

UNIVERSITY OF NAIROBI

**FACULTY OF ARTS
DEPARTMENT OF SOCIOLOGY**

**EMERGING LINKAGES BETWEEN SMALL-
SCALE FARMERS AND MNC'S IN THE
MARKETING OF HORTICULTURAL PRODUCE
IN KIRINYAGA DISTRICT. 4**

**A Project Submitted To The Department of Sociology
In Partial Fulfillment of The Requirements For The
Masters of Arts Degree**

By

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DECLARATION

I hereby declare this project paper is my original work and has not been submitted to any university for examinations.

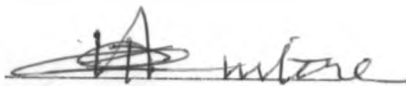
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DEDICATION

This work is dedicated to my family. I would also like to dedicate this paper to the people of Mwea division in Kirinyaga district in Kenya for their tireless effort and hard work in marketing and farming of French beans in a competitive world market.

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ABBREVIATIONS

COMESA	Common Market for East and Central Africa
EU	European Union
EPC	Export Promotion Council
EUREP	European Retailer Production Working Groups
FPEAK	Fresh Produce Exporters Association of Kenya
GAP	Good Agricultural Practices
GOK	Government of Kenya
HCDA	Horticultural Crops Development Authority
IMF	International Monetary Fund
JICA	Japan International Cooperation Agency
KBS	Kenya Bureau of Standards
KEDS	Kenya Export Development Support
KEPHIS	Kenya's Plant Health Inspection Service
MRL's	Maximum Residue Levels
MNC's	Multinational Corporations
MOA	Ministry of Agriculture
NEPAD	New Partnership for African Development
NIB	National Irrigation Board
TNC's	Transnational Corporations
OAU	Organization of African Unity
SAP's	Structural Adjustment Programmes

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ABSTRACT

The study set out to investigate on the problem statement on the role of Multinational Companies in relation to the efforts of small-scale horticultural farmers establishing themselves in the global market. The study took a representative of horticultural farmers in Mwea division in Kirinyaga District.

The objectives of this study were to examine the effects of globalized agriculture on local small-scale horticultural producers. This was made possible by examining the set up links that have existed over the years in the export of French beans. The objectives were further analyzed by establishing the success and failures of upcoming linkages set up between Multinational companies and farmers.

Quantitative data was collected through survey research from a sample of 90 small-scale farmers. Qualitative data was collected from key informants and secondary data in form of relevant books.

The study findings reveal that horticultural farmers for a long time have suffered through the manipulation and mishandling of the work of middlemen better known as brokers. The study also established that farmers are uniting to work together in order to enter in contractual agreements with Multinational companies. The linkages between companies and farmers are defined by written down contracts that are monitored by the European importer of the French beans.

The study concluded that the farmer has had some set backs in trying to establish a niche in the international horticultural market. But in the wake of contractual farming, farmers are getting some benefits in the marketing of their products in the international market through multinational companies.

Based on these findings the study recommended that there is need for better government involvement in the support of the farmers in the rural areas. The study also recommends the need for cohesiveness within the farmer groups.

CHAPTER ONE

1.0 Introduction

In the recent years globalization has taken center stage in all world affairs. It cuts across economic, cultural, social, political and religious affairs around the world. Many nations and states have been and continue to be in the pursuit to create a global village through cross border relations. This has resulted in shared ideas, resources and technological information. As Globalization navigates the world to a different course, economic globalization has emerged in form of global production and global marketing through Multinational Corporations (MNC's). MNC's are sometimes called Transnational Corporations (TNC's) (Gereffi 1994). These increasing large global bodies are greatly involved with horticultural farming in Kenya through subcontracting relationships with private firms (Jaffee & Morton 1995:80).

Globalization on a broad scale is defined as a set of processes that increasingly make the parts of the world interdependently integrated (Dickens, 1998:5). Another definition put forward by Otsubo (1996:1) more specifically defines " economic globalization as the integration of production, distribution and use of goods and services among the economies of the world." He adds that signs of globalization are manifested at a factor level in the increasing flows of capital and labour, and at the product level in a resounding growth in world trade beyond the growth of world output.

This study seeks to elaborate and highlight on one of the major indicators of economic globalization. That is, the work of middlemen representing Multinational Corporations with and through small-scale horticultural farmers in Kenya. The focus of the project was to examine and establish the existing and upcoming linkages between MNC's and local small-scale horticultural producers in Kirinyaga district.

Kenya is one of the very few Sub Saharan African countries that have emerged as major participants in international horticultural markets (Jaffee 1995:320). Kenya's horticultural trade has been far more diverse in terms of the range of products traded, the participants and the institutional arrangements, which have emerged to govern the trade. Kenya had a narrowly based trade in the 1960's. Having a few dominant products, small numbers of participating farmers and firms, Kenya's horticultural export sub-sector now delivers some seventy-five products to more than a dozen markets. The production base ranges from very small farmers to large plantations. The trade passes through a dense network of traders and processors of varied origins and diverse operational characteristics (Jaffee 1995:320).

Different links have been established with the middlemen some formal and others informal. Formal agreements are set up with the state policies and the intervention of the present government. On the other hand, the informal agreements have been operated entirely based on how the middlemen choose to communicate with farmers directly through contractual farming. Contract farming of horticultural crops has been seen as a win-win situation for small holders, raising opportunities for both income and self-employment (Dolan 2001:3).

On a global scale horticultural farming in Kenya is proving to be a very profitable industry. According to reports of Export Promotion Council (EPC), Kenya is moving towards a modernized approach in horticultural farming. Kenya is said to be the leading world exporter in horticultural products. The income earned from horticulture amounts to 25% of foreign exchange earned in the country after tourism (Ministry of Planning and Finance 2000). The table 1 below gives figures of the growth of the horticulture over the years as documented by the Economic Survey 2004(pg. 133):

Table 1: The growth of horticultural export

Year	Volume ·000 tones *	Value Kshs billion *
2000	99.2	13.9
2001	98.9	20.2
2002	121.1	26.7
2003	133.3	28.8

*Figures are exports by Horticultural Crop Development Authority

The increase in value is attributed to improved packaging particularly of cut flowers reinforced with the weakening of the Kenya shilling in 1999. The increase in horticultural export volume is attributed to more use of shipping as an alternative to airfreight. Shipping is cheaper and more convenient especially for fruits and vegetables (Economic Survey 2000).

With this in mind, this project addresses the issue of how a profitable sector in the economy has affected the lifestyles of small-scale horticultural farmers. The evidence collected has been documented and preserved in this academic paper. The evidence

gathered relates to the links that have been set up by the main stakeholders in the horticultural market. Moreover, the project seeks to explain how the links have contributed to the successes or failures of horticultural farming.

Over the years the Horticultural Crops Development Authority (HCDA) under the Ministry of Agriculture has handled the work of exports with horticultural farmers (MOA 1989). In recent years the demand for this crops has become great on a global level and the follow up on horticultural farmers across the rural divide has not be easy. The MNC's probably came into the work of horticultural production at a time when the demand for products in the international market was high. A lot of marketing and maintenance has been handled by the private sector. Out of all the research that had gone into horticultural farming, it was important to establish, whether farmers have relations with the concerned middlemen from the private sector. To fill this gap the study sought to understand if the horticultural sector has improved with the initiatives of the global marketing institutions.

Having established the existence of the foreign links and ties with MNC's this study set out to explore the nature of this links by looking at the small-scale production farmers in Kirinyaga District and how much they are involved in this systems.

Kenya's main destination for horticultural exports is European Union Countries and the Middle East. Horticultural produce exporters in Kenya and its environs are concerned about the many conditions set by their traditional European markets; these conditions range from quality, packaging and presentation of produce (Roozendal, 1994). The exporters have sought alternative outlets such as South Africa, Australia, the Far East, the

United States and Japan. These markets have as well proved to have strict quality standard requirements. The trends of export have increased over time and statistics are predicting a rise in exports. Reports from Kenya's Export Promotion Council (EPC) together with the European Union (EU) statistics show that Kenya was the largest supplier of cut flowers to Europe, with total exports worth Kshs 9.1 billion in 1999, 10.8 billion in 2000 and 11.1 billion Euro in 2001. It continues to say that over the past decade exports have increased from 3,224 tones earning 10 million in 1970 to 49,504 tones earning kshs 1.4 billion in 1989. This remarkable improve is highly attributed to the work of the private sector which has developed and become profitable which made available international and local outlets. In this regard, the project paper sought to identify whether the relationships with the private sector have been beneficial to the farmers.

Most of Kenya's economy is sustained by the success of productive areas, such as Kirinyaga District. It was important to investigate and establish how farmers in rural Kirinyaga are able to market their produce in the changing demands of the global market in the face of economic decisions in the world market. Some of the changing trends relate with relationships between horticultural producers and MNC's. New trends include different methods of contractual farming; export marketing and production of horticultural products.

A study by Japan International Cooperation Agency (JICA in Kenya) reveals that small-scale farmers contribute to 75% of agricultural production and are the key players in the sector. Recent trends indicate that small-scale farmers have largely been involved in

horticultural farming for domestic consumption and export market. (JICA Agricultural Development 1999-2001)

1.1 Problem Statement

The MNC's contribute to the highest main private exporters of Kenya's fresh flowers and vegetables and they hold shares in most countries in Africa and the rest of the world. In the horticultural industry in Kenya, these MNC's have invested heavily in the installation of cold facilities at the major airports in Nairobi, Mombassa and Eldoret and in many parts of Nairobi. Modern wholesale markets have also been established in these main towns. Prepackaging of high value and perishable vegetables and fruits is ensured such as French beans and strawberries destined for the European markets are undertaken by some of the large MNC's (FPEAK 2001). The produce from Kenya is highly desirable and so the market continues to flourish. But in as much as we look at the global impact and results it has achieved, there is need to look at the small-scale farmers who are still languishing in poverty despite their efforts to sell their fresh fruits and vegetables. These products are in high demand in the European Countries. Karl Marx theory of capitalism maintains that there are classes of people who are involved in the production of goods and a different class of people who own the means of production and distribution. In the capitalist theory, there are those that are exploited and those who exploit. There seems to be a socio-economic gap between the lifestyles of small-scale producers and the value of their commodities. What role do the middlemen play in this link system? Is the farmer protected by the government of the day? It is difficult for the governments in liberalized economy to implement policies and regulations, which can act as check systems between

the farmers and the global marketers (Hoogvelt 1997:75). Given this background the study was guided by the following questions:

1. *What is the role of middlemen attached to multinational corporations with regard to small-scale horticultural farmers in Kirinyaga district?*

Horticultural farming is one of the multibillion industries that is highly globalized. Globalization as a recent phenomenon has affected the economic progress of the unstable underdeveloped world. Globalization can bring benefits but it is resulting in uneven inequitable consequences between and within African countries. Its effects need to be properly evaluated and global MNC's should address ways and means for the compensating for some of the unintended effects according to reports from World Summit on Sustainable Development (2002:19). It was important to establish how middlemen interact with the small-scale producers and at what point they take over the production process.

Being a controversial issue, economic globalization has indeed affected rural districts. The aim of the study was to collect and compile quantified and qualified data to show how globalization as a trend is affecting the horticultural farming taking a study of small-scale horticultural farmers in Kirinyaga district.

2. *What are the problems that Kenyan horticultural small-scale producers encounter in establishing a niche in the global markets?*

In efforts to help farmers create their place in the world market, have government's agents left the farmers to the mercy of the global giants? "Export markets are fairly

protected by policy measures. Third world countries are faced with restricted access. Even it's own resources are in foreign hands" (Lieten 2001:102). Most states especially in the Third World Countries have left forces in the global market to navigate the process of marketing and production. It would seem that the government of the day has shifted its attention to global economic trends, generating debates through forums. The forums are discussed within bodies established to give Africa a greater bargaining power, such as the OAU (Organization of African Unity) which in the recent years has been transformed into NEPAD. (New Partnership for African Development), and COMESA(Common Market for East and Central Africa). These organizations were established to look into issues concerning all African Nations (Onwuka and Sesay 1985). Which revolve on issues around development, strengthening bargaining power in trade and the relationships between governments and MNC's. However, the effects of the work of these bodies are yet to be recognized and more so, the results observed and recorded from the people in the furthest rural corners. The plight of agriculturists in Kirinyaga needed to be established. Farmers have developed ways of dealing with economic hardships that come with challenges of new technologies and strong economic blocs. As economic globalization rapidly takes the world by storm through global giants in the world market, there was need to find out if the farmers in rural societies have been over shadowed?

3. What are the benefits and shortcomings of marketing horticultural products in a globalized system to rural farmers?

Have the lifestyles of the people in the rural Kirinyaga greatly improved in the rise of profitable horticultural industry? This question sought to examine and establish whether

there are more advantages or disadvantages of dealing with middlemen in global marketing. It was important to establish whether the marketing channels have proved to be satisfactory to the farmer. According to Nabudere (Nyongo et al 2002:68), most societies in African have been brainwashed to believe that there is no other way the world can go except to globalize, the results of this is many marginalised societies resulted to the TINA¹ syndrome (Lieten 2001:99). If some farmers pulled out from the already established networks, would they be able to stand on their own and support themselves in a harsh global environment? Some farmers would probably argue that the safest place to find ones niche is through the MNCs by complying and following the rules and standards set by this co operations. What are the gains that come along with the working together with these global marketing giants? In addition, it was important to establish and know the hurdles that producers go through while working with the global giants.

1.2 Objectives

The overall objective of this study was to examine the effects of economic globalization on local small-scale horticultural producers. This was made possible by examining; the set up links and establish the success or failures of this links in relation to small-scale horticultural farmers taking a study of Kirinyaga.

¹ There Is No Alternative (TINA). Samir Amin 1996:84 confronts this defeatism with the following exclamation. "This position is absurd and criminal. All situations have alternatives" (Lieten 2001:99).

1.3 Specific Objectives

The specific objectives derived from the overall objective. Details were required to give specific evidence to the problem questions raised. The following specific objectives guided the study:

1. To identify the systems associated within links between horticultural producers and MNC's taking rural Kirinyaga District as an example.
2. To highlight and understand the limitations encountered by the horticultural producers in the efforts to integrate into the global world market with MNC's.
3. To establish the socio-economic effects of the co-operation between middlemen representing MNC's and small-scale horticultural producers and the approach farmers are taking to deal with emerging issues.

1.4 Justification

Literature captured earlier reveals that horticultural farming is a huge foreign exchange earner in Kenya. The small-scale horticultural farmers continue to live in poverty and yet they contribute to two thirds of all agricultural production (Dixon et al 2003:2). There was need to find out why there are so many poor people in the rural areas. In addition, to establish how this economic drift between the large-scale and small-scale farmer came about. It was import to document a report on the system of interaction between farmers

and middlemen representing MNC's. More specifically, this study was justified on the following reasons:

The *first reason* is that the academic field lacks substantial factual evidence that gives information on the relationship between small-scale horticultural farmers and MNC's. In this regard, data collected was used to establish quantitative and qualitative facts in an academic paper that will inform the scientific research and create awareness of systems of linkages. The interaction between small-scale farmers and middlemen needs to be evaluated critically to inform scientific research. The negotiation skills employed and the benefits to both parties in Kirinyaga were analyzed. Considering that globalization is an ongoing process the work of MNC's offer a tremendous opportunity for trade and interaction while on the other extreme some communities view globalization as confusing, undesirable and dangerous to local markets (Prah 2002:69). With the facts, the study set to establish whether there is a need for fears and worries by the rural communities.

