INFLUENCE OF CONTRACT FARMING ON MARKETING OF FARM PRODUCE. A CASE OF SMALL SCALE FRENCH BEANS FARMERS IN KUTUS LOCATION, KIRINYAGA COUNTY.

BY

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DECLARATION

This research project is my original work and has not been presented for a degree in any other University.

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This Research Project is dedicated to my dear wife Rahab, our beloved children Timothy, Rhoda and Grace for their invaluable love and great desire to see me excel in higher academic heights. Special thanks go to my Dad Joseph and Mum Lucia for their prayers, unwavering support and encouragement. God bless you.

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ABBREVIATIONS AND ACRONYMS

APMCA	-	Agricultural Produce Market Committee Act
FAM	-	Food Agriculture Ministry
FAO	-	Food Agricultural Organization
FPEAK	-	Fresh Produce Exporters Association of Kenya
GDP	-	Gross Domestic Product
GOK	-	Government of Kenya
HCDA	-	Horticultural Crop Development Authority
IFAD	-	International Fund for Agriculture Development
KHDP	-	Kenya Horticultural Development Program
KTDA	-	Kenya Tea Development Agency
MDGs	-	Millennium Development Goals
MFA	-	Ministry of Food and Agriculture
MOA	-	Ministry of Agriculture
MRL	-	Maximum Residue Levels
UN	-	United Nations
USA	-	United States of America
USAID	-	United States Agency on International Aid for Development
ZEGA	-	Zambia Exporters Growers Association
ZHC	-	Zambia Horticulture Company

ABSTRACT

This research study was carried out in Kutus Location, Kirinyaga County. The purpose of the study was to investigate the Influence of Contract Farming on Marketing of farm produce a case of small scale french beans farmers in Kutus Location. The objectives of the study were to: Determine the extent to which access to contract farming Information influences marketing of french beans; Examine extent to which training small scale french beans farmers on contract farming influences marketing of french beans; Explore the extent to which service provision to small scale french beans farmers in contract farming influences marketing of french beans and Investigate how small scale french beans farmers knowledge of legal framework in contract farming influences marketing of french beans in Kutus Location, Kirinyaga County. The research design used in this study was descriptive survey. Group administration of the questionnaires to small scale french beans farmers from nine registered farmer groups was used to collect data. The target population for this study was the 252. Proportional stratified simple random sampling was used to select the respondents. The table for sample size determination by Israel (2013) was used to arrive at the sample size of 155 group members as the respondents. The study instrument was validated prior to actual data collection by close consultation between the researcher and fellow students in Master of Arts degree in Projects Planning and Management and colleagues in the horticulture industry. A self help group from Ngoliba in Thika was used for piloting of the research instrument. Pilot testing provided an opportunity to detect any difficulties likely to arise and how to mitigate the difficulties. The collected data was coded, analyzed and the report presented in percentages and frequency tables. The study established that majority of the farmers relied only on buyers of their french beans as their main source of information. It was established that training helped small scale french beans farmers produce safe to use french beans for the market, therefore increasing their market share. Further, the study revealed that majority of the small scale french beans farmers were receiving inputs from the buyers on credits. This helped the small scale french beans farmers to invest and diversify in other business operations in their farms. The study further established that despite majority of the small scale french beans farmers do not know how to use legal frame work, despite being trained in such knowledge. The study recommends that: small scale french beans farmers should pursue alternative sources of Information other than the buyers of their produce; technical support to small scale farmers should be expanded beyond the monitory boundaries. On legal frame work, the government should aim to liberalize the market environment in such a way as to promote healthy competition.

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

The agricultural industry over the years has been facing extensive threats due to aging of the farming community, reduction in the number of farms, farm land being converted to housing and industrialization. Despite the insurmountable challenges associated with farming, agriculture is instrumental in transforming the economic and social framework particularly of the rural economy as it has the potential to expand the level of employment opportunities, enhance income distribution and reduce the level of poverty. This is in line with Millennium Development Goals. According to Millennium Development goals report of the United Nations of 2013, two of its main set goals are to halve the proportion of the population living in extreme poverty and hunger in the developing world by 2015. By the year 1990, 47% of the population living in the developing world lived under 1.25 US dollar per day.

In 2010, the proportion of the population living under US dollar 1.25 had reduced to 22%. In 1990 according to Millennium Development Goals report of the UN of 2013, 23.2 % of the population in the developing world was undernourished. However, the percentage decreased to 14.9% between 2010 and 2012. The target to reduce extreme poverty and hunger by more than half, for the populations living in the developing world by the year 2015 has been made possible by use of focused global development efforts and accelerated action (Ki-Moon, 2013). According to 2013 UN report on MDGs, efforts and accelerated action in agriculture can lead to increased production and marketing of produce in the developing world. Increased production and marketing of produce more so in the rural areas can lead to increased food production and income to the small scale farmers therefore raising their income to above 1.25 US dollar per day.

In her Vision 2030, Kenya aims to increase her Gross Domestic Product(GDP) annual growth rate to an average of 10% over the vision horizon 2008 to 2030 (GoK ,2007). The vision 2030 cannot be realized without reducing the proportion of her population living in extreme poverty and hunger. In chapter four of Kenya vision 2030, The Economic Vision and Strategy: Adding Value to our Products and Services, the strategy to be employed will be to raise income in agriculture through processing (GoK, 2007). Processing will add value enabling her products to compete with the best in other parts of the world. These interventions will lead to market expansion for her products which leads to expanded markets for the farmers and especially the small scale farmers in the rural areas. Such interventions will benefit the small scale french beans farmers in Kutus location Mwea east district whose main problem is how to market their french beans produced as fresh vegetables for export market.

According to Horticultural Crop Development Authority (HCDA), Ministry of Agriculture (MOA) and United States Aid on International Development (USAID) validated report for the year 2011, farm produce marketing challenge facing the small scale farmers, is a common problem facing small scale french beans farmers in Kenya. The farm produce marketing challenge is faced more by the small scale french beans farmers compared to large scale or independent producers (HCDA, MOA and USAID, 2011). The french beans marketing challenges reduce the small scale farmers to price takers irrespective of the heavy costs they incur in the production and marketing process (Kathrin and Heike, 2006). Kathrin and Heike (2006) argue that, of great concern, is that the farmers must bear the high risk of not being able to market all of their produce which in bad times even lead to 100% loss of their produce. On the other hand, according to Kathrin and Heike (2006), the processors and or buyers are not able to procure all of the quantity and quality of the farm produce under contract farming. This is despite the fact that they recruit the small scale farmers to grow produce for them, support them with certified seeds, and some processors and or buyers even provide fertilizers and chemicals to the recruited farmers. According to Kathrin and Heike (2006), contract farming is seen

as a possibility to help solve the marketing challenge through linking small scale farmers to the buyers of their produce.

Contract farming, involves businesses signing contracts with farmers to grow for them a specific crop in order to get a specific product, at an agreed quantity, quality and time, where in return the business promises to buy back the produce at an agreed price or range of prices in addition to other benefits as outlined in the contract (Kumar, 2011). Kathrin and Heike (2006), further argue that, contract farming has the potential to link small scale farmers to the market and therefore stimulate agricultural production in the face of globalization. Contract farming also can fill the gap left by the governments in the wake of market liberalization by providing access to inputs, technologies, credit and other services (Kathrin and Heike, 2006). Many challenges seem to constrain small scale farmers from participating actively in the marketing of their produce. These many challenges appear to be a direct consequence of the size of the small scale farmers operations (Jaeger, 2010). French beans farmers in Kutus location, Kirinyaga County are equally affected by similar challenges.

Contract farming has been practiced in different models and has been defined in various ways. Kurt and Johann (2006), define contract farming as a contractual arrangement between farmers and the buyers of their produce, whether oral or written, specifying one or more conditions of production, and one or more conditions of marketing, for an agricultural product, which is non transferrable. According to Kumar (2011), contract farming is of great interest to the buyers who are looking for an assured supply of produce for sale or for processing. Kumar (2011) further argues that, processors are among the most important users of contracts, as they wish to have full utilization of their plant processing capacity. Food and Agricultural Organization for the United Nations (FAO) defines contract farming as an agricultural production carried out between the farmer and the buyer in accordance to the agreement between the two parties (FAO, 2012).

Contract farming has been in existence for many years, not only in the developed world but also in the developing countries as well (Mathew & Wendy, 2000). In the United States of America (USA), contract farming can be dated back to the beginning of the 19th century (Prowse, 2012). According to Prowse (2012), the main reasons that could have led to contract farming in the United States of America were wide spread changes in technology and the greater requirement for effective crop production and marketing of the produce. Prowse (2012) further argues that the growth of contract farming in the United States also appears to have been partly based on the ability of the producer organizations also called farmer groups to market farmers produce collectively as facilitated by the 1929 US marketing act and also the role of the United States of America commodity credit corporation in financing agricultural contracts.

In India, there has been a long history of regulation limiting the private investment and trade in various aspects of agriculture. It is not until 2003, when the reforms of the Agricultural Produce Market Committee Act (APMCA) was initiated in many states, that it was illegal for businesses to purchase agricultural produce directly from farmers rather than from government regulated local markets called Mandis (Kumar, 2011). In his study on the Rise of contract farming in India, Kumar (2011) points out that contract farming in India has been emerging as a preferred mechanism through which agribusiness can directly engage farmers. Kumar (2011) gives an example of Pepsi Company as one of the earliest promoters of contract farming in India. In 1997, Pepsi Company set up a tomato processing plant in Punjab, which was not a traditional tomato growing area, and started tying up with farmers to grow tomato varieties needed for ketchup. Kumar (2011), further points out that, although Pepsi Company has since exited tomatoes processing, it still works with 12,000 small scale farmers, primarily to procure Potatoes for potato chips.

According to a study done in Egypt by The International Fund for Agriculture Development (IFAD,2011),contract farming could be an effective way of including small holder farmers in the effort to supply horticultural export value chain, particularly if farmers are organized into farmer associations also called farmer groups. This study further revealed that small holder farmers in Egypt had the potential to increase their

income by as much as 63% when they engage in contract farming, of organic horticultural produce, and by 43% if they engage in convectional export. Jaeger (2010), argues that contract farming would not only benefit the small scale farmer, but both parties, the small scale farmers and the produce buyers, for it gives an opportunity for the marketing costs to be taken out of the chain as well as providing a conduit for information .

1.1.1 Contract Farming and its Challenges in Kenya

In Kenya, contract farming has been practiced for many years and is more developed than in other African countries. Many books and papers published all over the world mention case studies from Kenya (Kathrin and Heike, 2006). For example, Kathrin and Heike (2006) give a case of Frigoken Kenya Limited. Established in 1989, Frigoken by 2006 was the largest producer of premium quality processed vegetables in Kenya. According to Kathrin and Heike (2006), Frigoken purchases 100% of its produce through contractual arrangements with mostly small scale farmers and the intermediaries. The commercial contracts for each category have a different design. Kathrin and Heike (2006) give Meru greens and Top Mark Growers as some of the Intermediaries buying produce from their contracted farmers and in turn supply to Frigoken.

In another case study Waswa, Onyango and Mcharo (2012), in their study on Contract Sugar Cane Farming and Farmers Income in the Lake Victoria basin, Kenya, they wanted to find out the relationship between Contract Sugar cane farming, poverty and Environmental management in the Lake Victoria Basin. In their study, they found out that income distribution between companies and the farmers was skewed in favour of the companies and at the expense of the farmers. The skewed income distribution is done through cost deductions for which farmers have no control and no idea over the rationalization process (Waswa et al, 2012).

In 1997, The Horticultural Crop Development Authority (HCDA) published the code of conduct which was meant as a blue print memorandum of understanding between the buyer and the seller of fresh horticultural produce and to serve as a guideline for both parties in order to conduct good business practices (Kathrin and Hoefler, 2006). The code of conduct mentions seventeen important points, which provides a framework to the development of a legally binding contract. In addition, while HCDA was actively engaged in its own marketing operations, it developed a generic contract which could serve as a basis to develop contracts for specific cases.

According to Fresh Produce Exporters Association of Kenya (FPEAK,2011),there are more than sixty companies dealing in fresh vegetables, fruits and cut flowers both for export and domestic consumption. All these companies are all privately owned and adhere to very high standards in handling their products. The buyer and exporter companies involved in the buying and or processing of the French beans are not able to produce enough of the quantities of the products they need for the export and local sales. This means they have to enter into contractual farming agreements with farmers to grow produce for them which they buy in accordance with the conditions spelt out in the agreements whether formal or informal.

French beans farming in Kenya can be traced back to early 1970s. Kutus Location of Mwea East district in Kirinyaga County is considered as one of the pioneer Locations in Kirinyaga County in french beans farming in the country (Kimenye, L. N, in FAO, 2002). According to Food and Agricultural Organization (FAO, 2002) up to early 1990s only Njoro canning was processing fine beans for export market. By 1994, four other processing firms had joined the French beans export business. The emergence of French beans processing firms for export market therefore encouraged small scale french beans farmers' in Kirinyaga County under which Kutus Location falls and the whole country to expand production and marketing of the French beans.

With continued demand for processed and fresh beans for export to the European Union, the retailers and leading supermarkets in Europe developed concern for the food safety and hygiene sold to their customers (FAO, 2002). According to FAO (2002), this led to the creation of European Good Agricultural Practices (Euregap) standards whose aim was to ensure all the processed and fresh vegetables for export were safe for human consumption, which is free from harmful chemicals, pests and diseases.

According to the United States Agency on International Aid for Development (USAID) the unique small holder base was threatened in 2003 when European Union supermarkets introduced Euregap (USAID, 2005). Hence the 60,000 registered small holders had to face this challenge or else lose the export market business valued at US dollar 600 million in 2003,compared to the national cost of certification which stood at only US dollar 25 million(USAID,2005). Following a very aggressive campaign by Kenya Horticulture Development Program (KHDP), Kenya fresh produce exporters association (FPEAK) small holder producers were sensitized on the need to pull their resources together through formation of farmer self-help groups which legally entered into contractual farming agreements with the buyers and exporters of their french beans and therefore effectively overcame the challenge and threat that faced them (USAID, 2005).
Despite the marketing challenge brought by the European Market set rules and regulations (EureGap) in 2003, small scale french beans farmers in Kenya increasingly improved their production and the volume of french beans marketed to the European markets through the exporters. As an example, according to Horticulture validated report of 2011, done jointly by Horticultural Crops Development Authority (HCDA), Ministry of Agriculture (MOA) and United States Aid International Development (USAID) on production and marketing of French beans in Kenya between 2009 and 2011, Kirinyaga County under which Kutus Location, was the leading county in the production and marketing of French beans. In the year 2009, 24,540 MT of french beans were produced. The revenue realized was Kenya shillings 997Million. In the year 2010, production of french beans was realized 26,216MT giving a revenue of Kenya shillings 1.027 billion. In the year 2011, production of 22,325MT of French beans was realized giving an income of

Kenya shillings 1.076 billion. In total, Kirinyaga County contributed 67% of the volume and income realized in the three years compared to other major producers such as Meru 15%, Laikipia 12% and Muranga 6%. According to the HCDA validated report of 2013, 95% of the French beans production for the National export to the European markets was a contribution that came from the small scale farmers either in registered farmer groups or those marketing their produce as individuals through brokers.

1.1.2 The Marketing Challenge

Despite the high production of french beans by the small scale farmers in Kirinyaga County within which Kutus Location falls, the biggest challenge faced by french beans small scale farmers in Kutus location is how to market all the french beans produced to the buyers, for export market. According to the HCDA validated report of 2013, the marketing challenge mostly occurs in times of excess production of the french beans which at times is coupled with low demand for the french beans by the buyer and or processors customers in the European markets.

