieties like Ngowe, Apple, Kenti, and Tommy Atkins). Sales are high mainly in January to March and in October to December. Other exports include small amounts of pineapples and beans.

3.2 An overview of Kenyan flower Market

Kenya exports 66% of its cut flowers to the Netherlands, 25% to the United Kingdom, 7% to Germany and 2% to France[48]. Netherlands re-exports flowers from Kenya to other destinations like the USA and Japan.

« °pcit PP 16
Maf ket intelligence, 2004

pje chart: 1 Share of Kenyan cut flower exports to Europe, 2003



Source: Export processing zone

Roses make up 74% of Kenya's flower exports, followed by carnations which are the most popular flower in Britain depending on the calendar of the year.

Kenyan growers have made attempts to meet market demands in different ways, for example they deliver wrapped bunches to UK supermarkets, where staff need to do nothing more than place them in water.

Part of the products on offer from Kenya includes a banquet ready to go, labeled and date-coded. The major importers include Flamingo UK, which supplies British supermarkets and Marks and Spencer.

O'her markets are Netherlands and supermarket chains like Tesco - where Kenyan firms have 250/o market share, beating Colombia and Israel which have about 16% each. Netherlands **minates** the trade in cut flowers worldwide through its auction halls where Dutch wholesalers **wers** for re-export.

CHAPTER FOUR

4j World Trade Organization (WTO) and European Union Requirements

This chapter reviews the role of WTO in international trade and the EU market requirements.

World Trade Organization (WTO) is a UN agency which has played a crucial role in its campaign for the removal of barriers to trade. The origin of WTO dates back to the end of the second world war when the United States took lead in the formation of GATT and in pressing for the reductions in world Tariffs through successive rounds of negotiations. As a result, the world's tariff barriers to trade have been greatly reduced resulting to an increase in the volume of world trade[49].

Since 1947, the lowering of trade barriers has been one of the major focal points for the industrialized countries with WTO playing a major role[50]. However despite the efforts made by WTO in reduction of trade barriers, European Union continues to impose requirements which constitute significant barriers to global trade.

4.2 European Union and its Market Requirements for horticultural exports.

This section examines the EU market requirements which Kenyan exporters to the market are expected to meet. It covers both the legislative and non-legislative requirements. Private standards are discussed at length as they are equally important and compliance to them is crucial

SO j-'psey & Chrystal "*Economics*" (New York, Oxford University press, 2007)

Wn u B Matto - A & English (Eds), "*Development, trade and the WTO A Handbook*" (Washington, The orlc i Bank, 2002)

for all exporters.[51] A brief highlight of EU is given for the purpose of understanding the **background** of its market.

European Union was initiated in 1958 with a membership of 15 countries. There was an evolution from EEC to EU. EU today has grown to 27 members.[52] EU is an example of free trade-zone/trade bloc which has been created by countries as a means of reducing tariffs. The motivation to form the EU came about as a result of devastation caused by the World War 11. The countries of Western Europe suffered balance of payments deficits as a result of response to reconstruction efforts.[53] They therefore felt the need to expand their income base through improving their market.

Compliance to EU market-requirements is a prerequisite for the market access. The idea of EU legislative market requirements originated from the member states that have set them out as a basis for accessing their market. These market access requirements are applicable throughout the whole of EU member states. In some cases EU members may have additional requirements that are more stringent. Nevertheless the EU requirements supersede the National requirements of the EU member states. EU uses a number of legal requirements so as to harmonize legislation throughout the Union.

PDt
a i, mr>rket information Database *"EU market Access requirements"*
Inv eC,0llnell>c R> S.L. & Flynn, S.M. " Economics Principals, Problems and Policies" (New York, McGraw-Hill S3 n>2008)
arbaugh,R.J. "International Economics" (Ohio, Thompson South-Western, 2006)

There are additional Non- legislative market Access requirements in form of private standards regarding quality, occupational health and safety of workers, business ethics and social responsibility. These private standards are said to be more stringent.

Eu market requirements are not negotiable. Whenever EU introduces a new export requirement, it informs the WTO and gives exporters 60 days to effect the requirement.

The government of Kenya has taken some measures through the office of Kenya Bureau of **standards** (KEBS) and has formed a committee through which stakeholders from the government **and** the private sector express their views/ comments regarding introduction of new requirements. Since EU is independent, exporters cannot defy its requirements and especially when they are targeting her market. Organizations such as FPEAK undertake to train their members so that they can meet the new requirements as desired[54].

However during the carbon foot print campaigns in United Kingdom (UK) by environmental activitists who urged consumers to shun horticultural produce from Kenya for having been airlifted for a long distance, thereby leading to environmental pollution from carbon emission, the local stakeholders such as FPEAK, Export Promotion Council and others bargained through 'he ministry of trade with UK supermarkets. The Kenyan mission through the UK government managed to convince the supermarkets which were threatening to shun away Kenyan horticultural produce to drop their campaign which appeared to be discriminatory[55].

[54] Interview with Francis Wario, Agronomist at FPEAK (Nairobi 3.9.10)
[55] Interview with Julius Kibet, Assistant Manager Market Research Services, Export promotion (Nairobi 13.9.2010)

4.3 Analysis of EU market requirements and their effects on the farmers/exporters.

After collecting primary data, a general observation was made and it was demonstrated that, the gU market is too harsh on Kenyan exporters. The need for the government to help in exploring [flore markets outside Europe cannot be underestimated.

The EU market requirements are; council Directive 2000/29/EC of 8 May 2000 which is on protective measures against the introduction into the community of organisms harmful to plants or plant products and against the spread of associated diseases within the community. A variety of organisms that adversely affect the quality of the produce have been highlighted such as insects, mites, bacteria, fungi, viruses and parasite plants. The above directive subjects certain plants and plant products from other countries to a check on entry into EU territory. It involves a documentary check, an identity check and plant- health check for vegetables and flowers.

All producers or exporters of plants and plant products (including fruit and vegetables and wood products) who are looking for EU market opportunities, have to ensure their products comply with the EU's Phytosanitary (plant health) requirements. The main requirements relate to import restrictions to ensure that certain harmful organisms (pests) will not enter EU territory. Furthermore, some products have to be accompanied by a Phytosanitary certificate when placed °n the EU market. Products that do not comply with the Phytosanitary requirements are rejected.

[ln] Kenya, KEPHIS is the custodian of EU market requirements as far as this directive is [c°]ncerned. It has been mandated to ensure farmers/exporters comply with this directive[56]. ^[p]H1S has established Analytical Chemistry Laboratory which undertakes tests on pests,

[ld] **"Interview** with Melon Kabole, Plant inspector at KEPHIS" (Nairobi 15.9.2010).

diseases and it carries out analysis of pesticide residues and formulations in a wide range of agricultural produce, soil, water and animal tissues.

About 100% of the horticultural staff interviewed from large size farms interviewed on the extent to which this particular requirement affects their exports/ produce responded by saying that it reduces the volume of exports by between 2% to 5%. Around 100% of horticultural staff from medium size farms stated that this requirement raises production cost by between 2% to 6%. Staff from small scale farms had varied responses. Around 99 % said that, this directive does not affect their exports, while 1% said it raises the cost by 20%. It is worthy to note that, most of the small farms are sub- contracted by the large size farms. There is a value chain in this sub-sector of agriculture.

In relation to the role played by the government in the implementation of this directive, a 100% of the Agriculture officers interviewed stated that, it trains horticultural farmers on its requirements. KEPHIS plays an inspectorate role.

Directive 85/374/EC lays down the principles of product liability in the EU. An exporter can be held responsible for injuries caused by a wide range of products such as:

Primary agricultural products (food in its raw state, e.g. meat, cereals, fruits and vegetables).

Exporters of consumer products, have to take into account that they can be held responsible for injunes caused by defects of their products. When an exporter's consumer goods cause injuries, an exporter risks damaging his/her reputation and thereby losing customers. EU consumers may require financial compensation for injuries caused by defective products.

The EU legislation on product liability holds the EU importer responsible for injuries caused by imported defective products. However, the EU importer may pass on a claim filed by an injured gU consumer to the exporter,

features of a defective product?

According to EU **requirements, a product is considered defective when it is not as safe as** EU consumers **might expect and also if the information the exporter gives regarding the product** turns **out to be false. This means that a product will not be considered defective just because it is** poor **quality or because a safer version is on the market. When deciding whether a product is defective, many things are taken into account especially on the basis of what the exporter has indicated. The issues involved cover;**

- **The manner in which a product is marketed;**
- Any instructions or'warnings that are given;
- What might reasonably be expected to be done with it;
- The time the producer supplied the product[57].

Injuries for which compensation can be sought include death, personal injury and damage to private property other than the defective product itself. The amount charged for loss or damage is 500 euro or more. EU member states can individually set limits for the total liability for damage resulting from death or personal injury. This limit may not be less than 70 million Euros.

