DECLARATION

This research project is my original work and has never been presented for a degree in any other university.

Signature..... Date..23-07-2012.....

GEORGE MUCHUGA HD 334 – 033 – 1396/2011

This research project has been submitted for examination with our approval as the University Supe

Signature.....

DR. CHARLES

Signature..... Date.....26/07/12.....

MRS. SALOME RICHU

DEDICATION

I dedicate this research study first to God and then to my family members for the immense support that I received during the period of study. I will forever remain grateful.

ACKNOWLEDGEMENT

My sincere appreciation goes to the Almighty God for the much needed strength, courage, health and resources. He has abundantly provided all to allow me to carry out the research study.

The successful completion of the research study was made possible through the combined efforts of my supervisors Dr. Charles Ombuki and Mrs. Salome Richu who tirelessly guided me through.

I greatly appreciate the support and encouragement I have received from my wife Joyce Wangui and our children David Njoroge and Joanne Wanjiru – may God bless you all.

To all my friends, I appreciate your support and encouragement.

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ABSTRACT

The general objective of the study was to investigate the factors affecting suppliers selection in the horticultural industry. The study included exploring the effects of quality of input products on suppliers selection, finding out how the input price affects supplier selection, investigating the effects of lead times on suppliers selection and establishing the effects of supplier's innovation on suppliers selection.

The study adopted a descriptive survey design. The population comprised all the 66 senior, middle and lower level management staff at Waridi Limited. A census was used as it represented the relevant population. A total of 66 respondents were used for this study. The study relied on data collected through a questionnaire structured to meet the objectives of the study. Responses in the questionnaires were tabulated, coded and processed by use of a computer Statistical Package for Social Science (SPSS) version 17.0.

From the study findings, it can be concluded that quality of input product, input price, lead time and supplier's innovation are important factors affecting suppliers selection in horticultural industry in that order. Other factors highlighted in selecting suppliers noted by the study include: convenience; response; delivery duration; terms of payment; hygiene; means and ways of transporting the product; availability of the product; competency; communication; availability of ISO standards; effectiveness of the products; discounts offered; distance from the farm; mode of transport; size of the business; legal qualifications; credibility of the supplier; credit terms; certification from various quality certification bodies; sensitivity of environmental conservation; good response and co-operation; genuineness of products; market feedback; shipment; technical support; and supplier's stability.

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LIST OF ABBREVIATIONS AND ACRONYMS

GDP	:	Gross Domestic Product
Global GAP	:	Global Generally Accepted Agricultural Practices
ISO	:	International Organizations for Standardization
J I T	:	Just in Time
JKUAT	:	Jomo Kenyatta University of Agriculture and Technology
SPSS	:	Statistical Package for the Social Sciences.
KEPHIS	:	Kenya Plant Health Inspectorate Services
HCDA	:	Horticultural Crops Development Authority
FLO	:	Flower labeling Organization
KFC	:	Kenya Flower Council

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DEFINITION OF TERMS

Suppliers Innovation: Process of creating better or more effective products, processes, services, technologies, or ideas that are readily available to the markets.

Lead time: The time taken between placing an order for goods or services to the moment it is received by the customer.

Procurement cycle: A sequence of activities that an organization performs to acquire goods or services.

Supplier: A party that supplies input goods or services.

CHAPTER ONE

INTRODUCTION

Introduction

This chapter presents the background to the study and the statement of the problem. It also presents the purpose of the study, objectives, research questions, significance and scope of the study.

1.1 Background of the Study

In today's highly competitive environment, an effective supplier selection process is very important to the success of any organization. Effective sourcing decisions form the basis of sound supply of an organization. Selecting the appropriate supplier is the key to the success of every outsourcing decision, and is thus the focus of much published literature (Ordoobadi, 2009).

Purchasing Managers have turned to be a cornerstone in the exchange of critical business information and the creation of value. They are the main actors in the process of evaluating and selecting suppliers and, therefore, must be properly equipped to guarantee that sourcing decisions will be adopted in the most cost-effective way with due regard to the overall interest of their organizations. Selecting the best set of suppliers is an extremely challenging and important issue (Talluri and Sarkis, 2002).

The importance of supplier's selection has justifiably received considerable attention in the academic literature. Existing research has provided many

important insights and models for the evaluation and selection of suppliers. Historically, subjective approaches have received a little more attention, but as a result of the inherent complexity and growing importance of the problem, prescriptive quantitative approaches have been gaining in popularity and are considered to be effective methods of selecting suppliers (Weber *et al.*, 2000).

A variety of changes in the business environment are increasingly leading firms towards development of long-term strategic partnerships and collaborations with a few competent suppliers in non-core process outsourcing to improve overall organizational performance and generate sustainable competitive advantage (Ghodeswar and Vaidyanathan, 2008).

The goals of supply should be to provide uninterrupted flow of materials supplies and services to operate the organization, keep inventory investments and loss at minimum, maintain and improve quality, find or develop best in class suppliers, purchase required items at the lowest total cost of ownership, achieve harmonious, production internal relationship and improve organizations competitive advantage.

The purchasing process involves commitment of considerable resources. Getting the right suppliers is a major task which when executed properly would see the organization better placed to deal with competition (Bhutta & Huq, 2002).

Having good suppliers means growth or survival. The success in selecting suppliers to run the business requires much effort to get and retain the best. Well

selected suppliers create value for both parties. Optimization of costs and resources is established when a good supplier relationship exist.

1.1.1 The Horticulture Industry

The agriculture sector in Kenya contributes directly 24% to the Gross Domestic Product (GDP) of which a third is contributed by the horticultural sector (Republic of Kenya 2010). According to Republic of Kenya (2010), horticulture is an important subsector of Kenyan agriculture, the mainstay of the country's economy and the leading foreign exchange earner after tea bringing in Kenya shillings 71.6 Billion in 2009. Horticultural industry has over the year performed well and this has been attributed to the fact that it is largely private sector driven and has so far been lucrative. The report continues to note that the main inputs for the horticultural industry are Fertilizers, Packing Materials and Chemical. Sustained horticultural production is essential to realize Vision 2030.

There has been a shift by some multinationals in the horticultural sector from Kenya to other regional countries as a result of high cost of doing business threatening the future of the horticultural industry. Republic of Kenya (2010) noted that agro processing, packaging and quality standards in the domestic market are not fully developed and that several factors such as high cost of inputs and lack of quality control for local input hinder the potential of the industry. The poor quality of inputs attributed to counterfeiting and adulteration and their high cost are a hindrance to faster development of the subsector. However, most of the input dealers are not trained to offer quality advisory services to farmers and supplier

selection require skills as most of the outputs products using inputs products are globally used and the quality as well as issues of environment would need to be addressed well for the output products to be well accepted by the overseas customers.

1.1.2 Waridi Limited

Waridi Limited is located in Athi River and is a flower growing company specializing in Roses and was among the first flowers farms to be established in Kenya (Waridi, 2011). The farm is run by qualified personnel in their areas of specialization in addition to having regular consultancy to ensure that its products are to the international standards (Waridi, 2011). The vision of the organization is to be the leading supplier of flowers in the world with the objective of growing and sourcing of flowers following the highest ethical and environmental standards. Customer's feedback has been taken seriously and any issues raised are addressed as well as comments taken for improvements.

Over the past few years complaints have been recorded on the quality of products purchased which have been having an effect on the final products. As Republic of Kenya (2010) noted, the local suppliers of input products have not been developed well enough to meet the requirements of the horticultural industry. This has also been made worse by the action of some suppliers who have been deliberately providing sub standards input products. Waridi Limited has been faced with the challenge of selecting the right suppliers to meet their needs.

1.2 Statement of the Problem

The vast majority of studies on the supplier's selection focus on isolating the different supply source selection criteria and assessing the degree of their importance from the purchasing firm's point of view (Ghymn & Jacobs, 1993). Republic of Kenya (2010) noted that the horticulture industry have been faced with numerous challenges related to customer requirements despite past growth and that agro processing, packaging and quality standards were pointed out to be low in Kenya as they have not been fully developed.

Republic of Kenya (2010) observed that efforts should be made by the horticulture industry suppliers to supply the requirements as per the industry requirements. The horticulture industry has lately been subjected to various certifications requirements such as KFC, Global GAP and FLO among others in order to compete effectively in the market (Waridi, 2011). These and other certifications requires that the horticulture industry to follow and maintains the set standards to secure the profitable markets. Horticultural industries have put a lot of effort in order to comply with these certifications as displayed in their packaging and stationery materials.

In order to comply with the customers and certifications requirements, there have been deliberate efforts at Waridi Limited to select and retain suppliers to supply the input products that would make it competitive. This is reflected by senior management involvement in purchasing as well as maintaining constant communication with suppliers. Even with all these efforts in place, it was observed

that the heads of department have been returning products to the suppliers for non conformity as well as delaying the execution of work plans and this was attributed to delay and poor quality of the input products. The number of obsolete items has also been increasing as reported in the financial statements reports for 2011. The problem of poor quality and delay of input products can be attributed to various factors affecting suppliers selection of suppliers. The effects of these factors on the supplier selection leads to operational performance of the farm and that is why this study is focusing on those factors affecting suppliers selection in the horticultural industry.

Studies carried out attempting to shade some light on the subject under study are more general and have failed to give a detailed insights and analysis of the issues under the current study (Shin, 2008; Wathe, 2009). Odhiambo (2010) on the other hand focused more on the whole supply chain management for effective competitive advantage. This therefore leaves a knowledge gap on factors affecting supplier's selection in the horticultural industry. So far no known study by the researcher has attempted to find out factors affecting supplier's selection in the horticultural industry. Hence the current study sought to investigate the factors affecting supplier's selection in the horticultural industry focusing on Waridi Limited.