In 2012, the small scale french beans farmers in Kenya found themselves in a challenging situation when the companies buying their french beans could not buy their french beans following the ban on all fresh vegetables for exports by the supermarkets in Europe for the suscipision that small scale french beans farmers were spraying Dimethoate on vegetables for export, a pesticide suspected to cause ill health to humans, animals and contamination to the Environment (Songa in Today Financial News, 2013). The ban by the European Union supermarkets between January and September 2012 caused the volume of beans sold by the small scale farmers to the European supermarkets to drop from 59,000 metric tones to 54,000 metric tons between January and September 2012(Mwikaya in Business Daily, 2013). According to Mwikaya in Business Daily (2013), this led to the loss of four billion shillings in the period January to September 2012.

Records from East African Growers Company, show that despite having signed contractual agreements with small scale farmers in its out grower schemes for the year 2012 to 2013, the company was accepting from its registered small scale farmers, french beans at between 50 to 80% packability as compared to 80 to 100% packability for the year 2011 to 2012. Mwikaya in Business Daily (2013) argues that in such a case it is the small scale farmers who suffered most. According to Mwikaya in Business Daily(2013),this is because, despite of having signed an agreement between East African Growers and its small scale farmers, the company could only buy what it could process and export leaving the rest of the produce with the farmers. There is no provision for cost sharing in the contract in the event of calamities (Mwikaya in Business Daily, 2013).

To save small scale french beans farmers from increased losses following the ban, Fresh Produce Exporters Association of Kenya (FPEAK) and Horticultural Crop Development Authority (HCDA) engaged themselves in an awareness campaign to educate the vegetable growers especially the french beans farmers and the sellers of agrochemicals on the complete ban of the sale and use of Dimethoate and use of other chemicals banned from use in the European market (Mwikaya in Business Daily, 2013). According to Mwikaya in Business daily (2013), the campaign would not only save the small scale french beans farmers business from collapsing but also avoid damage on the Kenyan economy. French beans contribute five percent of the total vegetable volumes exported, but 30% of the total revenue earned from vegetable exports, meaning this would have significant medium term impact on the small scale farmers, the exporters and the country (Mwikaya in Business daily, 2013).

Mandola (2005), explains that it is common practice that the small scale farmers have their produce ready for marketing, but due to some arbitrage opportunities, the buyers and processors will be unwilling to buy the small scale farmer produce in whole as per the signed contractual agreements. Such opportunities according to Mandola (2005) include supply and demand, prevailing market prices, prolonged draught, heavy rainfall leading to floods, disease and pest out breaks which all lead to acute produce shortage.

Mandola (2005) says that forces such as oversupply of the produce leads drop in prices, failure to pick all produce from the farmers as agreed in the signed contracts, rejection of farmer produce at the processing plant or buying point. In times of acute shortage, Mandola (2005), says on the other hand, farmers side sell their produce in order to take advantage of the existing high market prices due to high competition for the produce thereby denying the contracted buyer of their produce the chance to buy the produce as agreed in the signed farming agreements.

1.2 Statement of the Problem

The problem facing small scale french beans farmers in Kutus location is marketing of their french beans produced for both fresh and processing market under contract farming. The marketing challenge, force the small scale french beans farmers to be the price takers and absorbers of the production cost. This happens when production at the farm, exceeds the buyers demand for the french beans intended for the fresh and processing export market (Kathrin and Heike, 2006). Therefore, despite having signed farming agreements with the buyers and processors of their french beans, the small scale french beans farmers find themselves with produce that cannot enter the intended market.

The logic behind contract farming is that the buyer of the produce under contract farming is guaranteed of the supply of the produce in question where price, quantity, delivery, time and quality are all established in advance (Jaeger, 2010). On the other hand, in contract farming, the farmer, and in this case the small scale french beans farmer, should benefit at a minimum with the assured link to existing and new markets through access to marketing information in contract farming, training on contract farming, technical support by having access to better inputs which include high quality seeds, education extension on latest technology, technical support, access to credit facilities, good infrastructure and access to legal institutions amongst others (Mandola, 2005). According to Mandola (2005), this objective is not always achieved.

Contract farming has the potential to solve the marketing problem faced by both the small scale french beans farmers and the procurement problem faced by buyers and processors of the french beans (Kathrin and Heike, 2006). Kathrin and Heike (2006), further explains that this potential is never realized due to some arbitrage opportunities which arise and more often lead to the breach of contracts.

Information available on the status of contract farming and its influence on the marketing of farm produce and with specific reference to french beans, reveals very little information on the advantage of contract farming on marketing of french beans. There is not enough information available on how contract farming has influenced the production and marketing french beans with reference to small scale farmers.

This study therefore, sought to establish the influence of contract farming in marketing of farm produce a case of small scale french beans farmers in Kutus location, Kirinyaga County. The researcher delimited the study on small scale farmers marketing their french beans through registered farmer groups.

1.3 Purpose of the Study

The purpose of this study was to investigative influence of contract farming on marketing of farm produce, a case of small scale french beans farmers marketing their french beans through registered farmer groups in Kutus location, Kirinyaga County.

1.4 Objectives of the Study

This study was guided by the following objectives.

1. To determine the extent to which access to contract farming information by small scale french beans farmers influences marketing of french beans in Kutus location, Kirinyaga County.
2. To Explore the extent to which training of small scale french beans farmers in contract farming influences marketing of french beans in Kutus location, Kirinyaga County.

3. To examine extent to which technical support to small scale french beans farmers in contract farming influences marketing of french beans in Kutus location, Kirinyaga County
4. To investigate how small scale farmers knowledge of legal frame work in contract farming influences marketing of french beans in Kutus location, Kirinyaga County.

1.5 Research Questions

This study was guided by the following research questions

1. To what extent does access to contract farming information by the small scale french beans farmers influence marketing of french beans in Kutus location, Kirinyaga County?
2. In which ways does training of small scale french beans farmers in contract farming influence marketing of french beans in Kutus location, Kirinyaga County?
3. To what extent does technical support to small scale french beans farmers in contract farming influence marketing of french beans in Kutus location, Kirinyaga County?
4. How does knowledge of legal frame work by the small scale french beans farmers in contract farming influence marketing of french beans in Kutus location, Kirinyaga County?

1.6 Significance of the Study

There are several parties to this study, who could find the findings to the study, to be of use to them. They include; french beans small scale farmers, buyers, processors, financial institutions, the government, and Nongovernmental organizations.

The small scale french beans farmers could use the findings to this study to get more insight and knowledge in contract farming and therefore use such knowledge to improve on their marketing skills and expand their market share in the export market. They could

also use the findings to improve on the crop husbandry methods and produce quality french beans potentially improving their farming business and their standards of living.

The buyers and processors of the french beans could use the findings to this study in developing policies, plans and programs aimed at improving the quality of contract farming. For example, they can develop training packages on crop husbandry, produce grading and handling, food safety and standards, packaging and market presentation.

Banks and financial institutions could use the findings and learn how they can work with the contracted small scale farmers in providing credit facilities which could help the small scale farmers in expansion of production and marketing of their produce.

The findings to this study could help the government and Nongovernmental organizations make more informed decisions on funding of projects initiated by the small scale farmers in contract farming. Such projects include building grading sheds, installation of irrigation water among others.

1.7 Assumptions of the Study

This study was guided by the following assumptions.

1. The researcher assumed that all the respondents, the group leaders with other personal commitments other than group leadership, will avail themselves to the designated meeting place, suggested date and time to respond to the questionnaire items.
2. The researcher further assumed that the respondents will honestly and to the best of their understanding respond to all the items in the questionnaire, with the motivation that findings to this study shall help them solve the marketing problem for their French beans.

1.8 Delimitations of the Study

This study was confined to french beans small scale farmers in Kutus location, Kirinyaga County. The study focused on those farmers marketing their french beans through registered farmer groups or associations. This is because small scale farmer groups or associations have well defined structures of leadership and management and this make

data collection process for this study less difficult, for the researcher anticipates well organized and stored records.

1.9 Limitations of the Study

With more funds and time available to the researcher, the sample size to this study would have been expanded by including french beans farmers from all other registered farmer groups in other locations from Kirinyaga County. It could also have expanded the boundaries by including the group leaders from the selected farmer groups for this study as well as members and group leaders from other registered farmer groups in Kirinyaga County. This would have allowed more useful and valuable data to be collected and included in the findings, discussion and conclusions to this study. However, due to limited funds and time constraints, the researcher limited his study to the group members selected from the nine registered farmer groups in Kutus Location. The researcher hoped to benefit from the group members experience and skills in providing information on contract farming and its influence on marketing of their french beans, when responding to the items in the questionnaire.

1.10 Definition of Significant Terms Used in the Study

Access to Contract Farming Information Refers to how small scale French bean farmers acquire know how on french bean production methods and practices and how this is influences marketing of their frech beans. Access to contract farming information further refers to the type and the source of information and the medium used to transfer the information to the small scale french beans farmers.

Contract Farming Farming done under mutual agreements whether formal or informal. Farmers who shall grow certain crops for the interested buyers who will be ready to buy such crops for the satisfaction of their markets. Contract farming may involve signing of documents which spell out certain agreements or understanding between involved parties or may be just verbal agreements or shaking of hands.

EureGap Euregap is a European market organization that regulates good agricultural practices on all fresh produce exports to the European countries. This includes Vegetables, fruits and Flowers. The organization makes sure all food safety and standards are observed.

Farmer groups Registered Groups with the Ministry of Culture, Social services and Gender, made of small scale farmers who have come together with the sole purpose of having a collective advantage in the marketing of their french beans to the existing buyers and processors through contractual agreements with them

French Beans Marketing Refers to the production and selling of the french beans by the small scale farmers with registered farmer groups to the buyers of the french beans. This encompasses all the four Ps of marketing (Product, promotion, price and place).

Small Scale French Bean Farmers For this study, the term refers to those farmers who produce and market their french beans through registered farmer groups or associations only. It does not refer to french bean farmers producing and marketing their french beans outside the registered french beans farmer groups or even their size by produce or volumes sold to the buyers and processors are small.

Technical Support This refers to services given to the small scale french beans farmers under contract farming by the agribusiness companies, in terms of inputs like fertilizers, chemicals, certified seeds, technical advice by the extension education officers.

1.11 Organization of the Study

Chapter one of the study contains introduction, giving a background of the study while putting the topic of the study in perspective. It gives the statement of the problem, the purpose and the significance of this study. This chapter outlines the objectives, limitations and assumptions of the study.

Chapter two, contains the literature review which cover introduction, home based, school based and personal factors. The chapter ends with a conceptual frame work.
Chapter three consists of research methodology which was used in the study. It covers the research design, target population, sampling design and size, data collection, validity and reliability of the data collection instrument, data analysis technique and ethical considerations.

Chapter four presents data analysis presentation, interpretation and discussion of the findings. This is according to the data collected on the Influence of contract farming on the marketing of farm produce. A case of small scale french beans farmers in Kutus location, Kirinyaga County.

Chapter five presents a summary of the study findings, conclusions and recommendations. The findings are summarized in line with the objectives and the purpose of the study which was to investigate the influence of contract farming on marketing of farm produce, a case of small scale french beans farmers in Kutus location, Kirinyaga County.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter provides literature review on the history of Contract farming and its influence on marketing of french beans from the global perspective, Africa and Kenya. This chapter will provide a better insight into the definitions and complexity of the research problem in this study as stated in the statement of the problem. For this study, the literature review looked into access to information by the small scale french beans farmers in contract farming, training of small scale french beans farmers in contract farming, service provision to small scale french beans farmers in contract farming and small scale french beans farmers knowledge of legal frame work in contract farming and its influence on marketing of french beans. The target population for this study was the small scale french beans farmers marketing their french beans through registered farmer groups in Kutus location of Kirinyaga County.

2.2 Access to Contract Farming Information by Small Scale French Beans Farmers and its Influence on Marketing of French Beans

To grow farm produce that will be accepted by the small scale farmers intended and preferred market, the small scale farmers must have access to accurate useful information and at the right time(Ozowa, 1999). It is safe to assert that the information needs of the small scale farmers and especially for french beans small scale farmers revolve around the resolution of problems such as acquiring of certified and quality seeds, pest hazards, weed control, soil fertility, farm credits, labour shortage, and information link to existing and new markets among others. According to Ozowa(1999),information needs of the small scale farmers can be grouped into five major groups or categories namely Agricultural inputs, extension education, Agricultural technology, Agricultural credit, and marketing.

On agricultural inputs, Ozowa (1999) argues that small scale french beans farmers will need information on the right varieties of seeds to use for their plantings, the pricing of such seeds, the fertilizer to use and the rates, the supplier, and yield expected per kilogram of seeds planted. They also need information on the chemicals to spray, allowed spray rates, maximum residue levels allowed (MRLS), pre-harvest intervals, banned chemicals which must not be sprayed is very crucial. According to Ozowa(1999), when information on agricultural inputs is not made available and especially to the small scale farmers, and at the right time, the small scale farmers end up acquiring wrong inputs which lead to poor yield, substandard quality, unsafe produce which will be unacceptable to the buyers and processors of their produce. A case in point is the year 2012 when the small scale french beans farmers in Kenya used prohibited chemicals such as Dimethoate which had been completely banned for use in fresh and processed vegetable production for the export market to Europe (Mwikaya, 2013).

According to Mwikaya (2013), exporters of fresh and processed french beans found using banned chemicals or exceeding maximum residue levels (MRLs), risked being banned from exporting their produce to the European export markets. As a result, the small scale french beans farmers suffered in that, despite having contractual agreements with the buyers and processors of their french beans, the buyers and processors were not able to buy the farmer produce following the ban to supply fresh vegetables suspected to have traces of the banned chemicals or exceeding the maximum residue levels to their customers.

Marketing information to be made available to small scale farmers according to Ozowa (1999) include such information as product planning, product pricing, product promotion and place, also called distribution. This is information on what crop to plant and the variety at a given season with marketability of such a crop as an important deciding factor. Ozowa (1999) further argues that, marketing information should include such information as the market trends, sales timing, likely prices, quality and quantities required, and it also include the distribution channel to the buyers and processors of the

farmer produce.. This help the small scale farmers to plan on how to stagger their planting programmes or cycles, the amount of hectare to plant in order to avoid a market glut and therefore loss of revenue and profit. Ozowa (1999) further suggests that market information should advise the small scale farmers on the benefits of group marketing. This information for example could help the small scale french beans farmers in Kutus location to have organized sales of the surplus and bulk transport of produce.

2.3 Training Small Scale Farmers in Contract Farming and its Influence on Marketing of French Beans

Training of farmers and especially the small scale french beans farmers, on factors of production help improve farmers knowledge on how these factors relate to marketing of french beans, for example grading, packaging among others.

2.3.1 Training Small Scale Farmers on Crop Husbandry and Marketing of French Beans

Producing high yielding crops has always been an important part of farming. With the cost of production rising day by day, and crop prices in the market not keeping the pace, farmers and especially small scale farmers have to critically understand the modern production techniques which could help them overcome this threatening challenge.

According to a report released by the Ministry of Food and Agriculture, Ontario Canada in 2003, inputs must be carefully measured so that the yield for each unit measured is worth more than the cost of the unit used. This report is quick to mention that, high yields do not necessarily mean high profits. This is because, the profits also depend on the prevailing market prices. It is therefore very important for the farmers and especially small scale farmers to be regularly trained on the best possible production methods to ensure minimized costs of production and therefore help them realize bigger profit margins (Ministry of Food and Agriculture, 2003).