The Ministry of Agriculture (Kenya) in collaboration with a wide range of stakeholders is in the Process of formulating a National food safety policy to ensure Kenyans as well as consumers of [ex]Ported products access healthy food.

[57] Op cit pp31

Among the horticultural officers interviewed on the effects of this directive from large size farms, 100% stated that, this directive make them lose between 2% to 10% of the total export income while those from medium size farms, 99% stated that it raises production cost by between 2% to 6%. 1% stated that, implementation of this directive raises production cost up to 20% and those from small size farms had 1% state that it increases production cost by 5% while 99% stated they lose between 350kgs to 500kgs through rejection of their produce. It forces the supervisors to be more vigilant. The government does not negotiate on behalf of the exporters with EU but through the Ministry of Agriculture and KEPHIS, it trains the exporters/farmers on its implementation requirements.

The EU Regulation (EC) 1234/2007 in conjunction with Regulation (EC) 1580/2007 outlines the marketing standards for aM fresh, unprocessed fruits and vegetables. An exporter of fresh fruits and vegetables to the EU has to make sure their products comply with requirements on Health control (food law, hygiene, microbiological criteria, contaminants, pesticides) and Plant health (Phytosanitary) control (which relates to harmful organisms). Fruits and vegetables not covered by a Specific Marketing Standard ('SMS') have to comply with the general market standards.

EU has put in place marketing standards for the following types of fmit and vegetables:

j^W **Interview** with Masaku, The Phytosanitary quality assurance and standards officer, ministry of agriculture
^airob rjerS* tvlasa•cu was responsible for training farmers and staff on EUREP-GAP in the ministry of Agriculture

apples, citrus fruit, Kiwi fruit, Lettuces, curled leaved and broad-leaved endives, peaches, nectarines, pears, straw berries, sweet peppers, table grapes and tomatoes.

In Kenya, KEPHIS plays the role of the EU watch dog. Farmers/ exporters request for inspection of their farms, crops and even during post harvest for a fee. They are charged ksh35 per mileage during the site visits and a KSh 1000 per inspector. Once a farmer meets the requirements, a phytosanitary certificate is issued[59]. Adherence to rules and procedures set out by KEPHIS is crucial because when horticulture exports are rejected, the alerts are sent to the Ministry of Agriculture. An exporter with a record of rejected produce risks a ban from the relevant ministry.

The EU Regulation 396/2005 of the European parliament and the council of 23 February 2005 are on maximum residue levels of pesticides in products of plant and animal origin. There is a limit of the maximum quantities of pesticide residues that are permitted at any given time in products of animal or vegetables. The maximum residue levels (MRLS) are specific to particular edible products that are intended for human beings or animals. An exporter of food products to the EU has to ensure his/her products meet all food safety requirements. These requirements are set by EU legislation which is supplemented by the EU buyers' requirements such as the private standards.

MRLS are the maximum allowed concentrations of pesticide residues in or on food products. They ensure that pesticide residues in food do not reach an unacceptable risk for consumers. All foodstulfs intended for consumption in the EU are subject to MRLs standards. Fligh presence of

pesticide in food products is not allowed. The categories of food stuff affected by this regulation include fresh fruits and vegetables, preserved fruit and vegetables, wine, cereals and cereal products, products of animal origin (such as honey, but excluding fish). Products containing ^re pesticides than allowed are withdrawn from the EU market. Producers of food products should be aware that withdrawal of their product is likely to cause severe reputational damage.

The MRLs are crop-pesticide specific. This means that maximum limits for one pesticide may vary depending on the crop it is used on. For instance, the MRL of a certain pesticide on apples can differ from the MRL of that same pesticide on papayas. If the level of pesticide exceeds the MRL but is not a risk to human health, the shipment will be rejected and destroyed at the exporter's expense if detected at the port of entry. If detected at point of distribution or retail sale, the exporter and the- buyer get informed and their details are likely to be published on publicly available electronic databases. There may be no further action because there is no risk to human health[60].

According to the primary data collected from horticultural staff, all the officers from medium size farms indicated there has been an increase in cost of production ranging between 2% and 5%. They particularly highlighted strict supervision from the farm, post harvest handling and transportation to the point of export. This raises the cost of production because of the high standards required. Around 99% of horticultural staff interviewed from large size farms on the effects of this directive stated that it raises the cost of production by between 5% and 15%. Only [1] /> stated that, they lose up to 3 tons of their exports annually. They resort to using a variety of Pesticides in controlling different pests because EU is very specific on what should be avoided in

insights: EU requirements for imports of Fresh Fruit and Vegetables: A supplier's guide.

pest control. Chemicals with high PHI should not be sprayed on crops. Among the staff interviewed from small size farms had varied responses; 25% indicated they lose about 3% of their exports due to rejection, 50% indicated they lose 10% monthly and 25 % stated they lose up to 20% of their exports.

Commission Directive 2002/63/EC of 11 July 2002 outline community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin. The minimum size of each laboratory sample for peas and beans is 1kg which is used for analysis.

The EU Regulation 178/2000 of the European parliament and of the council of 28 January 2002 is on food safety. This particular regulation also forms one of the EUREPGAP control points (EUREPGAP contains some of the private standards required to access the EU market). Its purpose is to ensure food products exported to EU can be traced back from the consumer to the farm where they were produced. The emphasis is on traceability and the ability to identify a unique product and the raw materials used in its production and to follow the progress of that product right through the production. The EU regulation on traceability requires that, operators in the food sector put in place product withdrawal systems as well as records identifying the source of the raw materials.

According to Masaku of the ministry of agriculture, matters of community health are not negotiable. Healthy food is a basic need for all. This is one of the reasons the Kenya government in collaboration with stakeholders is formulating a National food safety policy.

yH commodities exported to the EU requiring Phytosanitary certificates, are expected to adhere (0 a Maximum Pest Limit (MPL) which is 0.5% for quarantine pests and 25g/600 units for soil, /^ll exported consignments may be subjected to inspection, performed on arrival at the point of entry into the EU at the member state's border inspection point. The exporter meets the cost of inspections. Some exporters think inspections are intrusive.

According to Kabole of KEPHIS, in Kenya Phytosanitary certificates are issued by KEPHIS after a farmer has complied by inviting the crop inspectors to inspect his/her farm/site before any planting has taken place. Permit to import the materials required is granted after the crop inspectors are satisfied with the site. Imported planting materials are accompanied by Phytosanitary certificates from the country of origin. On arrival in Kenya, KEPHIS inspects those materials before issuing a permit. This is followed by subsequent farm visits after planting has taken place and depending on EU requirements for specific crops/plants. Some crops require more visits than others. Post harvest inspections are carried out further at the Airport (JKIA) depending on earlier findings on the farm by inspectors, samples can be up to a 100% of the produce prepared for export.

A total of 90% of the staff from small size farms stated they lose between 10% and 15% of their **produce** due to rejection after failing to fulfill the requirement. Around 10% of the respondents **stated that** a total of about 390kg of their produce is rejected on monthly basis. They further **"a,nented** on having to keep records of their activities. Kabole of KEPHIS highlighted the high value upheld by EU on record keeping. Crop inspectors are expected to keep records of all their **"Sections** and comments/recommendations. According to 90% of the horticultural staff

I

interviewed from large size farms on the effects of this regulation stated it raises production cost by between 3% and 5%. They lamented about having to put in place a system of tracing each farm produce. About 10% stated they have put a system in place so it does not affect them negatively any more. A 100% of respondents from medium size farms stated that this regulation raises production cost by up to 5%. They lamented the need for the farm to put in place high standards on blocking, labeling their products, packaging, spraying programmes and on the choice of chemicals.

EEC regulations 315/68 and 316/68 set quality standards for flowering bulbs, corns and tubers and for fresh cut flowers and fresh ornamental foliage. A product that fails to conform to the quality standards may not be held or transported with a view to sale, or be offered for sale, either be imported or exported within EU. Marketing standards that are covered by this regulation include; the acceptable minimum size and size grading, packaging and presentation, marking i.e. identification, nature and origin of product and also requirement on commercial specifications.

The horticultural staff interviewed on this regulation had varied responses. A round 90% of horticultural staff from medium size farms indicated that, this particular requirement affects exports by raising production cost to between 1% and 2%. 10% indicated the effects are not much. For an exporter to produce quality products, one has to either import planting materials or buy from well renowned companies. This raises the cost of production. 50% of respondents from 'arge size farms said the effects were not much because they buy their planting materials from Unowned companies and 50% indicated they import their materials and this raises the cost of F°duction by about 2%. 25% of horticultural staff interviewed from small size farms indicated

tl,js regulation raises their production cost by 15%. 25% stated it raises their cost of production ly 1%. A total of 50% stated negative effects were negligible because they buy quality planting materials thereby reducing chances of getting materials that are infected with pests and diseases.