The *second reason* for the study was to practically elaborate that there has been an impact on the change in lifestyle of the people in the rural areas because of globalization of agriculture. It was important to get the facts to know which came first whether it was the need to change the lifestyle of the people in the rural areas that resulted to globalized agriculture or is it vice versa? There was need to establish practically if the intended purpose of globalization have been achieved in the rural communities.

Third. Small-scale farmers are majority of horticultural farmers in Kenya they contribute 70% of agricultural farming (JICA 2001). They face many obstacles in global relations as they try to establish a niche in production and marketing. The study needed to inform policy so that challenges facing small-scale farmers can be taken into consideration in future policies. In all the efforts to maintain and uphold rural development the work of planners, economists, sociologists and other agents needed to be recognized and implemented in order to improve the lifestyle of people in the rural areas by giving them a means of livelihood. Indeed, in a country like Kenya where the economic growth rate is on average 2% per year a lot needs to be done by people of all sectors of the economy (Ministry of Finance and Planning 2000). The set up policies of international marketing and production need to be reviewed in order to help the people at the grassroots.

Fourth reason, was for the study to shed light on the systems of production and marketing that have been in operation in the rural areas between farmers with middlemen. The study fills in the gap through research on the linkages that exist. There was a need to review the appropriateness of systems that have been laid down over the years that govern horticultural trade. The evidence from small-scale farmers will add to the build up of information. The study finally establishes that globalization of agriculture has a link to the changing lifestyle of the people living in the rural areas. It is evident that with the liberalization of markets, there has been excitement on the wave of technological advancement and we need not forget that Kenya's economic sustainability depends on the agricultural sector. But the world trend on economic globalization is the formation of economic blocs like African Union and COMESA all geared towards improved trading relations between countries within the region.

The *fifth* and *final reason*, globalization as a recent ongoing phenomenon is an interesting field of research. Globalization has its odds and ins on one hand there is a global imbalance in the distribution of benefits and on the other hand the opportunities have increased to create or expand wealth, acquire knowledge & skills, & improve the quality of life thus lifting millions of people out of poverty. This study adds to the studies that have been done in the aspect of rural districts in Kenya for the purpose of research.

1.5 Scope of the study

The study was undertaken in Kirinyaga district in Kenya, which is a high productive area in central province. The district is clustered with Embu, Nyeri and Muranga in central province district where rain fed horticulture is prevalent in these areas, although irrigation of horticultural crops is widely spreading (Ministry of Agriculture 1982). The study concentrated on the aspect of production and marketing of vegetable horticultural crops that are found Kirinyaga District. The zonal effects² make Kirinyaga a suitable district. Kirinyaga district has four divisions namely Gichugu, Ndia, Mwea and Municipality.

The study focused on one representative division that is greatly involved in horticultural production; that is Mwea division. The lower zones of Mwea division are supplied by irrigated waters from canals from Nyamindi & Thiba Rivers that were constructed to supply water for irrigating horticultural crops.

1.6 Definition of key terms

Horticulture is defined as “the science and art of growing fruits, vegetables, flowers and ornamental plants” (Jaffe et al 1995:322). Horticultural farming or production is thus the use of mechanized and manual skilled labour to produce vegetables, flowers and ornamental plants using rain fed methods or irrigation waters for growth and germination. This form of farming is done on both small scale and large-scale production for marketing. The study focused on small-scale horticultural producers. The study looked at the production vegetables and fruits such as French beans, tomatoes, capsicums, aubergines, onions, passion fruits, and avocados. However, the central point of concentration in the study was on French bean farming. The study also looked at farm inputs, outputs, quantities produced and quantities exported towards French bean farming.

Globalization as earlier defined is a set of processes that increasingly make the parts of the world interdependently integrated (Dickens 1998:5). Economic globalization is defined “as the integration of production, distribution and the use of goods and services among economies of the world (Otsubo 1996:1). In the study economic globalization was measured by the linkages of the farmers to MNC’s. It was also measured by the number of channels that the farmers go through to market their produce. Operational costs towards production, yields produced and returns from marketed produce.

³ Zonal effects are classified into three aspects Agro-ecology (availability of rainfall), production factors (availability of suitable land, labour and capital) and Marketing (easy access to markets) (MOA horticultural handbook 1982).

Multinational Corporations (MNC's) are huge entities that are headquartered in core countries (rich countries) but do business in multiple nations both rich and poor. Wallace & Bradshaw 1996:49. In the study, MNC's are represented by middlemen that deal differently with horticultural farmers.

Middlemen: this refers to groups, individuals and companies that are involved in buying and selling from small-scale farmers the horticultural produce.

CHAPTER TWO

2.0 LITERATURE REVIEW

The objective of this section is to capture relevant literature reviewed with regard economic globalization and horticultural farming. The foundation of the chapter gives a brief account (emerging themes) on how horticultural farming began in Kenya from the agricultural crises. It also captures how Kenya has become integrated into the agricultural globalization. The section attempts to outline the present situation of small-scale horticultural farmers in Kirinyaga district. The main frame of this section describes the major themes that have emerged from literature reviewed. The final part of this section gives an account of the main schools of thoughts that impact development and underdevelopment in third world countries.

2.1 Agricultural Crises in Kenya

Kenya has been known world over for its production and export of tea, coffee & dairy products. Over the last two decades, there has been an immense depression in agricultural productivity that has greatly affected the economy of the country. Many reasons attributed to the gradual collapse of the coffee industry in Kenya. They range from climatic drawbacks, which include low unreliable rainfall, unpredictable rainfall patterns (Elnino phenomena) and long drought seasons. Tea production attributed to Elnino weather phenomenon declined by 15.5% from 294.2 thousand in 1998 to 248.7 thousand tones in 1999 (Economic Survey 2000). Other reasons highlighted by JICA (1999-2001)

include administrative drawbacks faced by the government established cooperative societies. Most agricultural co-operatives entered into financial constraints, because of mismanagement production levels diminished and giant co-operatives split into smaller units (see table 2 below). The governments reduced role in marketing, crop processing and acting as a channel for processing farm inputs greatly affected the growth and productivity of the farming industry. Among all this constraints, there was also lack of government commitment in improving infrastructure, poor water management, inadequate extension services, and inefficient agricultural technologies to help farm production among the farmers and inadequate access to affordable and appropriate credit facilities (JICA 2001). The table 2 below shows the continued drop in production levels of tea and coffee over the last decade.

Table 2: Drop in Production levels Tea and Coffee

Production in tones '000	1989/90	1990/91	1991/92	1992/93
Coffee Co-operatives	69.5	51.3	51.0	42.4
Coffee Estates	34.4	35.1	34.3	32.7
Tea Small-holder	110.0	112.7	99.81	112.53
Tea Estates	87.0	90.9	88.26	90.63

Table 2 Source: Economic Survey 2000

The World Bank in a report in 1981 identified three root causes of African economic crisis. The first reason cited by the World Bank are structural factors; such as history,

politics, geography and climate. Secondly, external factors; such as the disadvantaged position of African economies as primary-product exporters, and in particular the declining terms of trade of their exports. Finally, internal factors, especially deficient economic policies (World Bank, 1981). In many parts of Africa and Kenya as a whole, Agriculture has also been greatly affected by major economic reforms that came in form of structural adjustment programmes (SAP'S), which were laid out, by the World Bank and the International Monetary Fund (IMF). The introduction of certain quotas on imports and removal of subsidies on exports greatly affected the agricultural export commodities (Dolan, 2001). The adjustment policies went on to lay out that the states role in the economy be reduced, the liberalization and deregulation of markets, the encouragement of free agricultural production and exports without government interference, the rationalization of macroeconomic policies through the freeing of exchange rates, the reduction of budget deficits. Implementation of these policies was strenuous and they resulted to adverse effects to the African economies. African nations defaulted in implementing these adjustments and ended up with huge debt burdens and major economic crisis (Ndegwa, 1997). A modern form of dependency in Kenya developed where pressure mounted due to the issues of servicing foreign debt. These led to African state losing its political and economic strength (Mbatia, 1996:34-35). Without political and economic strength states are unable to stand on their own they thus become avenues for the rich nations to dictate terms of trade on the international market. Weak States result due to the lack of bargaining power and the borders of these nations are easily opened to all foreign investors. In Kenya's case, the agricultural sector was the most affected.

Bates (1981:2) postulates that one of the major problems hampering the growth of farming in Third World nations is the nature of incentives offered to producers. Given the right and sufficient incentives, farmers can overcome barriers. The growth of horticultural farming might have come about of these incentives offered by Multinational companies or lack thereof on the other side. Through a review of part evidence the links between small-scale producers and major MNC's through middlemen have been explored to establish if they are formal. Moreover, the evidence explains whether there is a relationship between growth of export of horticultural products and the change in lifestyle of the small-scale horticultural producers.

2.2 Horticultural Farming in Kenya

In the early 90's farmers began slowly drifting away from farming traditional export commodities (which include tea and coffee). This was due to the economic crises in Kenya and the lack of a promising export sector. The HCDA, which is an arm of the Ministry of agriculture, experienced major shake-ups in the early 80's (MOA 1989). The work of marketing and production of horticultural produce began shifting to private traders mostly rich Multinational Companies who worked with middlemen located in the country. Many small-scale farmers in central Kenya with active encouragement of the government and development agencies pursued production of high value "niche" crops

such as fruits and select vegetables (Little 2000). These crops have lately become known as Non-Traditional Commodities (NTC's)³ (Little2000).

On a broader scale, horticultural farming commercially dates back to the 1960's. The work of Ngone (1975) explains that the Horticultural Crops Development Authority (H.C.D.A) was established to fulfill the need to diversify the exports of agricultural exports in Kenya. This was to enable the country more foreign exchange to create more employment in the rural areas (GOK 1970). In the early 70's, the government of the day was highly involved in the success of horticultural crops through HCDA and import countries. The farmers were assured of a ready market as long as the quality of the produce was to the expectations of the European markets. Problems experienced by farmers of that day were on issues like choice of crops and acreage allocation, constraints in production of high quality products, selling outlets and competition between station and private traders. Economic efficiency of grading stations and operating costs was of great concern back then (Ngone 1975).

From the previous century to the current times, have there been many changes in the horticultural industry? The study highlights on the changes the trade has experienced in the light of all different approaches that have been adopted by development agencies and the government of the day. The study set out to elaborate whether farmers still experience the same constraints! Considering that statistics have revealed that horticultural farming is a major foreign exchange earner the questioned asked is why are people in the rural

³ "In the hopes to diversifying exports, increased trade revenue and enhancing the so-called private sector farmers have resulted to the production of non-traditional commodities"(NTC)(Barnham et all 1992; Meerman 1997; Worldbank 1980)

areas still poor. The study attempts to fill the economic gap. It was important to examine the links involved in the production and marketing and examine where all the foreign currency earned is absorbed.

Small-scale producers dominate the production of French beans, Asian vegetables and fruit. In the vegetable sector strict limits on pesticide residues in the European markets have tended to favor the larger producers and exporters who are able to organize to have some control over the production practices of their suppliers particularly with regard to intervals between pesticide sprays and picking. Larger producers are also favored by quality of prepackaging French beans ready for the supermarket shelf and immediate for cooking. Airfreight expenses have also been costly for the Kenyan producers. There seems to be great competition from the countries such as Gambia and Morocco, which have advantage of shorter distances thus less costs in air-freight (Kenya Scenarios 1998).

It is internationally agreed for example that when a pesticide is applied to any intended commodity its residues on any consumable portion must not exceed the Maximum Residue Levels (MRL's), which has been set as zero. Kenya's Plant Health Inspection Service (KEPHIS) ensures that these standards are met but when products reach the European market, the European inspection team rejects the products (KEPHIS 1996). These are just but a few of some of the conditions to be met. All the conditions can be discouraging to small-scale farmers. Contract farming has come up as a way of survival for small-scale farmers. A study by Dolan (2001) was done to analyze the divisive impact of horticultural farming through the contract farming. The study based in households farming French beans in Meru District Kenya. The findings established that export of

vegetables have increased rapidly over the last decade surpassing coffee (once Kenya's most prosperous export crop). The findings also revealed that some two million people are now employed in the export horticulture sector with half the trade volume derived from 15,000 small-scale farms (Dolan 2001). The study did not capture or identify the roles of different contact persons in the channels of contract farming. This research identifies the different roles of different contact persons and tries to fill the gap on the existing channels of contract farming especially with middlemen. In addition, findings of this study attempt to indicate whether the lifestyles of these people have generally improved in the face of widening poverty margins in the rural areas.

2.2.1 The Growth of Horticultural Farming in Kirinyaga

In Kirinyaga district, Kibirigwi Irrigation scheme was started in 1979 with donor funding. This was one of the successful schemes in horticultural production of tomatoes, potatoes onions and French beans. However, due to many internal and external problems it collapsed in 1995 with the withdrawal of donor management. In the initial years of the project, the Ministry of Agriculture (MOA) provided extension workers, production was good-high yields, they also provided efficient extension service, and efficient marketing and farmers were highly motivated. Farmers were provided with machinery and sprinklers. In the mid and late 1980's managerial problems and crop disease plagued the scheme leading to its final collapse. Financial problems began and farmers did not recover their money. Then out of despair and lack of confidence on the co-operative officials, production declined and systems maintenance collapsed. Due to lack of crop rotation the soils acquired a build up of bacterial diseases such as black rot and bacterial

wilt. Contaminated seeds area also known to lead to the build up of these diseases in the soil (JICA 1997). Horticultural farming is now prevalent in Mwea Division with farmers working together with H.C.D.A and private middlemen (MOA 1999).

The collapsed projects in different part of Kirinyaga resulted in farmers slowly scattering and beginning farming individually on small scale. The main crops grown today are French beans, tomatoes and choice fruits. The study set out to establish and learn how these farmers come together in the present day without the involvement of the Ministry of Agriculture and donor agents to facilitate the marketing of their produce. To succeed in the trade they have adopted alternative mechanisms. According to Jaffee (1995:38), export oriented operations have been sustained by extra market trading networks. These have provided input in transaction costs, improved access to information, and have assured farmers of market outlets even in unsuitable or declining markets. Extra markets networks have taken various forms and have involved both informal and formal systems. The communities have established personalized systems and based on agreements and sanctions with middlemen and private investors.

2.2.2 Systems of horticultural markets in the global scenario

The entrance of MNC's in Africa dates back to pre-colonial days, whereby most of the raw material resources were produced in the heart of Africa and transported back to the European countries to process finished goods and products. Much of Africa's external trade in primary agricultural commodities was handled by European trading companies

that operated with support and protection of metropolitan and colonial governments (Jaffee & Morton, 1995:77).