The MFA (2003) report gives examples of such production techniques, which include, selection and buying of the right and certified seeds, soil management, proper land tillage, crop residue management, crop rotation and cover crop, nutrient management, pest and disease management through pesticide and fungicide sprays, field and planning records. The report in addition give examples of the farming records, the tillage record for five consecutive years and crop rotation that should be used to train small scale farmers on some of the best practices that can be adopted to help them improve yields and profit margins from the market. Ministry of Food and Agriculture report of 2003 shows that Farmers who do not value and attend trainings, lack information on the market trends and therefore cannot effectively market their produce at competitive terms since they have no access to the latest information on crop production and marketing techniques.

In most cases the farmers are left at the mercy of the middle men who take advantage of their ignorance and therefore reap maximum profit margins with little care of the farmers gains, even when it is clear to middlemen that the farmers are selling their produce at a loss (Mitchell, 2011). According to Mitchell (2011), this is a common occurrence in production, marketing of produce by the small scale farmers who in most cases lack the collective bargaining power especially those selling their produce to the market as individuals and not in farmer groups. This challenge is experienced with french beans small scale farmers in Kutus location.

2.3.2 Training Small Scale Farmers in Food Safety, Standards and Marketing of French Beans

Small scale farmers are happy and proud of fruits and vegetables they produce and they often strive to offer fruits and vegetables that are inherently safe and healthy for consumers (Zehnder et al, 2012). According to Zehnder et al (2012), just a single incidence of food or fruits contamination can have very devastating effects. Zehnder et al (2012), says when in 2006-2007, there was a large outbreak of Escheria coli O157:H7, (a strain of bacteria responsible for causing lethal diarrhea in humans), from Spinach grown

in California `occurred, the sales of spinach plummeted and the market did not recover for many months. Zehnder et al (2012), further indicates that news of out breaks tend to cause losses of markets and therefore revenue not only to the affected farmers but to those even not involved in the outbreak. According to Zehnder et al (2013), this phenomenon is not confined to disease outbreak only, the problem also occurs with chemical use on food like fresh vegetables for fresh export to the European Union markets.

Zehnder et al. (2012), says there are many steps that can be taken to minimize food contaminations by the small scale farmers and therefore avoid such huge losses as is the case with the small scale farmers growing fresh vegetables for export to the European Union markets. One of these many steps is training the small scale farmers to learn about risky practices and taking steps to minimize such risks.

Training does not have to be difficult. There should be some established procedures for production, workers hygiene, harvesting, post harvesting handling and even transporting of the produce to the market (Zehnder et al., 2012). According to Zehnder et al. (2012), tips for good agricultural practices in these areas can be found in individual company's fact sheets for the buyers and processors of the vegetables and fruits for export. The small scale farmers should then go through these fact sheets with their workers to explain to them how they want the activities done, for example packaging done as per their customers requirements and demands. Zehnder et al, (2012), further argues that once the written procedures are developed, they should be easily accessible and readable by both the farmers and their workers in a language they understand, more so their native language to remind them of the most important points. Zehnder et al, (2012) further explains that the training to the small scale farmers and their workers should aim to help them to periodically review and update the identified procedures in line with their customers demand and expectations.

2.3.3 Training Small Scale Farmers on Harvesting, Post-Harvest Handling and Marketing of French Beans

The most important key to quality maintenance of fresh harvested produce like fruits, vegetables and even cut flowers is careful handling. Symptoms of injury incurred during harvesting, handling, grading and packing, usually are not evident until the products reach the retail or the consumer level. This is too late for the small scale farmers to do anything about their quality image (Wilson, Boyette and Estes, 1999). Wilson et al, (1999), in their study on post-harvest handling of fresh fruits, vegetables and flowers argue that management of post-harvest losses, should start in the field and continue throughout harvesting, handling and marketing of the produce.

In their study, Wilson et al. (1999), recommend that small scale farmers and their harvesting labour must be well trained on such issues as how to handle the produce during harvesting, identifying the right maturity stage, do minimum handling of the harvested produce and even do field packing if possible.

Wilson et al (1999), further recommends that such bad practices as dropping of the harvested produce from some height, overfilling of the harvesting buckets or bins should be avoided. Wilson et al (1999) conclude their study by saying that harvesting and post harvesting handling are the ultimate stages in the process of producing quality fresh vegetables and fruits. Production, post-harvest handling, packaging, cooling, transportation and marketing costs are the same whether vegetables are sold or not. Considering such investments, Wilson et al (1999), further recommends that growers who include small scale french beans growers should do everything possible they can to ensure quality maintenance of their commodities, and the satisfaction of the buyers and processors of their produce, in this case the french beans. Wilson et al (1999), emphasizes that the small scale farmers should always remember that marketing is extremely competitive and therefore should strive to keep their buyers and processors satisfied.

2.3.4 Training Small Scale Farmers on Intermediaries and Marketing of French Beans

The role of the middlemen in the marketing chain can't be ignored or underscored (Kariuki, Obare and Loy, 2006). According to Kariuki et al (2006), gentleman's agreements involving handshakes or promisory market access possibilities through brokers and middlemen have enabled most small scale french beans farmers in Kenya, to export an extensive array of fresh vegetables.

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Intermediaries also known as the middlemen are individuals or business concerns who perform various marketing functions involved in the purchase and sale of products which move from the producers or farms to the consumers who include buyers and or processors of the produce (Mohammad and Raza, 2011).

In their study on small growers at the mercy of the middlemen, Mohammad and Raza (2011), argue that in Pakistan, middle men are perceived as being exploitative and detrimental to the interests of the farmers. This is because small scale farmers sell their produce to these middlemen at cheaper prices since they do not have direct link to the buyers and processors in the market. Hence the middlemen therefore control the prices.

According to Mohammad and Raza (2011), the small scale farmer operations make it difficult for them to make direct individual marketing of their produce, due to small marketable surplus. These small scale farmers are in most times scattered over a vast land mass, and in most cases characterized by poor infrastructure which makes it difficult to access the small scale farmers farms. This makes transportation of the perishable produce to the market very difficult for the buyers, processors and even the famers themselves.

Mohammad and Raza (2011), further argue that these difficult conditions therefore provide golden opportunities for the middlemen to come forward and offer services which the small scale farmers are unable to offer to the buyers and processors of their french beans . In addition, the middlemen further provide loans to the poor small scale farmers to help them carry out their daily operations, with an agreement that the

middlemen will recover their loans from the proceeds realized from the small scale farmers sales.

However, according to Mohammad and Raza (2011), this in most cases make the poor small scale farmers to be price takers and therefore have no power to sell their produce at the current prevailing market prices. According to Mohammad and Raza (2011), small scale french beans farmers therefore, need to be trained on the role of the middle men in the marketing chain. The need to train the small scale french beans farmers on the role of the middlemen in the marketing chain of the french beans is because, in the procurement and marketing of the french beans, most buyers and processors often chose to utilize the intermediaries or the middlemen (Mitchell, 2011).

French beans production and marketing in Kutus location, in Kirinyaga County assumes the same marketing structure explained in the above cited studies and examples. Hence training of the small scale french beans farmers on the role played by the middlemen in the marketing and selling of their french beans to the market is critical.

2.4 Technical Support to Small Scale French Beans Farmers in Contract Farming and Marketing of French Beans

According to Consumer Unity and Trust Society International (2011), technical support include supply of inputs to farmers and especially on credit basis, such as certified seeds, fertilizers and chemicals. Other technical support includes extension education which includes training of farmers on correct crop husbandry procedures, harvesting techniques, grading and handling of the produce.

CUTS International (2011) further explains that technical support also include financial services like giving cash advance to farmers to help them prepare land for planting, buying of certified seeds fertilizers, chemicals and to pay harvesting labour amongst others.

Provision of inputs to farmers for example on credit and specifically the small scale farmers, is an easier way for them to obtain inputs such as quality seeds, fertilizers, chemicals among others. This helps the small scale farmers accelerate the transfer of the latest technologies to the rural areas (Eaton and Shepherd in Kathrin and Hoeffler, 2006). Different stakeholders involved in a market relation have different motivations and aspirations (Ramatu, Sarpong and Akwasi, 2006). Small scale french beans farmers on one hand are motivated by the assurance of market access for their produce, reduction of inputs price, reduction of uncertainty or risk in marketing of their french beans. On the other hand, the agribusiness companies are motivated by the fact that they are assured of consistent supply of good quality and cheap produce (Ramatu et al, 2006).

2.5 Small Scale Farmers' Knowledge of Legal Frame Work in Contract Farming and Marketing of French Beans

There are different possible disputes that could arise out of contract farming (Jain, 2008). According to Jain, (2008) such disputes could be attributed by the produce buyers refusal to receive the delivery of the contracted goods, delay in payments beyond the agreed period, discounting of payments, rejecting of the produce under contract farming without good convincing reasons, forced price reductions especially in times of oversupply, and many others.

In a study on regulation and dispute settlement in contract farming in India, Jain (2008), recommends that disputes arising out of contract farming agreement should be referred to an authority mentioned in the agreement to act as an arbitrator. The agreed or prescribed authority should be able to solve the dispute within an agreed time frame. In the Kenyan situation, Horticultural Crop Development Authority (HCDA) serves this role.

Although corporate bodies, government agencies and individual developers, are out of necessity, to reduce the many disputes that arise in the contract farming agreement, Jain (2008) argues that, it is important in the formulation of the contract farming agreement, the two parties be involved in the signing of the contract, the catalysts of the contract,

small scale farmers, their representatives and the buyer of the produce should be given an opportunity to contribute to the drafting of the agreement and assist in the wording of the specific terms which the small scale farmers can understand. Jain (2008) further stresses that it is the responsibility of the buyer of the farmers produce to ensure that all the small scale farmers fully understand the legal implications of the agreement signed. The terms and conditions entered into must be written down for open and independent examination and copies given to the farmers' representatives.

However, Jain (2008) in his research on Regulation and dispute settlement in contract farming in India notes that in the majority of the disputes between the small scale farmers and the buyers of their produce, it is highly unlikely that a buyer will take legal action against a small scale farmer for the breach of a contract. Action by small scale farmers against the buyer of their produce is similarly improbable. Jain (2008) says this is because the costs involved during legal redress are inclined to be far in excess of the amounts claimed, and legal action seems to threaten the relationship between the produce buyer and all the small scale farmers producing for the buyer.

Jain (2008) concludes by saying that, as neither side is likely to seek legal remedy through the courts, it is therefore highly important to clearly educate small scale farmers on simple, quick and easy methods or ways of solving arising disputes between them and the buyers of their produce. Such simple, quick and easy methods such as the two disagreeing parties coming together to solve the dispute between themselves, without arbitration or legal tussle at the courts, should be clearly identified in the farming agreement where applicable.

2.6 Theoretical Frame Work

Most research work is founded on a question, concept or thought (Amy, 2013). According to Amy (2013), the researcher not only questions, but ponders and develops thoughts or theories on what the possible answers could be on the research question. Amy

(2013) on his work on how to write the theoretical framework in research, states that these thoughts and theories are then grouped together into themes that frame the subject. Amy (2013) further explains that the function of the theoretical framework is to provide a foundation for the parameter, or boundaries of a study therefore helping the researcher not to get off the track by digging into information that has nothing to do with his or her research topic. Amy (2013), argues that researchers are curious about broad subjects, but with a good theoretical framework, they can stay tightly within the topic of research.

2.6.1 Theories on Contract Farming and Marketing of Farm Produce

There are several theories that try to define and discuss contract farming (Prowse, 2012). According to Prowse (2012), these theories use different methods and explanations to try and define what contract farming is. In his study on Contract farming in developing countries, Prowse (2012) states that contract farming theories classify contract farming into three. First are the market specification contract which guarantees a farmer of the market outlet, time of sale, and the pricing structure if some degree of quality is met. The second classification according to Prowse (2012) is the resources providing contract where some physical and technical inputs are provided by a firm with the requirement that the farmer has to market his produce through the firm providing the inputs. Prowse (2012) states that the last classification is production management contracts where the contracting firm stipulates and enforces conditions of production and processing. The contracted farmers therefore relinquish a degree of control over the production process on the farm.

But according to Wu (2013), since the early 70s, contract theory has largely evolved into a theoretical field within mainstream economics. In his study on adapting contract theory to fit contract farming, Wu (2013), says that theories on contract farming basically classify contract farming into two approaches. The first approach is the complete contracts approach where the relationship assumes that the contract governs all the performance under all contingencies. Wu in his study further states that the second approach is known as incomplete contracts where there are unspecified or enforceable

contingencies in a contract. Contract farming relationships can be distinguished according to the parties involved and the way they are organized. That is, who provides the technical support, manages the finances, and in charge of transport. According to Eaton and Shepherd in Kathrin and Heike (2006), there are four types of contract farming models, Informal, centralized, Multipartite and intermediary. In their study on contract farming in Kenya, theory, evidence from selected value chains, and implication for development cooperation, Kathrin and Heike (2006) explain each of the models by giving examples of the companies practicing each model.

The informal model is characterized by the absence of signed contracts between the parties involved. These informal agreements could be between the small scale farmers and the buyers and processors. It could also be between the consolidators and the small scale farmers. These agreements are mostly referred to as hand shake or gentleman's agreements and they bear very high rate of risk in breaching of agreements between the parties (Kathrin and Heike, 2006).

Centralized model, also known as the Out grower Schemes on which this study is anchored, involves a centralized processor or buyer procuring from a large number of small scale farmers (Kathrin and Heike, 2006). According to Kathrin and Heike (2006), the cooperation is vertically well integrated and most of the times such crucial services as pre financing of inputs like seeds, fertilizers, spray chemicals, technical advice and transport are provided(Appendix. In Kenya the centralized model is used by big companies such as Finlays, Vegpro, East African growers, Kenya Horticulture Exporters (KHE) to mention a few. These companies mostly dealing with buying of vegetables and fruits from the small scale farmers handle the payments of their farmers through their own financial departments.

Multipartite model is where there are three levels of signing the farming contract (Kathrin and Heike, 2006). According to Kathrin and Heike (2006), the first level is between the buyer or processor and a consultant also known as consolidators. The second level of

signing the contract is between the consultant/consolidators and the small scale farmer groups whereas the third level is between farmer groups and the small scale farmers themselves. In this type of arrangement, the buyer or the processors deal with the consolidators directly in all the transactions and not the small scale farmers. This model is also commonly used by the large horticultural companies. The model can be compared to out sourcing (Kathrin and Heike, 2006).

The fourth model of contract farming according to Kathrin and Heike (2006) is the intermediary. This model is not very common in the Kenyan french beans market. This model reflects an official form of middlemen or the intermediaries which have not been preferred in Kenyan french beans market. A Good example is Meru Greens which supplies french beans to Frigoken Kenya Limited and Other exporters (Kathrin and Heike, 2006). The interesting issue is, Meru Green does not directly export the produce. From all the three models discussed above, the informal, centralized and the multipartite are commonly practiced.

This study was therefore anchored on the complete contract theory approach as discussed by Wu (2013) and the centralized farming contract model as illustrated by Kathrin and Heike (2006). The incomplete theory by Wu(2013) and the Centralized model by Kathrin and Heike were in line with the purpose of this study which was to investigate the influence of contract farming on the marketing of farm produce a case of small scale french beans farmers in Kutus location, Mwea east district. The target group was the small scale french beans farmers marketing their french beans through registered farmer groups to the buyers and processors of french beans for fresh and processing export market.

2.7 The Global Status, Evidence of Contract Farming and Marketing of Farm Produce

Contract farming has been in existence for many years as a means of organizing the commercial agricultural production of both large and small holder farmers (Shoja, 2005). In a study on globalization and contract farming in India, Shoja (2005), writes that in an age of market liberalization, globalization and agribusiness, there is a danger that small scale farmers will find difficulty in fully participating in the market economy. Shoja (2005), further argues that in the era of globalization, the concept of contract farming is an effective way to co-ordinate and promote production and marketing in agriculture.