Requirements in Production of Fruits and Vegetables according to EUREPGAP.

This section deals with private standards as outlined by the EUREP-GAP. It is worth noting that the EUREP-GAP have been upgraded to the status of Global -Gap. According to Masaku[61] the stakeholders in horticultural sector were of the opinion that, if they had to work hard to meet EU market requirements, then they could qualify to export globally. Therefore the EUREP-GAP was upgraded to Global-GAP.'However the good agricultural practices promoted by the EUREP-GAP are the same promoted by Global-GAP. For the purposes of this research project which covers the period between 1990-2010,1 will stick to the title of EUREP-GAP which was initially EU specific. Exporters to EU are expected to ensure their horticultural exports adhere to private standards which are more stringent. Producers of fruits and vegetables targeting European Union market are expected to adhere to Good Agricultural Practice (GAP) standards on their farms. This is essential for the development of best-practice for the global production of horticultural products such as fruits and vegetables. EUREGAP has outlined a set of private standards which lorm a framework for Good Agricultural Practice for horticultural producers. EUREPGAP suPP0rts the principles of HACCP (Hazard Analysis Critical Control Points) and encourages its Use- Adherence to these standards is essential for the maintenance of consumer confidence in fresh produce.

'°Pcitpp42

^11 fanners/producers are expected to be able to demonstrate their commitment to;

- Maintain consumer confidence in food quality and safety.
- Minimize detrimental impact on the environment, while conserving nature and wildlife at the same time.
- Reduce the use of crop protection products.
- Improve the efficiency of natural resource use and,
- Ensure responsible attitude towards worker health and safety

Fanners receive their EUREPGAP approval through an independent verification body that is **approved** by EUREPGAP.

4.4 EUREPGAP Standards (up graded to Global GAP)

Exporters to EU have to also comply with additional standards. These are private standards which are independent from official import requirements. In most cases, these additional standards may be imposed by retailers, importers, processors and pressure groups like the environmentalists and human rights activists. They are said to be more stringent. There is increasing emphasis on sustainable mode of production which combines profits, care for the environment and workers' welfare. There are growing concerns from the civil society groups found in the developed countries brought about by the increased participation of developing countries in the trade of live plants and cut flowers. The concerns arise from the welfare of workers in flowers' growing conditions. There is a general belief that there is wide use of dangerous chemicals in the Horticultural sector and that there are less stringent regulations in Sloping countries. This has led to pressure being put on retailers to engage in a more

^sponsible commerce. This pressure has not resulted in new legislations or mandatory labeling 0r packaging regulations, but they have led to an increase of private environmental labels being proposed by a number of organizations. There are private certificates' schemes for flowers and plants which are standards developed within the European private sector and they include; \lilien programma Siertellt (MPs) which was established by the Dutch Floricultural sector and EUREGAP with support from the flower auctions and several flower trading organizations. EUREPGAP is one of the earliest programs of certification cleared in 1993. These standards are applicable to growers, traders and florists all over the world. EUREPGAP forms part of the private standards required of exporters by EU retailers.

Other bodies like the Max Havelaav Foundation certify agricultural products that are sold in accordance with international criteria of fair trade[62].

I

The verification of compliance requires records that are first linked to the farm (and if applicable **also** the field, orchard or green house) in which the crop is grown, until the moment when the **crop** is harvested, after which the recording is linked to batches or lots and the produce handling **site.** In short from, "farm to the table". In Kenya KEPHIS plays a supervisory role at a fee.

•n matters of Traceability, EUREPGAP is concerned with the question of whether the registered Product is traceable back to and tractable from the registered farm where it has been grown.

^ere has also been a concern with record keeping and the required internal self- inspection. The **nee d to** have access to all records requested during inspection up to a period of two years. The

J [1] REPGAP C/O Food plus GMBH. "*Control points and compliance criteria Fruit and Vegetables version 2.0 Jan*

farmer is expected to undertake a minimum of one self- inspection per year against the gUREPGAP standard. The internal self- inspection requires documentation and recording. There is also the issue of varieties and Rootstocks. The importance of effective crop husbandry in relation to the seed producing crop of the registered product crop is emphasized.

There is requirement of documented evidence that guarantees seed quality (e.g. free from injurious pest, diseases, virus etc) and that states variety purity, variety name, batch number and seed vendor.

EUREPGAP control point on site History and site management requires documentation of food safety, operator health and environmental risk assessment that takes into account prior use of land, type of soil erosion,/quality and level of ground water, availability of sustainable water sources and impact on and of the adjacent area. Incase during assessment, a non- controllable risk is identified, which is critical to health and / or the environment, the site cannot be used for agricultural activities. Soil and substrate management is equally emphasized. It is required that, maps for soil defining the type of soil is availed for each site, based on a soil profile or soil analysis or local (regional) cartographic soil -type map. KEPHIS undertakes site visit before any planting takes place for the purposes of fulfilling this requirement.

The control point of fertilizer requires that, the technically responsible person demonstrates competence in determining quality and type of fertilizer (organic and inorganic) to use. documentary evidence must be available that demonstrates training and competence of the technically responsible person.

gtfREPGAP control point on irrigation demands that, there is prediction of irrigation requirements. There is emphasis on use of systematic methods for calculation of water requirement of the crop. The calculations have to be available on request which are supported by data records e.g. rain gauges, drainage trays for substrate, evaporation meters, water tension meters (% of moisture in the soil) and soil maps.

Out of the total horticulture staff interviewed from large size farms, 75% stated implementing this regulation raises their cost of production by between 1% and 5%. 25% stated it raises the cost of production by about 15%. This is as a result of high cost of installing irrigation facilities. However once the installation is done, there is an increase of farm's production. When horticulture staff from small size farms were interviewed concerning the effects of this regulation on their exports, 50% responded by saying it raises the cost of production by between 15% and 20%. 50% said it raises the production cost by between 3.5% and 5%. 75% of horticulture staff from medium size farms stated that this regulation raises production cost by between 10%-15%. 25% stated it raises the cost by 2% and this is caused by the high cost of control point and fertigation equipments.

There is emphasis on crop protection against pests, diseases and weeds with the appropriate minimum crop protection product input. All crop protection product inputs have to be documented with clear written justifications, target and intervention thresholds. This control Point includes observation on choice of chemicals, records of application and pre-harvest 'Nervals. Disposal of surplus application mix, crop protection product and Residue Analysis. Th[e] eontrol point on crop protection product storage and handling requires that, during the crop

harvesting time, there is an analysis of hygiene risk for both harvest and pre- farm gate transport process. Availability of documentation is a requirement and up to date risk assessment that covers the hygiene aspects of the harvesting operations. The packaging /harvesting containers on the fann are to be used exclusively for produce.

Respondents from small size farms concerning this regulation had varied responses; 75% stated it raises the cost of production by between 3% and 5%. 25% stated it raises the production cost by 15%. This is due to the cost incurred in grading, storage facilities, transport and loss when there are traces of high chemical residue levels. The produce is at times affected by poor temperature and bruises. Staff from both medium and large size farms stated that, though there is cost involved in the choice of the allowed chemicals in crop protection and cooling /storage facilities, in the long run quality produce is realized which raises income by up to 10%.

The Ministry of agriculture in collaboration with stakeholders in the horticulture sector/ export has managed to come up with Kenya-GAP (Kenya good agricultural practices). FPEAK played a major role in drafting the Kenya-GAP which has been adopted by big local supermarkets like Nakumatt. According to Masaku, farmers who meet the standards of Kenya-GAP are in a position to export their horticulture produce globally.

Hygiene during produce handling is emphasized. There has to be a hygiene risk analysis Performed for the produce handling process. When KEPHIS inspectors visit a certain farm, they check on sanitation/hygiene facilities that have been put in place as well as the records on the Oration they have been in use. There is an emphasis on waste and pollution management, ycling and Re-use. The need for identification of waste and pollutants is emphasized. A

catalogue and documentation of waste products produced by farm processes must be put in place.

gUREPGAP control point on worker health, safety and welfare emphasizes on risk assessment for safe and healthy working conditions. Workers who operate dangerous complex equipment have to be trained and a record of training kept for each worker. These are especially workers who handle and apply crop protection products. Workers are expected to submit voluntarily to annual health checks in line with guidelines laid down in local codes of practice. There has to be a member of management clearly identifiable as responsible for worker health, safety and welfare issues. This control point also puts emphasis on the safety of visitors. The need to have I available evidence that the company's visitor personal safety procedures and requirements are officially communicated to visitors and sub contractors (this implies that, company visitor personal safety procedures are visible to all visitors or subcontractors).

According to horticulture staff interviewed from small size farms, 75% said implementing this requirement raises the production cost by between 2% and 3%. 25% stated that the cost goes high by between 5% and 6%. This cost is from medical cover, compensation from injuries sustained from accidents at work and the cost of protective equipments for the workers.