These foreign companies in the recent years have slowly shifted their investments towards expanding existing capacity and trade or toward diversifying product lines away from commodities facing adverse market trends. Kenya for instance has witnessed diverse diversification of foreign owned tea, coffee and sisal companies into horticultural production and trade (Hoogvelt 1982:3).

Kenya produces cut flowers for export. Flower farming has proved to be very profitable. Flowers constitute an industry that earns US \$ 3040 million a year (Roozendaal 1994). However, a large part of the profit does not stay in the country. The HCDA has been trying to check the leakage of foreign exchange, but this has proven to be very difficult. A reason for this is that many transactions take place outside Kenya. One branch of Dutch Rabobank alone has 15 Kenyan flower growers using its payment system. Additionally, it seems that the trade does not make any substantial contribution via taxes. International development agencies such as USAID funded Kenya Export Development Support (KEDS) project on horticultural products. The aim of the project is to increase employment and foreign exchange earnings in Kenya through the non-traditional export. In order to achieve this, KEDS offers short and long term technical assistance commodities, training and analytical research to both the Kenyan public and private sector (Roozendaal 1994).

The work of MNC's is free from government interference in many countries only the rich governments work around the conditions of these firms. This conditions set are normally to check the quality of the products going into the overseas markets. Many reasons sited by international markets why Kenya is favorable place for horticultural farming is cheap labor and favorable climate. Studies indicate that most horticultural systems of marketing across the global scenario are mainly established and sustained through contractual farming (Kabira 2002).

In the horticultural industry, private firms and individuals have been largely permitted to develop their own institutional arrangements and respond to international market signals. Contractual farming has been successful in other districts e.g. the contractual farming for potatoes farming in Nakuru District a study by Kabira (2002). The findings of this study were that factories grow their own potatoes and process them. Factories are also associated with out growers in nucleus plants. Factories make contractual arrangements with brokers and wholesalers. The above study was done on a large-scale production. This was not possible for small-scale producers due to poor market returns and food security concerns caused by the devastating effects of the lager grain borer countrywide. Most middlemen will go for large-scale because they are more profitable (Kabira 2002). There is definitely more focus on the large-scale producer where more profit is derived. The question then arises who handles the agricultural concerns of the small-scale farmers. This study brings forward the views of small-scale horticultural farmers.

Contractual farming involves an interaction of land, labor and capital towards market relationships. It involves strong commitment of labor and land on the part of the grower

and provision of credit and inputs by the buyer. By extending inputs and other services (e.g. credit) to smallholders, contracting firms and buyers acquire access to the farmers land and labor for the production of agricultural products (Little 2000). Many of the farming relationships in Kenya are contractual (Jaffee and Morton, 1995). The use of contract farming by large firms is usually a means to reduce labor costs by pushing these costs upon the out-grower and by not having to manage and rely on a hired workforce. Out-grower relationships are defined in different strategies whereby the export firm often has a nucleus farm that is surrounded by small out-grower units. At the start of planting seasons the exporter and the out-grower usually agree on a fixed price. This scenario has been captured by Little (2000) in a paper describing contractual farming in Peri-urban Areas of Sub-Saharan Africa. The nature of contract farming involves following aspects as outlined by Little 1999:5 firstly, high-value specialty crops with lucrative niche markets. Secondly, the need for consistent, reliable supplies on the part of the buyer or supplier the latter that may be a processing company. Thirdly, a system of input and output markets that cannot be met through open market purchases. Lastly, a labor intensive commodity that small holders can produce efficiently. The benefits of contract farming to the firms seem to outweigh the benefits to the farmer. Critically observing the relationship in contract farming one concludes that it is basically one sided in terms of who sets the conditions. The end produce is exported at a cost, which the firm receives and the farmer gets a small portion.

Contractual horticultural farming has become so popular and most farmers have benefited within this agreements between the marketers and farmers. These include being supplied with machinery, seeds, fertilizers and other equipment. But these benefits are limited and

they do not reach to the small-scale farmer who has limited resources. In a case where farmers are not associated with large firms it was important to research on the methods the small scale producer is able to grow and market their products.

2.3. Main Themes in globalization

By observing the changing trends of the agricultural sector from the above review, the major theme emerging is the globalization of agriculture. It is quite concise that globalization has played a role on the development of Kenya as a Third World Country. The growth of the horticultural industry is being influenced by systems in the global scenario. The following major themes in this section have informed the study.

2.3.1 Role of economic globalization in development or underdevelopment

Many scholars argue that the work of globalization is not new. Globalization is the expansion of the west over a decade of years. Prah (2002:34) chooses to explain that globalization came up as a series of stages from imperialism to early mercantilism, industrial capitalism, monopoly capitalism and contemporary trans-national finance capitalism. In many parts of the world, the economies have become integrated through these processes. The scholars of the day seem to disagree with the whole concept of a global village this is because there are richer nations with the competitive advantage and so the poorer nations have suffered over unfair trade relations. The distribution of power and resources is still unequal. The relationships between MNC's with less developed Countries have proved to be restrictive, rigid and exploitative (Bradshaw & Wallace 1996:49). Others believe and theoretically argue that globalization has benefited and

continues to benefit the whole world as a whole (Oden 2001:56). Globalization as a historical process resulted in innovation and technological progress. It refers to the increasing integration of economies around the world particularly through trade and financial flows (IMF 2000). Trade within the COMESA region has increased greatly. Foreign goods have invaded Kenyan supermarkets to the point of drowning our locally manufactured goods. As we observe the current Kenyan society, it is entirely and purely capitalistic in nature. Accumulation of wealth is the order of life. The rich are getting richer and the poorer more poor. The cost of living is high and medical services are still not within the reach of people in the remote areas of the nation.

The work of Multinational corporations has far surpassed international trade as a channel for international economic exchanges. Multinational companies have created a widening chain out of the process of international production. The combined production of all multinational corporations abroad is now greater than the total value of goods and services that enter the trade between countries. This has come to be known as the *internationalization* of production (Hoogvelt 1982:3). The larger role of economic globalization was to make partnerships in the world market. This was to enhance international trade and break down borders between nations. For some, globalization is an ongoing process for others, are convinced that we have already achieved a truly global market place. Yet, to others the global economy represents tremendous opportunities for others it is a confusing gray area.

There was a need to redefine the relationship between actors participating in the global scenario and to avoid some countries especially third world countries from falling behind.

The process of globalization appears to have reinforced the marginalization and exclusion. Slaughter and Swagel 1997:1&4 have mentioned that globalization has coincided with higher unemployment among the less skilled and with widening income inequalities. The African markets continue to be dumping sites for unwanted goods from the west. Cheap drugs and second hand clothing wear flood the streets. The second rated goods are welcome to Kenya because of the poverty levels of the majority people who can afford them.

2.3.2 Concept of economic globalization

Lieten 2001:99 analyzes the concept of economic globalization, as represented by a drive towards liberalization, privatization and downsizing of the state involvement in economic affairs in a nation. All this processes are geared towards wholesome development. Significantly, the emergence of borderless ness, global diffusion and an existence of global infrastructure can further examine the concept of globalization.

The interrelationships of markets, finance, goods and services and the networks created by transnational corporations are also major economic relations that have been created through economic globalization. There has also been a transformation in the organization of production and marketing among smallholder farmers in Africa. Economic globalization has also brought an aspect of agribusiness and contract farming (Little 1999:5). The systems of agribusiness and contract farming are what that has led to the growth of globalization of agriculture.

2.3.3 Globalization of Agriculture

Globalization of agriculture comes in the wake of international production and marketing of agricultural products across the borders. Globalized agriculture has had various effects and changes in the world market. There have been changes in transaction costs, changes in input-output co-efficient (due to technology development research) and changes in relative prices of products. Different policies have been laid out in the world market. These policies have had different impacts on African Nations with prevailing policies in these countries. Policies that dictate how much economic power are on both the producer and the marketer. Policies by governments on subsidies for external inputs especially fertilizer and improved seeds. Also, Policies in the world market on quotas that affect the cost of imports and exports. All these depend on government support (Dixon et al 2003:iv). Globalization of agriculture has also brought about the transfer of research and development skills across borders and multinationals have gone into specialization of production. Specialized production has resulted to mono cropping on large tracts of land both individually or corporately owned. The benefits accrued from this form of farming is more profitable than intercropping. These have in effect lead to winners and losers based of comparative advantage (Swanson et al 2002:2). Factors such as climate, water for irrigation and government system bring about the comparative advantage.

In Sub-Saharan Africa, access to the international agricultural market has been difficult and strenuous owing to the fact that strict rules and regulations are imposed on them. The global market seems to favor the large-scale farmers who are able to adhere to the

procedures laid out (Booker 1997). Because of adequate cash flow and relevant technology, large-scale farmers penetrate the global arena easily. However, more than two thirds of farmers in Sub-Saharan Africa are smallholder. They have been faced by adverse market trends ranging from unpredictability and hostility because of international set conditions. For the small-scale horticultural farmers, they will rely on the available channels of middlemen for marketing of produce. Poverty continues to increase in the wake of an expanding agricultural market. Smallholder⁴ farming is the backbone of African Agriculture and food security of the two thirds of Sub-Saharan Africa's population that resides in the rural areas. Small-scale farmers are affected directly and indirectly by linkages set up in the world market that are exposed to globalization (Dixon et al 2003:2).

Small-scale horticultural farmers have for along time relied on exporting their crops for viability. Globalized horticulture has drowned the small-scale farmers because of free-market systems the work of the large-scale multinationals has taken over (Swanson et al 2002). The effects of global marketing as concerns horticultural farming can be measured by looking at the rate of growth and development in the rural areas. The adoption of Saps by African governments exposed farmers to open liberalized markets. The downsizing of state involvement in agriculture brought about private investors into the agricultural sector (Lieten 2001:100).

2.4 Theoretical Framework

⁴ The term smallholder refers to their limited resource endowments relative to other farmers in the sector. (Dixon et al 2003:2)

The study attempted to expose theoretical framework that take into account major sociological theories that relate with development and underdevelopment. Development perspectives can be described by the world system theory. This theory is concerned with how systems have been set up in different nations in relation to their economic status. In addition, the study looked at dependency theory and economic growth which main aim was exploring the mechanisms that continue to dominate international relations between small-scale farmers/producers, middlemen/marketers and multinational corporations.

2.4.1 World Systems Theory

This theory was formally formulated by Immanuel Wallerstein in his book published in 1974. Wallerstein's theory stems from capitalism and an aspect of dependency theory. According to Wallerstein the modern world, compose of a simple capitalist world economy that has emerged historically since 16th century. Wallerstein maintains that the prosperity of countries is as a result of single capitalist economy. That capitalism is the dominant mode of production. He seems to explain that nations and states are therefore interdependent of each other and it is therefore the place of each state to identify their economic niche within the global economy. Wallerstein (1980:19), argues 2

“Capitalism was from the beginning an affair of the world economy and not nation states. It is misreading of the situation to claim that it is only in the 20th century that capitalism has become world wide although this claim is frequently made in various writings particularly by Marxists. Capitalism has never allowed its aspirations to be determined by national boundaries.”

The theory rests on a historical view of development that stresses economic political and military events of the past. The theory is grounded on past historical events of the world such as slavery, colonization and imperialism to understand global inequality. Wallestein (1980:18) maintains that there are three structural positions in a world economy-core, semi-periphery and periphery. The core states have been defined as those that have a strong economic base; the wealthiest nations with a strong state. There is a marked difference between the periphery who are the extreme opposite of the core, they are the poor states, the least developed countries and above all they have unstable economies. The gap between the core and periphery is attributed to unequal exchange that is enforced by the strong states on the weak states: the core states on the periphery. The core states are in a privileged situation. They are placed to exploit other countries. Thus, the emergence of more powerful states, referred to as "global ruling class" (Mc Michael 2000:17) and the emergence of multinational corporations and the work of globalization. "Although this model has been heavily criticized it does a much better job of identifying extended factors that restrict the development of poor countries than the modernization theory" (Bradshaw & Wallace 1996:44).

The facts of this theory guided the study to establish the kind of relationships farmers in the rural areas have with middlemen representing MNC's. It is clear from the theory that there already exist unequal exchanges between countries. The theory further guided the researcher to collect information on the policies laid down between the small-scale farmers and the middlemen. The theory gave basis to examine whether horticultural farmers are being exploited or not being exploited.

2.4.2 Dependency Theory

This theory is closely related to world system theory. In fact, "Wallerstein sees dependency theory as a subset of his broader world system perspective" (Selingson, 1996:217). It emerged as a critique of modernization theory. It seeks to explain why some countries are rich and getting richer as the poor countries remain poor. It explains that poverty in third world countries is as a result of their dependence on the rich countries or core countries (Mbatia, 1996). Scholars explain this kind of system as a form of neo-colonialism⁵ where African countries are faced with restricted access to the global arena and even access to their natural resources is limited (Lieten, 2001:102). The growth of dependency is attributed to the origins of capitalism.

Unequal exchange is considered as central; throughout the arguments of dependency theorists they look at the relationship between the industrialized countries and third world countries. Through the international division of labor third World Countries have been made to specialize in the production of mainly crops and other raw materials. Core countries specialize in the production of expensive manufactured goods. Dependency through trade is based on monopolistic control of the market by rich countries that leads to the transfer of surplus profits generated in the dependent countries to the dominant countries. Hoogvelt (1997:75-77) talks of thickening economic networks with the core countries. she says that during the colonial days capitalist nations gathered and amassed all the wealth they could from the third world and settled comfortably.

⁵ Neo-colonialism: The modern form of colonization, where present free governments are unable to cut ties with former colonial masters (Mafeje 2002:73).

This theory was applied to this study to understand why set structures are followed by farmers, governments and parties concerned. The theory was used to explain how farmers depend on the middlemen or vice versa and to explain which of the parties have a greater economic advantage.

2.4.3 Economic Growth Theory

Economic growth theory is explained by Todaro and Smith (1995) as the role-played by capital accumulation, labor force growth and technological progress. In a case of less, developed countries they explain economic growth is measured by the following factors; rates of growth per capita income, rates of growth of total productivity, rates of growth of population, migration possibilities coupled by brain drain, benefits of international trade, spread of development, level of technological advancement, prevailing climatic conditions, and presence of foreign institutions and developed countries.

The factors of this theory have been applied in this study to measure the growth rate of the horticultural industry in relation to the change in lifestyle of small-scale horticultural farmers.

A neo-classical growth model devised by Robert Solow an economist believes that a sustained increase in capital investment increases the growth rate. He posits to add that a steady-state growth rate is reached when output, capital and labor are all growing at the same rate, so output per worker and capital per worker is constant. He believes that to raise an economy's long-term trend rate of growth requires an increase in the labor supply and an

improvement in the productivity of labor and capital. A traditional growth rate explanation for the persistent poverty of many LDC's is that they lack proper control of natural resources and capital goods (Romer 2002).