According to Shoja (2005), there are advantages, disadvantages and problems arising from contract farming. These advantages, disadvantages and problems will vary according to the physical, social and market environments. More specifically, the distribution of the risks will depend on such factors as the nature of the markets for both raw material and the processed product, the availability of alternative earning opportunities for the farmers, and the extent to which relevant technical information is provided to the contracted farmers.

In Zambia contract farming of fresh vegetables for domestic markets can be traced back to the 1970s when the government of Zambia established Zambia Horticultural Company (ZHC) as a parastatal (Mwikisa, 2005). Vegetables for export which include french beans, baby corns, mange tout, sugar snaps, until 2004 Agriflora was the main exporter.

According to Mwikisa (2005), Agriflora signed contracts with cooperatives representing members who are the producers and mainly the small scale farmers. Agriflora would then in turn market the small scale farmers produce to the United Kingdom and European markets through shipping arrangements with Zambia Export Growers Association (ZEGA).

According to Mwikisa (2005), both formal and informal contracts are used in the production and marketing of vegetables by the small scale farmers in Zambia. Majority of the small scale farmers in Zambia rely on some form of short term production contracts

to supply vegetables to public institution such as schools, hospitals, hotels, super markets and lodges. These contracts specify quantities, qualities, price and date of delivery. In his study on the status of contract farming and contractual arrangements in Zambian agriculture and business, Mwikisa (2005), further writes on other crops grown under contract farming which include cotton, sugar cane, tobacco and coffee

2.8 Status, Evidence of Contract Farming and Marketing of Farm Produce in Kenya

Contract farming and marketing of french beans is not new in Kenya. There is substantial evidence of contract farming of cash crops like tea, coffee, tobacco, sugar cane, cotton among other crops (Minot, 2011). In their study on contract farming, theory, evidence from selected value chains and implications for development cooperation, Kathrin and Heike (2006) have discussed in details and have shown evidently that contract farming has been practiced in Kenya for many years. On their research on Contract farming in Kenya, Kathrin and Heike (2006) have given elaborate examples of the crops, fruits and even poultry companies practicing contract farming with the small scale farmers and the regions involved.

Contract farming has also been practiced on other crops such as sugar cane (Waswa, Onyango and Mcharo, 2012). In their study on Sugarcane contract farming and farmers income in the Lake Victoria basin, Waswa et al, (2012) sought to establish the gains by small scale farmers in the Lake Victoria basin by practicing contract farming in sugar cane.

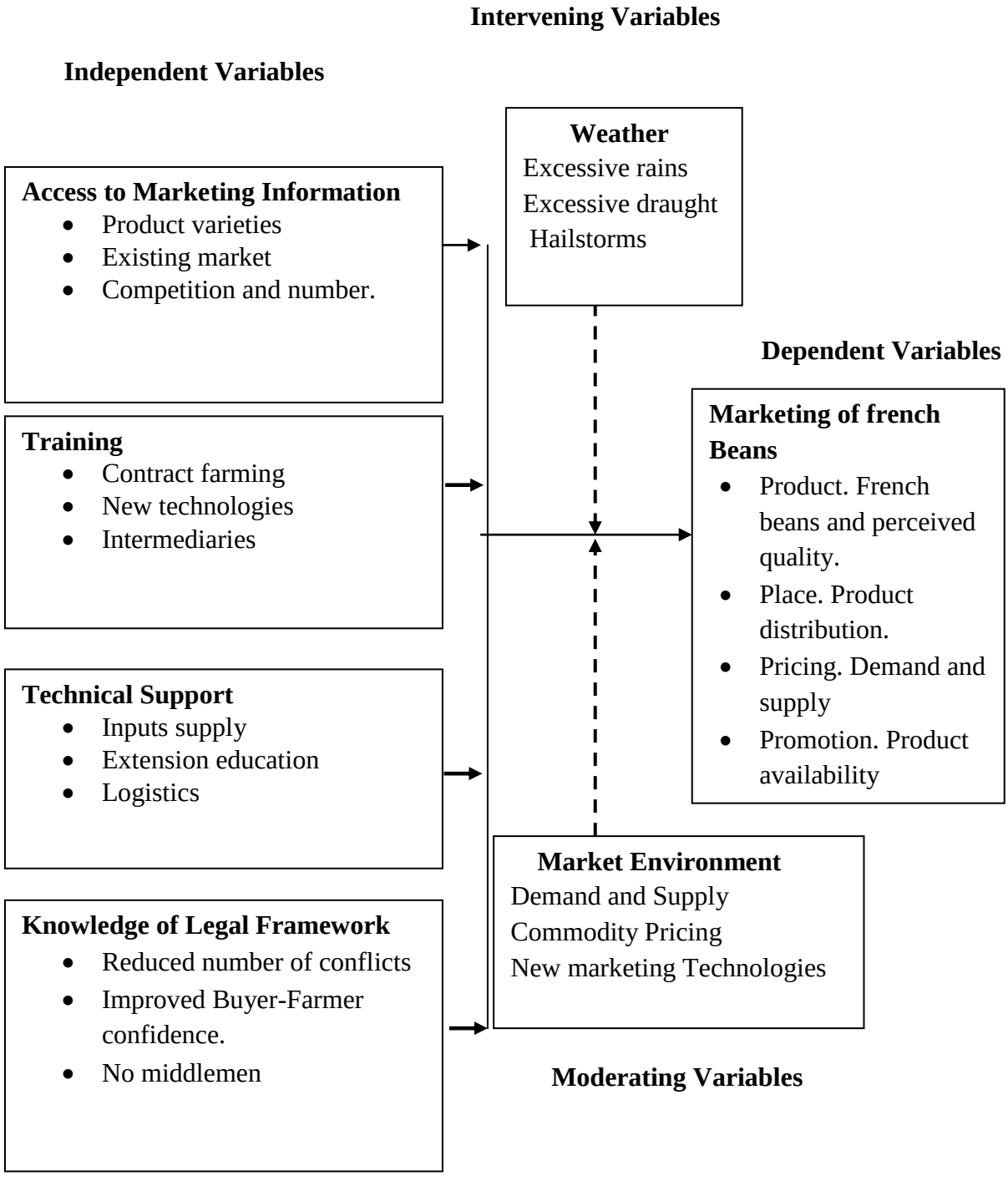
In another study on contract farming in Africa: opportunities and challenges, Minot (2011), gives an example of when contract farming is suitable. Minot (2011), gives some of the reasons as when the buyer or seller is in export business, or when supply of the produce in question becomes unstable over time. According to Minot (2011), for example, Kenya Tea Development Agency (KTDA) had a contract with 562,000 small scale tea growers in Kenya in 2011. According to Minot (2011), this was in 2011 the

largest scheme of contracted small scale out growers in the World. The scheme provides inputs, Extension services and Technical assistance amongst other services.

2.9 Conceptual Frame Work

The conceptual frame work below shows the relationship of the study variables as conceptualized by the researcher. The independent variables are the catalyst factors of contract farming while the dependent variables are the measures of french beans marketing. The independent variables are assumed to be part of the drivers of contract farming and therefore influences marketing of french beans, which is the dependent variable.

Figure 1: Conceptual Framework



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers the description of the methods that were applied in carrying out the research study. The chapter was organized under the following subsections. The research design, location of the study, target population, sampling techniques and sample size. The chapter also covers the construction of the research instruments, pilot study, validity, reliability, data collection techniques, ethical considerations and data analysis techniques.

3.2 Research Design

A research design is a general plan of how a researcher will go about answering the research questions (Orodho, 2004). A research design is also a conceptual structure within which research is conducted and constitutes a blue print for the collection, measurement and analysis of data ` (Kothari, 2004).

The research design used in this study was descriptive survey design. Descriptive studies are conducted within communities to establish the extent of a range of problems, issues or concerns that have not been previously explored in depth (Mugenda, 2011). According to Uma and Roger, (2010), descriptive studies are done to investigate and describe the variables of interest in a problem.

According to Robbins (2003), descriptive survey studies are advantageous in that they are easily adopted to collect information `whose findings and conclusions can be generalized to the whole population. Descriptive studies are logistically easier and simpler to conduct because of their limited geographic scope.

3.3 Target Population

The target population for this study was 252 small scale french beans farmers marketing their french beans as members of nine registered farmer groups in Kutus location Kirinyaga County. A Target population is the entire group a researcher is interested in, draw conclusions or generalize the results of the study (Mugenda and Mugenda, 2003). The 252 small scale farmers, were members of the groups, both male and females.

3.4 Sample Size and Sampling Procedure

This section presents the method that was used to determine the study sample size from which data was collected.

3.4.1 Sample Size

A sample size is a sub-set of the total population that is used to give the general views of the total population (Kothari, 2004). The sample size must be a representative of the population on which the researcher would wish to generalize the research findings. According to the sample size determination table by Israel (2013), (Appendix 5), for a target population of 252 group members, the optimum sample size for this research study was therefore 155 group members.

Table 3.1: Table of sample size determination

Name of the group	Location	Members	Sample size
Domba Horticulture shg	KUTUS	35	21
Mondaki Horticulture shg	KUTUS	26	16
Gakika Horticulture shg	KUTUS	21	13
Kirindiri Horticulture shg	KUTUS	27	17
Effort Horticulture shg	KUTUS	32	19
Kamiigua Horticulture shg	KUTUS	32	19
Kiorugari Horticulture shg	KUTUS	24	15
Nyangati Horticulture shg	KUTUS	27	17
Kangu Horticulture shg	KUTUS	28	18
TOTALS		**252**	**155**

3.4.2 Sampling Technique

Sampling technique is the act of selecting a suitable sample or representative part of the population for the purpose of determining characteristics of the whole population (Frankel & Wallen, 2008). This study used proportional stratified simple random sampling technique to obtain a study sample of 155 members from a population of 252 farmers.

Proportional stratified simple random sampling technique is a sampling process which helps to achieve the desired representation of various sub-groups in a population under study and especially where one group is feared to be underrepresented or missed out altogether (Mugenda, 2008). According to Mugenda (2008), where the population embraces a number of distinct categories of different sizes, then the frame can be organized by those categories into separate strata. Mugenda (2008), further explains that the subjects are then selected in such a way that existing sub-groups in the population are proportionately but randomly represented within the sample. Proportional stratified simple random sampling technique helps to ensure that the sub-groups that constitute the majority in the population are represented proportionately (Mugenda, 2008).

For this study, to ensure that a representative sample of the group members was selected without bias and randomly, tags with representative numbers for the sample size to be selected from each group were written and placed in a bucket. Group members, assembled at one common meeting point were then asked to pick one paper at a time. The papers picked by each member were opened and the representative number used to select the respondents sample from the target population irrespective of whether the picked respondent is a female or male. Each group member had an equal chance to be selected as a subject for the study sample.

3.5 Research Instrument

Invented by Sir Francis Galton in 1870, a questionnaire is a research instrument consisting of a set of questions intended to capture responses from the respondents in a standardized manner (Bhattacherjee, 2012).

According to Bhattacherjee (2012), there are two main types of questionnaires, the self administered and the group-administered questionnaire. In the group administered questionnaire, the respondents are brought together to a common place and time, and each respondent is asked to complete the questionnaire while in that common place and the respondents enter their responses independently without interacting (Bhattacherjee, 2012). For this research study, a group administered questionnaire was given to the selected sample of 155 respondents from the nine registered farmer groups in Kutus Location.

3.5.1 Pilot Testing

The researcher carried out a pilot testing exercise for the questionnaire before actual administration to the actual research sample. This helped the researcher to understand the difficulties likely to be encountered and best know how to mitigate the difficulties before the actual administration of the actual questionnaires. Another purpose for pilot testing was to ensure that the items in the research instrument are stated clearly and had the same meaning to all the respondents in the selected sample (Mugenda, 1999). This helped the researcher to assess the clarity of the instrument.

The procedure used to pre test the questionnaire was identical to the one that was used during the actual data collection in order to help the researcher make meaningful data collection. The questionnaires therefore were pre tested to a selected sample from Ngoliba in Thika which had similar characteristics to the actual sample that the researcher intended to use in the study at Kutus Location, Kirinyaga County.

According to Mugenda and Mugenda (2003), the equivalent of 10% from a selected sample is enough to do a pilot test. A representative sample from Ngoliba in Thika was selected for a pilot study for the research instrument. From a sample size of 155 farmers selected, 10% of the sample size was 16 subjects.

3.5.2 Research Instrument Validity

Validity of a research instrument is the extent to which the instrument measures what it is intended to measure (Mbwesa, 2006). She continues to explains that if the instrument measures what it is not intended to measure, then it fails to be valid.

To test the validity of the research instrument for this study, the instrument of measure in this case the group administered questionnaire, was thoroughly discussed item by item with fellow post graduate students, colleagues in the horticulture industry, who are experts in matters dealing with small scale farming in the horticulture industry and especially french beans growing and marketing.

3.5.3 Research Instrument Reliability

The reliability of a measure indicates the extent to which it is without bias or error free and hence ensures consistent measurement across time and across the various items in the research instrument (Uma and Roger, 2010). According to Uma and Rodger (2010), reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the, ‘‘goodness’’, of measure.

To test the reliability of the research instrument to be used by the researcher, the instrument was subjected to test-retest reliability method. Test-retest reliability is a measure of consistency between two measurements or tests of the same construct administered to the same sample at two different times (Battacherjee, 2012). According to Battacherjee (2012), when the measuring tool is consistent over time following several tests, then the measure is reliable. However, according to Mbwesa (2006), the interval between the administration of two tests to the same sample should not be unduly long. Longer periods between two administrations of the tests lower the correlation coefficient,

since there is a high likelihood of changes in the subjects taking the test. Shorter periods of up to 90 days are recommended (Mbwesa, 2006).

According to Mugenda and Mugenda (2003), equivalent of 10% of the subjects from the selected sample is enough to do piloting of the test-retest reliability. Hence 16 respondents were selected by the researcher from Ngoliba in Thika pilot sample. To test-retest reliability of the research instrument for this study, the instrument was subjected to two tests with an interval of 14 days from the first test. A sample selected from Ngoliba in Thika, but having the same characteristics with the actual sample in Kutus Location, Kirinyaga County was used.

The reliability for the instrument after test-retest was determined by calculating the correlation coefficient. The questionnaire items responded by the respondents applied twice to the test group were assigned arbitrary scores. Scores obtained were then keyed into the SPSS software and through the use Cronbach's alpha scale, a correlation coefficient of 0.73 was obtained. According to Gliem and Gliem (2003), the closer the Cronbach's coefficient is closer to 1, the stronger the correlation coefficient is and this indicates that the research instrument has a strong internal consistency. The instrument used in this study had a correlation coefficient of 0.73 and was therefore considered to have a strong internal consistency.

3.6 Data Collection Procedure

Data obtained from the respondents, was cleaned, summarized, analyzed and a report prepared and presented. Research permit from the National Commission for Higher Education Science and Technology was obtained before commencement of data collection from the small scale french beans farmers in Kutus Location, Kirinyaga County. The researcher with two trained research assistant visited the selected sample, small scale french beans farmers for data collection purposes. The questionnaires were administered to the sample groups for response to the items therein and completed questionnaires were handed over to the researcher immediately after completion by the respondents.

3.7 Data Analysis Technique

The raw data obtained from the study was systematically organized and converted to numerical codes representing measurements of variables. The cleaned, organized and well coded data was analyzed by use of descriptive statistics which according to Frankel and Wallen (2008) is a technique that enables the researcher to meaningfully describe data with numerical indices or graphical form. The descriptive statistics used in this study involved use of percentages and frequency tables to answer the research questions and objectives in relation to the research problem.