1.3 Research Objectives

The main objective of this study was to investigate factors affecting suppliers selection in horticultural industry.

The specific objectives were:

1) To explore the effects of quality of inputs products on suppliers selection.
2) To find out how the input price affects supplier selection.
3) To investigate the effects of lead times on suppliers selection.
4) To establish the effects of supplier's innovation on suppliers selection.

1.4 Research Questions

The research sought to answer the following questions:

1) What effects does the quality of input products have on supplier selection?
2) How does input price affects supplier selection?
3) How has the lead time affected supplier selection?
4) What are the effects of supplier's innovation on supplier selection?

1.5 Justification of the Study

The findings will be of importance to Waridi Limited in providing the management with insight of factors affecting suppliers selection. This research will increase awareness of the strategic benefits that arise from business performance through sourcing and concentration on suppliers. The study will also be important to other flower farms in the horticultural industry on identifying factors affecting suppliers selection. Organizations such as Kenya Flower council,

HCDA, KEPHIS and other related government agencies governing the horticulture industry will also benefit from the study. The findings of this study will enrich existing knowledge and hence will be of interest to both researchers and academicians who seek to explore and carry out further investigations. It will provide basis for further research.

1.6 Scope of the Study

The study was limited to the factors affecting suppliers selection with specific reference to Waridi Limited in Athi River Kenya. This means that the current staff working in Waridi Limited were supplied with questionnaire with the aim of getting their views regarding the factors influencing the suppliers selection.

1.7 Limitations of the Study

There are some factors that limited the progress of the study. The respondents that were approached were reluctant in giving information fearing that it might have negative image about the Waridi Limited as well as on the suppliers. The research handled the problem by carrying out an introduction letter from the university and assuring the respondent that the information was to be used purely for academic purposes. The researcher also encountered the problem of getting the right information from the respondents as the information required could be confidential. The researcher encouraged the respondents to participate without holding back the information they have as the research instruments did not require the names to be disclosed and assuring them that the purpose of the research was only for academic purpose.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter presents a review of the literature related to the study. Previous studies are important as they guide the researcher on other studies that have been done on the same. Literature review on suppliers selection provides an understanding of various independent variables identified in the conceptual framework and how they affect the dependent variable.

2.2 Selection of Suppliers

Purchasing decision process has become complex, multidimensional and multifunctional activity. The traditional role of purchasing has significantly changed over the past few years as organizations increasingly globalize their sourcing activities. In today's highly competitive and interrelated business environment, selection of suppliers is very important to the success of a firm (Weber *et al.*, 2000). Academic attention to the purchasing decision in general and supplier selection in particular through more systematic methods has increased over the last two decades (Shin, 2008).

Many articles have addressed the importance of selecting the right suppliers and the attributes for making such a decision (Weber *et al.*, 1991). In practice there could be several criteria's used by a firm for its supplier selection decision, such as price offered, part quality, on-time delivery, after-sales services, response to order change, supplier location, and supplier's financial status (Shin, 2008).

Even though perhaps one supplier can satisfy the buyer's total requirements, many buying organizations have an ingrained practice of shopping around for superior deals (Shin, 2008). Quality of parts, delivery reliability and other criteria as well as price should now be taken into account in selecting the best suppliers (shin, 2008).

In purchasing, the procurement cycle is the activities that an organization performs to acquire products. The cycles are shown by the figure 2.1.

Steps in the purchasing cycle

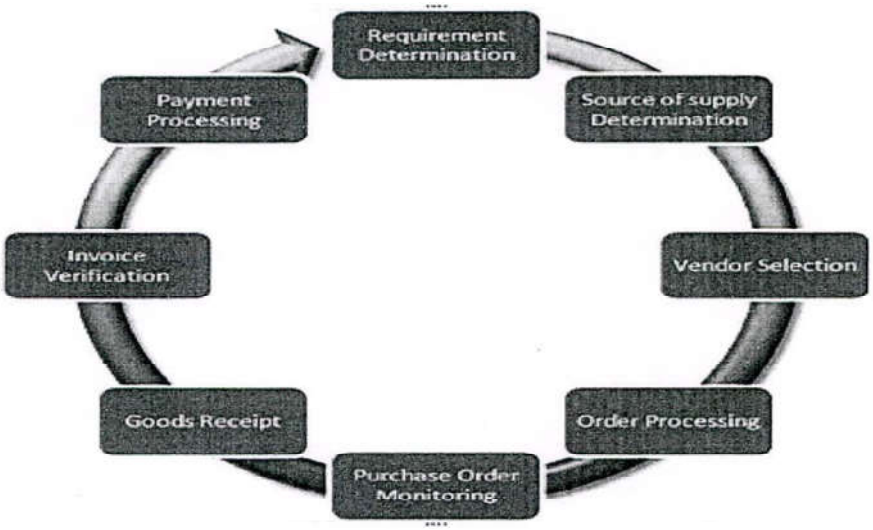

Figure 2.1: Procurement Cycle
Source: http://nazrinrizal.blogspot.com

The procurement cycle has the advantages of direct cost savings through lower prices paid, indirect savings through value addition, savings achieved through procurement process efficiencies, savings achieved through a more efficient supply chain e.g. freight efficiencies, visibility and utilization of appropriate technologies.

The overall supplier selection problem should not only select the right suppliers, but also allocate the right order quantity among the selected suppliers, based on a set of given objectives and constraints (shin, 2008). In order for companies to attain the goals of low cost, consistent high quality, flexibility and quick response, organizations have increasingly considered better supplier selection approaches (Bhutta & Huq, 2002).

Since the supplier selection process encompasses different functions (such as purchasing, quality, production, etc.) within the company, it is a multi-objective problem, encompassing many tangible and intangible factors in a hierarchical manner (Bhutta & Huq, 2002). Supplier selection process is inherently multi-objective in nature, because typically more than one criterion such as price, quality, delivery and performance needs to be considered and evaluated in selecting suppliers and monitoring their performance (Talluri & Sarkis, 2002).

When evaluating sources, the single most important task for buyers is assessing the key competitive factors in their industry and translating these dimensions into supplier evaluation criteria. Therefore, a buyer should analyze and evaluate the potential threats when selecting suitable supplier resulting from a systematic selection process and its corresponding attributes.

Although the criteria used in supplier evaluation and selection vary across products and services and purchase situations, previous research have identified similarities in purchase decisions.

2.3 Factors Affecting Suppliers Selection

The following are the perceived factors affecting the suppliers selection in horticultural organizations;

2.3.1 Quality of Input Products

Quality is when the seller's product or service meets or exceeds the customer's expectations (Kotler, 1999). Therefore quality refers to the ability of the supplier to supply goods as specified or whether the items perform in the actual use as per the expectations. According to Kotler (1999), quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs. Quality is the degree to which inherent characteristics of a product or service meets the set requirement or criteria. Quality is therefore evaluated on the basis of several dimensions such as performance, features, reliability, durability, conformance, serviceability, aesthetics and perceived quality. Firms do put on a lot of emphasis on the issue of quality and have set up quality assurance measure to ensure that the requirements of the customers are met. Quality assurance is concerned with defect prevention and can involve a number of approaches depending on the nature of the industry the firm is operating in.

There has been a conflict as to what matters more between quality and price when it comes to purchasing with a general feeling that consumers will value quality products more than the cost. As a result of this, suppliers continuously improve on the product to gain highest return, by increasing growth on their sales and market share. However, many suppliers have their product quality unaltered after its initial

formulation while others may cut quality to offset rising costs, while others may deliberately reduce quality in order to increase current sales or profits. This cause of action may affect the firm's performances in the long run.

Henson (2005) explained that as firms compete among themselves in the national and international markets, they attempt to differentiate their products to protect and gain market share, and public standards are unlikely to provide sufficient scope for product differential on the basis of quality attributes. Bain (2004) argued that the very ways in which suppliers operate are defined by such quality based competition and at the same time the associated institutional arrangements are crucial to the legitimacy of quality attributes included in manufactured products or services.

Odhiambo (2010) noted that the quality issues are the most important criterion in most organizations but concluded that organizations should set the best selection criteria for competitive advantage. According to Mutyola (2009), quality has resulted to be a persistent trend in customer demand and this has put more focus on product quality. In horticulture industry the type of the products used could have a major impact on the production if the products happen to be of low standards. Republic of Kenya (2010) noted that many suppliers to the horticultural industry do provide adulterated products. A chemical could completely destroy the whole plants in the farm if the chemical composition is not of the right mix.

2.3.2 Input Price

Input price is what a buyer pays to acquire products from a seller. Input product pricing is what companies consider when examining its overall profitability. Effective purchasing management is vitally necessary to ensure the free flow of materials at economic prices and in suitable quantities to meet production schedules and sales programs. Weber, Current and Benton (1991) noted that net price, delivery and quality are the three most popular criteria applied in supplier selection decisions but the net price has extremely important comparing to the others. A study by Gao and Tang (2003) noted that even part price such as the product prices, excluding the costs of transportation, ordering and storage, could be significantly important to a firm's purchasing decision. Qian (2009) noted that price was on the lower lever on the level of supplier's selection and indeed it was considered general in comparison to such criteria as research and development, lead time and quality.

Unless the appropriate material resources are made available at the right time and the right price, organizations plans will not succeed. Purchasing departments, especially in the larger organizations, therefore, need to develop strategies to control the flow of supplies at favorable prices. The pursuit of short-term price advantages may have negative consequences. The price should be considered sparingly in decisions as many suppliers offer input prices which are way low but in effect not disclosing the correct overall input price.