2.5 Summary of literature review

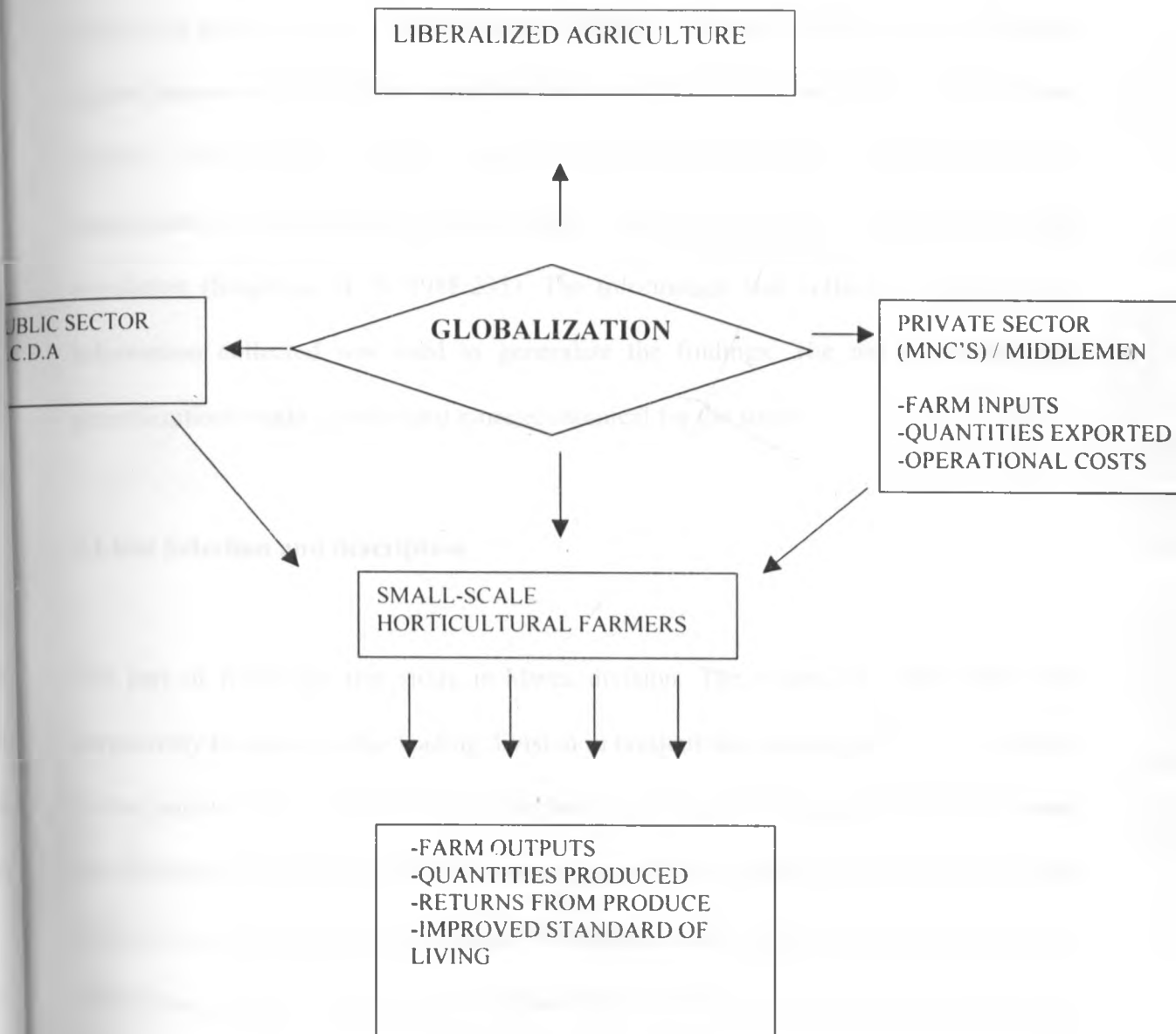
Though the literature acknowledges the existence of contractual horticultural farming especially with large-scale producers, it did not clearly explain how these contractual relationships come about and the parties involved in small-scale production. There was therefore the need to capture more data that lays out the process of marketing with small-scale horticultural producers in the wake of the growth of horticultural exports. Middlemen have a role to play and the data captured their role as international agents and the networks that have been established.

It is evidently clear from the literature that the foreign exchange earned from horticultural exports amounts to the billions of Kenyan shillings. With this money trading hands, reviewed literature should have captured the change in lifestyle of the people in the rural areas who are direct producers of horticultural products. The evidence gathered in this project adds up to the information on the change in lifestyle.

The major players in marketing of the produce from farmers either private sector or public sector are normally guided by some policy framework. These policies are clear to the buyer but the reviewed literature does not reveal whether the producer is aware of these

international policies regarding marketing and production. The study thus explores the policies that have been set out to work in the international marketing arena.

2.6 Theoretical Framework



CHAPTER THREE

3.0 METHODOLOGY

This chapter deals specifically with the methodological aspect of the study. The researcher selected Kirinyaga district and further took a generalized study of Mwea division. The researcher selected Kirinyaga district purposively. The district is one of the productive areas in terms of horticultural farming. The other reason for selecting the district purposively is that the researcher knew the district quite well since it is her home district. The researcher applied survey research method where a large number of respondents were chosen through probability sampling procedures to represent a large population (Singleton et al 1988:233). The information was collected from samples. Information collected was used to generalize the findings. The use of samples for generalizations made it easier and more economical for the study.

3.1 Site Selection and description

The part of Kirinyaga this study is Mwea division. The researcher selected the area purposively because it is the leading division in horticultural farming in Kirinyaga. Mwea is also popular for its production of rice and French beans. Studying all other divisions would render the study too wide. Mwea division has a farm area of 504 sq. km and produces most food crops in Kirinyaga. Most of the land in Ndia and Gichugu division is utilized to grow cash crops. Irrigation from Thiba and Nyamidi canals boosts production in Mwea division. Horticultural farming is also becoming lucrative source of income. The area grows large quantities of French beans that are exported to various countries (District Development Plan 1997-2001).

Unlike the upper zones of Kirinyaga district Mwea has dry and hot climate most of the year. Climate in this area is equatorial tropical type of climate. The pattern of rainfall is in two seasons, long rains, which occur from March to May, Short rains that occur from October to November. There are several trading centers in 4 towns namely Mutithi, Wanguru, Ngurubani and Kimbimbi. Wanguru town is the most populated. This town has particularly been promoted by the increasing in horticultural production in its catchment areas. Female labor unskilled and semi-skilled is most common (District Development Plan 1997-2001).

As the researcher got to Mwea division using the road to Embu from Makutano, we noticed the area along side the road is marked by flat terrain. The farms are covered with paddies of rice. The first town in sight is Mutithi, as the journey continues we approach Wanguru town where there is a lot of activity. We leave Wanguru and cross a bridge demarcating Ngurubani town. The waters form the huge canal channeling water from Thiba river channeling water from Thiba River. The last town in the long drive is Kimbimbi that has the least activity. Mwea division ends at a great junction with the road leading to Embu on the north and the east road leading to Kerugoya.

Infrastructure

The infrastructure is poor with very poor interior road networks. The main modes of transport are donkeys and bicycles. Very many people walk to the markets and trading centers.

3.2 Units of analysis

The unit of analysis is the entity around which the researcher seeks to make generalization (Singleton et al 1988:97). In this study, the units of analysis was the small-scale horticultural farmers and middlemen: the relationship between the two parties.

3.3 Research design

The research applied survey research whereby a cross-sectional study was carried out. In this case, data was collected from a cross-section of respondents chosen to represent the larger population. The research was conducted using qualitative and quantitative research methods. The study is descriptive in the aspect of discussions with small-scale farmers on the nature of relationships. The questionnaire was used to collect qualitative data. Interview guide was also used for in-depth discussions with the key informants and was also used during the Focus Group discussions. During the research, additional research tools were used to supplement the main instruments of data collection. These included the literature review field notes, theoretical framework and unstructured and informal interviews with respondents in the study area.

3.4 Sample Procedures

The study adopted a probability and non-probability approach. Babbie (1995:150) sees probability sampling as the most respected and useful method of sampling. Singleton (1988:137) observes that probability sampling involves random selection. That means

each element in the population had an equal chance of being chosen. In non-probability sampling, other factors were used in selecting of elements.

Kirinyaga District was selected purposively where the researcher used her expert judgment. Out of all the known four divisions in Kirinyaga namely Mwea, Ndia, Gichugu and Municipality, Mwea division was selected purposively. It is the division involved in the most agricultural activities. The study further narrowed down to purposively select three major marketing agents in the district who have a list of farmers they work with. Because of marketing competition, the companies requested not to be named. Out of the three lists provided, the researcher, applied random selection to come up with a sample frame of small-scale horticultural farmers. Out of each of the three marketing agents, a random sample of 30 was drawn bringing to 90 the total number of small-scale horticultural producers to be interviewed. This sample size was able to give generalized findings. Because of time and cost constraints, the researcher found this sample size to be efficient. The researcher used expert judgment to select key informants to guide the study. These informants included extension workers with the ministry of agriculture, extension workers attached to various organizations working with farmers and representatives from HCDA. Focus Group discussions were held with the key informants and key persons in the trading centers and representatives from multinational corporations were invited.

3.6 Methods of Data Collection

The study used two sources of data namely primary and secondary data.

3.6.1 Primary Data

Semi-Structured Interviews

The study adopted an interview schedule guided by a questionnaire. The questionnaire was administered to the randomly selected small-scale farmers. The schedule contained both open and closed ended questions. The interview schedule carried questions on establishing the socio-economic effects in relation to the study. Research assistants were trained on data collection to pretest the tool and the actual collection of data. Focus group discussions and open forums were held.

Unstructured Interviews with Agents

The researcher interviewed 10 key informants. These informants included extension workers from the ministry of agriculture and established self-help organizations. They guided the researcher to collect information from certain groups and individuals. Key informants helped the researcher by giving information that was independent of the influences of the farmers. Through probing the researcher was able to gain in-depth information on the work of brokers and companies. During the focus group discussions, participants generated individual opinions, feelings and perceptions about the topic of study freely and openly.

3.6.2 Secondary Data

For analysis of relationships between different variables, both unpublished and published sources was used to get more information. This included periodicals, journals and ministry of agriculture reports to get an overview of the study.

3.7 Data Analysis

The data collected was analyzed by both quantitative and qualitative techniques. Inferential statistics was used to analyze the information gathered from the small-scale farmers. In this case, inferential statistics are statistical methods that deal with the kinds inferences that can be made when making generalizations from data to affect the entire population (Baker, 1994:378). Information from key informants was analyzed using descriptive statistics to show the relationship between variables. According to Baker, (1994:378) descriptive statistics refer to simple statistical methods that do not support or falsify a relationship between variables but only help in describing data.

Information collected was coded for easy analysis. A coding scheme was prepared based on response categories that emerged from collected data. This was done by SPSS (Statistical Package for Social Scientists) and tables were created using excel spreadsheets.

3.8 Challenges faced in the field

The research was carried out during the dry season between August and September 2004, the weather was therefore harsh because it was very hot and dusty. The communities were also experiencing a minor drought and respondents were experiencing challenges finding food for their dependants. The researcher had to be careful and sensitive when interviewing the people.

Another challenge there is a high level of donor dependency in the community in Mwea division. The respondents were thus expecting monetary returns after talking to the researcher, but the researcher explained to them that the research was purely academic. To deal with this challenge the researcher provided light refreshment during interview sessions.

Language barrier was another challenge considering that most interviewed respondents only spoke vernacular. Completing an interview took much longer than anticipated this called for much patience from the researcher.

The political atmosphere also proved to be a challenge because most respondents were bitter with the new government that had entered second year running office. Farmers were questioning why the government was not committed to helping poor farmers after making promises during the previous year elections.

The farmers in Mwea were not so united especially the horticultural farmers. Most farmers were individualized in their approach towards marketing of their horticultural products. It was therefore difficult for the researcher to get the farmers to sit in groups to talk about their problems in horticultural farming.

Another challenge was the infrastructure problem; the rough terrain and long distances into the villages meant a lot of fuel consumption for the car used by the researcher.

CHAPTER FOUR

4.0 RESULTS OF THE STUDY

This chapter aims to revisit the questions set in chapter one. The evidence gathered in the field research is used to answer the questions. The overall aim of the study was to find out the effects of economic globalization on small-scale horticultural farmers. This was made possible by examining the existing linkages between farmers and multinational corporations. The researcher explains from the findings the nature of these existing relationships, the problems and the socio-economic effects experienced in the linkages. The other theme that is covered in this section is the place of small-scale horticultural farmers in the global markets, how they establish a niche. The researcher tries to interpret the findings of the study to explain how the small-scale farmers are working towards successful horticultural marketing systems.

4.1 Marketing agencies and conditions

A Farmer has to be very keen on farming and selling their French beans to avoid rejects and disappointments. The grading system is very strict and the farmers should be very careful during the production process. The size of all French beans should be uniform considering the variety either fine or extra fine beans. The beans should not have any spots; they should be fully mature and harvested at the exact day they were planned for harvesting. There are many varieties but from Kenya *monel* is the most popular. The burden on the farmer to produce perfect produce is therefore very great.

4.1.1 Regulations and Structures of Companies towards contract agreements

During the Focus Group discussions key informants interviewed on the operations of the companies gave different findings on the way companies operate. But one thing was prevalent that companies have to follow the guidelines set up by Eurep Gap⁶ because most of the importing companies send their agents to inspect the work of the companies.

Companies use some specific criteria to select the farmers who are eligible for contract farming. They look at the farmers' ability to farm reasonable size of land either personal or rented. The agents inspect the farms and advice on chemicals to be used. The companies ensure that the farmer has initial source of capital according to the set companies' capital base. The company considers whether the farmer has a source of water or if they are using canal waters whether it is properly piped to the farm. The most important aspect is also the willingness of the farmers to farm and put capital input on their own.

4.1.2 Eurep Gap conditions for the company

The conditions set by the steering committee of Eurepgap ensure that agriculture is undertaken in a responsible way, respects food safety, the environment, workers welfare and the welfare of animals. Eurep is a set of normative documents suitable to be accredited to internationally recognized certification criteria such as ISO Guide 65

⁶ Eurepgap started in 1997 as an initiative of retailers belonging to the European Retailer Production Working Group (EUREP). It is an equal partnership of agricultural producers and their retail customers. Their mission is to develop widely accepted standards and procedures for the global certification of Good Agricultural Practices (GAP)(www.eurep.com)

www.eurepgap.org). The certification standards manual is very extensive and elaborates the conditions a company has to attain to become accredited. The deadline for accreditation for all countries exporting to the European market was on 31st December 2004. The researcher interviewed the key informants at a time when they were in haste in order to beat the deadline set by Eurep-gap. This study cannot look at all the requirements because of the bulk of written material, but will point out the major ones as highlighted by the key informants. The company is required to build electrical coolers enough of them not more than 50km from the farmers within their trading jurisdiction. The cooling facilities should be clean and administrative records maintained efficiently. Employees within these facilities should be well paid. Companies are required to come up with better systems of compensation of paying the farmers. The companies grading and quality control system should be well grounded. The companies should have good handling facilities for the produce and they are required to give well sound advise to the farmers on how to use chemicals (www.eurepgap.org).