3.8 Ethical Consideration

A covering letter introducing the researcher to the respondents was issued to each respondent explaining the nature and purpose of the study. The researcher exercised utmost caution while administering the data collection instruments to the respondents to ensure their rights and privacy were respected. Before the actual administration of the instruments, an explanation on the aim and purpose of the study was explained to the respondents in the language they understood well.

The study also sought the consent of the respondents before being provided with all the requirements of the study. The study findings have been presented without any manipulation of the data in favour of the researcher's expectations

Table 3.1: Operational Definition of Variables

Objectives	Independent Variables	Indicators	Measuring Levels	Tools of Data collection	Tools of Analysis
Determine extent to which access to contract farming information by small scale french beans farmers influences marketing of french beans in Kutus Location, Kirinyaga County.	Contract farming information	Farmers acquiring information on product varieties	Nominal	Questionnaire	Percentages and Frequencies
		Market and Marketing trends. Competition in the market.	Nominal	Questionnaire	Percentages and frequencies
		Farmers acquire credit facilities from financial institutions to support production and marketing of their french beans.	Nominal	Questionnaire	Percentages and frequencies
Explore extent to which training small scale farmers in contract farming influences marketing of french beans in Kutus location, Kirinyaga County.	Training	Quality french beans being marketed	Ordinal		Percentages and frequencies
		More safe french beans marketed	Ordinal	Questionnaire	Percentages and Frequencies
		Adoption of New marketing technologies by small scale farmers	Ordinal	Questionnaire	Percentages and Frequencies
		On Intermediaries role along marketing chains	Ordinal	Questionnaire	Percentages and Frequencies
Examine extent to which technical support to small scale farmers	Technical support	Small scale farmers acquiring inputs at competitive terms.	Nominal	Questionnaire	Percentages and frequencies

under contract farming influences marketing of french beans in Kutus Location, Kirinyaga County.		Extension education	Nominal	Questionnaire	Percentages and frequencies
		Support on transport, cash advances, and logistics.	Nominal	Questionnaire	Percentages and frequencies
To investigate how knowledge on legal frame work by small scale farmers in contract farming influences marketing of french beans in Kutus Location, Kirinyaga County.	Knowledge on legal frame work	Reduced conflicts between small scale farmers and produce buyers	Ordinal	Questionnaire	Percentages and Frequencies
		Improved farmer- buyer confidence in french beans marketing	Ordinal	Questionnaire	Percentages and frequencies
		Reduced or no Intermediaries Along marketing chains	Ordinal	Questionnaire	Percentages and frequencies

CHAPTER FOUR
DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter presents results of the study based on the analysis of the data collected from the field. The main purpose of the study was to investigate influence of contract farming on marketing of french beans, a case of small scale french beans farmers marketing their french beans through registered farmer groups in Kutus location, Kirinyaga County. The chapter is organized into six sections. Section one presents questionnaire return rate, section two consists of the respondents' background information while the remaining four sections present findings of the study.

4.2 Questionnaire Return Rate

The study sample comprised of 155 french beans farmers drawn from nine registered small scale farmer groups in Kutus location, Kirinyaga County.

Table 4.1: Respondents rate of return.

Age	Frequency	Percent
Males	96	66.2
Females	49	33.8
Total	**145**	**100.0**

From the above table 4.1, 155 respondents were sampled, and 145 respondents filled in and returned their questionnaires, giving a return rate of 93.5%. This was high enough for data analysis and discussion of the findings. According to Mugenda and Mugenda (2003), a response rate of 50% is adequate for analysis and reporting, 60% is good and a response rate of 70% and above is excellent.

4.3 Demographic Characteristics of the Respondents

The demographic characteristics of the respondents (summarized in tables 4.2 to 4.5) were sought to assess if these characteristics would influence production and marketing of french beans in Kutus Location, Mwea east district.

4.3.1 Respondents Gender

Gender in this study referred to the sex of the respondents and its influence on marketing of french beans.

Table 4.2: Respondents gender

Age	Frequency	Percent
Males	96	66.2
Females	49	33.8
Total	**145**	**100.0**

Results from table 4.2 shows that 66.2% of the respondents were males whereas 33.8% were females. This revealed that the proportion of males participating in contract farming of french beans in Kutus location was almost double or twice compared to that of females. The findings as shown in table 4.1 shows that, females shy away from contract farming of french beans due to the many challenges encountered in production and marketing of french beans.

4.3.2 Respondents Age

This study sought to find out the age distribution of the small scale farmers involved in production and marketing of french beans with registered farmer groups. Table 4.3 illustrates age of small scale farmers who participated in the study.

Table 4.3: Respondent age

Age	Frequency	Percent
Below 25 years	7	4.8
26-35 years	51	35.2
36-45 years	42	29.0
46-55 years	33	22.7
Over 55 years	12	8.3
Total	**145**	**100.0**

As shown in table 4.3 the study revealed that 4.8% of the respondents were below 25 years, 64.2% were aged between 26 and 45 years, while 31 % were aged 46-55 years. This shows that majority of the respondents 86.9 % were between the age range of 26 years and 55 years. This is an age bracket with many financial commitments like bringing up a family, paying for school fees among others and therefore was expected to be economically active. Results from table 4.2 further shows younger people, 64.2% in the age bracket of 26-45, participated more in contract farming and marketing of french beans, compared to older farmers, 31% in the age bracket 46 and above. Older people are conservative and less responsive to the adoption of new ideas and practices and would therefore be discouraged more easily by the many challenges found in french beans production and marketing.

The findings of this study agree with those of Berg (2013) in his study on Socio-economic factors affecting adoption of improved agricultural practices by small scale farmers in South Africa. Berg (2013) study, involved small scale farmers between the ages 30 to 65 years, practicing dry land farming and irrigation schemes. In his study, he found that adoption of new ideas and technologies such as certified seeds, new pesticides in the market, modern machineries and new ways of land preparation by the older farmers was slow or none at all. Berg (2013) study, further revealed that older farmers tend to be more risk averse and this according to Berg (2013) tended to affect the old farmers decision making on adoption of new ideas and technologies. The findings of this study, further agreed with those of Darko (2014) on his study on effects of gender,

education and age on the adoption of agricultural technologies in Ashanti, north and eastern region of Ghana. He found that age has been found to either positively or negatively influence the adoption of new ideas. In his study, Darko (2014) concludes that the relationship between age and adoption of technology varies with the type of technology being introduced. In another example Adesiina and Baidu in Darko (2013) they found that age was found to positively influence adoption of sorghum growing in Burkina Faso. They found that sorghum growing was adopted more by the older people in age compared to the youth.

4.3.3 Respondents Marital Status

This study sought to find out the marital status of the small scale farmers involved in contract farming and how this influenced production and marketing of the french beans at Kutus location. The results are displayed in Table 4.4 below.

Table 4.4: Respondents marital status

Education level	Frequency	Percent
Married	112	77.2
Single	27	18.6
Divorced	3	2.1
Widowed.	3	2.1
Total	**145**	**100.0**

Results presented in table 4.4 indicate that77.2 % of the respondents were married, 18.6% were single, 2.1% were divorced while the remaining 2.1% were windowed. This shows that majority of the farmers in contract french beans farming in Kutus location were married. The study findings concurred with those of Erapa (2006) on his study on Contract farming in Karnataka: A boon or bane, where he found that over 93% of the contract farmers were married. However, Erapa's study does not show the relevance of marriage in contract farming. Most studies, on contract farming, do not show the influence of marriage on contract farming. For this research study, the researcher attributes the higher percentage of married couples in contract farming, to the fact that,

this is a category of a group of farmers with many family commitments such as paying for school fees for their children, hospital bills among others and therefore the need to have a stable source of income as found in contract farming.

4.3.4 Respondents Education Level

The researcher in this study sought to establish the level of education of the farmers in relation to contract farming and its influence on french beans production and marketing at Kutus location. The results are as shown in table 4.5 below.

Table 4.5: Respondents education level

Education level	Frequency	Percent
None	4	2.8
Primary	58	40.0
Secondary	38	26.2
College	44	30.3
University	1	0.7
Total	**145**	**100.0**

Table 4.5 shows that 40.0% of the respondents had attained primary education, 26.2% had secondary education, 30.3% had College education, and 0.7% had University qualifications while 2.8% of the farmers had not attained any formal education. This shows that majority of the farmers in french beans contract farming were literate and not without education as would be the perception. However, only 0.7% of the respondents had university education, and this shows that not many people with university education considered french beans farming as a way of earning an income. The findings of this study agree with those of Musara, Zirenge, Chagwiza, Chimruramahwe and Dube (2011) on their study on the influence of education on small scale farmers participation in contract farming. Musara *et al* (2011) in their study established that education level as measured by the number of years in school significantly influence farmers participation in contract farming. However, Musara *et al* (2011) established that with more achievement in education level, farmer participation in contract farming tend to decrease,

since people tend to shun agriculture for white collar jobs. These findings agreed with those of this study where the researcher found established that of the respondents interviewed, only 0.7% had University education.

4.4 Extent to which Access to Contract Farming Information Influences Marketing of French Beans

The first objective in this study sought to determine the extent to which access to contract farming information by the small scale french beans farmers' influences marketing of french beans in Kutus location, Kirinyaga County. To meet this objective, the researcher first asked the respondents to indicate the source of information on contract farming.

Table 4.6: Access to contract farming information

Access to contract farming information	Frequency	Percent
Access to contract farming information	144	99.3
No access to contract farming information	1	0.7
Total	**145**	**100.0**

Results from table 4.6 shows that 99.3% of the respondents had been receiving information on contract farming with only 0.7% of the respondents stating they never received information on contract farming. The findings of this study agree with those of Olandele (2006) who in his study on multilinguality of farm broadcast and agricultural information access in Nigeria found that in farming, information is vital for increasing production and improving marketing and distribution strategies. The findings further agree with those of Aina (2007) where she found that Information opens windows of sharing experiences, best practices, sources of financial aids, credit facilities and new markets. According to Aina (2007), information has a vital role to play in improving and sustaining agricultural production of any nation.

4.4.1 Ways in Which Farmers Acquire Information on French Beans Farming

This study sought to find out ways in which the small scale French beans farmers in Kutus location acquired information on contract farming and how this influenced marketing of French beans in Kutus location. The results in Table 4.7 illustrates this.

Table 4.7: Ways in which farmers' acquire information on French beans farming

	Buyer		Media		Others	
	f	%	f	%	F	%
The product or the variety of french beans to grow for the market	144	99.3	1	0.7	0	0.0
Farming inputs for example certified seeds, fertilizers	144	99.3	1	0.7	0	0.0
Extension Education	145	100.0	0	0.0	0	0.0
Financial and credit facilities	0	0.0	0	0.0	145	100.0
Market and marketing information	144	99.3	1	0.7	0	0.0

Results from table 4.7 show that 100.0% of the respondents reported they received information on extension education from the buyer. Further, the results show that 99.3% got information of the product or variety, farming inputs, market and marketing information from the buyer. Only 0.7% indicated they received information through the media. This shows that french beans farmers in Kutus location were only relying on one source of information for most issues, the buyer. The findings of this study were not in line with the findings by Rees e*t al*., (2000) who established that the major sources of information for small scale farmers in Kenya include community sources, neighbours, churches, community based organizations and barazas, nongovernmental organizations and government extension services. Similarly, the findings were not in line with Khan, Morgan and Sofranko (1990) who established that farmers accessed agricultural information from the extension agents, relatives, dealers, mass media, better farmers and neighbors.

4.4.2 Benefits of Accessing Contract Farming Information to Small Scale French Beans Farmers in Kutus Location, Kirinyaga County.

This study sought to establish if there were any benefits associated with access to contract farming information and how this influenced production and marketing of french beans in Kutus location, Kirinyaga County. Table 4.8 below illustrates the results.

Table 4.8: Benefits of accessing contract farming information

Benefits	Agreement levels	Frequency	Percentage
Access to contract farming information has given your group an opportunity to sell your french beans to the preferred buyer in the French beans market	Strongly agree	0	0.0
	Fairly Agree	5	3.4
	Agree	58	40.0
	Neutral	28	19.3
	Disagree	19	13.1
	Fairly Disagree	25	17.2
	Strongly Disagree	10	6.9
	Total	**145**	**100.0**
Contract farming information has given group an opportunity to secure bigger share of the market in French beans marketing compared to the other French beans farmers in the location	Strongly agree	5	3.4
	Fairly Agree	3	2.1
	Agree	86	59.3
	Neutral	12	8.3
	Disagree	31	21.4
	Fairly Disagree	4	2.8
	Strongly Disagree	4	2.8
	Total	**145**	**100.0**
Contract farming has helped french bean farmers to easily access credit facilities such as cash advances from financial institutions	Strongly agree	4	2.8
	Fairly Agree	0	0.0
	Agree	95	65.5
	Neutral	14	9.7
	Disagree	23	15.9
	Fairly Disagree	7	4.8
	Strongly Disagree	2	1.4
	Total	**145**	**100.0**

The results as shown in table 4.8 revealed that 43.4% of the respondents agreed with the statement that access to contract farming information has given the group an opportunity to sell beans to the preferred buyers,19.3% of them were neutral while 37.3% disagreed

with the statement. The study further revealed that 64.8% of the respondents agreed with the statement that access to contract farming information had given their group an opportunity to secure a bigger share of the market, 8.3% were uncertain while 27.0% of them disagreed with the statement. Majority of the respondents 68.3%,also agreed with the statement that access to contract farming information had helped them to easily access credit facilities such as cash advances from financial institutions, 9.7% were neutral while 22.1% disagreed with the statement. The findings to this study agree with the findings of Setboonsarng (2008) in his study on global partnership in poverty reduction, where he established that access to contract farming information helped the small scale farmers have market access for their products, which eventually led to increased production and income, reduced risk of price fluctuations, timely inputs delivery to the farm, credit and financial intermediation, introduction of higher value crops among other benefits.

4.5 Extent to Which Training Small Scale French Beans Farmers Influences Marketing of French Beans.

The second objective of the study was to explore the extent to which training small scale french beans farmers in contract farming influences marketing of french beans in Kutus location, Kirinyaga County. To address this objective, the study first sought to establish whether farmers had received any training on contract farming.

4.5.1 Number of Respondents who had Received Training on Contract Farming

From 145 respondents, 96.6% had received training on contract farming while 3.4% of the respondents indicated they had never received any training. Table 4.9 illustrates frequency in which farmers received training on contract farming.

Table 4.9: Number of farmers who had received training on contract farming

Farmers training status	Frequency	Percent
Had received training	140	96.6
Had not received any training	5	3.4
Total	**145**	**100**

The results in table 4.9 shows that majority of the small scale french beans farmers in Kutus location had therefore been trained on contract farming.

4.5.2 Frequency in Which Farmers Receive Training on French Beans Production.

The study sought to find out how often the small scale french beans farmers received training in contract farming and how this influenced marketing of french beans. Results in Table 4.10 illustrates this.