About 75% of the staff from medium size farms stated that implementing this requirement raises lll e cost by between 2% and 3%. Around 25% stated that taking care of the welfare of the workers makes them improve on their performance thereby leading to few losses of produce.

The staff from large size farms had varied responses, 30% stated that, the rise of implementing this requirement rises by only 0.5% on the existing costs. 35% stated that, the cost of production rises by about 5% while 35% indicated that the benefits realized after implementation of this requirement lead to an increase in production by up to 95%. This is as a result of ensuring the workers are happy and healthy.

Control point on environmental issues requires that, the farmer understand and assess the impact his/ her farming activities have on the environment. There has to be a compliance form relating to EUREPGAP standards. In addition there has to be documents of the actions taken with respect to complaints regarding EUREPGAP standard deficiencies found in products or services. Failure to comply with the EU requirements spells lack of entry in the EU market or a poor reputation for an importing farm..-Information from some horticultural staff indicates that private standards like the EUREPGAP increase the burden of cost on exporters.

When the horticultural staff was asked their feelings towards EU market requirements and the implication in their work, those from medium size farms lamented about the cost of implementation being high. The cost of equipments and staff training can go up to 20%-25% e.g. cooling facilities, workers' protective gear, and facilities for water analysis, grading and testing for MRLs.

The staff from the large size farms lamented about the increasing cost of production and especially putting in place high standards of handling produce, storage, measures for traceability [a]»d ensuring the produce does not get spoilt during transportation.

According to the staff from small size farms, record keeping for farm produce from planting to the time it gets to the customer is challenging. Having to build shades, facilities for refrigeration, sorting out produce, packaging and cost of certification raises the cost of production.

All the issues being mentioned by the horticulture staff are all related to meeting EU market requirements. They are forced to hire more staff to play different roles in ensuring their produce meets the EU market requirements.

Out of the total horticulture staff interviewed from the small size farms, medium size farms and the large size farms, only 30% knew that the government is intervening and bargaining with EU on their behalf. Those who are aware that the government is intervening on behalf of horticulture sub-sector said the intervention has to do with extension of the period of implementation of the market requirements.

r

CHAPTER FIVE

5.1 Kenyan Institutions dealing with legal and regulatory framework for Horticultural Sector

In Kenya there are institutions which are key in the horticultural sector. The country's legal framework in regard to horticulture is handled by both the government ministries and their relevant agencies, e.g. Ministry of Agriculture, the Ministry of trade and industry and HCDA[6']. International traders are expected to adhere to international rides as found in legal framework of trade bodies like the WTO and the EU market requirements.

5.2 The Horticultural Crops Development Authority (HCDA)

The Horticultural Crops Development Authority (HCDA) is a parastatal established by the Government under the Agricultural Act CAP 318 in 1967 with the aim of developing and regulating the Horticultural industry.[64] This order has gone through some amendments over a period of time, the latest being in 1995 which aimed at revitalizing the horticultural industry. HCDA is a regulatory body of the horticultural sub-sector in Kenya. It is charged with the responsibility of promoting the development of horticultural crops, licensing exporters (to EU and other destinations), and disseminating information on horticultural marketing. HCDA was originally given authority to fix prices, regulate trade, and operate processing facilities and market horticultural goods. This has however changed after the body withdrew from its buying **and** selling functions from the market in 1986.

Strategic **Objectives** of **HCDA**

[63] r\ • °P cit pp.6

[64] Ibid

HCDA objectives operate in line with the Authority's Strategic plan[65].

These objectives are;

- To facilitate the development and review of the policy, legal and institutional framework to facilitate continued growth, development and sustainability of horticultural industry.
- To facilitate and coordinate the implementation of comprehensive development and marketing strategies for the horticultural industry.
- To build adequate capacity to provide quality, efficient and effective services to the sub-sector.
- To mobilize resources and develop mechanisms for efficient and effective utilization of resources; and
- To strengthen customer service delivery mechanism and enhance the corporate image of the Authority. '

HCDA produces monthly magazines which highlight international market news for horticultural products. It gives export permits to horticultural exporters/farmers from Kenya. And it offers on hire transport and cold room facilities for horticulture products.

5.3 Kenya Plant Health Inspectorate Service (KEPHIS)

KEPHIS is the designated government institution to implement the Plant health component of the SPS Agreement and some aspects of food safety. It is also called the National Plant

Horticultural Crops Development Authority, Marketing Newsletter January 2010 Edition.

Protection Organization (NPPO)[66]. KEPHIS was established under the State Corporations Act (Cap 446) in pursuant to Legal Notice No. 305 of 18th October 1996, with a mandate to undertake quality control services of agricultural inputs, plant variety, and protection of plant health. The Corporation commenced operations in 1997. It has also been mandated to oversee the monitoring of the effect of agricultural activities on the environment with a view of ensuring acceptable plant health standards and sustainable land resource use[67]. KEPHIS aims to protect plant resources, facilitate safe trade in agricultural inputs and produce, provide security from emerging threats to agriculture and environment and provide sound institutional management.

KEPHIS is mandated to coordinate all matters relating to crop pest and disease control. It is mandated to;

- Establish service laboratories to monitor the quality and levels of toxic residues in plants, soils, animal tissue and crop produce.
- Advise the Director of Agriculture on appropriate seeds and plant materials for export and import.
- Administer plant breeders' rights in Kenya and serve as a liaison office for International Union for protection of new varieties of plants and breeders' rights register.
- Undertake inspection, testing, certification, quarantine control, variety testing, and description of seeds and planting materials.
- Undertake grading and inspection of plants and plant produce at the ports of entry and exit.

66
67 VAvw.kephis.org
Horticultural Insight, Quarterly publication of the Fresh Produce Exporters Association of Kenya, Issue No. 7 Sept-Dec 2009

KEPHIS has an inspection unit at Jomo Kenyatta International Airport where it carries out inspection on horticultural products before they leave the country for export.

5.4 Kenya Agricultural Research Institute

The Kenya Agricultural Research Institute (KARI) is a national institution that brings together research programmes in food crops, horticultural and industrial crops, livestock and range management, land, water management and socio-economics. KARI endeavours to promote sound agricultural research, technology generation and dissemination to ensure food security through improved productivity and environmental conservation.

5.5 Kenya Flower Council

This is a private voluntary association which comprises of independent growers and exporters of cut-flowers and ornamentals. KFC was formed in 1996 to promote responsible and safe production of cut flowers in Kenya. KFC is also concerned with protection of the natural environment and the welfare of all farm staff. It further seeks to provide a common platform for the growers and exporters and to ensure that parties involved act within acceptable local and international standards.

5.6 Fresh Produce Exporters Association of Kenya (FPEAK)

This is a Trade association for growers, exporters and service providers dealing with horticultural industry (flowers, vegetables and fruits). The FPEAK's aim is to represent and improve the business environment of the horticultural industry for the sake of its members. This Association seeks to ensure its members are able to compete internationally and are in a position to access

market through the use of efficient technologies. It also supports adherence to international Standards and it lobbies for favourable policies and trade agreements, promotions and encourages integration of both small and large scale growers into the global value chain[68].

5.7 Export Promotion Council

Export promotion council is Kenya's premier institution mandated to develop and promote export trade. It was established in 1992 and today it plays a focal point for export activities in the country. Its mission is the promotion of Kenya's goods and services and harmonization of export related activities[69].

I

[8] Horticultural Insight, Quarterly publication of the Fresh Produce Exporters Association of Kenya Issue No 7 Sept-Dec 2009

Export promotion council, "Your guide to Export trade"

CHAPTER SIX

6.1 Challenges faced by the Kenyan Horticultural exporters to European Union

The data for this chapter is basically from the horticulture staff. The challenges are cross cutting right through the small size farms, medium size farms and the large size farms. Respondents from the horticultural sector indicated the following as being part of their every day challenges.

- Maintenance of the produce from the source to the market e.g. ensuring crop protection, handling with care and storage.
- Having to meet all of the expected requirements is a challenge due to the high cost involved in certification.
- High cost of transportation from the farm to Europe, there is high cost involved in hiring trucks for transport and airfreight charges.
- Putting in place a system of traceability from the source to the consumer.
- Liability cost and meeting the requirements for MRLs leads to huge losses.
- High cost of cooling and storage facilities.
- Horticulture produce is highly perishable, when there is no airfreight space the produce goes to waste.
- High cost of fuel.
- High cost of labour from the farm and strict harvesting methods which require well trained staff.
- High cost of packaging materials some of which are poor quality.
- Cost of certification; in Kenya visits by crop inspectors from KEPHIS are paid per inspector, per visit and car mileage. EU may require a certain number of inspections for different crops.

CHAPTER SEVEN

Summary, conclusion and recommendations.

This chapter provides a summary, conclusion and makes recommendations of the study.