Price is one element in supplier selection that needs to be considered and evaluated in selecting suppliers and monitoring their performance. This is the best suited

variable that is easily quantifiable and can be used with ease by many buyers when in need of getting more information for decision making. Total cost of ownership is a technique which looks beyond the price of a purchase to include many other purchase-related costs. It focuses on the true costs associated with the entire purchasing cycle, thus it considers all costs related to the acquisition, usage, maintenance and follow-up of purchased goods or service as well as purchasing price. Total cost of ownership has become increasingly important as organizations look for ways to better understand and manage their costs in selecting the suppliers and maintaining relationships with them.

Supplier selection process should not only consider the cost, but also a wide range of other factors such as organization and relationship by considering the whole supplier capability in a long-term and strategic way. In negotiating the right input prices, consideration should be made in regards to the discounts and credit terms.

2.3.3 Lead Time

Berry and Parasuraman (2001) defines lead time in the supply chain management as the time from the moment the customer places an order (the moment you learn of the requirement) to the moment it is received by the customer. Lead time is one of the main competitive factors among companies. The ability to deliver quickly influences export, sales and thereby revenue. The definition of lead-time can vary, depending on what part of the company is focused upon. It normally includes all activities from start to end (Talluri & Sarkis, 2002).

Lead time begins with the first receipt of a customer order and ends with customer receipt of the product or service. Everything in between is the lead-time (Talluri & Sarkis, 2002). Total lead-time is made up of time devoted to processing orders, to procuring and manufacturing items, and to transporting items between the various stages of the supply chain. Lead-time typically includes two components: Information lead times (i.e., the time it takes to process an order) and Order lead times (i.e., the time it takes to produce and ship the item). Information lead time can be reduced by using very sophisticated and modern communication system while Order lead time can be reduced through efficient supply chain management (Talluri & Sarkis, 2002).

Due to demanding and unstable business environment, suppliers must be able to react quickly to any unexpected orders. Many suppliers have proactive mechanics to meet such emergencies. An effective lead-time would also depend on how effective it's the supply chain is. As organizations seek to satisfy customers, they go to great strengths to ensure that they meet their needs irrespective of the cost to be incurred. If the buyer wishes to evaluate suppliers' bids on the dimensions of price and lead-time, the buyer must construct a tradeoff between these two dimensions to determine whether it prefers, say, a bid with a high price and short lead time to a bid with a low price and long lead time.

The suppliers' Cycle Time impacts significantly on the ability of the corporation to improve its processes in an appropriate time frame. In fact, the shorter the response time in providing the required input products by the suppliers, the better the. The suppliers' cycle time, impacts significantly on the capability of the

company to react to the customers' demands in an appropriate time frame of the company to react to the customers' demands in an appropriate timeframe.

Kumara *et al* (2003) noted that strategic partnership with right suppliers must be integrated within the supply chain in order to contain costs by eliminating waste, improving quality, improving flexibility to meet end-customers' value expectation, and reducing lead time at different stage of the supply chain. Shin (2008) noted that although cost and quality are still crucial, however, manufacturers today are under pressure from their customers to cut lead times and improve speed.

The global business operations have been evolving and the factors that were once less important have been taking a centre stage. The speeds that have become a characteristic of the modern business have become a competitive edge in many businesses.

2.3.4 Supplier's Innovation

Innovation means to introduce something new, to make changes. Innovation may therefore be used in the context of introducing e-commerce or supply chain professionalism, certainly in small businesses and probably in customers. Business needs to shift to collaboration and innovation. Order winners are those competitive characteristics of competitive advantage that make the customer chose the suppliers products and order qualifies as those characteristics that a firm must show to be a viable competitor in the market place. Meeting customer needs requires communication understanding customer needs, working with customer to solve design needs as well as freeness and openness.

Innovations can be viewed as the process of turning ideas and knowledge into products and services that create a consumer demand within the market place. There are several innovations in product, process and breakthrough as well as incremental. Innovation should help the organizations to meet global challenges, and domestic competition, challenges of rapid technological changes and the enhancement of the value of the enterprise from innovation reputation. Firms in many industries face increasing global competition and markets that demand more frequent innovation and as a result, a fundamental change seems to have occurred in the way innovations are generated (Hakansson and Eriksson, 2003).

Lazzarotti and Manzini (2009) noted that in pursuit of innovation, buyers often purchase key products from a single supplier or a handful of suppliers and enter into a partnering-style collaborative relationship with them. This implies that innovation as a product of a joint buyer-seller process is often gained either through the integration of a supplier into a new product development process or in the context of a continuous improvement process. Research shows that suppliers increase buyers' product success by mobilizing of their capabilities to innovate and develop products when involved in the innovation process early (Primo and Amundson, 2002). It is important that firms should invest in the latest technology to allow them develop products that enhance the satisfaction level of it's customers.

The expectations for an innovative supplier have been operational in highlighting the ability of the supplier to design new products or make changes to existing

products and using the highest level of technological capabilities that they possibly possesses. Innovation by suppliers also requires input from the stakeholders and this requires collaboration with all the stakeholders.

2.4 Overview of Literature

The literature review reveals that several multiple dimensions and criteria must be used in the evaluation of supplier performance during supplier selection. Allot have been done to explain the main factors that influence the selection of suppliers with each study resulting in general explanation. Odhiambo (2010) highlighted that quality has become the main important criteria and that the best criteria should be used for competitive advantage.

2.5 Research Gap

Studies carried have concentrated on the general issues on the selection of suppliers (Shin 2008; Wathe 2009). As Republic of Kenya (2010) noted, the selection of supplier to meet the specific needs of the organization is the main challenge for the horticulture industry. This is based on the huge demand the customers place on the industry to meet the environmental requirements which calls for innovation in the packaging materials as well as minimal usage of the chemicals that are harmful to the environment.

This then calls for an evaluation of the suppliers in the industry who will meet the specific needs and that the reason that this study is being conducted. Many literatures have pointed out several factors which are important for the vendor

selection decision, including net price, quality, lead time, flexibility, service support, technology, capability, performance history, communication, and geographical location. However, these literatures have not identified where these criteria are best suitable.

2.6 Conceptual Framework

Mugenda and Mugenda (2003), defines a conceptual framework as a hypothesized model identifying the concepts under study and their relationships. The factors that influence the supplier's selection in the horticultural industry will be reflected as illustrated in Figure 2.2 below:

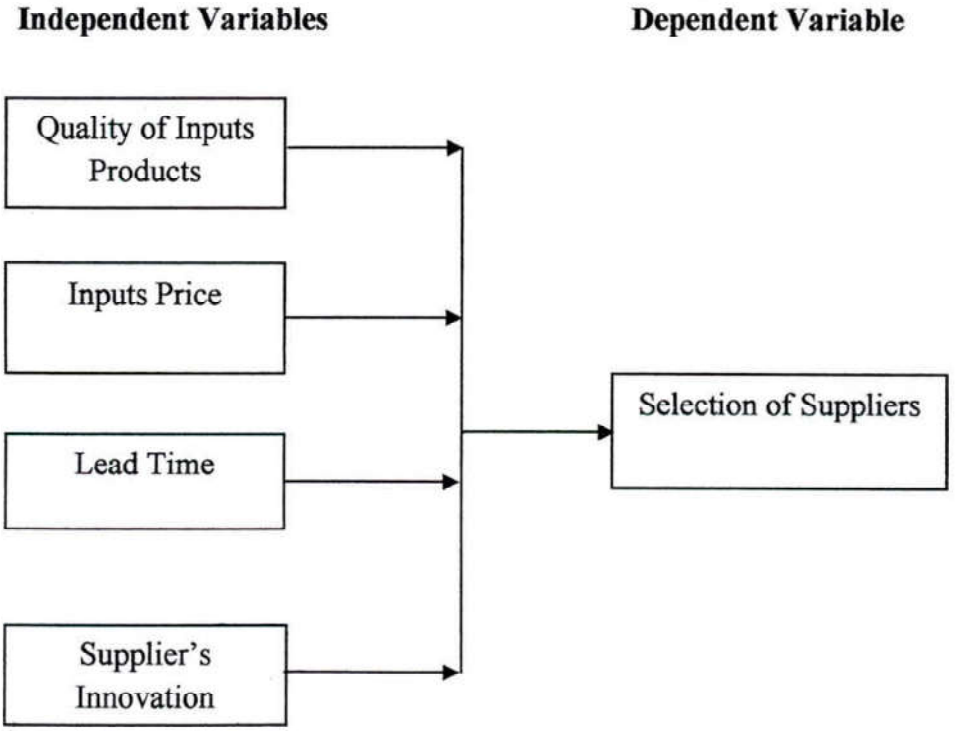

Figure 2.2: Conceptual Framework

In this framework, there are certain factors that affect supplier's selection in the horticultural industry. These factors include but are not limited to quality of inputs

products, input price, lead time and supplier's innovation. For this study, only four are considered as the independent variables. Factors affecting suppliers selection are the independent variable that affects the dependent variables.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the methods that was used for the study and adopts the following structure: research design, target population, population description, sampling, and data collection methods, research procedures and data analysis and methods.

3.1 Research Design

This study adopted a descriptive survey design which according to Churchill (1991) is appropriate where the study seeks to describe the characteristics of certain groups, estimate the proportion of people who have certain characteristics and make predictions. The study aimed at collecting information from respondents on factors that affect supplier's selection in the horticultural industry.

Khan (1993) recommends descriptive survey design for its ability to produce statistical information about aspects of education that interest policy makers and researchers. The design was chosen for this study due to its ability to ensure minimization of bias and maximization of reliability of evidence collected. Furthermore, descriptive survey design raises concern for the economical completion of the research study. The method is rigid and focuses on the objectives of the study.