Table 4.10: Frequency in which farmers receive training on French beans farming

Items	Once		Twice		Thrice		More than 3 times		No training	
	F	%	f	%	f	%	F	%	f	%
Contract farming agreements	90	62.1	28	19.3	8	5.5	14	9.7	5	3.4
Crop husbandry	30	20.7	56	38.6	21	14.5	33	22.8	5	3.4
Food safety for example health and hygiene	30	20.7	22	15.2	17	11.7	71	49.0	5	3.4
Food safety and standards for example Euregap	19	13.1	33	22.8	14	9.7	74	51.0	5	3.4
Harvesting and harvesting techniques for example grading	17	11.7	28	19.3	15	10.3	80	55.2	5	3.4
Post harvesting technology for example packaging	36	24.8	17	11.7	37	25.5	50	34.5	5	3.4
Market and the marketing chain of French beans	48	33.1	33	22.8	40	27.6	19	13.1	5	3.4
Intermediaries and their role in the marketing chain of French beans	63	43.4	50	34.5	7	4.8	20	13.8	5	3.4

Of the surveyed respondents, 62.1% reported that they received training on contract farming agreements once, 5.5% received thrice while 3.4% had never received any training. In terms of food safety for example health and hygiene, 20.7% of respondents received training once, 15.2% received twice, 11.7% thrice while 49.0% received more than three times. The results further showed that, post harvesting technology trainings were received once by 24.8%of the respondents, twice by 11.7%, thrice by 25.5% and more than three times by 34.5% of the respondents. With regard to the market and the

marketing chain of french beans, 33.1%of the respondents received training once, 22.8% received twice, 27.6% thrice and 13.1%) of the respondents received more than three times in a year. In relation to intermediaries and their role in the marketing chain of french beans, 43.4%of the respondents received training once, 34.5% received twice, 4.8% received thrice and 13.8% of the respondents received training more than three times in a year. The findings presented above indicates that the major areas in which french beans farmers were receiving training regularly included food safety and standards for example health and hygiene, harvesting techniques and post harvesting technology. Results in table 4.9 further show that the respondents were rarely receiving training on contract farming agreement, crop husbandry, marketing and the marketing chain and the roles of intermediaries in the marketing chain.

The findings of this study concurred with the report from the Ministry of Food and Agriculture Atlanta United States of America (2003), which states that farmers and especially small scale should be regulary trained on the best possible production methods to ensure minimized costs of production and therefore help them realize higher profit margins (MFA, 2003).

4.5.3 Training Facilitator

This study sort to find out who facilitated the trainings and how this influenced marketing of french beans in Kutus location. Table 4.11 illustrates this.

Table 4.11: Training facilitator

Training Facilitator	Frequency	Percent
Buyer	135	93.1
Farmer Group	10	6.9
Total	**145**	**100**

Results presented in table 4.11 illustrates that 93.1% of the respondents reported that trainings on contract farming were facilitated by the buyer while 6.9% of them stated that trainings were facilitated by the group. The results therefore showed the value attached

to the farmer trainings in contract farming by the buyers in relation to the french beans business.

4.5.4 Benefits of Training Small Scale Farmers in Contract Farming

This study sought to find out if there were any benefits associated with training small scale french beans farmers in contract farming and how this influenced marketing of french beans in Kutus location. The results in Table 4.12 illustrates this.

Table 4.12: Benefits of training small scale french beans farmers

Benefits of training	Agreement/ Disagreement levels	Frequency	Percentage
Training has helped group to increase its market share in the French beans market through production of more beans	Strongly agree	8	5.5
	Fairly Agree	1	0.7
	Agree	88	60.7
	Neutral	18	12.4
	Disagree	23	15.9
	Fairly Disagree	3	2.1
	Strongly Disagree	4	2.8
	Total	**145**	**100.0**
Training has helped group to increase its market share in the French beans market through production and selling of safe French beans to the market or buyer	Strongly agree	7	4.8
	Fairly Agree	8	5.5
	Agree	95	65.5
	Neutral	12	8.3
	Disagree	18	12.4
	Fairly Disagree	1	0.7
	Strongly Disagree	4	2.8
	Total	**145**	**100.0**
Training has helped the group to be compliant to food standards	Strongly agree	6	4.1
	Fairly Agree	7	4.8
	Agree	117	80.7
	Neutral	7	4.8
	Disagree	3	2.1
	Fairly Disagree	0	0.0
	Strongly Disagree	5	3.4
	Total	**145**	**100.0**
Training has helped group to increase its market share in the French beans market through reduced side selling by eliminating or reducing the number of brokers	Strongly agree	3	2.1
	Fairly Agree	2	1.4
	Agree	108	74.5
	Neutral	12	8.3
	Disagree	15	10.3
	Fairly Disagree	0	0.0
	Strongly Disagree	5	3.4
	Total	**145**	**100.0**

As shown in table 4.12, the research study established that 66.9% of the respondents agreed with the statement that training had helped them to produce more beans for the intended market, 12.4% of them were neutral while 20.8% disagreed with the statement. It was further revealed that 75.8% of the respondents agreed that training had helped them to produce and sell safe french beans, 8.3% were undecided whereas 15.9% were of the view that training did not help them to produce and sell safe beans. In addition, the results revealed that over 80.0% of the respondents indicated that training had helped the group to be compliant to the food standards and also reduced side selling by reducing the intermediaries along the marketing chain. The findings to this study agree with those of Afenyo (2015) where in his study, Making Small Scale Farming Work In Sub Saharan Africa, he found that training of small scale farmers in new skills and knowledge help them respond efficiently to their ever evolving challenges. Afenyo (2015), further found that most importantly small scale farmers don't benefit from the food markets especially the urban and export food markets which they seem to even lose despite the frequent trainings on various methods and techniques on how to capture them. Such methods include food safety and standards among many others.

4.6 Technical Support to Small Scale French Beans Farmers in Contract Farming and its Influences on Marketing of French Beans

The third objective of this study was to examine the extent to which technical support to small scale french beans farmers in contract farming influences marketing of french beans in Kutus location, Kirinyaga County. To meet this objective, the researcher first sought to determine from the respondents, who supplied small scale farmers with various farm inputs. In response, all the respondents, 100.0% reported that they were supplied with inputs by the buyers. The following are the terms in which farmers receive farm inputs.

4.6.1 Terms in Which Farmers Receive Farm Inputs

From the findings, 62.1% of the farmers were supplied with inputs on credit terms while 37.9% of them were supplied inputs on cash. This shows that majority of the farmers were receiving inputs on credit. Table 4.13 illustrates this.

Table 4.13: Terms in which farmers receive farm inputs

Terms of receiving farm inputs	Frequency	Percent
Credit sales	90	62.1
Cash sales	55	37.9
Total	**145**	**100.0**

4.6.2 The Supplier of Inputs to Small Scale Farmers

The study established that, majority of the respondents, 56.6% reported that they were provided with credit facilities by their current buyer whereas 43.4% stated that they were receiving credit facilities from the Agrovets. Table 4.14 shows provision of credit facilities to the farmers.

Table 4.14: Supplier of Inputs to Small Scale Farmers on Credit

Supplier of Inputs	Frequency	Percent
Buyer	82	56.6
Agrovets	63	43.4
Total	**145**	**100.0**

4.6.3 Benefits of Acquiring Inputs on Credit Facilities

This research study established that provision of inputs to small scale farmers on credit presented several benefits to them. The farmers used the money they could have spent on buying inputs on other beneficial projects. Table 4.15 shows the benefits acquired by the french bean farmers who received credit facilities from the buyers.

Table 4.15: Benefits acquired by the french beans farmers who received Inputs on credit facilities (multiple responses)

Benefits	Frequency	Percentage
Land preparation	25	23.6
Paying the workers	20	18.9
Education	19	17.9
Pay Hospital bills	16	15.1
Buy food	13	12.3
Social responsibility	5	4.7
Diversification	6	5.7
Entertainment	2	1.8

n=106

The results from table 4.15 shows that 23.6% of the respondents were able to use the money to prepare land for planting, 24.4% used the money to pay the salaries for their workers, 23.2% paid school fees for their children, 19.5% used the money to improve the health of their family members, 15.8% used the money to buy food, 6.1% of the respondents used the money to meet their social responsibility,7.3% used the money to diversify into other projects. 2.4% of the farmers reported that they used the money on entertainment. This study therefore established that technical support which includes providing inputs on credit such as fertilizers, quality seeds agrochemicals among others, help the small scale farmers engage and manage other farm activities and involvement as shown in table 4.15 above. The findings were in agreement with those of Eaton and Shepherd in Kathrin and Hoeffler, 2006 where they state that providing inputs to small scale farmers on credit help them accelerate the transfer of the latest technologies to the rural areas.

4.6.4 Other Providers of Credit Facilities

Table 4.16 shows providers of credit facilities among the 63 farmers who reported that they were not receiving credit facilities from the buyers.

Table 4.16: Other providers of credit facilities (multiple responses)

Providers of credit facilities	Frequency	Percentage
Financial institutions	34	54
Farmers own contribution	19	30.2
Women groups.eg. KWFT	6	9.5
Borrow from friends	4	6.3
Total	**63**	**100.0**

As shown in Table 4.16, 54% of the respondents reported that they received credit facilities from financial institutions like banks, 30.2% received from their own contribution in the group while 9.5 % indicated that they received from women groups such as Kenya Women Finance Trust, and 6.3% said they received their credit facilities from friends. The findings revealed that the buyers of the farmers french beans were not keen to financially support the small scale farmers in production and marketing of french beans for fear of losing their money and the produce when production and marketing environments became unfavourable. The findings disagree with those of IFAD (2003), on a study: Agricultural Marketing Companies as a Source of Small Holder Credit in Eastern and South Africa, where IFAD established that despite the risk associated with inputs provision on credit, most buyers were still willing to give small scale farmers inputs on credit given the fact that the benefits were more than the losses. The study by IFAD (2003) further established that, the buyers in most cases would calculate the equivalent of the loss if the small scale farmers default the loan repayments and compare it to the gain of the volumes of the produce delivered by the small scale farmers. That is, the value of the profits gained from purchase of the produce under contract farming.

4.6.5 Frequency in Which Farm Produce is Picked Per Week.

The objective of this study was to establish whether the buyers of the french beans from the contracted small scale farmers provide support to them as suggested in the research proposal. Table 4.17 illustrates this.

Table 4.17: Frequency in which farm produce is picked per week

Frequency of Picking Farm Produce	Frequency	Percentage
Once	7	4.8
Twice	64	44.1
Thrice	74	51.1
Total	**145**	**100.0**

Table 4.17 shows that 4.8% of the respondents indicated that farm produce was picked once per week, 44.1% stated twice while 51.0% reported thrice. All the respondents 100 % further reported that the produce was picked at the central place (shades). In addition, 97.9% of the respondents indicated that produce was picked and transported in crates, whereas 2.1% said the produce was picked and transported in boxes. These findings confirmed the buyers' interests in picking the produce from farms in order to secure all the produce and not lose it to competition especially in times of shortage.

4.6.6 Buyers' provision of Extension Education

This study sought to establish whether extension education was provided by the buyer and how this influenced marketing of french beans in Kutus location. Table 4.18 illustrates this.

Table 4.18: Provision of extension education

Provision of Extension Education	Frequency	Percent
No Extension Education	29	20.0
Extension Education Provided	116	80.0
Total	**145**	**100.0**

As shown in Table 4.18, 80.0% of the respondents agreed that buyers of the French beans were providing them with extension education while 20.0% stated that they were not provided with any education.

4.6.7 Areas in Which Buyers of the French Beans Provide Extension Education

The objective of this study was to establish some of the areas under which the buyer provided extension education and how this influenced marketing of french beans. Table 4.19 illustrates this.

Table 4.19: Areas in which buyers of the French beans provide extension education

Areas	Frequency	Percentage
Grading	35	29.2
Harvesting	25	20.8
Spraying	23	19.2
Land preparation	20	16.6
Packaging	12	10
Pest control	2	1.7
Hygiene	2	1.7
Marketing	1	0.8

n=120

As shown in Table 4.19, the major areas in which buyers provided french bean small scale farmers with extension education were grading 29.2%, harvesting 20.8%, spraying 19.2% and land preparation 16.6%. Other areas mentioned included packaging, pest control and hygiene. On providing extension education, the findings to this study agree with those of Bluman, Lowengert and Magen (2010). Bluman *at el.* (2010) on their study found that extension education in developed countries was even privatized where farmers have to pay for the extension services and that extension education was no longer a responsibility to the government. The findings of this study found that the buyers of the small scale french beans solely decided on what areas to provide extension education. The findings to this study differ with those of Bluman *et al* (2010). Bluman et al explains that in situation where extension education has been privatized and farmers have to pay

for extension education services, then the farmers should have a voice when extension goals and means of delivery are discussed. According to Bluman *et al.* (2010), extension education therefore becomes demand or market driven rather than supply driven.

4.7 Farmers' Knowledge of Legal Frame Work in Contract Farming and its Influence on Marketing of French Beans

The fourth objective of the study was to investigate how small scale french beans farmers' knowledge on legal frame work in contract farming influences marketing of french beans in Kutus location, Kirinyaga County. To answer this research objective, the study first sought to establish whether french beans farmers have ever received any training on legal frame work in reference to contract farming. Table 4.20 shows the results of this analysis.

Table 4.20: Training on legal frame work in reference to contract farming

Any training on legal framework	Frequency	Percent
Yes	100	69.0
No	45	31.0
Total	**145**	**100.0**

As shown in Table 4.20, 69.0% of the respondents reported that they had received training on legal framework in relation to contract farming while 31.0% of them stated that they had never received any training. This shows that majority of the farmers had skills on legal frame work in contract farming and therefore were expected to be in a position of solving disputes that may arise between them and the buyers of their french beans.

4.7.1 Areas Covered During Training on Legal Framework.

This study sought to find out areas covered during training on legal framework and how this influenced marketing of french beans in Kutus location. Table 4.21 illustrates this.

Table 4.21: Areas covered during training on legal framework (multiple responses)

Areas covered	Frequency	Percentage
Grading	38	44.2
Packaging	28	32.6
Produce rejection	11	12.8
Spraying	7	8.1
Side selling/brokers	2	2.3

n=86

From the results presented in Table 4.21, it is clear that the major areas that were covered during training on legal framework were grading 44.2%, packaging 32.6%, produce rejection 12.8%, Spraying 8.1% and side selling 2.3%. The reason for more emphasis on grading and packaging training as shown on table 4.21 above is because of the product presentation and buyer perception during marketing. Poor grading and packing would negatively influence product presentation and perception by the buyer therefore influencing negatively the quantity of the french beans bought by the buyers of the french beans. Training on produce rejection is because when the buyers of the french beans consistently rejects the farmer produce, this leads to farmers being discouraged and therefore stop producing the french beans for the buyers. As a result the buyers are unable to keep consistent supplies of the french beans to their customers and this may lead to cancellation of supply contracts signed between the buyers of the french beans and their customers.

Table 4.21 further reveals that more emphasis was also placed on training the small scale french beans farmers on sprays and spraying programs. Training is on Chemicals to use and those banned from use on fresh produce for export market and the pre harvest intervals. As recent studies have shown use of prohibited chemicals like Dimethoate can lead to closure or ban from exporting fresh horticulture produce from Kenya as happened from December 2012 to September 2013 (Songa in Todays Financial News, 2013).

4.7.2 Breach of Contract

This study further sought to find out whether farmers had ever breached the contract with the buyers of their french beans.

Table 4.22: Breach of Contract by the Small Scale Farmers

Breach of Contract	Frequency	Percent
Yes	119	82.1
No	26	17.9
Total	**145**	**100.0**

In response, as shown in table 4.22, 82.1% farmers agreed that they had breached a contract while 17.9% stated that they had never breached a contract with the buyer.

4.7.3 Factors that Lead to the Breach of Contract Between Small Scale Farmers and the Buyers of French Beans.

Many factors leads to the breach of contract by the small scale french beans farmers on one hand and the buyers on the other hand. Table 4.23 show some of the factors that lead to the breach of contract among small scale french beans farmers and the buyers of the french beans.