7.1 Conclusion

This study has demonstrated that EU market requirements negatively affect local exporters/producers. One of the study finding is related to the cost of producing horticulture produce that is acceptable in the EU market. Expenses begin before any planting has taken place. The inspection of planting sites starts with crop inspectors from KEPHIS at a cost. Failure to invite KEPHIS from the beginning leads to lack of Phytosanitary certificate for one's produce during the time of export. The cost of producing for EU is very high especially for small and medium size farms. One has to take into account the cost of planting materials, packaging materials, harvesting facilities, cooling system, storage and transportation all intended to ensure the produce meets the expected standards. These issues affect the small scale farmers, medium and the large scale.

It is very clear that the government intervention is in training farmers on EU market requirements in collaboration with other stakeholders and inspections (KEPHIS). KEPHIS issues import permits for planting materials once the crop inspectors are satisfied with planting sites. KEPHIS also issues Phytosanitary certificates for exports but there is no bargain as far as implementing the requirements is concerned. This is especially so where the requirements have to do with the health matters of the consumers.

This study demonstrates that, not many horticulture producers are members of associations which can intervene on their behalf in regard to EU market requirements.

This study has established that, EU has a tendency of shifting goal posts of their requirements during the low season. This is especially so when the farmers in Europe are able to supply the horticulture products in demand like in summer when there is supply of flowers. This amounts to trade protectionism in every sense. When exporters send their produce to EU market only to find the standards have been revised, they incur high losses. The cost of destroying or returning the produce to the country is met by the exporter.

There seems to be lack of coordination between the needs of the horticulture farmers in the rural areas and the interventions carried out by the government. This came out very clearly when only 30% of the horticulture staff demonstrated their knowledge of the government's intervention in horticulture export matters. This was different from the response received from the staff working with institutions based in Nairobi that deal with horticulture exports. Institutions like FPEAK work closely with the government and are part of the members of Technical committee which deal with exports.

Recommendations

The horticulture exporters should form their own associations to advance their interests especially in the harmonization of the EU legislative and private standards market requirements. They should also use the associations to bargain for better terms in the implementation of the EU market requirements. For example if an exporter has a good record, then some stringent Measures should be made lenient like impromptu inspections. Their associations should be in a

position to bargain with EU market when it acts discriminatively by shifting goal posts like lowering the acceptable minimum residue /pest levels. EU should at least have a one stop for all their market requirements to make it exporter friendly.

There is a need for the government to help in search of other markets in order to tame the EU harsh measures. There should be a trickle down system of information from the government to the small size farms. This is because the government is the one that receives alerts of rejected horticulture produce from EU. This information can save farmers/exporters from incurring huge losses.

The government should consider facilitating small scale farmers with lending services that are tailor made for them so that they can be able to implement these stringent EU requirements comfortably.

There is also need for further research for alternative means of exporting horticultural exports. A study on processed ready to eat products and pre-packed fresh produce is crucial so as to avoid losses being incurred when airfreight space is inadequate.

Research on the way specific EU market requirements affect specific plants/ fruits and/or vegetables is important to further equip exporters with the relevant information.

BIBLIOGRAPHY

Ball, McCulloch, Geringer, Minor and McNett. "International Business the challenges of Global competition" (New York, McGraw- Hill Irwin, 2008).

Cassen, R. Jolly, R,, Sewell, J. & Wood, R (Eds) "Rich Country Interest and Third World **Development"** (London, Croom Helm Ltd, 1982)

Carbaugh, R.J. "International Economics" (Ohio, Thompson South-Western, 2006)

Central Bureau of Statistics Ministry of Economic Planning and Development, "Economic Survey 1982"

Central Bureau of Statistics Ministry of Finance and Planning "Economic survey 2002

Chilton, K. & Warren, M. "Environmental Protection" (New York, basic Books Inc. 1988).

Boutrif, E & Pineiro, M (Eds) "The New International Trade context for Developing countries: The impact of SPS and TBT Agreements (FAO).

Dijkstra, T. & Magori, T. D. (Eds.), "Horticultural Production and Marketing in Kenya, Part 5: Proceedings of a dissemination seminar, Nairobi, 16-17th November 1994" (African studies centre, Leiden Egerton university, Njoro).

Hoekman, B. Mattoo, A & English (Eds.) "Development, Trade and the WTO A Handbook" (Washington, The World Bank, 2002).

Karen, V. K & Anthony, D. "European Union Law Anthology" (Cincinnati, Anderson Publishing Co. 1998)

Lipsey & Chrystal. "Economics" (New York, Harper and Row, 1954).

Sklair, L. "Sociology of the Global System" (New York Harvester Wheat Sheuf, 1991)

Yeats, A.J. "Trade barriers facing developing countries" (New York, St.Martins Press, Inc. 1979)

Drogue's. & Gozlan E. "Trade -distorting SPS and TBT regulations in the EU? A qualitative assessment **from** the market for live plants and cut flowers working paper 07/13" (Paris, INRA, UMR Economie Publique-Agroparistech, July 2007)

McConnell, C.R, S.L. & Flynn, S.M. "Economics Principals, Problems and Policies" (New York, McGraw-Hill Irwin,2008)

EUREPGAP c/o Food plus GMBH, Control Points and Compliance criteria Fruit and vegetables version 2.0 - Jan 04.

Fresh insights: EU requirements for imports of Fresh Fruit and Vegetables: A supplier's guide.

Horticultural News The Official Journal of HCDA October/November 1998

International Research Network, PKF consulting Ltd "Horticulture Industry in Kenya 2005 " (Export Processing Zones Authority).

Nge'the, M. G. "Decision Making Among Small Scale Women Horticultural Farmers in Limuru Location of Kiambu District, Kenya" (Thesis for masters, institute of African studies, University ofNairobi, 1995).

Office of the Vice-president and Ministry of planning and National Development, "Economic survey 1995"

Office of the Vice-president and Ministry of planning and National Development, "Economic survey 1999"

Business solutions of the EU- ACP Economic partnership Agreements Phase three. Horticultural in Eastern and Southern Africa (ESIA).

Economic Survey, Central Bureau of Statistics, 2004

CBI Market Information Database "EU Market Access Requirements"

CBI Market Survey: The cut flowers Market in the EU.

Dankers, C. "Private standards in the United States and European Union markets **for** fruit **and** vegetables, implications for developing countries" (FAO 2007).

Mbithi, S & Karuri, C Fresh Produce Exporters Association of Kenya (FPEAK), 2004.

Horticultural Insight, Quarterly publication of the Fresh Produce Exporters Association of Kenya, Issue No. 7 SeP-Dec 2009

Horticultural Crops Development Authority, 2003

Horticultural Crops Development Authority, Marketing Newsletter January 2010 Edition.

Kanyingi, M. (Ed.) "Floriculture Impact of the Financial Crisis on the Floricultural Sector" (Scoop communications, Nairobi 2009).

Kenya Flower council, 2004.

CBI market survey: The Cut flowers market in the EU.

Nyangweso, P. M., & Odhiambo, M. O. "Exporting Kenya's Horticultural Products: Challenges and opportunities in the 21st century".

Price Water House Coopers; Sustainability Impact Assessment (SIA) Sustainable
Sally, S. "Ethical Trade in African Horticulture; Gender Rights and Participation, March 2004".

Profound Advisers in Development "Cut flowers and Foliage. A Survey and Marketing Guide on the major markets in the European Union" 1996

Songa, W & Gikonyo, A ,Paper for the workshop on the theme; " Value added Food Exports & Investment opportunities' 3rd and 4th march 2005, at the Grand Regency Hotel, Nairobi (Horticultural Crops Development Authority HCDA)

The Agriculture Outlook January-June 2009

Wabule, M. Fungoh.P. O & Njoroge, I. (eds.) "National Horticulture Research. Review workshop proceedings 5th -10th May 1991- Thika (Kenya Agricultural Research Institute Information Technology Unit, 1991)

http://ec.europa.eu/development/geographical/cotonouintro_en.cfm

www.kephis.org

>

APPENDIX 1

Kenya has got a variety of horticultural products. See some of the Horticultural products found in Kenya.

Flowers from Kenya	**Vegetables from Kenya**	
Achillea	Arrow Roots	Brussels sprouts
Agapanthus	Artichoke	Cabbage
Alstroemeria	Asparagus	Canned beans
Amaranthus	Aubergines	Capsicums
Ammi Majus	Baby corn	Carrots
Arabicum	Basil	Cassava
Arum lilies	Beetroot	Cauliflower
Aster	Baby beans	Celery
Atriplex	Broccoli	Cherda
Bamboo	Brussels sprouts	Chillies
Bulpleurum	Cabbage	Chillies long
Carnation	Canned beans	Chillies short
Carthamus	Capsicums	Chires
Chrsan cuttings	Cassava	Chora
Cut foliage	Cauliflower	Coriander
		Cucumber

Listed below are some of the fruits found in Kenya.