4.1.3 Eurepgap conditions for the farmer

Key Informants in the focus group discussions highlighted on the major conditions given by the Eurepgap. The companies are supposed to communicate to the farmers the conditions that they should comply in order to export their products overseas. Eurepgap conditions for the farmer are also detailed since the importer considers the source of the French beans as the most important consideration. The farmer is required to construct grading sheds with charcoal coolers they should be well ventilated, clean and cemented. During the research period, most farmers interviewed were in the process of getting together in groups to put their funds together to construct the sheds. Non-flammable

chemical stores have to be constructed and a pit for burying waste containers and papers. The farmer is required to keep administrative records and a follow up of production and sale. Pickers and handlers of produce should wear uniforms and cover their heads no children should be within the harvesting area. The pickers and farm workers should not have any makeup or extra furnishing on the nails. The person spraying chemicals is required to wear protective gear. The farmer should have lavatory facilities for the pickers at a distance from the farm.

The European companies buying French beans from the farmers in Mwea enforce all these conditions. The companies in Kenya stand to gain that they will receive more tenders from the European countries if they adhere to these rules. But for the poor farmers these rules are too heavy and are beyond their financial ability to meet these standards. Companies are working together with farmers groups to help finance the new adjustments. In the end, both the farmer and the companies will benefit from the changes because inspection teams from overseas countries will guarantee their products as safe for consumption.

4.1.4 Problems encountered by companies in contractual agreements with farmers

Key Informants highlighted the following issues encountered in the production and marketing process by farmers. One company agent explained to the researcher;

The biggest problem we have with farmers is production control farmers normally plant beyond the specified quota as directed by the company agent. This normally leads to a greater harvest. The farmer tries to convince us / the agent that those are the specified

seeds provided. This is normally the case when the field officers do not do regular on farm inspection. His friends and neighbors also coax the farmer to sell their produce for them through the agent. On the day of collection, the agent finds excess beans beyond the contract agreement. These are what we call miracle beans a rhetoric term explaining the bumper harvest of the farmer out of seeds he did not plant. (Company agent)

Arguments normally ensue when the agent declines to take extra produce that the farmer has but most times a compromise is arrived at. The farmers defend their extra produce by saying that those are all the seeds that were allocated to him. Where company agents are dissatisfied with the farmers unruly conduct, they resort to nullifying contracts.

Another problem is the sorting and mixing process it is very tedious; a lot of produce is left behind. Agents also complained of strict conditions placed on them by Kenya Plant Health Inspectorate Service (KEPHIS). KEPHIS is a government body that deals with inspection and grading of fresh produce for the purposes of ensuring that produce meets export quality standards and phytosanitary requirements of the importing country (Ministry of Agriculture 2002). So the farmers need to understand that rejects are inevitable when the produce reaches the airport the inspectors do serious sorting.

During great demand periods, the farmers prefer to sell their produce to the brokers who will normally pay a higher price for produce. Extra-contractual marketing thereby reduces the companies' targeted produce for export.

Farmers are also faced with the problem of temptation to use money supplied under contract. They divert the money for purposes other than those intended and other needs that arise thereby reducing yields. The money could be spent on basic needs or even helping a relative. The agent has a problem cause he falls short of the required quota.

Another problem is that company agents also said contract farming comes with many strict rules and regulations from planting to harvesting. Farmers are unable to comply because of their social obligations. So for the farmer to enter the contract agreement the company has to really investigate whether the farmer can seriously comply. By interviewing and consulting the company agents are able to know whether a farmer is compliant to contract farming.

4.2 Challenges facing companies in the International market

Key Informants revealed that exporting fresh fruits and vegetables is very competitive market. Considering that many countries in the North of Africa like Algeria and Morocco are coming up fast in the production and export of fresh fruits and vegetables the standards that have been raised by the European countries are high. The North African countries have a comparative advantage in terms of proximity. The freight charges are lower for these countries compared to Kenya who are in the Far East of Africa. Companies expressed that shipping, handling and freight charges when airlifting were very expensive.

Another challenge the companies explained was that lack of routine flights to carry the produce to overseas countries resulted in problems because the produce would stay refrigerated for a longer period. There was a higher chance for produce to be rejected if it takes a longer time in the country under refrigeration. On normal occasions if some produce is rejected, samples are sent back to the exporter and the whole quantity rejected is quoted on the payment vouchers.

Another challenge faced by companies is the procedures of strict standardization of products that is done by the Kenya Bureau of Standards (KBS) and KEPHIS. There has been a great deal of emphasis on the residual component in fresh fruits and vegetables. This means that all produce being exported should have zero levels of residual components. According to Plant Inspection Unit Report (2001) all plant materials for export must comply with the following quality standards: free of pests/pest damage, free from disease damage, free from noxious weeds, free from abnormal surface moisture, free from defects or damage, clean, fresh, sound & firm and properly graded (according to size color and shape) and properly packaged. Companies have to hire expertise in Standards and quality control to inspect the produce for export before it gets to KBS and KEPHIS. This has proved very expensive to the companies.

Companies have also had problems with *basket* contractors who pose as big importing companies and yet have no residential office or premises in the importing country. The basket contractors source for the exporters in order to have fresh produce shipped to the destination and they latter disappear without payment. The exporters have become enlightened on the methods the connen operate. One method is that they normally will

put a minimal or no down payment for delivery of produce. But those companies that have fallen prey to this have lost millions of dollars.

4.3 Role of Horticultural Crops Development Authority in relation to stakeholders

The Horticultural Crops Development Authority (HCDA) is an arm operating independently under the Ministry of Agriculture (MOA). Over the years, the HCDA has handled the work of exports with farmers (MOA 1989).

The stakeholders that work with the HCDA are the exporting multinational companies, importing companies and nations and all horticultural farmers. The authority is governed by an act of parliament "The Horticulture Act 2000". The researcher continued the research by talking to extension officers under HCDA and the ministry of agriculture to find out the role of the government in the export market of smallholder horticultural farmers. The researcher summarized the role of HCDA under the following section. Part III section 12 (d)-(f),(q) of The Horticulture Bill 2000 state (MOA 1999), The functions of the Authority which are

- “(d) to promote and support research and training in the horticultural industry
- (e) to organize and supervise multiplication and distribution of pure quality materials.
- (f) to facilitate the provision of technical advice and training on technologies in production, processing, research and marketing.
- (q) encourage contract farming of horticultural crops and if need be mediate between growers and buyers to ensure implementation of fair contractual agreements and possible arrangement for marketing intervention measures.”

HCDA has a handling depot facility in Mwea but when the researcher visited the depot it had been rented out to private company. Key Informants said the reason for leasing out the property is the HCDA was in financial problems. Farmers attached to that particular company were using the cold storage facilities. On enquiry the researcher was informed that the HCDA is going through restructuring and will have a good footing in the coming year. When interviewed, farmers revealed that the HCDA depot in Mwea was not helpful to them. Yet it is the government arm that should be protecting farmers from being exploited.

One farmer expressed his dissatisfaction with HCDA:

"Before contracting with companies I had entered contract agreements with the authority and but the contracts were fruitless. The authority still owes me some money and some huge sums of money to other farmers. I did not have good marketing relationships. Farmers attached to the HCDA used to pay 17% handling commission if they were to use the depot storage facilities. That 17% that was deducted was too much money. The authority needs to streamline their marketing system". (Farmer-Mwea)

HCDA had in the past marketed produce for farmers and they still can market produce for farmers. However, the Authority lacks organization and coordination. In addition, farmers complained of the expenses in terms of commissions and handling charges.

The other role of HCDA is that it is a link to the European countries. The overseas authorities are aware that the authority is the link to the horticultural farmer. Whenever there is a need for horticultural products from an importer who has no ties with the exporting companies, the orders for produce from overseas come straight to the authority.

The work of HCDA is to look for a supplier through competitive fair tendering processes. However, in many cases no tendering procedure is used, a company with good relations with the authority will be given the tender to supply fresh produce. Key informants revealed this as very frustrating because it is corrupt and unfair. Some farmers who have grouped together and went to look for a business market from the HCDA have been very disappointed by being turned away or kept on hold for a long time.

The above case is a clear indication that the state has failed the peasant farmer. HCDA as a government arm has failed to serve farmers effectively. This can be attributed to the mismanagement of state co-operations due to political interference and internal wrangles within organizations. By failing to protect the farmers the state is creating poverty. The function of the body was to market the produce and pay farmers on time. But the opposite was going on: delayed payments and lack of support. The farmers have been kept out of discussions on matters that concern their well-being. States have not operated to promote development they work to undermine it by being overly inefficient and being poor managers of resources. The way forward to solve this problem is to involve the Non-Governmental Organizations in the development process of horticultural farmers.

4.4 Quality Standards and control in the exporting of fresh produce

Before a farmer can think of exporting French beans, he has to look at the current demand and consider what is required. The biggest concern influencing the export of fresh produce in the international market is the strict Quality control standards set by the European countries. This section derives heavily from secondary data obtained from main

manuals used for horticulture. According to JICA and MOA (2000) the main varieties exported from Kenya are Monel, bobby, Morgan, Army and Super Monel. The main export season for French beans is October to May. The following steps are followed to ensure excellent results.

i) Planting and Harvesting

Certified seeds have to be planted. Harvesting commences 6 to 8 weeks (best time is after 45 days) after planting and continues for 1.5 – 2 months. Picking should be done at regular intervals ideally thrice a week to maintain export quality. The pods should have the stalk still attached. After picking the pods should be taken to the grading shed immediately to avoid shriveling and deterioration of quality (JICA 2000:82).

ii) Post harvesting handling

Farm workers should be clean. Quality assurance standards cleaning facilities have to be installed in the packing/grading sheds to ensure that workers wash their hands regularly, sick workers should not handle produce. Harvested produce should be placed in clean plastic containers and covered with a clean damp cloth to avoid shriveling. The pods should be taken to the grading shed.

a) Grading

French beans for export must meet the following minimum quality requirements. Must be intact, sound, of fresh appearance, clean and free from excess external moisture. Beans must be of specified size and of such a state as to enable produce withstand transport and handling to meet market requirements at the destination.

cartons of 25 pods are pre-cooled to remove heat and can be stored for 1-2 weeks. Carrots should be packed in a cool air.

airports within 12 hours of harvest and must be from Cap 319 (1969) "The Agricultural"

export shall be well formed with pods of the same length and size. Each container shall be clearly marked on

Extra fine grade: These beans must be beans of superior quality and have the shape, size and color characteristic of the variety. They must be turgescient, very tender, seedless string less and free from defect. Width of the pods (as determined by diameter of pod cross section) must be less than 6mm and a minimum length of 10cm (JICA 2000:82).

Fine grade: Beans in this class must be of good quality, turgescient, tender and must have characteristic size and color of the specific variety. Small seeds and short soft strings are permissible provided that the pod snaps clean. When broken with a pod must be between 6-9 mm.

Bobby beans: This category comprises beans of marketable quality that do not qualify for inclusion in the higher classes but satisfy the minimum requirements.

iii) Packaging, pre-cooling and transportation

The pods are packed in corrugated fiberboard cartons of 3kg gross weight or in plastic pre-packs weighing 250, 500 or 1,000gm. The pods are pre-cooled to remove field heat. This is done at 7-8 degrees using forced air coolers. The beans can be stored at 7 to 8 degree and a humidity of 95- 100% for up to 1-2 weeks. Cartons should be packed and transported carefully to allow free movement of air.

The produce for export must arrive at the airport within 12hrs of harvest and must conform to the following regulations (Extracts from Cap 319 (1969) “ The Agricultural Produce (Export) Act”:

- “All French beans intended for export shall be well formed with a any protruding fibers.
- Pods in every container will be of the same length and size.
- Net weight of pods in every container shall be clearly marked on

the outside of every container.

- French beans intended for export shall be packed in well ventilated card, board or timber containers packed weight of each inner container shall exceed 5kg.
- Every container of French beans intended for export shall be lined with clean tissue paper and the pods therein shall be in even parallel rows” (JICA 2000:83).

As the secondary data reveals, the farmer has to strictly follow the above guidelines to get excellent produce and avoid rejected produce. All the labor put into French bean farming should be commensurate to the money paid for the exported produce. But in many instances this is not the case, small-scale farmers earn just enough money for another season of replanting their farms.

4.4.1 Residual Issues affecting horticultural export

The maintenance of toxic free produce has been the most sensitive issue in the international market for horticultural produce. Different bodies are working to help farm ensure the produce for export is free from any traces of pesticides and insecticides.

KEPHIS is accredited as an internationally recognized as a quality-certifying agency for Kenyan Produce. KEPHIS collaborates with other organizations in the course of inspecting plant materials. The laboratories have been certified to the European Union Standards and handles Minimum Residual Level (MRL) issues. MRL issues relate to the produce quality requirements in the international markets relating to the use of pesticides, trace ability of the product and maintenance of the environment. The growers should prove to the buyers that their products have been grown and handled under acceptable conditions that all active ingredients in pesticides cannot be traced. MRL's are set for

every listed pesticide and for each crop on the basis of good agricultural practices. The issues of toxicity of the active ingredients effect on human, animal and environmental health. If required data is not submitted MRL's are set automatically at analytical zero (LOD-level of detection) hence increasing the risk of exceeding the permitted pesticide residue levels in the produce (MOA 2002).

The use of pesticides is almost indispensable for production of quality horticultural crops in our agro-ecological zones. But the European countries are working together with the KEPHIS to help maintain the required safety standards. Companies working with farmers are supposed to educate them on the various standards set by the European markets in order to obtain the best results in production.

4.5 Profiles of the Respondents

The study covered a sample size of 90 small-scale farmers. All the respondents were selected from Mwea division in Kirinyaga. A total of 10 key informants were interviewed and 3 focus group discussions were held.

The cross section of small-scale horticultural farmers can be defined as farmers who cultivate on farm size ranging from anything from quarter of an acre to two acres either rented or personal land. The farmers in Mwea division grow their crops through irrigation from canals diverted from Thiba River. Irrigated crops include rice that is sold locally and horticultural crops that are grown for export mainly French beans. All farmers channeling water to their farms are required to pay two thousand shillings annually to the

National Irrigation Board. This money goes towards maintenance of the canals. According to the Irrigation Act (Cap 347) "the government through the NIB is the principal actor in ensuring a conducive institutional and legal framework for irrigation and drainage development in the country. The government also provides resources particularly for the expansion of irrigation and drainage infrastructure"(National Irrigation Board Corporate Plan 2003-2007). The National Irrigation Board is responsible for all the maintenance and regulation of waters flowing through the canals from Thiba and Nyamidi Rivers. The water is channeled to the farms through furrows and the farms that are upstream; petrol water pumps are used to siphon the water into the farms to water the French beans and other crops. Part of the background of the respondents is the age brackets of farmers. This was captured in table 3 where the researcher clusters the different age groups to establish the most active work force.