3.2 Target Population

According to Ngechu (2004) a population is a well defined or set of people, services, elements, events, group of things or household that are being investigated. The research targeted a population of 66 composed of senior, middle and lower management staff at Waridi Limited. This comprised the staff controlling finance, purchasing and all the users of the inputs products. This ensured that those controlling spending and other procurement issues were included. Out of the 66 targeted population 48 responded which was a good representative at 72 %.

3.3 Sampling and Sampling technique

Mugenda and Mugenda (2003) defined sampling as the selection of respondents who represent the target population in the study. A census method was used where all the 66 employees directly involved in the procurement participated in the research study. The respondents were from senior management, middle management and lower level managements who are individuals knowledgeable with the questions at hand and literate.

3.3.1 Sampling Procedure

Mugenda and Mugenda (2003), states that, the target population should have some observable characteristics, to which the researcher intends to generalize the results of the study. The respondents were selected from a population of all the 66 possible employees who have effects on suppliers selection.

Kerlinger (1973) noted that a well chosen sample of 10% of the total population could be adequate if it allowed reliable data analysis. A population of 66 respondents chosen represented a good sample for the study in Waridi limited. The target population for this study is presented on table 3.1.

Table 3.1: Target Population

Category	Population	Percent
Senior management	8	12
Middle level management	22	33
First level management	36	55
Total Population	**66**	**100**

Source: Waridi Human Resource Department (2012)

3.4 Research Instrument

A structured and semi- structured questionnaire was used to collect primary data. The questionnaires were preferred in this study because respondents of the study are assumed to be literate and quite able to answer questions asked adequately. It contained a mix of questions, allowing for both open-ended and specific responses to a broad range of questions. Kothari (2004) terms the questionnaire as the most appropriate instrument due to its ability to collect a large amount of information in a reasonably quick span of time. It guarantees confidentiality of the source of information through anonymity while ensuring standardization (Churchill, 1991). It is for the above reasons that the questionnaire was chosen as an appropriate instrument for this study.

The researcher used content validity to examine whether the instruments answered the research questions. Adjustments and additions to the research instruments consultations and discussions with the supervisor were done to establish content validity. The sample questionnaire is provided in Appendix II

3.5 Data Collection Procedure

The researcher obtained an introductory letter from the University to collect data from the farm, then personally delivered the questionnaires to them and had them filled in his presence. The researcher employed self administration approach of data collection and monitored the process to ensure that unintended people did not fill the questionnaire. The questionnaires were filled and assistance was sought where possible thus raising the reliability.

3.6 Data Processing and Analysis

The process of data analysis involved several stages namely; data clean up and explanation. The data was then coded and checked for any errors and omissions. Frequency tables, percentages and means were used to present the findings. Responses in the questionnaires was tabulated, coded and processed by use of a computer Statistical Package for Social Science (SPSS) version 17.0 program to analyze the data. Qualitative data from open – ended questions were analyzed using content analysis and presented through narratives.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the findings of the study tabulated and presented in narratives, tables and figures for ease of explanation and understanding for the reader. The main objective of this study was to investigate factors affecting suppliers selection in horticultural industry. This required a mixed method approach for collecting data from the respondents targeted. These findings are elaborated in this chapter.

4.2 Response Rate

Out of 66 questionnaires which had been administered to the interviewees, 48 of them were returned for data analysis. This translates to 72 percent return rate of the respondents. Overall, the response rate can be considered to have been very high.

4.3 General Information of the Respondents

The study sought to find out the general information as background information since people are diverse. This was captured by finding out their distribution by gender, age, department, number of years with organization and number of staff in the departments. The distribution of respondents by departments is as shown in table 4.1.

4.3.1 Respondents Departments

Table 4.1: Distribution of Respondents by Departments

Suggestions	Frequency	Percentage
Administration	12	25
Production	8	17
Pest Control	4	8
Exports	3	6
Security	3	6
Building	4	8
Human Resource	2	4
Post Harvest	4	8
Irrigation	1	2
Others	7	15
Total	48	100.0

Table 4.1 reveals that majority of the respondents work in the administration at 25 % while production has 17% of the respondents. Accounts has 17%, pest control 8%, building 8% and post harvest (8 %). This shows that the organization have majority of staff in production and administration departments which are important in investigating factors affecting suppliers selection in horticultural industry.

4.3.2 Distribution of Respondents by Gender

The study sought to find out the distribution of the respondents by gender to know which gender is the majority at the Waridi Limited. The findings are presented in table 4.2.

Table 4.2: Distribution of Respondents by Gender

(Gender)	Frequency	Percent
Male	36	75.0
Female	12	25.0
Total	48	100.0

From Table 4.2, it is evident that more than half of the respondents represented by 75.0% are male while 25.0% are female pointing to a male dominated sector. This is in line with other sectors of the economy in Kenya where there are gender disparities in recruitment and hence the same manifests in the respondents sample.

At 75% of the total respondents, the male gender makes most of the decisions affecting input products and supplier's selection. It would be interesting to find out the effect the reverse would have on the organizations performance. The results may or may not be similar. However the success in quality management and prudent supplier selection may be attributed to the gender ratio present at Waridi Limited.

4.3.3 Distribution of the respondent by education level

The study sought to find out the education level of the respondents. The results are presented in figure 4.1.

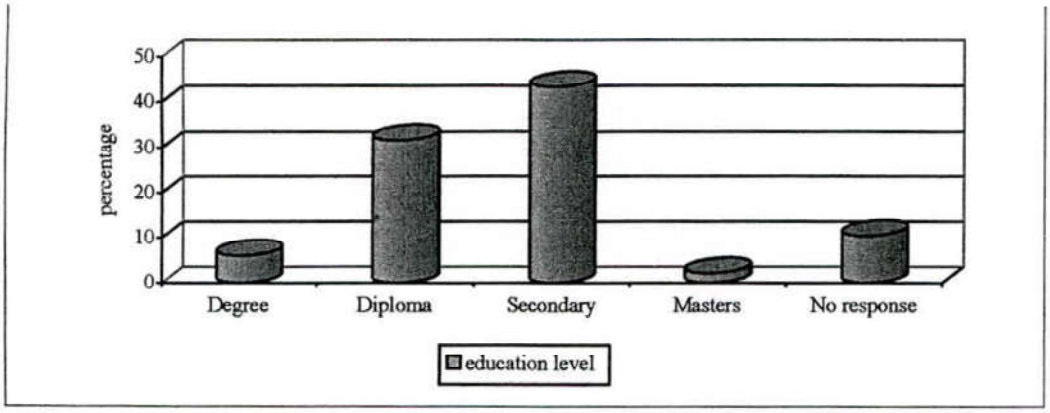

Figure 4.1: Distribution of the respondents by education level.

Figure 4.1 shows that majority of the respondents have attained O-level or Secondary education at 43.3% while 31.6% have attained diploma level of education. Another 12.6% have attained undergraduate education while the minority 2.1% has attained post graduate level of education. The findings indicates that majority of Waridi Limited employees have attained tertiary education.

The presence of undergraduate and post graduate officers in Waridi Limited points to a diversity in the management of the firm. With a well educated leadership, the firm is able to reap the benefits of efficient and informed decision making mechanism.

4.3.4 Years worked in Waridi Limited

The study sought to find out the years worked by the respondents in Waridi Limited. The results are presented in the figure 4.2.

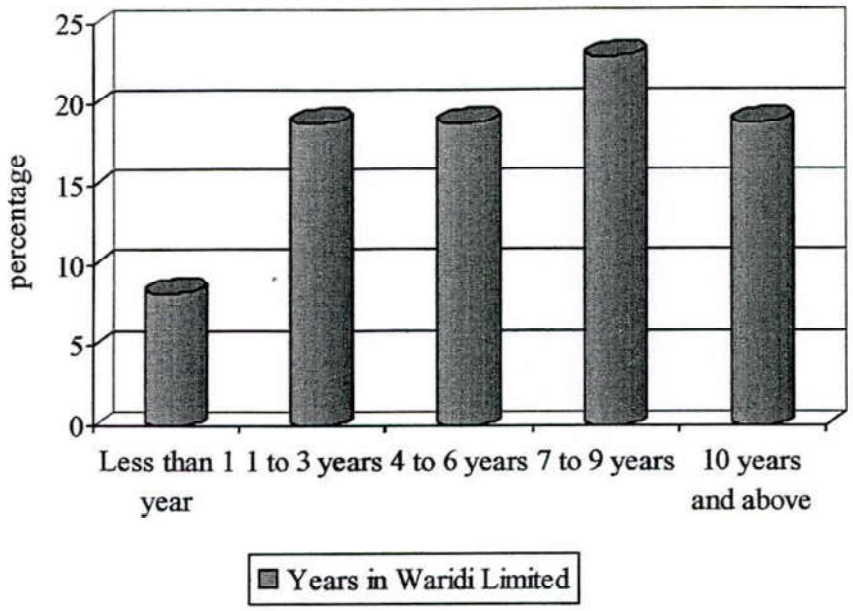

Figure 4.2: Years worked in Waridi Limited

Figure 4.2 reveals that majority of the respondents (22.9%) have worked in Waridi Limited for 7-9 years. The figure further reveals that 18.8% have been in Waridi Limited for 1-3 years, 18.8% for 4-6 years, 18.8% for 10 years and above and the minority 8.3% have been there for less than 1 year.

The research shows that majority of employees at Waridi have been working there for more than four years. These points to harmony especially in leadership with regards to decision making. This contributes to its quality of decisions that affect inputs products and supplier selection mechanisms.

4.4 Quality of Input Products and Suppliers Selection

The first objective of the study was to explore the effects of quality of input products on suppliers selection. This is an indicator of suppliers selections pattern in the horticultural industry. The results are as per table 4.3 below.

Table 4.3: Extent of agreement to statements regarding suppliers' selection in the organization.