Table 4.23: Factors that lead to breach of contract (Multiple responses)

Factors that lead to breach of contract	Frequency	Percentage
Delayed payment	36	30.2
Rejection of the produce	29	24.4
Failure to pick produce from the farm	24	20.2
Under payment	17	14.3
Failure to pay for delivered produce	13	10.9

n=119

Results presented in Table 4.23 illustrates that 30.2% of the respondents reported that delayed payment was one of the major factors which led to the breaching of the contract between them and the buyers, 24.4% blamed rejection of their farm produce by the

buyers while 20.2% said failure to pick produce from farm as agreed was another source of breach of contract. Another factor that led to the breach of contract was failure to pay for the delivered produce to the french beans buyer (10.9%). These findings were in agreement with the findings of Jain (2008) who reported that there are different disputes that could arise out of contract farming. These disputes could be attributed by the produce buyers' refusal to receive the delivery of the contracted goods, delay in payments beyond the agreed period, discounting of payments, rejecting of the produce under contract farming without good convincing reasons, forced price reductions especially in times of oversupply, and many others.

4.7.4 Termination of Contract Clause, Contract Sanctions, Arbitrator and Witnesses to Contract Farming.

To achieve objective number four, to investigate how knowledge of legal framework by the small scale french beans farmers and its influence on marketing of french beans in Kutus location, the study sort to find out whether the farming contract which bound them to the buyers of their french beans had a provision of a contract termination clause, contract sanctions, arbitrator and witnesses to contract farming and how this influenced marketing of their french beans. Table 4.24 illustrates this.

Table 4.24: Contract termination clause, contract sanctions, arbitrator and witnesses to contract farming

Items	Yes		No	
	F	%	F	%
In reference to the contract signed between the group and the buyer of the French beans, does this contract have an exit/termination clause?	141	97.2	4	2.8
Are there witnesses to the farming contract signed by the group? For example HCDA, MOA	136	93.8	9	6.2
Is an arbitrator specified in the contract	119	82.1	26	17.9
Are there clear sanctions to mitigate the breach of contract for example penalties	85	58.6	60	41.4

Results in Table 4.24 illustrates that 97.2% of the respondents reported that they had a contract termination clause with the buyer, whereas 2.8% said they didn't have. On the witness to the contract, 93.8% stated that they had witnesses, while 6.2% said there was none. On arbitration, 82.1% agreed an arbitrator was specified in the contract while 17.9% said there was none specified. On sanctions, 58.6% of the respondents stated that the contract had clear sanctions to mitigate the breach of contract and 41, 4% stated otherwise.

The findings in this study were in agreement with Jain (2008) findings, who argues that, it is important during the formulation of the contract farming agreement, the two parties involved in the signing of the contract, small scale farmers, their representatives and the buyer of the produce should be given an opportunity to contribute to the drafting of the agreement and assist in the wording of the specific terms which the small scale farmers can understand.

4.7.5 Status of legal Conflicts in Contract Farming

This study sought to find out whether knowledge of legal frame work by the small scale french beans farmers led to reduced conflicts between the small scale french beans farmers and the buyers of the french beans and how this influenced production and marketing of french beans in Kutus location. Table 4.25 illustrates this.

Table 4.25: Reduced legal conflicts through legal frame work knowledge in contract farming

Levels of agreement/ disagreement	Frequency	Percent
Strongly agree	4	2.8
Fairly agree	33	22.8
Agree	21	14.5
Neutral	25	17.2
Disagree	46	31.7
Fairly disagree	1	0.7
Strongly disagree	15	10.3
Total	**145**	**100.0**

As shown in Table 4.25, 40.1% of the respondents agreed with the statement that knowledge of legal framework in contract farming had led to improved buyer-farmer confidence and therefore reduced legal conflicts, 17.2% were neutral while 42.7% disagreed with the statement. This shows that the majority of the farmers did not believe or agree that knowledge of legal frame work helped them have a transparent and free business with the buyers of their french beans. The findings of this study therefore revealed that conflicts and breach of contract still exist despite the signing of farming agreements, presence of sanctions, witnesses and arbitrators to the farming agreements. It is interesting to note from Jain (2008) findings that neither the small scale farmers nor the buyers who are bound by farming agreements would be willing to take legal action against each other. Jain in his study states that this is due to the huge costs and time spent in settling of disputes legally. Jain further reports that due to the huge costs involved, the conflicting parties resolve to settle their disputes outside the legal corridors by use of friendlier ways like talking to each other through an arbitrator.

Table 4.26: Improved marketing of french beans as a result of knowledge of legal framework in contract farming

Levels of agreement/disagreement	Frequency	Percent
Strongly agree	3	2.1
Agree	79	54.5
Neutral	10	6.9
Disagree	49	33.8
Fairly disagree	2	1.4
Strongly disagree	2	1.4
Total	**145**	**100.0**

Table 4.26 shows that 56.6% of the farmers agreed with the statement that knowledge of legal framework in contract farming has helped farmer groups in marketing of french beans, 6.9% were neutral while 36.6% disagreed with the statement. The findings to this study agrees with those of Pultrone(2012) where in her study, an overview of contract farming: legal issues and challenges she found that, a sound legal frame work governing contract farming help promote contract negotiations and guide farmers and buyers to

have more successful implementation of agricultural contracts meaning successful business between the two parties.

According to Pultrone (2012), incomplete or inadequate legal frameworks may expose farmers to situations where they have to accept abusive clause and ‘’take it or leave it’’ contracts from their buyers or unclear and ambiguous contractual clauses with hidden risks. Pultrone, further in her work states that sound contracts are indispensable for the protection of the parties in cases where unforeseeable circumstances, breach of contract and other situations arise.

4.7.6. Beneficiaries of Contract Farming

In this study, the researcher sought to find out who benefited most in contract farming agreements. Table 4.27 illustrates this.

Table 4.27: Beneficiaries of contract farming

Beneficiary of Contract Farming	Frequency	Percent
Buyer	111	76.6
Small Scale French Beans Farmers	34	23.4
Total	**145**	**100.0**

As shown in table 4.27, 76.6% of the respondents were of the view that french beans buyers were the beneficiaries of the contract farming agreements while 23.4% of them felt that the small scale french beans farmers benefited the least with contract farming. This study differs with the findings of Kumwenda and Madola (2005) on their study, the status of contract farming in Malawi, where they found that equally, both Kasungu tobacco farmers trust and Limbe leaf Tobacco Company benefitted from contract farming agreement. Kumwenda and Madola (2005) in their findings say that for Limbe leaf tobacco company they benefitted by procuring high quality, quantity flue cured tobacco and recovery of loans was a 100% where us the Kasungu tobacco farmers benefitted by having yields which doubled their profits due to service provision which included provision of inputs on credit, extension service among others.

CHAPTER FIVE
SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings, conclusions and recommendations for further research based on the study findings.

5.2 Summary of the Findings

The main purpose of the study was to investigate influence of contract farming on marketing of farm produce, a case of small scale french beans farmers marketing their french beans through registered farmer groups in Kutus location, Kirinyaga County.

In relation to gender, this study found that 66.2% of the respondents were male and 33.8% were female. This confirmed researchers concern in the research proposal that, due to the many challenges found in the french beans production and marketing, female gender were shy to participate in french beans business.

In relation to age, the study revealed that majority of the respondents 86.9% were between 26-55 years of age. This is an age bracket with many family and financial commitment and hence their involvement in french beans production and marketing, an income generating enterprise.

In relation to marriage status, the study also revealed that majority of the respondents, 77.2% were married. This further confirmed that, most people in Kutus location engaged in french beans farming, took french beans production and marketing as a business and not a way of living.

In relation to education, the study found that 40% had at least primary education, whereas 56.5% attained secondary up to college education. The findings confirmed that french beans production and marketing was not for people without education as the perception could have been.

5.2.1 Access to Contract Farming Information and its Influence on Marketing of French Beans

In relation to farmers' access to contract farming information, the study established that through access to contract farming information, 43.3% of the respondents agreed that registered farmer groups had an opportunity to sell their french beans to the preferred buyers in the market. 64.8% of the respondents agreed that farmer groups were able to secure bigger share of the market and also easily access credit facilities such as cash advances from financial institutions.

5.2.2 Small Scale Farmers Training in Contract Farming and its Influence on Marketing of French Beans

In terms of training, the study established that 96.6% of the respondents had received training on contract farming. The major areas in which these farmers received training regularly included food safety and standards, 71% of the respondents, confirmed they received trainings on health and hygiene more than three times a year. Harvesting techniques and post harvesting technology, 60% of the respondents, stated that they got trained three times and above per year. The findings further showed that 55.9% had received training on marketing and the marketing chain not more than twice in a year, and 77.9 % received trainings on the role of intermediaries in the marketing chain not more than two times in a year.

5.2.3 Technical Support and its Influence on Marketing of French Beans

On technical support, the study found that all the respondents 100.0% were supplied with inputs by the buyers. Of the interviewed respondents, 62.1% confirmed they were supplied with inputs on credit terms while 37.9% of the respondents indicated they were

supplied inputs on cash. Further, the study found that as a result, 30.5% of the respondents were able to use the money on land preparation, 24.4%stated that they were able to the wages for their workers, 23.2% used the money to pay for their dependants school fees among other benefits.

On Extension education, major areas in which buyers provided french bean small scale farmers with extension education were grading (56.0%), harvesting (38.8%), spraying (37.1%) and land preparation (34.5%). Other areas mentioned included packaging, pest control and hygiene.

5.2.4 Small Scale Farmers' Knowledge of Legal Frame Work in Contract Farming and its Influence on Marketing of French Beans

Regarding farmers' knowledge on legal frame work in contract farming and its influence on marketing of french beans, the study findings revealed that 69.0% of the respondents had knowledge on legal frame work in contract farming whereas 31% had no knowledge of legal frame work.

Areas covered during training on legal framework were grading (38.0%), packaging (28.0%) and produce rejection (11.0%). Other areas taught during the trainings were side selling and spraying. However, despite majority of the farmers reporting that they received training on legal framework,(82.1%) of them agreed that they had on several occasions breached a contract with the buyer. Some of the reasons which led to breaching of the contract between the small scale french beans farmers and the buyers were delayed payment (58.8%), rejection of the farm produce by the buyers (30.3%) and failure to pick produce from the farm (20.2%). Other factors that led to breach of contract were under payments. The research findings further revealed that majority of the farmers (over 80.0%) had entered into a farming contract that had a termination clause with the buyer, witnesses and specified arbitrator despite the belief to the contrary.

5.3 Conclusions of the Study

The first objective of this study was to determine the extent to which access to contract farming information influences marketing of french beans in Kutus location, Kirinyaga County. This study established that majority of the farmers relied only on buyers of their french beans as their main source of contract farming information.

Even though the respondents to this study indicated that access to contract farming information led to improved production and marketing of the french beans, easier access to credit facilities among other benefits, this study concludes that there is a likely hood that the buyers gave information that only favoured their business. Information that was useful to the small scale french beans farmers could have been retained, as long as it did not interpret into more business and profitability for the buyer. Therefore, small scale french beans farmers in Kutus location and other areas of the country should seek alternative sources of information as recommended by Rees et al(2000), Khan, Morgan and Sofranko (1990). This would help them to make more informed decisions on the preferred market for their french beans with better prices and improved buying conditions.

The second objective to this study was to explore the extent to which training small scale french beans farmers in contract farming influences marketing of french beans in Kutus location, Kirinyaga County. This study established that training helped small scale french beans farmers marketing their produce through registered farmer groups, produce more beans for the market and therefore increase their market share. It also helped them sell safe to eat french beans for the intended market and this helped them to increase their market share in the export market. In addition, training helped small scale french beans farmers in Kutus location to be compliant to the food standards for example the EUREGAP and also reduced side selling in that the farmers did not see the advantage of selling their produce through the brokers but rather sell directly to the buyers of their produce. The study therefore concludes that the buyers inclined their trainings more on the areas that would favour their business more than it could the small scale french beans farmers. This is not in line with the MFA (2003) recommendation that the small scale

farmers should be trained regularly and especially on areas that would help them maximize on profits and reduce their cost of doing business.

The third objective was to examine the extent to which technical support influences marketing of french beans in Kutus location. The study established that majority of the small scale french beans farmers were receiving inputs from the buyers on credits. Through these credit facilities, farmers were able to use money that could have been spent on buying inputs on cash to meet expenses of other needs such as land preparation, paying the wages for their workers, pay for their children school fees, pay the hospital bills, buy food, meet social responsibility expenses, diversification and entertainment. The conclusion on the above findings is that here is therefore need for the buyers to expand the percentage share of the technical support to the small scale french beans farmers given its benefits.

The fourth objective to this study was to investigate how small scale french beans farmers knowledge of the legal frame work influence marketing of french beans in Kutus location. The study established that despite majority of the small scale french beans farmers having received training on legal frame work, the small scale french beans farmers in Kutus location and other parts of the country still do not know how best to use such knowledge. This is because, the conditions prevailing in the production and marketing of french beans favoured the buyers more than the small scale french beans farmers.

The findings of this study agrees with Jain (2008), findings in his study on breach of contract and dispute resolution where he found that, it is highly unlikely that in the event of a dispute, either party will seek legal redress. Jain (2008) in his study found that, the cost implications in a legal redress far out way the gains. This study therefore concludes that, it is good for the parties in conflict to seek such easy and quick ways of solving their differences, such as sitting together to agree on the best way to solve their differences other than seeking legal address.

Finally, it can be concluded that access to contract farming information, training and technical support do influence positively production and marketing of french beans by the small scale french beans farmers in Kutus location and especially those marketing their french beans through registered farmer groups. It can also be concluded that, despite the small scale french beans farmers having knowledge on legal frame work, this knowledge does not seem to help the small scale french beans farmers achieve the desired objective of fully being in charge of production and marketing of the french beans. The findings of this study showed that 40.1% of the respondents agreed that knowledge of the legal frame work led to increased farmer buyer confidence. However, 42.7% disagreed that knowledge of legal frame work led to farmer buyer confidence. 17.2% were neutral, meaning they were not sure whether knowledge in legal frame work leads to improved farmer buyer confidence or not.

5.4 Recommendations of the Study

Arising from the study findings and the conclusions of the study, the study recommends that:-

i. This study established that small scale french beans farmers mainly depends on the buyers of their french beans as the main source of information. The shortcoming in this source of information is that the buyers could only have availed to the small scale french beans farmers the information they felt favoured their business.

   The study therefore recommends that the small scale french beans farmers should seek alternative sources of information for example the media, elite farmers, ministry of agriculture, such support bodies as Horticultural Crop Development Authority(HCDA), buyers competition among others.

   Information from alternative sources will make them access more rich information on contract farming and will therefore be able to make more informed decision on french beans production and marketing.

ii. The second objective to this study was to explore the extent to which training small scale french beans farmers in contract farming influences marketing of french beans in Kutus location. This study found that the buyers of the farmers french beans inclined their trainings more on areas that benefited their business than it would the small scale french beans farmers. According to MFA (2003), this should not be the case.

The study therefore recommends that, other than the trainings organized and facilitated by the buyers of their french beans, the small scale farmers through the leadership of their groups, should approach other bodies and organizations such as Horticultural Crops Development Authority (HCDA), Kenya Horticulture Council, nongovernmental organizations, for example TECHNOSERVE, Ministry of Agriculture, which all have experience and skills on contract farming and marketing of produce both in the local and for export market.

iii. The third objective to this study was to examine the extent to which technical support to small scale french beans farmers influences marketing of french beans in Kutus location. This study established that, technical support and especially inputs on credit terms relieved the farmers from the burden of buying inputs on cash basis. The study established that small scale french beans farmers could use this money to meet other expenses like, paying the wages for their workers, paying school fees for their children, pay hospital bills among others.