Table 3: Distribution of respondents by Age

Table 3 indicates the age of farmers. The researcher was trying to establish the most active work force and if the age of farmers had a bearing on the marketing skills through middlemen.

Table 3: Distribution of Respondents Age

Age in years	Number of respondents	Percentage (%)
18-25	12	13.3
26-33	28	31.1
34-41	32	35.6
>42	18	20
Total	90	100

Table 3 Source: Field data

From Table 3 one observes that majority of farmers interviewed (66.7%) are between 26-41 years of age while those below 25 years of age are the minority 13.3%. Thus the mean age of farmers is 37 ½ years of age. According to the finding in the distribution table most active work force is between 26 to 41 years of age. In the following sections, observations made explain the relationship between the most active work force and their high involvement in the aggressive marketing in a globalized market. Those younger than 26 years are dependants in school and colleges.

As reported by the key informants, french bean farming there is a gender disparity in the farming, harvesting and marketing. According to the findings, male farmers contribute to 78% of interviewed farmers and 22% are female. Most of those covered are married and have dependants. At least 98% of all interviewed farmers had dependants who consisted of immediate nuclear family and extended family. The most popular farm labor is women who are the popular pickers⁷. Women are preferred, as harvesters because they are careful in picking French beans. The skill required to pick the beans should be applied carefully. Men are hired to do planting, weeding and ploughing of farms. The entrance of contract farming saw the participation of more women in the marketing of French beans.

Respondents that were interviewed shared that they have great economic burden. The researcher tried to establish whether the earnings received out of horticultural farming was adequate for the sustenance of their livelihoods. Table 4 illustrates this.

Table 4 Distribution of economic burden on households

Table 4 indicates in terms of percentage where the greater economic burden on respondents is experienced. The earnings received are spent on the expenses as are ranked in order of importance in Table 4.

⁷ Pickers are farm laborers employed on a daily basis to harvest French beans. They are paid an average of 20shs per harvest of 3kg cartoon of French beans. In a day, a picker will harvest at least one crate of French beans weighing at 18kg per crate, which will earn the picker 120shs per crate. Depending on speed of picking pickers earn upto 240shs daily for two crates harvested.

Table 4: Distribution of economic burden on households

Expenses	Number of Respondents	Percentage (%)
Basic needs	70	77.8%
Health cares	60	70%
School fees	35	40%
Extended_family	25	30%
Savings	20	30%

Table 4 Source: Field data

Observations from Table 4 reveal that 77.8% of the respondent farmers spend most of their earnings on providing basic needs for dependants. In this context basic needs include food, shelter and clothing. Only 30% of the respondents are able to save their income. Health care is also very expensive. School fees are only paid for the high school dependants considering that primary school level education is free. Of all the interviewed farmers, their main source of income is farming. Few have small business, which include kiosks, tailoring stalls in the market and selling of extra farm produce such as sukuma wiki and ripe bananas in the local market. Spouses and relatives who are not on the farm operate these small family enterprises. Selling in the local market is not profitable at all, because most farmers have replica products for sale. The findings generally reveal that

the earnings from the French bean farming is relatively low for the small-scale farmer. There is little economic growth considering that only 30% of the farmers are able to save. It is the general observation that most small-scale farmers in horticultural farming spend most of the money earned in replanting and marketing the crops for successive seasons. One farmer reports :

"...the cost of living has become very expensive I am unable to save up. The money I receive is used for replanting the farm and buying food for my family. We hope the new Narc government will do something for the poor farmer" (farmer in Mwea).

As we shall later find out the farmers have little or no control over the prices set by the contracting companies or the brokers.

4.6 Definition of Small-scale farmers in Mwea Division

This part gives an overall view of what are considered the activities of small-scale horticultural farmers in Mwea Division.

In general, the findings of the study revealed that there are different types of linkages and forms of marketing horticultural crops through middlemen. The cross section of small-scale farmers interviewed revealed that even though they are contracted by companies, other times they opt to sell their own produce to freelance middlemen especially when there is high demand for produce. The study further reveals that out of all interviews conducted majority (98%) of small-scale farmers once sold their products through middlemen and minority (2%) began selling their products directly to exporting companies. More than 50 exporting companies buy and sell their products through middlemen in Mwea. Because of rivalry and competition, many company agents were

hesitant in revealing information on how they work with farmers even after assurances from the researcher that the research was purely academic. The researcher interprets the findings of these relationships under different headings in the body of the data analysis. French bean farming is the dominant activity in Mwea division as the findings revealed.

Key Informants explained why French bean farming is popular:

"...farming of tomatoes, passion fruits, avocados, aubergines, capsicums and onions is very expensive compared to French bean farming. I have to use extra expenses to grow tomatoes because they are so delicate and require a lot of attention. Many times, I will only incur a loss because I cannot afford the pesticides and fertilizers required to farm tomatoes this has resulted to fully depending on the success of French beans. The farmers who farm on large scale have more money to facilitate such farming of delicate fruits and vegetables." (Mr Gichobi extension worker and farmer)

As earlier pointed out the small-scale farmer will cultivate between one quarter to two acres of the farmland owned. The land owned is acquired through inheritance from parents and some farmers rent farms for planting of French beans. Rent charges for one acre of land for farming ranges between 3,000-5,000 Kshs for every three months. Cultivation of French beans involves intercropping and rotation to avoid soil exhaustion and to get rid of bacteria infection in the soil. Intercropping involves planting of beans, maize and other crops between the lines of French beans on many occasions because of limited farm size. Crop rotation involves growing of one crop in a separate area to allow for soil fertility. Farmers will generally divide their land into equal portions so that they can have overlapping seasons of harvesting. This ensures the farm is not over cultivated

and that the farmer has some regular source of income. Seasons of planting and harvesting are interspersed between one to two weeks. The small-scale farmers interviewed had different sizes of tracts of land to farm on, the land size determined the production level as captured in table 5.

Table 5: Size of farmland growing French beans

Production levels of French beans influenced the income received by farmers greatly.

Table 5 was obtained after respondents gave responses on area of land they have allocated to farming of French beans. The aim of the table is to show that there is indeed a relationship between the size of cultivated land (production levels) and the income received from sale of the French beans.

Table 5: Size of farmland growing French beans

Cultivated Area	Number of Respondents	Percentage
$< \frac{1}{4}$	14	15.5
$\frac{1}{5} - \frac{3}{4}$	32	35.6
$\frac{3}{5} - 1 \frac{1}{4}$	33	36.7
$1 \frac{1}{4} >$	11	12.2
Total	90	100

Table 5 Source: Field data

From Table 5, 72.3% of respondents, cultivate between 1/5 to 1¼ acres of land, while 15.5% cultivate less than ¼ acres and a minority of 12.2% cultivate on more than 1 ¼ acres of land. In relation to the income earned the farm sizes cultivated by small-scale farmers are relatively small but the farmers work vigorously. This table illustrates that the majority of small-scale farmers have relatively small tracts of land to farm their French beans considering that French bean farming is the main source of income. This table also gives a more clear definition of the small-scale farmers in Mwea division.

4.7 Farmers marketing through freelance middlemen

This kind of relationship involves small-scale farmers selling their farm produce to company agents through middlemen popularly know as brokers⁸. Brokers normally buy, take title of and resell the produce. Many of the farmers interviewed revealed that before contracting with companies they were involved in selling their produce through freelance middlemen. The practice is still rampant in many parts of Mwea. We later found out that getting in to contract with companies is difficult because of the strict guidelines set by the international marketing companies. Unable to meet these conditions, farmers remain outside contracts with companies and sell their produce to freelance middlemen. The researcher compiled Case study 1 which seeks to illustrate the kind of relationship that exists between the broker and the small-scale farmer. The case study gives the voices of farmers and brokers during a negotiation process where by a farmer is selling the French

⁸ Brokers are buying agents who buy produce from farmers and sell to company agents. Brokers normally live within the production areas.

beans and the broker is buying the French beans. The case study illustrates there is indeed unfair trade between the two parties farmer and brokers.

Case Study 1: Farmers versus Brokers

On a normal day, after hiring pickers to harvest produce, Farmers take the produce to sheds near the neighborhood where the pickers sort the produce and pack the French beans in cartons of 3kg or in crates of 18kg. Farmers going to the sheds narrate their experiences:

"..sheds are normally walking distances from our farms. We normally come together with other farmers to pay for construction of sheds. To avoid the French beans withering and drying we have to sort them out in the shed. But other farmers do not even have to leave the farm the brokers come for the produce in the farms. In most cases access routes to farms are too narrow or too muddy." (Farmers-Mwea)

" A very popular mode of transport in Mwea is the use of donkey carts. The donkeys are used especially when produce is to be transported to a distant place" (Extension Officer)

The researcher and key informant settle in a shed at Kimbimbi location where farmers begin arriving with their beans on donkey carts and bicycles. The conversation goes on with the farmers narrate their daily activities;

"Harvesting is normally completed at around noon so that sorting and grading can be done for two hours as the brokers come to buy the produce". (Farmer-Mwea)

The broker arrives after an hour and negotiations between the farmers and broker begin on arrival of the broker. The broker announces at random the buying price according to the market demand. The broker announces;

"During the low season you people know very well I am buying one carton for 3kg, at 30 Kshs" (broker 1)

Key informants informs researcher on the side:

"... And during high demand the same carton will be bought for 120 Kshs. Would you believe the difference is so great imagine that? The difference between the high and low season is so high!" (Extension officer)

But farmers interject the broker with raised voices in disagreement;

"...you brokers are conning us today we heard the beans are being bought for 90 Kshs. The companies are buying for 100 kshs, why are you cheating us give us more money" (aggressive farmer).

In many cases, the broker's announcement is final and the farmers desist negotiating further because of fear of disappointment.

The broker will produce his weighing scale and start measuring quantity of the produce. The weight obtained by the broker after measuring the produce will normally vary from the weight obtained by the farmer. In many instances this results because of the doctored weighing scale of the broker. An Impatient farmer removes his own weighing scale and argues with the broker;

"...That weighing scale of yours is faulty it is lower than mine. Let me measure mine, look at mine it has not been tampered with while yours looks like it has been doctored. When I measured my produce at home I obtained 30kg on these beans and when you use

your weighing scale you are getting 25kg. WHY ARE YOU CHEATING?" (Farmer-Mwea)

Broker 1 responds to the impatient farmer;

"...Your weighing scale is the problem mine is the most accurate weighing scale. So you need to check yours".

The disagreement with the brokers continues because farmers know that company agents normally pay more than what the brokers are offering. In addition, they have genuine weighing machines. But unfortunately Informants explained company agents will normally not want to deal with farmers directly in fact when farmers approach them, the company agents dismiss the farmers as small business. The agents prefer to deal with brokers only.

One farmer retorts in a loud voice to the broker;

"... Our God in heaven is watching you cheating the people I cannot stand this process you either increase the money you are paying or we walk away with our beans..." (Irritated farmer)

Broker to the farmer replies;

"... You have no alternative!!! You can go if you want, the price remains that way and I will buy from those who are here."

The irritated farmer walks away with his produce. Murmuring and grumbling goes on in the crowd. At some point the farmer loses the battle and ends up selling his produce to the broker at that particular price the broker is demanding. A broker will normally buy the produce and sell to another broker who in turn sells the produce to the company agent. The researcher trailed a broker after negotiations with the farmers to witness transaction between the brokers. In some instance there are up to three to four levels of brokers.

Broker 2 to Broker 1;

"I am buying 3kg carton at 60 kshs"

Broker 1 to Broker 2;

"I have 400 cartons of 3kg. How much will give me and please...make the price good for me".

Broker 2 gets his calculator and works out the figures and comes to a conclusion he offers broker 1 a total of kshs 24,000. Broker one receives the money without a tussle to avoid having bad relations with his fellow brokers.

Key informants reveal the second broker who is in contact with the company agent receives about double the amount of what he bought the produce. Key informants reveal that when the French beans are exported on the international market one kg of French beans costs between 600 – 1,500 kshs. That translates to an average of kshs 3,150/= for every 3kg carton of French beans. The difference in payments between the farmer and the international importer is so wide.

The case study is a clear illustration of the continued increase of capitalism according to Karl Marx. The broker clearly depicts the ruling class while the oppressed farmer is portrayed as the lower class worker. The unfair trade results to the constant struggle of control of the means of marketing. The little wages earned by the farmers in the lower class is all used to pay the expenses towards replanting and farming. The hardest working person is the farmer and he/she is unsatisfied with the terms of trade thus leads to conflict. To resolve the conflict the two parties need to come together to work things out. The researcher further analyzed the findings in terms of prices paid for produce by the brokers to the farmers and prices paid by successive brokers and came up with Table 6.

The negotiation process in the case study leads to the broker selling his produce to the other brokers in the successive stages. The researcher illustrates in Table 6 the amount of money earned in each stage of the negotiation process first from the farmer and to the last parties in the process that is the Multinational Company.

On average, production levels from one quarter of an acre a farmer will harvest a total of 100 cartons of 3kg each as reported. That's a total of 300kgs. Table 6 illustrates the production levels in terms of acreage and the total amount received at each stage of the transaction.

Table 6: Production quantity of French beans and price paid (low season)

Cultivated Area (Acres)	Total Production (kgs)	Price paid to Farmer (kshs)	Price paid to 1st Broker (kshs)	Price paid to 2nd Broker (kshs)	Price paid to Company by Importer
¼	300 (100 cartons)	3,000/=	6,000/=	12,000/=	315,000/=
¾	900 (300 cartons)	9,000/=	18,000/=	36,000/=	945,000/=
1	1200(400 cartons)	12,000/=	24,000/=	48,000/=	1,260,000/=
1 ¼	1500(500 cartons)	15,000/=	30,000/=	60,000/=	1,575,000/=
Total	3900(1300 cartons)	39,000/=	78,000/=	156,000/=	4,095,000/=

Table 6 Source: Field data

Table 6 clearly illustrates that the first broker will normally make a profit margin of up to 200% by buying the beans from the farmer. The table gives the monetary value received by the farmers, broker 1 and broker 2 with regard to quantity of produce sold. The comparison between the second broker and the farmer is a mark up of up to 400%. For 3.9 tones of French beans a farmer will receive kshs 39,000/= while the importer will pay kshs 4,095,000/= the gap is mind-boggling. The difference between the farmer and the international market is millions. The wide gap between the earnings to the companies and

farmers is attributed to the negative effects of globalization whereby the less developed countries are vulnerable to the downswings of global trade as explained by Schuurman (2001:69). This means that the economic power is found with the countries or parties with the greater capital resources they therefore set the terms of trade.