QUALITY OF INPUT PRODUCTS	Strongly Agree (%)	Frequency	Agree (%)	Frequency	Don't Know (%)	Frequency	Disagree (%)	Frequency	Strongly Disagree (%)	Frequency
Managers put a lot of emphasis on quality while sourcing for products.	70.8	47	27.1	18	0.0	0	2.1	1	0.0	0
Purchasing only sourced from the suppliers with ISO certification companies or those who follow quality standards	31.3	21	45.8	30	6.3	4	10.4	7	6.3	4
Suppliers who supply low quality goods are unlikely to be selected.	47.9	32	35.4	23	4.2	3	4.2	3	8.3	5
Quality is always considered more than any other factor in suppliers' selection.	64.6	42	22.9	15	4.2	3	4.2	3	4.2	3

The Table shows that majority of the respondents (70.8 %) strongly agreed that managers are putting a lot of emphasis on quality while sourcing for products. Quality was also identified where respondents considered it more than any other factor in suppliers' selection with a score of 64.6%. Regarding suppliers who supply low quality goods, 47.9% agreed that they are unlikely to be selected. Purchasing only sourced from the suppliers with ISO certification companies or those who follow quality standards had 31.3% of the respondents strongly agreeing.

Table 4.3 further reveals that 31.3% strongly agreed while 45.8% agreed to the statement that the firm purchases only from suppliers with ISO certification and those that follow quality standards as statements related to product quality. This implies that 77.1 % of the respondents were in agreement that purchasing should be done with those suppliers who are ISO certified. However, 10.4% disagreed to the statement that the firm is purchasing only sourced from the suppliers with ISO certification companies or those who follow quality standards as statements related to product quality in suppliers' selection at Waridi Limited. It's important to note that a very high percentage of the respondents strongly agree that managers put a lot of emphasis on quality while sourcing for inputs.

4.4.1 Actions taken on a supplier who supplies low quality goods more than once.

The respondents gave varied opinions on actions taken on suppliers who supply low quality goods more than once. The responses ranged from looking for alternatives, stopping the supply as the organization looks for quality products, suspending the grower for some period and even warning the supplier. There are cases that call for disqualifying the supplier, taking corrective action and notifying and asking supplier to supply good quality goods. A sample of the item required is always given to the supplier and if he does not have the right item, then the order is cancelled and given to the supplier with the right items.

4.4.2 Procedures in place to ensure that the products are as per the standards required.

The study sought to find out if there are procedures in place to ensure that the products are as per the standards required. The results are presented in the figure 4.3.

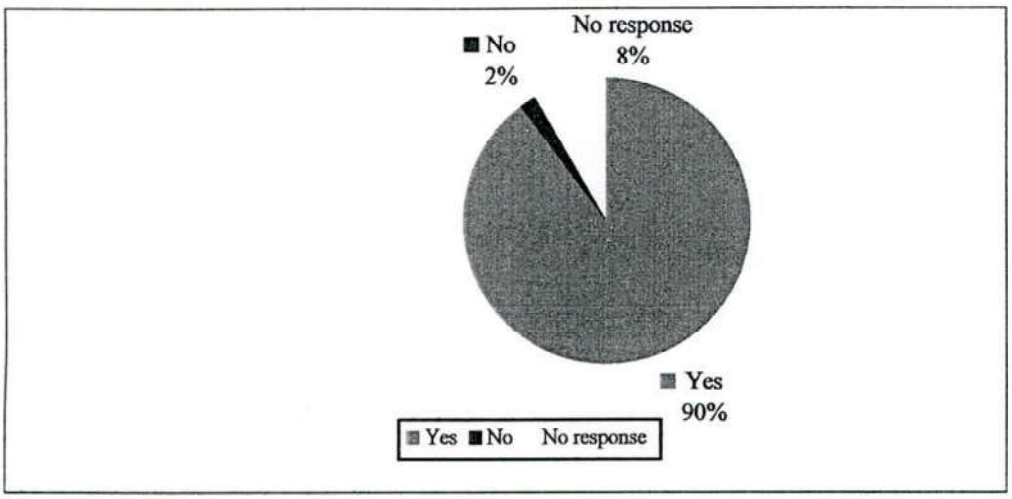

Figure 4.3: Procedures in place to ensure that the products are as per the standards required.

Figure 4.3 shows that almost all the respondents (89.6%) agreed that there are procedures in place to ensure that the products are as per the standards required while 2.1% disagreed. The responses given for the yes answer included the presence of ISO set procedures; purchases procedures; requisition procedures; thorough testing; departmental heads should confirm and approve the quality of the items before receiving and that there is a team of experts from every department to ensure the quality is up to standard.

The study therefore shows that the quality of input products have a huge effect on supplier's selection. The research thus shows that managers put a lot of emphasis

on quality while sourcing for products. This clearly came out from the research findings and is a general characteristic of many well performing companies. Procurement is a major risk area in many organizations and unless emphasis is strictly put by those in authority, the firm may lose in terms of quality and missed opportunities.

Overall, the statements relating to quality of input products on suppliers selection at Waridi Limited were rated highly by the respondents pointing to affirmation that this represents one of the factors affecting suppliers selection in horticultural industry. Therefore from the research findings, an overwhelming majority of 90% have put their support on having procedures that continually ensure that the firm's products are as per standards required. This again points to good practice on the part of Waridi Limited such that the leadership has advocated for stringent procedures to ensure quality products that ensure leadership in the market.

4.5 Inputs Price and Supplier Selection.

The second objective was to find out how the input price affects supplier selection in horticultural industry. The results are presented in table 4.4

Table 4.4: Extent of agreement on statements regarding suppliers selection in the organization.

INPUT PRICE	Strongly Agree (%)	Frequency	Agree (%)	Frequency	Don't Know (%)	Frequency	Disagree (%)	Frequency	Strongly Disagree (%)	Frequency
Prices of various suppliers are evaluated before any purchases.	58.3	38	41.7	28	0.0	0	0.0	0	0.0	0
Price discounts are considered before any purchases.	29.2	19	39.6	26	14.6	10	12.5	8	4.2	3
Credit terms are the main factors in selecting a supplier.	27.1	18	20.8	14	10.4	7	22.9	15	18.8	12
Managers go to a great length to negotiate for the prices.	41.7	28	31.3	21	8.3	5	12.5	8	6.3	4

The table shows that majority of the respondents strongly agreed to the statements that prices of various suppliers are evaluated before any purchases at 58.3%. It was also established that managers go to a great length to negotiate for the prices at

41.7%. Price discounts are considered before any purchases at 29.2% while credit terms are the main factors in selecting a supplier at 27.1%). The table further reveals that a proportion of the respondents agreed that prices of various suppliers are evaluated before any purchases with 41.7% strongly agreeing. Another 39.6% agreed that price discounts are considered before any purchases. Managers go to a great length to negotiate for the prices at 31.3%. However, 22.9% disagreed and 18.8% strongly disagreed to the statement that credit terms are the main factors in selecting a supplier as statements related to price in suppliers' selection at Waridi Limited.

The level of agreement on the statements put forth points to existence of good internal controls in the procurement process. The prices of various suppliers are evaluated before any purchases indicating proper controls in terms of costs and quality. From the findings, managers go out of their way to negotiate for the prices in a bid to bring costs down and improve on the firm's performance.

4.5.1 Actions taken when prices are good and the quality of the products are low.

The researcher went ahead to find out the actions taken when prices are good and the quality of the products are low. The responses ranged from going for good quality to customers complaints and rejecting the goods not meeting the standards. Other responses included negotiating so as to improve the quality of the products in order to retain the customer, stressing that cheap is always expensive, so it's better to go for a better quality product and spend money. There was also the opinion of disqualifying the supplier. It was also noted that the company relies on

Quality. Management of the company does not allow low-quality products irrespective of prices of the product. This ensures that the company does not compromise on the quality of the products in the name of price negotiations. They continually opt for the best quality and negotiate the prices later. This puts the firms in a very strategic position as it can promise and deliver quality products at all times. The firm's leadership is strict on quality regardless of the attractions in price offerings. Quality is the key to building brand loyalty and the leadership of Waridi Limited is well aware of this fact.

4.5.2 Procedures set to ensure only suppliers with competitive prices are selected.

The study sought to find out if there are procedures set to ensure only suppliers with competitive prices are selected. The results are presented in the figure 4.4.

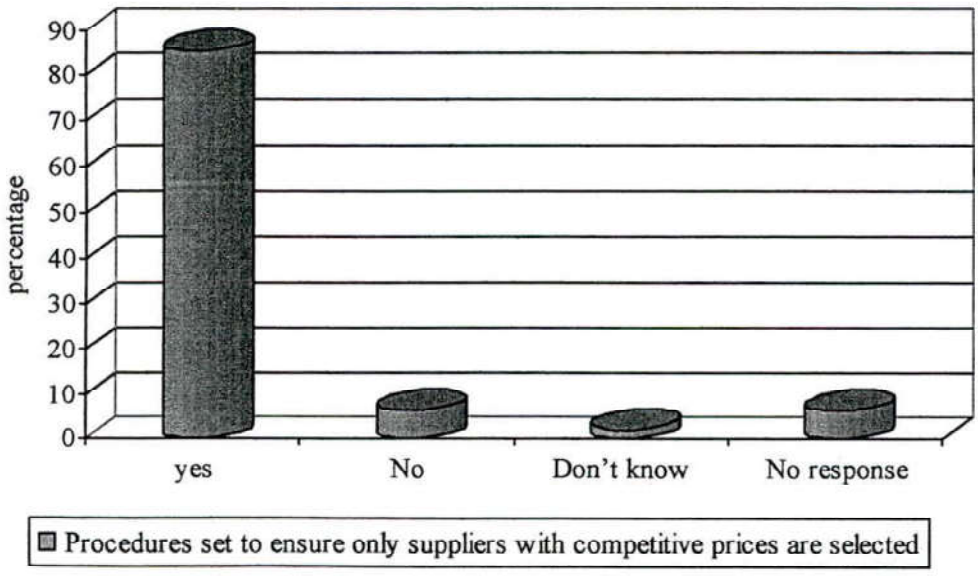

Figure 4.4: Procedures set to ensure only suppliers with competitive prices are selected.