APPENDIX 2

Fruits from Kenya

Apple	Guavas
Avocado	Homed mellon
Bananas	Lemon
Betel Nuts	Lime
Bixa	Litchi
Cashew nuts	Mangoes
Coconuts	Macadamia Nuts
Currants	Nor - Bixin powder
Custard Apple	Orange
Dried fruits	Passion fruits
Gooseberry Grapefruit	Pawpaw

There are a variety of Horticultural exports from Kenya as shown in the table below.

APPENDIX 3 Main types of exports from Kenya

Cut flowers	**Fruits and nuts**	**Vegetables**
Roses	Avocado	French Beans
Carnations	Mangoes	Snow peas
Statice	Passion fruits	Runner beans
Alstroemesia	Pineapples	Bobby beans
Cut Foliage	Bananas	Okra
Carthamus	Melons	Asparagus
Solidaster	Strawberries	Chillies
Chrysanthemums	Apples	Aubergines
Avabicum	Macadamia nuts	Garden peas
Ornithogalum	Cashew nuts	Onions
		Asian vegetables
		Carrots
		Spices and herbs

In Kenya there are areas which produce plenty of vegetables for both local consumption and export. Some of the vegetable production areas in Kenya are listed below.

APPENDIX 4

production area	**Altitude**	**Type of production (rainfall p.a)**	**Major vegetables**		**Minor vegetables**
			Domestic market	**Export market**	
Kiambu, Machakos, Nairobi	800 -2400 metres	Rain-fed (1500-2000mm) Machakos: irrigated (600-1000mm)	Cabbage, carrot, E. Potato Kale (Spring), Onion	Brinjal, capsicum, Chilli, okra, French bean, karela	Broccoli, Pea, Brussels sprout, Cauliflower, Courgette, Lettuce, Spinach, Cucumber
Baringo, Nyandarua, Nakuru	2100-2800 metres, Lake Naivasha: 1900 ' metres Lake Baringo 1000	Molo, Nyandarua: rain-fed (1200-1800mm) Lake Naivasha, Lake Baringo: irrigated (400-600mm)	Cabbage, carrot, E. Potato, kale, (Spring), Onion Garden pea	Capsicum, Chille Courgette, French bean, Cut-flowers	Broccoli, Spinach, Brussels sprouit, cauliflower, Courgette, lettuce, Cucumber
Embu, Meru, Nyeri, Murang'a	800-2500 metres	1200-2500mm rain-fed	Cabbage Carrot, Kale, onion, Tomato	Brinjal, Capsicum, French bean	
Kisii, South Nyanza	1100-2200 metres	Rain-fed (Kisii 1200-2100mm, S. Nyanza	Cabbage, Kale, Onion		

r

There are some companies in Kenya which specialize in Flowers; others have the capacity for both flowers and various horticultural products.

See a list of cut flower companies based in Kenya and their locations.[70]

APPENDIX 5

NO	COMPANY NAME	LOCATION
1.	Alora Flowers Ltd	Nairobi
2.	Aquilla Development Co. Ltd	Naivasha
3.	Bawan Roses Ltd	Nairobi
4.	Beverly Flowers Ltd	Nairobi
5.	Carzan Cultures Ltd	Naivasha
6.	Charm Flowers Ltd	Nairobi
7.	Enkasiti Flowers Ltd	Nairobi
8.	Finlay Flowers Ltd	Kericho
9.	Homegrown Ltd	Naivasha
10.	Kenya highlands Nurseries	Nakuru
11.	Kijabe Ltd	Naivasha
12.	Kisima Ltd	Nanyuki
13.	Lociand Ltd	Athi River
14.	Longonot Ltd	Naivasha
15.	Longonot Farm	Nairobi
16.	Magana Flowers	Nairobi
17.	Mosi Ltd	Nairobi
18.	Ol-Njorowa Ltd	Nairobi
19.	Oserian Ltd	Naivasha
20.	0. J. Dave Flower Ltd	Nairobi
21.	Pollen Ltd	Ruiru
22.	Primarose Flower Ltd	Nairobi

Kenya Flower council, 2004

23.	Redhill Flowers Ltd	Nairobi
24.	Redlands Roses	Ruiru
25.	Sander (K) Ltd	Nairobi
26.	Shalimar Flowers (K) Ltd	Naivasha
27.	Simbi Roses Ltd	Thika
28.	Sophia Roses Ltd	Thika
29.	Subati Ltd	Nairobi
30.	Suera Flowers Ltd	Nairobi
31.	Tambuzi Ltd	Nanyuki
32.	Terra Fleur	Thika
33.	Terrasol Ltd	Nairobi
34.	The Plant Factory (K)	Thika

Listed below are some of the companies which are known for their production of vegetables and fruits.[71]

APPENDIX 6

NO	COMPANY	LOCATION
1.	Avenue Fresh Produce	Nairobi
2.	Belt Cargo Services Ltd	Nairobi
3.	Bud of Paradise	Nairobi
4.	East African Growers Ltd	Nairobi
5.	Everest Enterprsies Ltd	Nairobi
6.	Fian Green Ltd	Nairobi
7.	Frigoken Ltd	Nairobi
8.	Greenlands Agro producers Ltd	Nairobi
9.	Hilfarm fresh Produce Ltd	Nairobi

[71] Fresh produce Exporters Association of Kenya (FPEAK), 2004

10.	Indu Farm EPZ Ltd	Nairobi
11.	Jambo Horticultural Export Ltd "2002"	Nairobi
12.	Horticultural Exporters (1977) Ltd	Nairobi
13.	Makindu Growers and packers Ltd	Nairobi
14.	Mboga Tuu	Nairobi
15.	Miner Exporters Ltd	Nairobi
16.	Sacco Fresh Ltd	Nairobi
17.	Sunripe (1976) Ltd	Nairobi
18.	Tropical Horticultural Products Ltd	Nairobi
19.	Vitacress (K) Ltd	Nairobi
20.	Wamu Investments Ltd	Nairobi
21.	Wilham (K) Ltd	Nairobi
22.	Woni Veg-Fru Exporters	Nairobi

Below is an outline of different types of vegetables produced in the various provinces in Kenya

Vegetable Production by Province, Jan- June, 2009

APPENDIX 7

Province	**Target 2009 (Ha)**	**Achieved Area Jan-June 2009 (Ha)**	**Projected Ha (July r-Dec 2009)**	**Achieved Production (Tons)**	**Achieved Values (Kshs.000')**
Cabbage					
Central	14,157	4,663	4,644	97,694	1,390,807
Rift Valley	8,185	4,940	.	63,210	948,158
Nyanza	2,465	1,806	.	30,291	331,200
Western	.	.	.	.	.
Coast	264	167	128	2,505	37,575
Nairobi	34	32	40	324	7,776
Eastern	107	900	.	2,000	25,000

Morth Eastern	-	-	-	-	-
Sub -Total	**25,212**	**12,508**	**4,812**	**196,025**	**2,740,516**
Tomato					
Central	5,025	1,816	1,911	27,564	1,165,345
'Rift Valley	6,626	2,053	-	57,854	1,446,341
Myanza	10,700	8,112	-	121,667	3,072,607
Western	-	-	-	-	-
Coast	1,584	467	602	14,010	350,250
[Nairobi	56	114	120	700	31,500
["Eastern	1,321	800	-	3,000	140,000
[North Eastern	660	460	32,550	22,450	449,000
[Sub -Total	**25,972.1**	**13,822**	**32,550**	**247,245**	**6,655,043**
[Kales					
[Central	7,514	2,815	2,124	47,002	585,140
Rift Valley	9,725	3,134.9	-	36,738	367,380
1 Nyanza	13,250	12,362	-	181,561	4,382,600
[Western	-	-	-	-	-
[Coast	1,584	467	602	14,010	350,250
Nairobi	120	114	130	700	17,500
Eastern	1,355	1,450	-	1,000	70,000
1 North Eastern	87	45	770	333	6,650
Sub- Total	**33,635**	**20,387**	**3,626**	**281,344**	**5,779,520**
Carrots					
Central	2,566	832.5	847	6,119	111,890
ftft Valley	1,465	443	-	6,556	163,908
1 Nyanza	462	412	-	3,029	60,623
1 Western	-	-	-	-	-
Coast	-	-	-	-	-
Nairobi	10	13	15	90	3,150
Eastern	171	293	-	1,000	4,000