The importing company will on ordinary cases pay on order for delivery of French beans. The prices in the overseas market remain constant but the prices in the rural areas keep fluctuating due to brokerage. Due to dependency and lack of alternative market farmers are unable to seek other alternatives and so they sell their produce to the brokers who are available at the given time. For a long time the African peasant farmer has had problems in marketing in the international market. Bates (1981:2) "outlines that if the basic problem of farming in developing countries is improper incentives for farmers, it follows that the origins of the problem lie in the actions of those who distort the operations of the market." The work of governments and international marketers is to make sure that the peasant farmer is not exploited. Bates outlines as a way forward " Governments could offer higher prices for food or they could invest the same amount of resources in food production projects. That there is a need to work on pricing policies" (Bates 1981:5).

4.7.1 Limitations of farmers to freelance middlemen linkage

As the case study revealed, the bargaining process is normally a very tedious time for both the farmer and the broker. After witnessing these negotiations that turned sour, the researcher concluded there is great mistrust between the farmer and the broker. To the researcher, the observations made out of this negotiation process seemed like unfair trade.

The brokers were making excess profit on the French beans trade. Some farmers are normally paid on the spot but this is a one off occurrence, most brokers normally carry the French beans on credit despite having cash with them. The farmers give the French beans in the hope that the broker will settle payments within reasonable time. The degree of trust comes in because the farmer knows where the broker lives especially if he is within the neighborhood.

One farmer explains:

...When I am so desperate to sell my beans I get to give the broker my produce on credit, in the hope that he will pay me soon. Many farmers are involved in that, It is uncertain because sometimes they pay and sometimes they don't. I have once lost upto thirty thousand shillings because of a broker who run away and disappeared with my money".

(Farmer-Mwea)

The probability of being swindled is normally high. In most occurrences brokers have been known to disappear without a trace or the broker denies ever having received any beans from the farmer. This is made worse by the fact that no written agreements exists between the farmer and the broker. These situations are normally very disheartening as explained by one key informant.

" Most farmers who sell their beans to the brokers have no written agreements they do not sign contracts so chances of being conned are relatively high. Most farmers are illiterate and it is a bother for them to read documents they find very complicated. The farmer can thus not take any legal action against a broker who has defaulted in

payments. This leaves the farmer helpless and very bitter about the whole process of working with the broker. That is why most farmers then decide to working with companies that are more promising in delivery and handling preferably when it comes to transacting French beans." (Extension Officer MOA)

In addition the broker is known to tamper with the weighing scale to best suit his or her own economic gain as earlier described. This bias raises more qualms between the farmer and the broker.

Another limitation of working with the broker is the problem of the farmer receiving rejected French beans. This normally happens three days after sale of fresh produce. The broker gains from this by keeping surplus money paid to him by the company. Most farmers say the broker normally collects these rejects from the handling depots. The broker more often than not will explain to the farmer how the company is very strict in the grading and sorting and thus resort to giving back produce that does not meet quality standards laid out. This is one of the many conniving tactics applied by the broker. This whole process ensues in to another heated debate and argument between the broker and farmer. Ordinarily rejects should be detected on the day of material sale and returned immediately to the farmer. According to the farmer the broker benefits from this by not paying the full amount due to the farmer. In most cases the farmer gives up and is left feeling dejected and helpless about the whole transaction.

To some extent the farmers have been brainwashed to believing that they have no other means out of the manipulative systems of broker to farmer relationship. According to

Slaughter and Swagel 1997:1&4 the globalization process has brought and reinforced marginalization and exclusion of weak parties in the marketing process.

The brokers have ensured there is a barrier between the farmer and the company agent, because of the economic advantage that will come on his or her side. Company agents also prefer dealing with one person because of time constraints of transporting the beans to the airport in a hurry. The farmer is never at any given time supposed to communicate with a company agent directly. There is therefore no direct market for the sale of produce. Brokers will in most cases want to maintain his relationship with the company agents in utmost secrecy. And also because of barriers due to proximity farmers are unable to reach company agents. In the latter parts of the study we shall see on the other side how the farmer gets into contract with the company.

In general the relationship between the farmers and brokers has proved to be frustrating over the years. One farmer described brokers;

...the whole process of brokerage is like dealing with a kishetani⁹ (meaning an evil practice). Brokerage is a means to accumulate money from the poor farmer. One should see the houses the brokers live in... very big expensive mansions.

Brokers are known to live luxurious lifestyles eating in the best restaurants and hotels. Brokers live within the same location with the farmers so the farmers easily notice the lifestyles of the brokers. Most farmers described the brokers as greedy because of accumulating money and exploiting people. The brokers normally build the best houses

⁹ Kishetani is a kiswahili word derived from the word shetani which means devil. Kishetani thus means an a devilish practice.

while the farmer struggles to survive on the little money made from his little produce. Brokers have been known to form their own cartels and they have central points of meeting. With this observation farmers have resorted to forming groups to get contracts with companies. With the collective bargaining farmers will eventually come out of their debt burden and vicious cycle of poverty. In his book *Peasants against the state* Bunker explains, “ ... studies have tended to treat peasants as the passive victims of national states that are themselves totally subordinate to the dictates of international capital. They thus ignore the ways in which peasant organizations can exploit the national state’s dependence on them” (Bunker, 1987:14). Farmers have the ability to fight for their rights given the right circumstances. But they are not doing it hard enough in the case of Mwea farmers.

Another challenge faced by the broker versus farmers, is that in the event of delay to collect produce brokers are unable to supply cold storage facilities to the farmers as compared to those who are contracted by companies. Farmers end up giving the waste produce to the animals.

4.7.2 Production costs

Production of French beans is an expensive farming activity. The findings revealed that from planting to harvesting a farmer would spend between Kshs 17,000/= to Kshs 25,000/= on farm inputs for one acre. Farm inputs include buying of certified seeds, paying of farm labor, buying of pesticides and fertilizers, buying of petrol to pump the water and paying of pickers. Compared to the money received back from one acre of land which is between Kshs 12,000/= - Kshs 15,000/= the farmer incurs a loss in planting and marketing of produce through freelance middlemen. But when the season is high and the

beans are in demand there is a likely hood of receiving more money. Because of the terrain, climate and type of soil. French bean farming seems to be the best most affordable form of horticultural farming because of the availability of irrigation waters. As will be discussed later the company agreements are likely to offer better terms of trade as they get into contracts with the farmers.

Farmers explained that coming up with capital seems to be the most challenging hindrances towards productive output. Farmers who sell their produce on credit to the broker will have to struggle to look for other sources of capital to plough back into the land. In most cases, credit facilities are hard to come by since farmers do not belong to any co-operative society. In the event where farmers cannot access alternative sources of capital, they normally borrow money from local lenders who are popular known as shylocks. The lenders normally give credit facilities but charge very high rates in interest rates for repayment.

Critically looking at the work of brokers and farmers it is evident that farmers have to put their foot down to get out of this exploitative system. One can explain small-scale farmers persistence in dealing with brokers as having relied on exporting their crops for viability and survival. Globalized horticulture has drowned small-scale farmers because of free market systems the work of the large multinationals has taken over (Swanson et al 2002). For farmers who have a grip on marketing with Multinational companies the results have been far better in terms of monetary returns.

Farmers explained that the cost of production was very expensive and that many factors will affect whether a farmer will go for a replanting season. Table 7 analyzes the number of farmers who consider various variables from the most important to the least important that will affect replanting season.

Table 7: Factors of Production Order of Importance

Table 7 seeks to outline responses given by farmers on the major factors of production that influence decision to plant another crop yield of French beans.

Factors of production	Most Important Frequency	Relatively Important Frequency	Important Frequency	Not Important Frequency	Least Important Frequency	Total respondents Frequency
Availability of capital	68	13	7	2	0	90
Availability of assured market	56	18	12	2	2	90
Rotation of crops	33	20	18	10	9	90
Current Price of product	10	10	8	23	39	90
Labor Availability	9	10	13	26	32	90

Key: Total Farmers

Table 7 Source: Field Data

From table 7 availability of capital ranked the most important influence in determining decision to plant French beans. 75% out of 90 farmers considered availability of capital will determine the farmers' ability to plant a new season in the crops. 62% out of 90 farmers considered the next most important factor was the surety of an opportunity to

market their produce after harvest. The farmer opted to plant knowing that he/she will be able to sell the produce. The problem of excess produce is a bother to the farmer; excess produce sometimes goes to waste, as the farmer has no one to buy from him. In many instances produce that has overstayed is used as animal feed. Rotation of crops was equally important to avoid soil exhaustion and in order to obtain even crop harvesting periods. Findings also reveal that price of beans is beyond the farmers control, prices are determined by the prevailing market forces. Market demand depends a lot on the overseas countries. The demand is high between the months of October to April. Key informants also revealed that during the world cup and the recently completed Olympic games in Athens in Aug 2004, there was great demand for French beans in the international market. Labor is readily available and it did not seem to bother most of the farmers. Only 9 farmers found the availability of labor as a major challenge. Most farmers said labor was readily available family members and people from the neighborhood. The most important people in the whole process according to the farmer are the pickers if a farmer does not pay his pickers word will spread around that the particular farmer does not pay employees. The next time round the farmer will completely lack people to work for him. So farmers have to pay the pickers on delivery of service or on the daily hire.

These findings reveal that the most important factors are availability of capital and surety of market for the farmers. It is thus important for the farmers to have a market that will cater for all their needs that will adequately cover their production costs with enough money for replanting.

4.7.3 Benefits of small-scale to freelance middlemen linkages

Despite the shortcomings of the relationship between farmers and brokers, there have been some benefits to the farmer. Brokers normally collect the produce from the farm using their own transport expenses this saves the farmer the hustle of having to look for transport to reach the collection point.

The other benefit of the farmer to broker relationship is that brokers will normally buy all the produce the farmer has to sell. The burden of looking for market is eliminated from the farmers' list of problems. Contracted farmers also explained that sometimes when the company agents decline to carry all the produce or excess produce the farmer will ordinarily look for a broker to sell the excess produce. So brokers come in handy in some occasions when the market demand is high and they are offering a relatively higher price than the contracted companies. Contracted companies have a fixed price rate of which they buy produce from the farmers so regardless of high demand and low demand contracted companies remain the same.

4.8 Linkage of Middlemen to Company Agents

The brokers have a special relationship with the company agents. A company agent normally recruits brokers to work for him according to the word given to him by other company agents. Company trucks are normally driven round to source for produce. On board of the company trucks are normally the driver and company agent who in most cases is a grader. When a broker wants business he would normally wait at a strategic point in order to see a company truck approaching the location. The broker then talks to the agent about business and they reach an agreement and he begins business at the agreed time. The agreement reached normally entails the time of meetings with the agent, the location of meeting and terms of payment. Key Informants explained that the company agent will normally “research” on the reputation of the broker. But for those who have been working together, business begins on demand for produce. The basis of their relationship is wholly based on trust and mutual benefits. If an agent were to cheat a broker or vice versa, word would spread around very fast and the agent and broker would lose their job and their reputation in the local community. Brokers are meant to prove that they are reliable middlemen. Case study 2 seeks to illustrate the relationship between the brokers and the company agents. The case study captures what transpires between the company agent and the broker before the broker goes to the farmer.

Case Study 2: Brokers linkage with company agents

Because of their reputation with the farmers, brokers were uncomfortable talking to the researcher. Even after explaining that this research was purely for academic purposes obtaining actual facts was difficult. Key informants who were previous brokers were more comfortable talking with the researcher because they have a clearer reputation.

Different companies have their own different collection days. Most companies are based in Nairobi but have agents in urban centers. On the day of collection, a company agent would arrive at the agreed place and meet the broker; or if demand is high two extra brokers are required. Greetings are exchanged and a brief conversation transpires.

Company agent to Broker 1.2 & 3

"...Today the demand is really high I require you to deliver a total of 3tonnes so each person is to bring me each 1 tone at 4pm sharp right outside the truck I am giving you each kshs 80,000." (Company Agent)

The company agents are normally very serious and keep business to the point. The company agent gives cash to the broker so that he can go and buy produce from the farmer. Amount of money released ranges from between Kshs 100,000/= to Kshs 250,000/= according to key informants. Brokers 1.2 and 3 are dismissed without room for further conversation. The first broker would then begin his work to recruit second brokers who will source and collect the produce from the farms. Broker recruits young men who are very agile.

Brokers 1 talks to recruited broker;

" Today the demand for beans is very high and you must go to the farms to collect the beans. I am giving you kshs 40,000 to get me one tone of beans".(Broker 1-Mwea)

The first broker gives half or even a quarter of the money given to him by the company agents. The rest of the money goes in to his profit for the day. Recruiting of brokers is normally a corrupt process that involves bribing and giving gifts. A broker would want to find his standing so he gives gifts to the company agents. Harvesting is normally

complete around noon so brokers go to the farms at that time. In addition, negotiations begin when the brokers arrive at the farm.

The Multinational companies agents are portrayed as the global ruling class, since they dictate the terms of trade in this relationship. The status of these companies attribute to the economic power they have over the marketing system in the horticultural sector. This has led to dependency on the company agents by the brokers. Dependency through trade is based on monopolistic control of the market by rich MNC's that leads to the transfer of surplus profits generated by the farmers (Hoogvelt 1997:75-77).

4.9 Emerging linkages and contractual farming relationships

Farmers have been working together to form groups that can work with companies. Farmers interviewed revealed that the frustrations of dealing with middlemen led them to seek contractual agreements with companies to ensure the elimination of brokers. Although contract farming has its own demands it also has its advantages and disadvantages. Over sixty exporting companies deal with French beans from farmers in Mwea division. Only few have agreed to contractual relationships with farmers in Mwea division. The interviews conducted were with farmers in established contracts. There seems to be some form of haste into grouping up and for companies to recruit groups. Key Informants reveal that this is because of the conditions that have been set by the Eurepgap¹⁰. The deadline to meet these conditions is the 31st December 2004. The

¹⁰ Eurepgap started in 1997 as an initiative of retailers belonging to the European Retailer Production Working Group (EUREP). It is an equal partnership of agricultural producers and their retail customers. Their mission is to develop widely accepted standards and procedures for the global certification of Good Agricultural Practices (GAP) (www.eurepgap.com).

conditions are both for the farmer and the exporting companies. Farmers are coming together to form Youth groups, marketing associations and small co-operative groups. Group formation is more advantageous compared to individual contracts. The groups have a greater bargaining power and in terms of receiving credit facilities companies are able to give groups more than to individuals.

4.9.1 Small-scale farmers with contracted company agents

Formal contracts that farmers get into vary with different companies. The study looked at some contracts to give a general overview and because of the nature of the study, not all contracts could be stipulated because of their length. Farmers explained that working with companies was a more stable form of business. And farmers are assured of market through contract farming most contracts last between 1-2yrs. Most company agents and farmers are now getting into written contracts, before farmers were identified by being assigned numbers and word of mouth contracts. But the requirements with the European countries are that companies should have contracts with farmers. The contracts stipulate that farmers will communicate directly to company agents and middlemen will not be included in the contract. The company will normally supply seeds to the farmer on credit basis and they require the specified quantity out of all the seeds supplied. The farmer is required to come up with his or her own capital for farming. In some cases, some companies give soft loans to farmers with the surety of other farmers within the group. Another common feature is that farmers have been required to build sheds as collection points for the produce. Most companies give technical advice to educate the farmers on how to grow their crops and the agro-chemicals to be used.