Figure 4.4 shows that almost all the respondents agreed that there are procedures set to ensure only suppliers with competitive prices are selected while 6.3% disagreed. However, 2.1% did not know the answer to the query. The responses given included suppliers cost comparison; submission of quotations; and from the purchase desk, a ranking of the supplier is in place considering the prices, quality and delivery timings.

From the research findings therefore, input price was identified as a major factor while making decisions regarding suppliers selection. The findings reveals that Waridi Limited feels that input price should be considered in suppliers selection to provide competitiveness without compromising quality. This is a positive business aspect that not only ensures quality but overall business growth and success.

4.6 Lead Time and Suppliers Selection

The third objective was to investigate the effects of lead time on suppliers selection and the results are presented in table 4.5 .

Table 4.5: Extent of agreement to the following statements regarding suppliers selection in the organization.

TIME OF ORDER AND DELIVERY	Strongly Agree (%)	Frequency	Agree (%)	Frequency	Don't Know (%)	Frequency	Disagree (%)	Frequency	Strongly Disagree (%)	Frequency
The time taken between order and supply does not matter.	12.5	8	12.5	8	0.0	0	27.1	18	47.9	32
Suppliers are informed specifically on importance of meeting delivery time.	43.8	29	39.6	26	6.3	4	8.3	6	2.1	1
Time of order and supply can be negotiated with suppliers to be flexible.	39.6	26	41.7	28	4.2	3	12.5	8	2.1	1
Products must be delivered at specified time frame without fail.	35.4	23	39.6	26	6.3	4	16.7	11	2.1	2
Time of order and supply relevant for some items only.	10.4	7	25.0	17	16.7	11	33.3	22	14.6	9

The table shows that majority of the respondents (47.1%) strongly disagreed to the statements that the time taken between order and supply does not matter as statements related to time of order and delivery in suppliers selection at Waridi Limited. Table 4.5 further reveals that a large proportion of the respondents strongly agreed to suppliers are informed specifically on importance of meeting

delivery time (43.8%), time of order and supply can be negotiated with suppliers to be flexible (39.6%) and products must be delivered at specified time frame without fail (35.4%) as statements related to time of order and delivery in suppliers' selection at Waridi Limited. A great percentage of the respondents also agreed that time of order and supply can be negotiated with suppliers to be flexible (41.7%), products must be delivered at specified time frame without fail (39.6%) and suppliers are informed specifically on importance of meeting delivery time as statements related to time of order and delivery in suppliers' selection at Waridi Limited.

Communication is a very important component in any business interaction. This is perhaps why suppliers are informed specifically on importance of meeting delivery time. This is a factors that had overwhelming positive response from the research. The findings showed that the time of order and supply can be negotiated with suppliers to be flexible. All this affects lead time and suppliers selection. This was closely followed by the fact that there is a requirement that products must be delivered at specified time frame without fail. These factors help us conclude that lead time is an important fact in supplier selection.

4.6.1 Actions when products are delayed more than the usual time agreed.

The responses given included the fact that if the delay is frequent, the firm finds an alternative supplier for the same product. At times an explanation is demanded where the company sends a representative personally to the supplier. This may include questioning the supplier and if need be, change the supplier. There is

follow-up done to establish the cause, and if the item is out of stock from the supplier, then the order is cancelled and bought somewhere. The most popular action was following up on the supplier to establish the cause and where the item is out of stock from the supplier; the order is cancelled and bought somewhere else. This is very typical of successful organizations where time management is very crucial both in maintaining quality and standards. Other factors fairly lower in prominence compared to following up the supplier in which case they were not as important in the study.

4.6.2 Measures in place to ensure that the products are delivered on time.

The study sought to find out if there are measures in place to ensure that the products are delivered on time. The results are presented in figure 4.5.

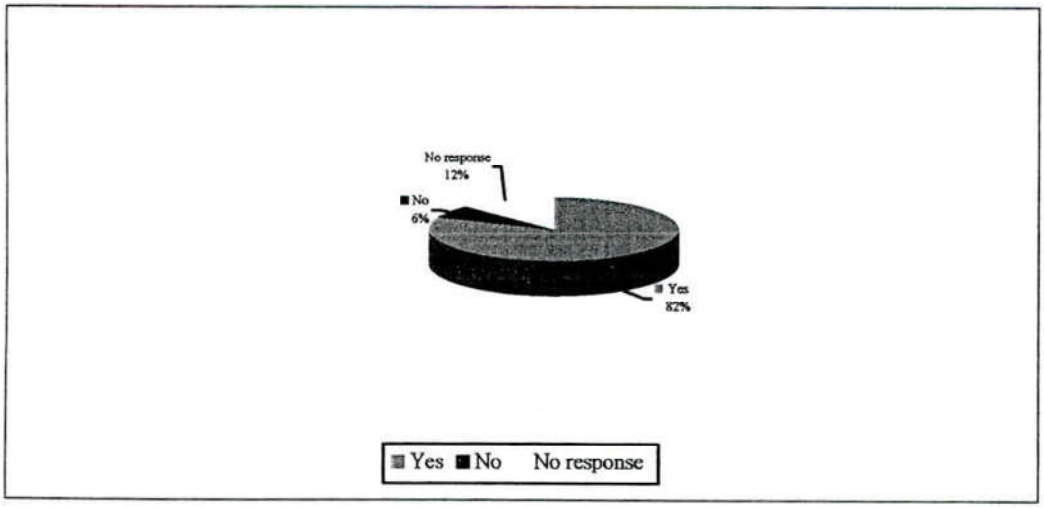

Figure 4.5: Measures in place to ensure that the products are delivered on time

Figure 4.5 shows that almost all the respondents (84.0%) agreed that there measures in place to ensure that the products are delivered on time while 6.0%

disagreed. The responses given by those who were in agreement stated that there are measures written in the requisition indicating the terms and time of delivery. There were indications of avoiding rush orders (products are ordered in a timely manner) and respondents quoted clear communication on when and what time to deliver them. Finally the supplier is informed of the importance of delivering the products on time. There was total agreement that there were measures put to ensure delivery on time. This ensures constant supply of good quality products and services.

From the findings, lead time was found to have an effect on the suppliers selection as confirmed by 47 % of the respondents. As Waridi Ltd seek to have a competitive edge in the industry, the issue of supply of input products on time was found to be important.

4.7 Supplier's Innovation and Supplier Selection.

The final objective was to establish the effects of supplier's innovation on supplier selection and the results are presented in table 4.6 .

Table 4.6: Extent of agreement to the following statements regarding suppliers' selection in the organization.

SUPPLIER'S INNOVATION	Strongly Agree (%)	Frequency	Agree (%)	Frequency	Don't Know (%)	Frequency	Disagree (%)	Frequency	Strongly Disagree (%)	Frequency
Purchasing done from suppliers who continue to improve on their products.	56.3	37	33.3	22	0.0	0	8.3	6	2.1	1
The farm share improvement information requirement with suppliers.	29.2	19	43.8	29	4.2	3	20.8	14	2.1	1
Products from different suppliers are compared for effective performance.	37.5	25	45.8	30	8.3	6	6.3	4	2.1	1
Purchasing done only from suppliers who demonstrate concern for environment.	35.4	23	31.3	21	16.7	11	10.4	7	6.3	4
Safety and handling of products is critical for selection of suppliers.	47.9	32	37.5	25	2.1	1	8.3	6	4.2	2

The table shows that majority of the respondents strongly agreed to the statements that purchasing is done from suppliers who continue to improve on their products

(56.3%), safety and handling of products is critical for selection of suppliers (47.9%), products from different suppliers are compared for effective performance (37.5%), purchasing is done only from suppliers who demonstrate concern for the environment (35.4%) and the farm share improvement information requirement with suppliers (29.2%) as statements related to innovation and creativity of suppliers in suppliers' selection at Waridi Limited.

Table 4.6 further reveals that a proportion of the respondents agreed to products from different suppliers are compared for effective performance (45.8%), the farm share improvement information requirement with suppliers (43.8%), safety and handling of products is critical for selection of suppliers (37.5%), purchasing is done from suppliers who continue to improve on their products (33.3%) and purchasing is done only from suppliers who demonstrate concern for environment (31.3%) as statements related to supplier's innovation in suppliers' selection at Waridi Limited. However, 20.8% disagreed to the statement that the farm share improvement information requirement with suppliers as statements related to supplier's innovation in suppliers' selection at Waridi Limited.

4.7.1 Actions on products not effectively meeting the needs of the farm.

The respondents were required to state actions on products not effectively meeting the needs of the farm. The respondents agreed that alternative suppliers should be sought as well as returning the input products to the supplier. It was also found that such suppliers should be disqualified from future supplying the input products.

4.7.2 Efforts in place to ensure that products are continually improved for better performance.

The study sought to find out if there are efforts in place to ensure that products are continually improved for better performance. The results are presented in figure 4.6.