[North Eastern	.	.	.	.	.
[Sub- Total	**4,674**	**1994**	**6,667**	**16,794**	**343,571**
[French Beans					
[Central	5,605	1,629	1,638	9,003	192,805
[Rift Valley	851	378	.	1,823	63,802
pNyanza	.	.	.	.	.
["Western	.	.	.	.	.
[Coast	.	.	.	.	.
[Nairobi	.	.	.	.	.
["Eastern	832	600	.	600	51,000
[North Eastern	.	.	.	.	.
pub- Total	**7,288**	**2,607**	**1,638**	**11,426**	**307,607**
[indigenous Vegetables					
| Central	.	.	.	.	.
Rift Valley	1,944	455	.	2,437	24,370
[Nyanza	7,900	6,971	.	34,789	578,300
Western	.	.	.	.	.
[Coast	562	437	182	3496	52,440
Nairobi	16	19	20	159	3,180
Eastern	.	.	.	.	.
1 North Eastern	.	.	.	.	.
Sub -Total	**10,422**	**7,882**	**202**	**40,881**	**658,290**
1 Spinach					
1 Central	2,345	778	804	5,592	173,054
[Rift Valley	1,189	491	.	4,334	86,680
1 Nyanza	5	5	.	.	.
1 Western	.	.	.	.	.
Coast	118	94	58	870	13,050
Nairobi	76	110	104	704	17,600
Eastern	133	200	.	100	7,000

North Eastern	-	-	-	-	-
Sub- Total	**3,866**	**1678**	**966**	**11,600**	**297,384**
Bulb Onions					
Central	1,651	264	274	1,540	20,149
Rift Valley	2,552	721	-	9,226	184,528
Nyanza	1,090	1,027.4	-	13,341	359,000
Western	-	-	-	-	-
Coast	382	34	165	510	17,850
Nairobi	32	26	32	194	7,760
Eastern	652.6	450	-	500	21,000
North Eastern	290	136	5,800	2,850	57,000
Sub-Total	**6,649.3**	**2,658**	**6,271**	**28,161.4**	**667,287**
Chilies/ Capsicum					
Central	322	106	114	931	21,075
Rift Valley	255.3	94.25	-	214.15	5,354
Nyanza	597	449	-	3,066	319,200
Western	-	-	-	-	-
Coast	862	236	292	2,360	64,850
Nairobi	16	14	16	130	4,940
Eastern	386	255	-	540	4,900
North Eastern	54	30.3	245	78.6	1,572
Sub -Total	**2492**	**1184**	**667**	**7,320**	**421,891**

Source: *Department of Crop Management MoA*

The trend of performance of major fruits in Kenya in the year 2009 between Jan-June is as shown below.

APPENDIX 7

Province	Target 2009 (Ha)	Achieved Area Jan-June 2009 (Ha)	Projected Ha (July - Dec 2009)	Achieved Production (Tons)	Achieved Values (Kshs.000')
[Avocado					
[Central	2,452	1,185	1,200	17,758	747,147
[Rift Valley	787	.	.	2,863	71,575
[Nyanza	150	42.1	.	33,737	872,100
[Western	.	.	.	.	.
[Coast	130	96.9	4	598	8,970
[Nairobi	22	4	6	30	750
| Eastern	1,000	1,200	.	4,000	15,500
| North Eastern	/	.	.	.	.
Sub -Total	**4,540**	**2,528**	**1,210**	**58,986**	**1,716,042**
Mangoes					
| Central	1,150	434	443	5,709	93,312
Rift Valley	1,327	.	.	10,426.4	312,702
| Nyanza	251	101.1	.	4,609	123,000
Western	.	.	.	.	.
| Coast	39	18,892	21	96,930	969,300
Nairobi	20	4	6	35	1,050
| Eastern	8,050	9,190	.	25,000	98,000
| North Eastern	605	421	7,020	5,052	50,520
[Sub -Total	**11,442**	**29,042**	**7,490**	**147,758.4**	**1,647,884**
| Bananas					
1 Central	17,418	79,66	80,54	1,885,93	13,881,29
[Rift Valley	3,443	.	.	10,423	312,702
Nyanza	1,590	407	.	969,800	18,512,700

[Western	786	1,395	.	74,813.5	1,682,138
[Coast	386	7896	204	42,945	644,175
[Nairobi	48	14	16	164	5,740
[Eastern	12,000	15,300	.	450,000	450,000
[North Eastern	705	557	10,310	7,149	81,358
[Sub- Total	**36,375**	**25,714**	**10,664**	**1,557,272**	**21,702,723**
[Citrus					
[Central	212	41	46	576	7,162
[Rift Valley	2,104	.	.	20,691	458,239
[Nyanza	85	26.7	.	475	18.5
[Western	.	.	.	.	.
[Coast	685	4,861	47	16,516	330,320
[Nairobi	.	.	.	.	.
[Eastern	106	400	.	2,000	2,000
1 North Eastern	68	38.1	408	212.6	21,26
Sub- Total	**3,260.81**	**5,367**	**501**	**40,471**	**797,787**
Passion Fruits					
1 Central	589	3,05	312	3,732	89,092
Rift Valley	1,105	.	.	12,565	502,604
1 Nyanza	177	87.7	.	3,576	72,860
1 Western	.	.	.	.	.
Coast	81	168	7	656	19,680
Nairobi	.	.	.	.	.
1 Eastern	560	270	.	1,000	20,000
1 North Eastern	.	.	.	.	.
jSub- Total	**2,512**	**533**	**319**	**21,529**	**704,236**
i **Pawpaws**					
1 Central	557	174	185	1,359	25,575
[Rift Valley	601	.	.	6,814	340, 690
Nyanza	370	180	.	9,678	551,600

[Western	-	-	-	-	-
["Coast	260	1,695	24	18,750	281,250
[Nairobi	-	-	-	-	-
[Eastern	1,200	1,000	-	10,000	100,000
[North Eastern	285	148	2,760	1,422	19,710
[Sub -Total 1	**3,273**	**3,197**	**2,969**	**48,023**	**1,318,825**
[Water Melons					
[Central	-	-	-	-	-
Rift Valley	106	-	-	2,863	71,575
Nyanza	205	93	-	919	2,780
Western	-	-	-	-	-
Coast	1,391	718	557	8,740	262,200
Nairobi	-	-	-	-	-
Eastern	142	80	-	200	2,000
North Eastern	260	217	4,850	3,990	39,900
Sub- Total	**2,103**	**1108**	**5,407**	**16,712**	**378,455**
Pineapples					
Central	770	280	283	6,030	68,350
Rift Valley	2,244	-	-	57,335	17,200,320
Nyanza	457	400.4	-	26,775	7,836,924
Western	212	34	-	2,524	72,330
Coast	113	387	87	1,942	58,275
Nairobi	-	-	-	-	-
| Eastern	17	10	-	50	150
1 North Eastern	-	-	-	-	-
[Sub- Total	**3,813**	**1,111**	**370**	**94,656**	**25,236,349**
1 Macadamia Nuts					
| Central	984	461	469	2,779	134,731
[Rift Valley	-	-	-	-	-
| Nyanza	-	-	-	-	-

Western	-	-	-	-	-
Coast	-	-	-	-	-
Nairobi	-	-	-	-	-
Eastern	1,360	1,360	0	3,000	105,000
North Eastern	-	-	-	-	-
Sub -Total	**2,344**	**1,821**	**469**	**5,779**	**239,731**

Source: *Department of Crop Management, MoA*

APPENDIX 8

Samples of the questionnaires

QUESTIONNAIRE INTENDED FOR GOVERNMENT OFFICERS

Note

Everything you say will remain confidential. This questionnaire is purely for academic purpose.

Please tick **(V)** where is appropriate.

1. What is your Gender? Female I I Male [

2. Designation

3. In what ways does the government of Kenya assist horticulture producers/exporters to implement Council Directive 2000/29/EC of 8 May 2000 which is on protective measures against the introduction into the community of organisms harmful to plants or plant products anil against the spread within the community?

Yes • No •

If yes what exactly does it do

If yes how successful has the government been in negotiating for that requirement

4. Does the government of Kenya negotiate with European Union for better trading terms/implementation terms as far as Council Directive 2000/29/EC of 8 May 2000 which is on protective measures against the introduction into the community of organisms harmful to plants or plant products and against the spread within the community?

Yes Q No | |

If yes what exactly does it do

If yes how successful has the government been in negotiating for that requirement?

6. In what ways does the government assist Kenyan horticultural producers/exporters in implementation of Directive 85/374/EC which lays down the principles of product liability in the EU?

What exactly does it do?

How successful has the government been in negotiating for that requirement?

7. Does the government negotiate with European Union as far as implementation of Regulation (EC) 1234/2007 in conjunction with Regulation (EC) 1580/2007 which provides the marketing standards for all fresh, unprocessed fruits and vegetables e.g. packaging?

Yes • No •

If yes how successful has it been, please mention various ways it has succeeded in.

8. Does the government negotiate with European Union as far as implementation of Regulation 396/2005 of the European parliament and the council of 23 February 2005 which are on maximum residue levels of pesticides in products of plant and animal origin is concerned?

Yes • • No • •

If yes, please explain the success

9. Does the government negotiate with European Union as far as implementation of Regulation 178/2000 of the European parliament and of the council of 28 January 2002 on food safety which establishes traceability is concerned?