One farmer elaborates about contract farming as follows;

The process of planting and harvesting through contracting is very rigorous. I prefer working with contracts with companies as compared to brokers. The company payments are consistent.

On average company agents will pay between Kshs 45 to Kshs 60 per kilo. While every 3kg carton a company would buy from between kshs 135 to 180 kshs. The range differs during the high and low seasons respectively. The prices compare more with the ones for brokers in that they are more by a relatively good range. The companies require farmers to plant seeds given to them and to produce the specified quotas. Table 8 was formulated to illustrate the amount of money received by farmers as they market through companies. The aim of the table is to compare the earnings received from marketing with companies with other form of relationship between the broker and the farmer.

Companies provide seed to the farmer. Table 8 illustrates results obtained on the number of kilograms of seeds planted and produces harvested. The table further elaborates the price paid after marketing through companies.

Table 8: The production of French beans and marketing through company agents

Cultivated Area (Acres)	Seeds Supplied by Company (kgs)	Total Production (kgs)	Price paid to farmer (kshs)
¼	10	300 (100 cartons)	13,500/=
¾	30	900 (300 cartons)	40,500/=
1	40	1200(400 cartons)	54,000/=
1 ¼	50	1500(500 cartons)	67,500/=
Total	130	3900(1300 cartons)	175,500/=

Source: Field data

Table 8 shows the price paid by companies to farmers. The average sale price paid for each kilogram of French beans is kshs 45/= by the companies. When farmers market through brokers they are paid kshs 30/= for every kilogram. The price paid to the farmer by the company for 400 cartons is 54,000/= when compared, to the same number of cartons when marketed through the broker will fetch kshs 12,000/=. The companies demand excellent quality of produce so the farmers work on consistent schedules and work program allocated to them to ensure high quality of produce.

4.9.2 Limitations of contractual relationship to the farmer

Farmers interviewed also raised concerns with the contractual farming system. One farmer complained;

One of the major problems is that companies do not keep to the promise of buying all the produce harvested by the farmer. If a farmer is given a quota to plant particular seeds of for example; 30kgs and to harvest 300 cartons, the company defaults by not taking all produce they buy about 150 cartons out of the 300 cartons. I am left with the agony of looking for market for the remaining produce. It is inevitable that the right next person I go to purchase my produce is the broker. (Farmer-Mwea)

Farmers have no otherwise but to work under the conditions of the company. The researcher through the interviews discovered that there is a lack of cohesiveness within

the community. The monopoly by companies is a kind of dependency that farmers have to rely on. Company agents explained:

...the reason they do not collect all produce is that there was less demand from the overseas market. Extra produce collected will only stay in the produce handling facilities and go to waste after some time. (Company agent-Mwea)

Evidence emanating from studies done on the work of MNC's in less developed countries reveal that MNC's have turned out to be part of the problem rather than a solution (Schuurman, 2001:79). The nature of the business done by these companies results to wider poverty gaps between the producers who are the farmers in this case and the exporters of farm produce.

Another limitation is that company agents have also been known to be corrupt in the way they allocate the quotas to farmers. Corruption cases occur when the company agent has to be bribed by the farmer to carry all the extra produce from the farmer. In some instances, the company agent demands gifts so that he is compelled to buy all the produce.

Another problem is that farmers have unwillingly found themselves in debt because of excessive advances and the demands that come with production. So the farmers have to be careful in taking loans. Others complained of delayed payment from their company.

The other issue of concern is number of rejects a farmer is likely to encounter when selling through companies. One farmer elaborates the problem of rejects:

The biggest problems we have are ghost rejects meaning that the beans that are rejected are not returned instead the payment voucher only specifies the number of rejects that were received by the company. This raises a lot of doubt on the farmers' side. (farmer Mwea division)

4.9.3 Benefits of the contractual relationship to the farmer

Through contract farming, farmers have had various benefits from the relationships. Farmer have benefited from the availability of credit facilities from the companies. The farmers explain;

...We have been happy with the technical advice given by field officers, the farmer can benefit from new skill and technology. The provision of seeds and fertilizers on credit is another benefit. The expenses of seeds are normally deducted after the produce is sold. Sometimes the farmer is assured of market. In addition to these the company trucks come and collect the produce in the farms. (Farmers-Mwea)

Another benefit of the relationship is that the monetary returns from the contractual agreement are better than marketing through brokers especially when the produce is all sold and no rejects are encountered. Farms receive the cheques fortnightly. If the planting program given by the companies is followed appropriately, one is guaranteed of a good produce that will pay well. Income earned is ploughed back into the farm and a little is put into the farmers' personal life. When interviewed, farmers felt that they were happy dealing directly with the company agents. In that way, they felt they are in touch with the export market. The farmer still said there is room for change in the improvement of

prices. But the general sentiment of contract farming is that it is basically helping improve lifestyles. The risk involved is less compared with dealing with brokers.

4.10 Conclusion

In the literature review the world systems theory was set out to explain that there exists unequal exchange between countries. The main producers of the French beans are in Kenya whereas the main buyers are in Europe. The farmer is poor and the brokers and companies are the major money makers. Farmers have been exploited by middlemen and multinational companies. It has been an economic struggle for farmers to get a footing in the global arena to market their produce. The findings also displayed that the farmers continue to work on the farms with little or no improvement in the lifestyle.

The nature of capitalism emerged in this study through the relationship between the work of farmers and brokers. The level of dependency is high in that the farmers are dependent on the brokers and the companies. The farmers cannot move on with their own ability. The trading in the global arena is very strict and without the help of the companies farmers meet very many hurdles. The vicious circle of poverty continues because farmers are unable to stand on their own.

CHAPTER FIVE

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

In summary the study has set out to clearly outline the linkages that exist between the farmers and multinational corporations in the horticultural industry in Mwea division. The benefits and problems of the relationship have been explained in the study between the horticultural farmers and the middlemen. This chapter seeks to highlight the main issues that the findings revealed as per the set objectives. The recommendations set to highlight areas of further study and give suggestions on the way forward.

5.2 Summary of Results

It is evident that the brokers are one of the major middlemen in the export of horticultural trade. According to the study, the work of brokers is highlighted as a major place in the rural society. Though being vital, the relationship between brokers and farmers has proved to be one sided and oppressive. Farmers have incurred financial losses due to the nature of this business. Most farmers who are not involved in contractual farming are still entirely dependent on brokers to market their produce. This has resulted to a vicious cycle of poverty and dependency.

Because of the fluctuation of prices while marketing through middlemen, farmers have been unable to plan adequately using the resources they have. The money received is used for their basic needs and replanting of their farms. The farmers said from 1988 to

date the price of French beans has not improved they keep ranging within the same amount. The unpredictable market prices in the light of increasing prices of fertilizers, fuel and pesticides has made French bean farming for small scale farmers very disheartening and unproductive.

The farmers also work with company agents that represent multinational companies. Contractual farming is slowly becoming a popular way for the horticultural farmers to market their produce. The international export market is very competitive and the multinational companies determine the ability for companies. Because of this nature farmers and company are required to meet exemplary standards set by most of the European companies of farming and marketing.

Group activities have emerged to enable the farmers enter the global market with the company. These activities include group lending, group farming and group marketing. The farmers are slowly beginning to benefit from group activities as compared to have operated on their own. The benefits include supply of certified seed to the farmer, loan facilities, technical advise and assured markets. Although not all the farmers are able to form groups to attain the qualifications of contractual farming most are still operating on their individual abilities. So in general the majority of farmers in Mwea are still dependent on brokers.

Government involvement with the farmers in Mwea is minimal. The government has left the farmer to the mercy of private marketers and brokers. The farmer is exposed since the government has failed to protect the farmer from harsh marketing environment. The

government of the day has spent a great deal of concentration on the floriculture industry. The export of flowers has overshadowed the export of vegetables and fruits.

The farmers in Mwea consider involvement with contracts as having contributed to their improved lifestyles. The earnings they receive from involvement with multinational companies is relatively profitable as compared with marketing and dealing with brokers.

5.3 Recommendations

The way forward for small-scale horticultural farmers is unification and group formation. Cohesiveness and group support will help farmers launch out into the international horticultural market with a greater bargaining power. Setting terms of trade will be easier for the farmers if they are united in forms of co-operatives and organizations. Sourcing for market as individual farmers is also very challenging so being in societies will also help the farmers access overseas contracts more easily. Another challenge to the individual farmer is the inability to have continuous flow of capital to run farm operations.

As a way forward to successful horticultural farming the Government of Kenya has to be fully involved in affairs of small-scale horticultural farmers. To avoid exploitation by brokers and private multinational companies, the intervention of the government in setting of standard prices is very important. The government should have a strong check system with a strong surveillance team of extension officers in the rural areas in order to protect the interest of the farmer. The ministry of foreign affairs would work with the

European companies in making international marketing policies more friendly and achievable to the farmer in the rural areas.

Another way forward is for the government to work on improving the infrastructure of the rural areas by making better passable roads: this will indeed make it easier for the farmers to market their products. The Horticultural Crops development Authority need to establish adequate cold storage facilities in Mwea division and they should make the services affordable for the farmer. To avoid multiple charges and unnecessary fees the HCDA should clearly line out the horticultural policies for the farmers.

The Ministry of Agriculture needs to set out a clear legal framework for the horticultural farmers to be protected and to avoid external exploitation and for farmers to have a place to set their complains and queries.

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APPENDIXES

Introduction.

My name is Rosemary Wang'ombe and these are my research assistants. I come from the University of Nairobi. I am conducting a research on horticultural farmers in Mwea division, as part of my fulfillment towards my masters degree in sociology. I want to ask you the following questions your co-operation will be highly appreciated.

Appendix 1 – Questionnaire/ Semi-structured questionnaire

Demographic data

Interviewer _____

Date _____

Town/ Trading center _____

1.0 Name of Farmer(optional) _____

Section A: Farmer's Personal Characteristics

1.1 Sex (Female/Male) _____

1.2 Age bracket(Please tick one)

a) 18---25 _____ b) 26----33 _____ c) 34----41 _____ d) 42 years and above _____

1.3 Marital Status (Single/Married/Divorced/ widowed) _____

1.4 Does the farmer have dependants? (Yes/No) _____

1.4.1 If Yes how many? State number _____

1.4.2 How does respondent help dependants? Briefly, list the things in descending order starting with the most important.

a) _____

b) _____

c) _____

d) _____

1.5 What is the farmer's main occupation? _____

1.5.1 If farming, only does farmer have other source of income? (Yes/No) _____

1.5.2 If yes, specify other source. _____

Section B: Farming Details- Farm Inputs, Farm Outputs, quantities produced and quantities exported.

2.0 What is the size of your land (acres)

Farm	Acres	How Used
Homestead Area		
Cultivated Land		
Total Land		

2.1 What horticultural crops are grown on your farm?

a) Vegetables _____

b) Fruits _____

2.1.1 Which of the above crops are grown through irrigation

a) Vegetables _____

b) Fruits _____

2.1.2 Which of the above crops are for export?

a) Vegetables _____

b) Fruits _____

2.1.3 Which crops are sold locally?

a) Vegetables _____

b) Fruits _____

2.2 How do you allocate your total farm: acreage in proportion to type of crop?

Number of Acres	Type of Crop

2.3 Are there certain farm inputs that influence growth of crops? Allocate number in order of importance. 1) Most Important 2) Relatively Important

3) Important 4) Not Important 5) Least Important

a) Availability of capital _____

b) Availability of assured market _____

c) Rotation of crops _____

d) Current Price of product _____

e) Labor availability _____

f) Other (explain) _____

- 2.4 List in order of most crucial the constraints faced through production of crops for export. a) _____
b) _____
c) _____
d) _____

2.5 Who advises you on how to grow fruits and vegetables? _____

2.6.1 What advise: technical or financial help? _____

Section C : Marketing of Produce: Number of channels, middlemen, Arrangement process

3.0 Where do you sell your produce? Government station or private buyer?

3.1 If not government set up stations. Where do you sell the produce?

3.2 Where do private buyers come from? _____

3.2.1 Do they come to your farm or do you deliver to them? _____

3.2.2 What quantity do they buy from you for export? _____

3.3 Do you have a written down agreement/ contract with buyer? _____

3.3.1 What is the contract agreement with the buyer please explain?

3.4 How do you sell your products / how much per kg to the middlemen?

Type of crop	Price per kg

3.5 Do the middlemen sell this produce for export? _____

3.6 What are the timings of marketing and selling to these middlemen (weekly/ daily or other specify)? _____

3.7 When are the payment times (weekly/daily/monthly or other specify)? _____

3.8 What is the criteria for accepting produce for export? briefly explain

a) Size _____

b) Disease _____

c) Ripeness _____

d) Variety _____

3.9 What is the criteria used for rejection of produce for export? briefly explain

a) Size _____

b) Disease _____

c) Ripeness _____

d) Variety _____

e) Other _____

3.10 Explain briefly the benefits you have received working with middlemen?

3.11 Explain briefly the constraints you have experienced working with middlemen?

3.12 From production to marketing what channels do you go through? In summary what is the nature of this channels.

Section D: Economic/ Socio-economic factors and effects, operational costs and returns from marketed produce.

4.0 How much economic input is involved in production of horticultural crops?

Type of Crop	Total inputs (kshs)	Acreage

4.1 How spread out are the planting seasons? _____

4.2 How much do middlemen pay for produce?

Type of crop	Kgs	Price for total sales

4.3 Do you obtain surplus produce and do you get profits on produce?

4.4 Do amounts of money paid for produce compare with amount used for production?

4.5 In summary how much do you put into production and what are your returns?

4.6 Has income from farm been beneficial to your personal life?

a) Social Status _____

b) Replanting on the farm _____

c) Ability to pay for health care _____

d) Basic expenses _____

e) Able to support dependants _____

f) Any other elaborate _____

4.7 Would you say horticultural farming has increased income for your household?

a) Yes b) No _____

4.7.1 If yes which among the following would be an indicator of increased income in your household?

a) Improved Nutrition _____

b) Increased ability to pay for education costs _____

c) Improved housing _____

d) Increased financial support to extended dependants _____

e) Purchase of Property _____

4.7.2 If No, which among the following would be an indicator of a non-changing lifestyle.

a) Expense in replanting. _____

b) Cost of living is high _____

c) Health care is expensive _____

d) Luxury goods are not affordable _____

e) Income earned is for basic needs only _____

f) If other explain _____

Vote of thanks to respondents for co-operation.

Appendix 2

Interview guide for Key Informants

1. Name and organization of key informant.
2. Knowledge of small-scale horticultural farmers and farming methods for export in Mwea division.
3. Knowledge of contractual farming methods within the area.
4. Knowledge of representative middlemen involved in buying and selling within the study area.
5. Problems encountered by farmers in the marketing process with middlemen.
6. Benefits received by farmers from relationship with middlemen.
7. Overall opinion of horticultural farming by small-scale farmers in Mwea division.
8. Changes need to be made by the government and private sector.