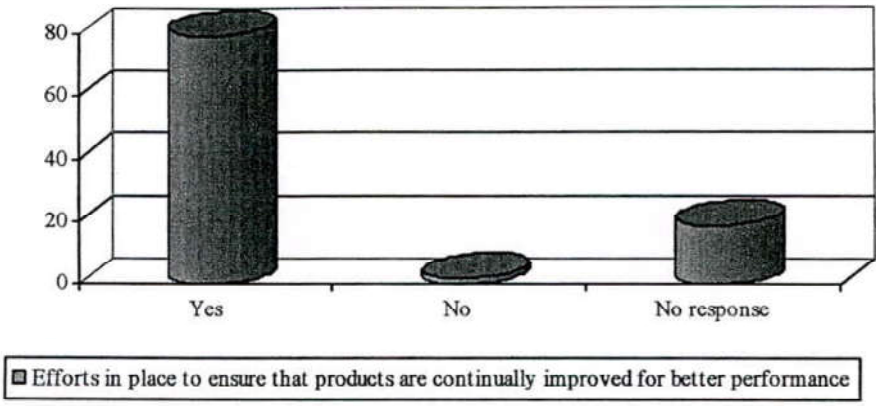

Figure 4.6: Efforts in place to ensure that products are continually improved for better performance.

Figure 4.6 shows that almost all the respondents (79.2%) agreed that there are efforts in place to ensure that products are continually improved for better performance while 2.1% disagreed. However, 18.8% did not know the answer to the query. The responses given by those who agreed include: training of the staff; through specific on the products; suppliers are given feedback on the performance of their products; and as a matter of policy, the organization is always seeking to better its products. Improvement of products continually was cited as a means of achieving better performance. This is very good news for other firms to learn that product research and innovation will eventually better performance and thus grows revenues and the overall business.

From the research findings, majority of respondents at 56 % agreed to the fact that input products will be purchased from the suppliers who improve on their products. This confirms the suppliers' innovation does influence the selection of suppliers . From the findings, 79 % of the respondents confirms that Waridi Ltd have mechanism to ensure that the output products are continually improved points to the fact that the suppliers who continually innovate will be mostly likely be selected.

4.8 Factors in Terms of Importance.

The study sought to establish the relative importance of quality of inputs products, input price, lead time and supplier's innovation in suppliers selection and the results are presented in table 4.7 below.

Table 4.7: Extent of agreement to the following statements regarding suppliers' selection in the organization.

RELATIVE IMPORTANCE OF FACTORS	Very Important (%)	Frequenc	Important (%)	Frequenc	Not sure (%)	Frequenc y	Less Important (%)	Frequency	Not Important (%)	Frequency	Rank
Quality of input products is the most important.	83.3	55	16.7	11	0.0	0	0.0	0	0.0	0	**1**
Input prices charged by suppliers are the most important.	56.3	37	33.3	22	4.2	3	4.2	3	0.0	0	**2**
Delivery time from order to receipt products is the most important.	43.8	29	47.9	32	6.3	4	0.0	0	0.0	0	**3**
Supplier's innovation is the most important.	22.9	15	58.3	37	8.3	6	6.3	4	2.1	1	**4**

The table shows that majority of the respondents strongly agreed to quality of input products as the most important factor in suppliers selection (83.3%), input prices charged by suppliers was ranked second (56.3%), delivery time from order to receipt products ranked at third position (43.8%) and supplier's innovation ranked fourth as factors regarding suppliers' selection at Waridi Limited. Table 8

further reveals that a proportion of the respondents agreed to supplier's innovation (58.3%), delivery time from order to receipt products (47.9%) and input prices charged by suppliers (33.3%) as factors regarding suppliers' selection at Waridi Limited.

At Waridi Limited, quality of input products is the most important factor in supplier selection with the respondents at 83% citing it as very important. This affirms that is a driving force in the organization and one that has been identified as very crucial. Input prices at 56 % was cited as very important while lead time and supplier's innovation followed as factors affecting supplier selection.

4.8.1 Other Factors Considered in Selecting Suppliers.

There were other responses recorded from the research which included convenience, evidence of response, delivery duration, terms of payment, hygiene and top quality, means and ways of transporting the product and availability of the product. Other responses included competency, communication, meeting ISO standards, effectiveness of the products, discounts offered, distance from the farm and back-up documentation from the supplier for the management to review. We also had responses touching on mode of transport, size of the business, legal qualifications, and credibility of the supplier. Others were credit terms, certification from various quality certification bodies and sensitivity of environmental conservation. Finally there was good response times and co-operation, genuineness of products, market feedback, shipment, technical support and stability.

The notable factors were effectiveness of the products and discounts offered and distance from the farm. These were noted as very important during management review of suppliers and eventually contracting for supply of inputs.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter gives the summary, conclusions and recommendation of the study. This is based on the research findings discussed and presented in the previous chapter.

5.2 Summary of the Findings

This study aimed at investigating the factors affecting suppliers selection in horticultural industry. The task included exploring the effects of quality of input products on suppliers selection, finding out how the input price affects supplier selection, investigating the effects of lead times on suppliers selection and establishing the effects of supplier's innovation on suppliers selection. The findings reveal that majority of the respondents were males who have attained secondary level of education. The findings further revealed that majority of the respondents have worked in Waridi Limited for 7-9 years and are from the production department.

5.2.1 Effect of Quality of Input on Suppliers Selection.

The study findings reveal actions taken by Waridi Limited on a supplier who supplies low quality goods more than once are; looking for alternative suppliers, stopping the supply due to the fact that the organization looks for quality products to warning the supplier, disqualifying the supplier, correcting action taken, notifying suppliers and asking them to supply quality good. In most cases a sample of the item required is given to the supplier and if he does not have the right item,

then the order is cancelled and given to the supplier with the right items. On the quality of input products and suppliers selection supplier selection we find that managers put a lot of emphasis on quality while sourcing for products, and that quality is always considered more than any other factor in supplier selection.

5.2.3 Effect of Input Price on Supplier Selection

The study findings on the effect of input prices on supplier selections revealed that actions taken by Waridi Limited when prices are good and the quality of the products are low include. Some of the strategies applied include going for good quality instead, negotiating so as to improve the quality of the products in order to retain the customer and amplifying that cheap is always expensive, arguing that it's better to go for a better quality product and spend money. There are instances where we have disqualification of the supplier, in others the company relies on Quality Management and still in some cases the company does not allow low-quality products irrespective of high prices of the product. Generally, the company does not compromise the quality of the products in the name of price, it will opt for the best quality and negotiate the prices later.

On the input price and suppliers selection, the study findings showed that prices of various suppliers are evaluated before any purchases and that price is a major factor in supplier's selection.

5.2.4 Effect of Lead Time on Supplier Selection

In terms of the effect of lead time on supplier selection, the study findings pointed to the fact that a majority of the respondents indicated that there are measures in

place to ensure that the products are delivered on time. This is achieved through having measures written in the requisition indicating the terms and time of delivery, avoiding rush orders i.e. products are ordered in a timely manner and having clear communication on when and what time to deliver the inputs. The supplier is always informed of the importance of delivering the products on time.

From the research on Waridi Limited, we realize that when products are delayed more than the usual time agreed, there are various reactions depending on whether the delay is frequent, when finding an alternative supplier for the same product. An explanation is demanded and the company sends a person personally to the supplier to question the supplier and if need be, change the supplier. In other cases a follow-up is done to establish the cause, and if the item is out of stock from the supplier, then the order is cancelled and channeled somewhere else. On lead time therefore, the findings reveal that time taken between order and supply matters in suppliers selection.

5.2.5 Effect of Supplier's Innovation on Supplier Selection.

It was established for the study that almost all the respondents agreed that there are efforts in place to ensure that products are continually improved for better performance. This can be seen through training of the staff, being specific on the products, giving suppliers feedback on the performance of their products and as a matter of policy, the organization is always seeking to better its products. The study findings further show that actions taken by Waridi Limited on products not effectively meeting the needs of the farm include looking for alternative products,

returning the supplies to the supplier and in severe cases disqualifying them and suspending them. Since the company has its operating standards, if the product quality exceeds the tolerance level, the product is rejected and taken back to the farm.

On supplier's innovation and suppliers selection the findings showed that purchasing is done from suppliers who continue to improve on their products. This then gives Waridi Ltd a competitive edge.

5.2.6 Other Factors on Supplier Selection

Other factors indicated by the respondents considered in selecting suppliers included convenience, response time, delivery duration, terms of payment and hygiene. Others were top quality standards, means and ways of transporting the product, availability of the product and organizational competency in handling the order. We also had issues of communication, meeting the ISO standards, test effectiveness of the products, discounts offered and distance from the farm. There were also concerns of back-up documentation from the supplier for the management to review, the mode of transport, and the size of the business and the legal qualifications of those engaged in supply management. In some instances credibility of the supplier, credit terms, certification from various quality certification bodies and sensitivity of environmental conservation were pointed out as supplementary factors affecting supplier selections. Still there were concerns of good response and co-operation, genuineness of products, market feedback, shipment, technical support and stability.

5.3 Conclusions of the Study

The study reveals that a lot of importance is attached to the quality of the horticultural inputs. This agrees with Bain (2004) who argued that quality is a base for competition and that quality attributes should be embedded in the products supplied. Quality issues are the most important criterion in most organizations (Odhiambo, 2010). A report of the Republic of Kenya (2010) noted that the most of the inputs products to horticultural products are adulterated which compromises on quality. This emphasizes the need to be very careful when purchases are made for the horticultural products. Mutyola (2009) also mentioned that the suppliers have been focusing on quality indicating that the suppliers have started putting more efforts on quality to satisfy the customers.

The study findings revealed that actions taken by Waridi Limited when prices are good and the quality of the products are low included going for good quality products, negotiating to improve the quality of the products thus retain the customer. They also agreed that cheap is always expensive, so it's better to go for a better quality product and spend money. There were comments on disqualifying the supplier because the company relies heavily on quality management. The company does not allow low-quality products irrespective of high prices of the product. The company does not compromise the quality of the products in the name of price, and will opt for the best quality and negotiate the prices later.