Yes • No I I

If yes, how successful has it been, please mention various ways it has succeeded in.

10. Does the government negotiate with European Union as far as implementation of EEC regulations 315/68 and 316/68 which set quality standards for flowering bulbs, corns and tubers and for fresh cut flowers and fresh ornamental foliage is concerned?

Yes • fro I I

If yes, please explain, in which ways

11. Does the government negotiate with European Union as far as implementation of EUREPGAP control point on irrigation/ fertigation which highlights the need to predict irrigation requirements is concerned?

Yes |___| No |___|

If yes what exactly does it do

12. Does the government negotiate with European Union as far as implementation of EUREPGAP control point on crop protection, product storage and handling is concerned?

Yes • No I—I

If yes, please explain in which ways

Explain how successful it has been

13. Does the government negotiate with European Union as far as implementation of EUREPGAP control point on worker health, safety and welfare which emphasizes on risk assessment for safe and healthy working conditions is concerned?

Yes • • No 1 |

If yes what exactly does it do

How successful has it been

What measures has the government taken to ease the implementation of European Union requirements by Horticultural producers/ exporters?

14. Is there any government department that addresses challenges faced by Horticultural exporters to European Union?

a) Yes •

b) No •

If yes, (a) which particular challenges are addressed?

(b) In what ways has it been successful?

QUESTIONNAIRE INTENDED FOR HORTICULTURAL OFFICERS

Note

Everything you say will remain confidential. This questionnaire is purely for academic purpose.

Tick **(V)** where appropriate.

1. What is your gender?

Female I 1 Male I I

2. Designation

3. In what category does your farm/firm fit in?

Small -scale horticultural Exporter |—|

Medium horticultural exporter |__|

Large -scale horticultural exporter I__I

4. In what ways do Council Directive 2000/29/EC of 8 May 2000 which is on protective measures against the introduction into the community of organisms harmful to plants or plant products and against the spread within the community affects your exports. Please indicate whether it is in terms of volume or if it affects your exports in terms of percentage of cost compared to other production/export requirements expenses.

5. In which ways does Directive 85/374/EC in conjunction with Regulation (EC) 1580/2007 which lays down the principles of product liability in the EU affects your exports. Please indicate whether it is in terms of volume or if it affects your exports in terms of percentage of cost compared to other production/export requirements expenses or in whichever way it does.

6. In what ways does the Regulation 396/2005 of the European parliament and the Council of 23 February 2005 which is on maximum residue levels of pesticides in products of plant and animal origin affects your exports. Please indicate whether it is in terms of volume or percentage of cost compared to other production/export requirements expenses or in whichever way it affects.

7. In which ways does Regulation 178/2000 of the European parliament and of the council of 28 January 2002 on food safety which establishes traceability for food products affects your exports. Please indicate whether it is in terms volume or percentage cost compared to other production/export requirements expenses or in whichever way it affects.

8. In which ways does EEC regulations 315/68 and 316/68 which set quality standards for flowering bulbs, corns and tubers and for fresh cut flowers and fresh ornamental foliage affects your exports. Please indicate whether it is in terms of volume, or percentage of cost compared to other production/export requirements expenses or in whichever way it affects.

9. In what ways does EUREPGAP control point on irrigation/ fertigation which highlights the need to predict irrigation requirements affects your exports. Please indicate whether it is in terms of volume or percentage of cost compared to other production/export requirements expenses or in whichever way it affects.

10. In what ways does EUREPGAP control point on crop protection, product storage and handling affects your exports. Please indicate whether it is in terms of volume or percentage of cost compared to other production/export requirements expenses or in whichever way it affects.

11. In what ways does EUREPGAP control point on worker health, safety and welfare which emphasizes on risk assessment for safe and healthy working conditions affects your exports. Please indicate whether it is in terms of volume or percentage of cost compared to other production/export requirements expenses or in whichever way it affects.

12. In what ways does the government assist in easing the negative effects brought about by the implementation of European Union market requirements by producers/exporters?

13. Do you feel that EU market requirements add an extra cost burden to your exports?

Yes • No I I

If yes, please explain

14. Is there any government department that attempts to bargain with EU to ease the challenges posed by implementation of EU market requirements on Kenyan Horticultural exporters?

Yes • No I 1

Please explain in what areas

In what area has it succeeded in

15. Which are the biggest challenges faced by horticultural exporters to EU as far as EU market requirements are concerned?

16. Which EU market requirement do you consider to be making Horticultural exporters incur high costs?

Please explain about the charges/costs

17. Is your farm a member of an association that lobbies for the interests of the Horticultural exporters with European Union?

Yes No **HZ]**

If yes, what exactly does it lobby for

In what areas have you succeeded lobbying for?

Feel free to make any other comments you wish below.

QUESTIONNAIRE FOR STAFF WORKING WITH INSTITUTIONS DEALING WITH HORTICULTURAL EXPORTS/ HORTICULTURAL PRODUCTS

This questionnaire is intended for academic purpose. Your participation will be treated as confidential.

1. Does your institution play any role in implementation of EU market requirements by Kenyan horticultural producers/exporters?

   Yes • No [ZD

   (a) If yes what role does it play?

   (b) If yes, how has it been successful?

   (b) Do you lobby with European Union on behalf of producers/exporters concerning this requirement?

   Yes • No I I

   If yes, in what ways has it been successful?

2. Does your institution play any role in implementation of EU market requirement Council Directive 2000/29/EC of 8 May 2000 which is on protective measures against the introduction into the community of organisms harmful to plants or plant products and against the spread within the community in relation to Kenyan exporters/producers?

   Yes • No I I

   (a)If yes what role does it play?

(a) How successful has it been?

(b) Do you lobby with European Union on behalf of producers/exporters concerning this requirement?

Yes • No 1 I

If yes, how has it been successful?

3. What role does your institution play in implementation of EU market requirement Directive 85/374/EC which lays down the principles of product liability in the EU in relation to Kenyan exporters/producers?

Yes • ' No I I

(a)If yes what role does it play?

(a) How successful has it been?

(b) Do you lobby with European Union on behalf of producers/exporters concerning this requirement?

Yes • No I 1

If yes, how has it been successful?

What role does your institution play in implementation of EU market requirement Regulation (EC) 1234/2007 in conjunction with Regulation (EC) 1580/2007 which provides the marketing standards for all fresh, unprocessed fruit and vegetables e.g. packaging relation to Kenyan exporters/producers?

Yes • No I I

(a)If yes what role does it play?

How successful has it been?

(b) Do you lobby with European Union on behalf of producers/exporters concerning this requirement?

Yes • No I I

If yes, how has it been successful?

5. What role does your institution play in implementation of EU market requirement Regulation 396/2005 of the European parliament and the council of 23 February 2005 which are on maximum residue levels of pesticides in products of plant and animal origin in relation to Kenyan exporters/producers?

Yes • No I I

If yes what role does it play?

How successful has it
been?

(b) Do you lobby with European Union on behalf of producers/exporters concerning this requirement?

Yes C D No I I

If yes, how has it been successful?

6. What role does your institution play in implementation of EU market Regulation 178/2000 of the European parliament and of the council of 28 January 2002 on food safety which establishes traceability for food products in relation to Kenyan exporters/producers?

Yes • No I I

What role does your institution play?

How successful has it
been?

(b) Do you lobby with European Union on behalf of producers/exporters concerning this requirement?

Yes • No I I

If yes, how far has it been successful?

7. What role does your institution play in implementation of EU market EEC regulations 315/68 and 316/68 which set quality standards for flowering bulbs, corns and tubers and for fresh cut flowers and fresh ornamental foliage in relation to Kenyan exporters/producers?

Yes • No [___|

What role does your institution play?

If yes, (a) how has it been successful?

(b) Do you lobby with European Union on behalf of producers/exporters concerning this requirement?

Yes • No I I

If yes, how has it been successful?

8. What role does your institution play in implementation of EU market EUREPGAP control point on irrigation/ fertigation which highlights the need to predict irrigation requirement in relation to Kenyan exporters/producers?

Yes • No •

What role does it play?

How successful has it been?

9. What role does your institution play in implementation of EU market EUREPGAP control point on crop protection, product storage and handling in relation to Kenyan exporters/producers?

Yes d] No 1—|

What role does it play?

How successful has it been?

(b) Do you lobby with European Union on behalf of producers/exporters concerning this requirement?

Yes • No •

If yes, how has it been successful?

10. What role does your institution play in implementation of EU market EUREPGAP control point on worker health, safety and Welfare which emphasizes on risk assessment for safe and healthy working conditions in relation to Kenyan exporters/producers?

Yes |___| No |___|

What role does your institution play?

If yes, (a) how has it been successful?

(b) Do you lobby with European Union on behalf of producers/exporters concerning this requirement?

Yes • No I I

What role does your institution play?

How successful has it been?