This study therefore recommends that technical support to small scale farmers should be expanded beyond the monitory boundaries and extend to other facilities like financial institutions where farmers can get cheaper loans, value addition to the marketing chain of their french beans, for example grading and packing for export at the small scale farmer groups level, just to mention a few. This will help the small scale french beans farmers to be economically empowered and therefore produce french beans not for subsistence purpose but for their growth and development, job creation, revenue generation among others.

iv. The fourth objective to this study was to investigate how knowledge of legal frame work by the small scale farmers influences marketing of french beans in Kutus location. The study found that most small scale french beans farmers had been trained on legal frame work. However, though trained, majority of the respondents,76.6%, were of the view that small scale french beans farmers did not feel empowered to use such knowledge to their advantage and therefore, the buyers of their french beans benefited more with contract farming. This study recommends that, it is of great success if disputing parties, that is, the small scale french beans farmers and the buyers of their produce could agree on very simple ways and methods of resolving their conflicts outside the legal corridors. Such simple methods include trust between the small scale french beans farmers and the buyers of their produce, inclusion in the signed agreements of simple clauses that promotes cordial business environment and value addition to the whole production and the marketing chain of the french beans.

v. From the findings of this study, legal frameworks in this country and especially those that deal with contract farming are underdeveloped. This study further recommends that the Government should make available policies that make recruitment, production, marketing of french beans more transparent, accountable for both the small scale farmers and the buyers. The government should aim at developing strong institutional legal frame works that make the business environment more attractive to both small scale french beans producers and the buyers. The government should further aim to liberalize the market environment in such a way as to promote healthy competition in an open and transparent market environment.

5.5 Suggestions for Further Research

Based on the study findings and conclusions, the following areas for further studies are proposed:-

i. A study should be conducted to find out how socio-economic status of the small scale french beans farmers for example age, gender, education, influences their

participation in contract farming and marketing of french beans in Kutus location, Kirinyaga County.

ii. A study should be conducted on the role of the government in developing strong institutional legal framework and its influence on marketing of french beans in relation to small scale french beans farmers and the buyers.

iii. A comparative study on the structure of group leadership and its influence on marketing of french beans, a case of small scale french farmers should be done. This will help understand group leadership formation is likely to influence production and marketing of french beans in reference to small scale farmers.

iv. Future studies should apply different research instruments like focus group discussions to involve respondents in focus group discussions as opposed to use of questionnaires used in this study in order to generate detailed information on contract farming and its influence on marketing of french beans.

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APPENDICES

Appendix 1: Letter of Introduction

April 1st 2014

Ndung'u Murimi Peter,

P.O Box 293-00232

Ruiru

Dear Sir/Madam,

Re: Questionnaire for Academic Research

I am a Post graduate Student pursuing Master of Arts Degree at the University of Nairobi. As part of my Course requirement, I am carrying out a study to investigate Influence of Contract Farming on Marketing of French Beans. A Case of Small Scale Farmers in Kutus Location, Mwea East.

I hereby kindly request you to fill in the attached questionnaire which will enable the researcher to obtain important information for the research study.

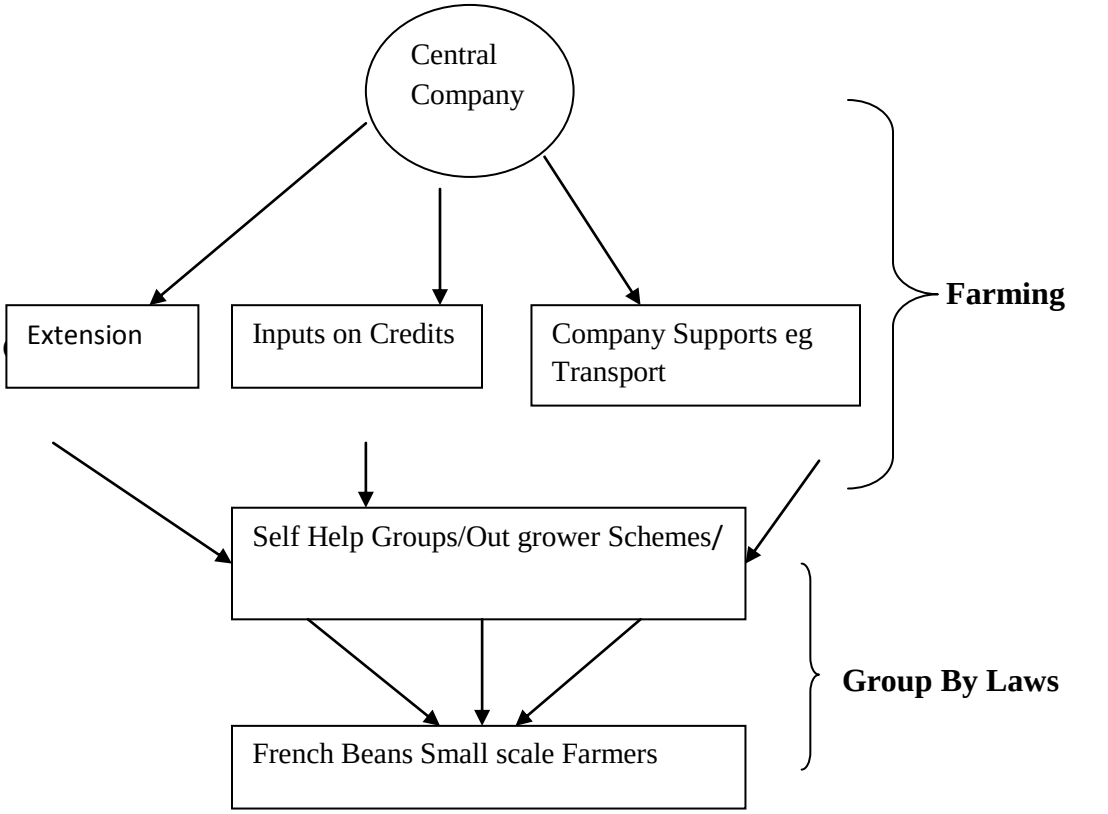
The information offered will be treated with utmost confidentiality and will not be unduly disclosed.

Your assistance and cooperation will be greatly appreciated.

Yours faithfully

Ndung'u Peter Murimi

Appendix 2: Centralized Model of Contract Farming



Source: Own Illustration- adapted from Kathrin and Heike (2006)

Appendix 3: Questionnaire for the Small Scale French Beans Farmers Marketing their French Beans through Registered Farmer Groups.

Please complete every item in this questionnaire. You may not write your name in the questionnaire. Tick in the box next to the right response and fill in the blank spaces accordingly.

Section 1: Respondents Background Information.

1. Please indicate your sex. Male ☐ Female ☐
2. Please indicate your age bracket?
   Below 25 years ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ over 55 ☐
3. Please indicate your marital status
   Single ☐ Married ☐ Divorced ☐ Windowed ☐
   Never Married ☐
4. Kindly indicate the level of your education
   None ☐ Primary ☐ Secondary ☐ Collage ☐ University ☐ Other ☐

Section 2: Access to contract farming Information and its influence on marketing of French Beans.

5. As a group, what is your source of information on Contract farming?
   Buyer ☐ Media ☐ Other farmers ☐
6. As a group, how do you acquire information on the following listed items?

i. The product or the variety of french beans to grow for the market?
   Buyer ☐ Media ☐ Other farmers ☐
ii. Farming inputs for example certified seeds, fertilizers?
   Buyer ☐ Media ☐ Other farmers ☐
iii. Extension Education? Buyer ☐ Media ☐ Other farmers ☐
iv. Financial or Credit facilities? Buyer ☐ Media ☐ Other farmers ☐
v. Market and marketing information for example number of buyers in the market and existing price? Buyer ☐ Media ☐ Other farmers ☐

7. Access to Contract farming Information has given your group an opportunity to sell your french beans to the best buyer in the french beans market?
   Strongly disagree ☐ Fairly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐

Fairly agree ☐ Strongly Agree ☐

8. Could you say access to Contract farming Information has given your group an opportunity to secure bigger share of the market in French beans marketing compared to the other French beans farmers in the location ?

Strongly disagree ☐ Fairly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐
Fairly agree ☐ Strongly Agree ☐

9. Could you say as a group, contract farming has helped you to easily access credit facilities such as cash advances from Financial institutions?

Strongly disagree ☐ Fairly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐
Fairly agree ☐ Strongly Agree ☐

Section 3: Training Small scale farmers on Contract Farming.

10. Have you had any training on Contract farming? Yes ☐ No ☐
11. If your answer to question 1 above is yes, kindly indicate how often you get trained on the following areas in a year

i. Contract farming and farming agreements. Once ☐ Twice ☐ Thrice ☐
More than 3 times a year ☐

ii. Crop husbandry Once ☐ Twice ☐ Thrice ☐
More than 3 times a year ☐

iii. Food Safety for example Health and Hygiene.
Once ☐ Twice ☐ Thrice ☐ More than 3 times a year ☐

iv. Food safety and standards for example Euregap
Once ☐ twice ☐ Thrice ☐ More than 3 times a year ☐

v. Harvesting and Harvesting Techniques for example grading
Once ☐ Twice ☐ Thrice ☐ More than 3 times ☐

vi. Post Harvesting technology for example packaging
Once ☐ Twice ☐ Thrice ☐ More than 3 times ☐

vii. Marketing and the marketing chain of french beans
Once ☐ Twice ☐ Thrice ☐ More than 3 times ☐

viii. Intermediaries and their role in the marketing chain of French beans

Once ☐ Twice ☐ Thrice ☐ More than 3 times ☐

12. Who facilitates the trainings? The group ☐ Buyer ☐ Other ☐
13. In your opinion, could you say training has helped your group increase its market share in the french beans market through the following ways:

i. Produce more beans for the market or buyer of your french beans?

Strongly disagree ☐ Fairly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐
Fairly agree ☐ Strongly Agree ☐

ii. Produce and sell Safe french beans to the market or buyer of your French beans?

Strongly disagree ☐ Fairly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐
Fairly agree ☐ Strongly Agree ☐

iii. Has helped the group be Compliant to food Standards

Strongly disagree ☐ Fairly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐
Fairly agree ☐ Strongly Agree ☐

iv. Reduced Side selling by eliminating or reducing the number of brokers

Strongly disagree ☐ Fairly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐
Fairly agree ☐ Strongly Agree ☐

v. In your own opinion, has training in contract farming added value to the marketing of your french beans as a group?

Yes ☐ No ☐

vi. If your answer to question 5) above is yes, please indicate how?

……

vii. If your answer to question 5 above is no, please indicate why.

……

Section 4: Technical Support to small scale farmers in contract farming.

14. On inputs supply, please indicate who supplies various inputs and on what terms?

Buyer ☐ Other ☐ on Credit ☐ Cash ☐

15. If the answer to question 1 above is other, please indicate who the supplier is……..
16. On credit facilities, does the current buyer for your french beans provide the group with any credit facilities?

Yes ☐ No ☐

17. If the answer to question 3 above is yes, please indicate atleast 4 areas benefiting from such support.

    i.…….

    ii……

    iii…….

    iv ……

18. If the answer to question 3 above is no, kindly state who provides the credit facilities to your group if different from the current buyer of your french beans.

    ……

19. On Transport

i. Where is the produce picked up? Individual farmers homes ☐ Central ☐ place(shades)

ii. How many times per week is the produce picked from the farm?

    1 ☐ 2 ☐ 3 ☐

iii. How are the french beans transported? In crates ☐ boxes ☐ sacks ☐ other ☐

iv. Who pays for the transport cost? Group ☐ Buyer ☐

v. Are there documents to accompany the picked up produce (traceability)

Yes ☐ No ☐

20. On Extension Education,

i. Does the buyer of your french beans provide extension education?

Yes ☐ No ☐

ii. If the answer to question 7 (a) above is Yes, Please indicate some of the areas the buyer provides extension education on.

    a.

    b.

    c.

    d.

iii. If the answer to question 7(a) above is no, who then provides extension education to the group other than the buyer of your french beans? Please indicate below.

……

……

iv. In your own opinion, could you say extension education has added value to the marketing of your french beans as group?

Yes ☐ No ☐

v. If your answer to question 7, d) above is yes, please briefly explain how……

……

……

……

Section 5: Knowledge of Legal Frame work in Contract farming and its influence on marketing of French beans

21. As a group, have you ever had any training on legal frame work in reference to contract farming?

Yes ☐ No ☐

22. If the answer to question 1 above is yes, please indicate at least three areas that the training covered.

i)…….

ii)…….

iii)…….

23. As a group, for the years you have been in farming business with your buyer, has either party breached the contract?

Yes ☐ No ☐

24. If the answer to question 3 above is yes, what led to the breach of contract?

……

…..

25. In reference to the contract signed between your group and the buyer of your french beans, please indicate whether the contract has an exit/termination clause?

Yes ☐ No ☐

26. If the answer to question 5 above is no, what do you do as a group in the event of a breach of contract by the buyer? Briefly state

.....……

……

……..

27. Are there clear sanctions to mitigate the breach of contract for example penalties?
    Yes ☐ No ☐
28. If the answer to question 7 above is yes, please indicate what penalties

    ……

    ……
29. Is an arbitrator specified in the contract? Yes ☐ No ☐
30. If the answer to question 9 above is yes, please indicate who the arbitrator is……..
31. Knowledge of legal framework in contract farming has led to improved buyer-farmer confidence and therefore none or reduced legal conflicts
    Strongly disagree ☐ Fairly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Fairly agree ☐ Strongly agree ☐
32. Are there witnesses to the farming contract signed by the group? For example HCDA, MoA? Yes ☐ No ☐
33. If the answer to question 12 is yes, what is the role of the witness?

    ……

    ……

    ….
34. In your own opinion, could you say knowledge of legal framework in contract farming has helped your group in marketing of your french beans?
    Strongly disagree ☐ Fairly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐
    Fairly agree ☐ Strongly disagree ☐
35. In your own opinion, who benefits most from Contract farming?
    The group ☐ The buyer ☐

36. Briefly explain your answer in question 15 above

……

……

……

Thank You

Appendix 4: Israel Table for Determining Sample Size From a Given Population

Sample Size for ±5%, ±7% and ±10% Precision Levels where Confidence Level is 95% and P=.5

Size of Population	Sample Size (n) for Precision (e) of:		
	±5%	±7%	±10%
100	81	67	51
125	96	78	56
150	110	86	61
175	122	94	64
200	134	101	67
225	144	107	70
250	154	112	72
275	163	117	74
300	172	121	76
325	180	125	77
350	187	129	78
375	194	132	80
400	201	135	81
425	207	138	82
450	212	140	8

Israel, G. D, (2013) Retrieved from https://www.edis.ifas.ufl.edu/pd006

Accessed 16/3/2013

Appendix 5: Research Authorization

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349, 310571, 2219420
Fax: +254-20-318245, 318249
Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No.

Date:

25th September, 2014

NACOSTI/P/14/2013/2647

Peter Murimi Ndungu
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Influence of contract farming on marketing of French beans. A case of small scale farmers in Kutus Location, Mwea East District,"*** I am pleased to inform you that you have been authorized to undertake research in **Kirinyaga County** for a period ending **30th December, 2014.**

You are advised to report to **the County Commissioner and the County Director of Education, Kirinyaga County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

DR. S. K LANGAT, OGW
FOR: SECRETARY/CEO

Copy to:

The County Commissioner
The County Director of Education
Kirinyaga County.

Appendix 6: Research Permit

THIS IS TO CERTIFY THAT:
MR. PETER MURIMI NDUNGU
of UNIVERSITY OF NAIROBI, 0-232
RUIRU,has been permitted to conduct
research in *Kirinyaga County*

on the topic: *INFLUENCE OF CONTRACT FARMING ON MARKETING OF FRENCH BEANS. A CASE OF SMALL SCALE FARMERS IN KUTUS LOCATION, MWEA EAST DISTRICT.*

for the period ending:
30th December,2014

.....
Applicant's
Signature

Permit No : NACOSTI/P/14/2013/2647
Date Of Issue : 25th September,2014
Fee Recieved :Ksh 1,000

.....
for Secretary
National Commission for Science,
Technology & Innovation