This was in contrast to what Qian (2009) had noted that the price was on the lower lever on the level of suppliers selection and indeed it was considered general

in comparison to such criteria as research and development, lead time and quality. However the findings agree with a study by Gao and Tang (2003) who noted that price could be significantly important to a firm's purchasing decision.

The study findings further showed that majority of the respondents (84.0%) indicated that there are measures in place to ensure that the products are delivered on time, this is achieved through having measures written in the requisition indicating the terms and time of delivery. There is also discussion on avoiding rush orders (products are ordered in a timely manner) and having clear communication on when and what time to deliver them. Other recommendations include the supplier being informed of the importance of delivering the products on time.

Shin (2008) noted that although cost and quality are still crucial, however, manufacturers today are under pressure from their customers to cut lead times and improve speed. This confirms what the findings indicated. Since the product must be delivered on time, then the suppliers not keen to deliver on time would not be considered for future purchases. The study findings revealed that almost all the respondents (79.2%) agreed that there are efforts in place to ensure that products are continually improved for better performance. This can be seen through training of the staff, being specific on the products, giving suppliers feedback on the performance of their products and as a matter of policy, the organization is always seeking to better its products.

The study findings show that actions taken by Waridi Limited on products not effectively meeting the needs of the farm included looking for alternative products, returning the supplies to the supplier, disqualifying the suppliers from future contracts and even suspending them. Since the company has its operating standards, if the product quality exceeds the tolerance level, the product is rejected and taken back to the farm. The findings also agree to what was noted by Primo and Amundson (2002) that customers purchase the input products from those who are involved in innovative processes.

As noted by Hakansson and Eriksson(2003) the finding agree that firms in many industries including horticulture face increasing global competition and markets that demand more frequent innovation and as a result, a fundamental change seems to have occurred in the way innovations are generated. Lazzarotti and Manzini (2009) observed that in pursuit of innovation, buyers often purchase key products from a single supplier or a handful of suppliers. This was also confirmed by the research findings.

Other factors indicated by the respondents considered in selecting suppliers included convenience, response time, delivery duration, terms of payment, hygiene and top quality, means and ways of transporting the product, availability of the product, competency, communication, meeting the ISO standards and effectiveness of the products. Others were discounts offered, distance from the farm to the supplier, back-up documentation from the supplier for the management to review, mode of transport, size of the business, legal qualifications and

credibility of the supplier. Others factors include credit terms, certification from various quality certification bodies, sensitivity of environmental conservation, good response and co-operation, genuineness of products, market feedback, shipment, technical support and stability of the supplier.

Qian (2009) noted that price was on the lower lever on the level of supplier's selection and indeed it was considered general in comparison to such criteria as research and development, lead time and quality. However as indicated, the findings puts the price at a higher level in the priority of suppliers selection. Shin (2008) highlighted that companies that emphasize zero defects and Six Sigma will rank the criteria in the order of quality, lead time, and cost, and select suppliers who can provide them with a high level of quality material and supplies. This did not agree with the findings that showed the importance of the factors starting with the quality followed by the price, then lead time and finally innovation.

From the study findings it can be concluded that quality of product, price, lead time and innovation are factors affecting supplier's selection in horticultural industry in that order.

5.4 Recommendations

The study highlighted the importance of suppliers selection to achieve a competitive advantage and maintain a cost effective organization. The study revealed that a systematic way of suppliers selection should be followed by considering several factors.

When selecting suppliers, the quality of the input products should be a major factor. Information should be collected about the standards that the suppliers follow to meet the quality of the input products. Any supplier who supplies low quality of input product should not be selected. This would only leave those suppliers who meet the quality needs as specified.

To ensure that the organization operate efficiently, price should be considered while selecting suppliers. An evaluation of the prices offered by the various suppliers should be carried out before a conclusion is made on the final suppliers for the organization. The input price should be part of the factor in supplier selection as low prices would as well mean that the quality of the input product is being compromised.

Given the current development and the constant changing consumers needs, the delivery time have become a critical factor. To ensure that the input products are delivered on time, any suppliers who is not keen on meeting the agreed delivery time with the organization should not be considered. The delivery time has become the next level of competition and the organization would lose out on major customers if the delivery time of the output products is not meet.

There have been rapid changes in consumer needs and tastes which have been changing very rapidly. To ensure that the customers needs are meet, any supplier who is not innovative enough as to create value for the customers should not be

considered. Only those suppliers who are continuously improving their input products should be selected. In horticultural industry the focus on the reduction of environmental pollution should be considered as well as the shift have been on the reduction of carbon emission.

5.5 Areas for further research

This study sought to find out the factors affecting supplier's selection in horticultural industry with particular reference to Waridi Limited attempting to bridge the gap in knowledge that existed. Although the study attained these, it mainly focused on one organization. There is need to replicate the study using many other organizations so as to find out the if there are any other factors affecting supplier's selection in horticultural industry. There is need therefore to conduct a similar study which will attempt to find out if good supplier management has an impact on financial performance of organizations.

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APPENDIX I: LETTER TO RESPONDENTS

George Muchuga
P.o Box 159 – 00242
Kitengela
Kenya.

RE: REQUEST FOR INFORMATION FOR REASEARCH PROJECT ON FACTORS AFFECTING SUPPLIER SELECTION.

In partial fulfillment for an award of Executive MBA degree, I am carrying out a research project on various factors influencing the suppliers selection in horticultural industry.

Given that this organization is a major stakeholder, I believe that you have vital information relevant to my research project. I kindly therefore request your assistance by filling in the questionnaire attached herewith and sending it back to me.

All the information will be used for academic purpose and will be treated with a lot of confidence. Do not hesitate to get in touch if there is any clarification needed on george@waridifarm.com

I look forward to your valued responses.

Yours sincerely

George Muchuga

APPENDIX II: QUESTIONNAIRE FOR THE SUPPLIERS SELECTION

This questionnaire is intended to collect data for academic purposes. The information will be treated with strict confidence.

Instructions to respondents: Please tick or write where applicable

Section 1: General Information

1. Name of the department .....
2. Number of staff in the department .....
3. Gender :

   Male ☐ Female ☐

4. Education level of the respondent.....

   Degree:

   Diploma

   Secondary

   Others:

5. Number of years worked in Waridi .....

Section 2: Factors affecting suppliers selection in Waridi Limited

6 The following statements are related to the suppliers selection in your organization. Please indicate the extent to which you agree or disagree on a scale of 1-5 , where 1- Strongly Agree, 2 - Agree, 3 – Undecided, 4 – Disagree, 5 – Strongly Disagree

QUALITY OF INPUT PRODUCTS	1	2	3	4	5
Managers put a lot of emphasis on quality while sourcing for products.					
Purchasing only sourced from the suppliers with ISO certification companies or those who follow quality standards					
Suppliers who supply low quality goods are unlikely to be selected.					
Quality is always considered more than any other factor in suppliers' selection.					

a) What are the actions taken on a supplier who supplies low quality goods more than once?

……

……

……

b) Are there procedures in place to ensure that the products are as per the standards required?

……

……

……

7 The following statements are related to the suppliers' selection in your organization. Please indicate the extent to which you agree or disagree on a scale of 1-5 , where 1- Strongly Agree, 2 - Agree, 3 – Undecided, 4 – Disagree, 5 – Strongly Disagree

INPUT PRICE	1	2	3	4	5
Prices of various suppliers are evaluated before any purchases.					
Price discounts are considered before any purchases.					
Credit terms are the main factors in selecting a suppliers.					
Managers goes to a great length to negotiate for the prices.					

a) What happens when prices are good and the quality of the products are low?

……

……

…… ……..

b) Are there procedures to ensure only suppliers with competitive prices are selected?

……

……

……

8 The following are statements attributed to supplier relationship. Indicate the extent to which you agree or disagree with each of the statements as applicable to your organization.

On a scale of 1-5, where 1- Strongly Disagree, 2 - Disagree, 3 - Not Sure , 4 - Agree , 5 - Strongly Agree

TIME OF ORDER AND DELIVERY	1	2	3	4	5
The time taken between order and supply does not matter.					
Suppliers are informed specifically on importance of meeting delivery time.					
Time of order and supply can be negotiated with suppliers to be flexible.					
Products must be delivered at specified time frame without fail.					
Time of order and supply relevant for some items only.					

a) What happens when products are delayed more than the usual time agreed?

……

……

……

b) Are there measures in place to ensure that products are delivered on time?……

……

……

……

9 The following are statements attributed to supplier relationship. Indicate the extent to which you agree or disagree with each of the statements as applicable to your organization. On a scale of 1-5, where 1- Strongly Disagree, 2 - Disagree, 3 - Not Sure, 4 - Agree , 5 - Strongly Agree

SUPPLIERS'S INNOVATION	1	2	3	4	5
Purchasing done from suppliers who continue to improve on their products					
The farm share improvement information requirement with suppliers.					
Products from different suppliers are compared for effective performance.					
Purchasing done only from suppliers who demonstrate concern for environment.					
Safety and handling of products is critical for selection of suppliers.					

a) What happens to products that are not effectively meeting the needs of the farm?

……

……

……

b) Are there efforts in place to ensure that products are continually improved for better performance?

……

……

10 In selecting a supplier how do you consider the following factors in terms of importance. On a scale of 1-5, where 1- Very important, 2 - Important, 3 - Not Sure, 4 – Less important, 5 – Not important

RELATIVE IMPORTANCE OF FACTORS	1	2	3	4	5
Quality if input products are the most important.					
Input prices charged by suppliers are the most important.					
Delivery time from order to receipt of products is the most important.					
Supplier's innovation is the most important.					

a) What other factors do you consider in selecting suppliers……

……

THANKYOU FOR TAKING TIME TO COMPLETE THIS QUESTIONNAIRE