FACTORS AFFECTING TEA PRICES AT THE MOMBASA TEA AUCTION IN KENYA

BY

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A Research Report Submitted to the Chandaria School of Business for the Award of a Master's in Business Administration Degree (MBA)

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STUDENT'S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other institution, or university other than the United States International University – Africa in Nairobi, Kenya for academic credit.

Signed_____   Date_____

  Samuel Gebreeziabher Kahsay (ID 634915)

The research project has been presented for examination with my approval as the appointed supervisor.

Signed_____   Date_____

Dr. Elizabeth Kalunda

Signed_____   Date_____

Dean, Chandaria School of Business

ABSTRACT

The purpose of this study was to establish the factors affecting tea prices at the Mombasa Tea Auction in Kenya. The specific questions sought to answer were: to establish the extent market demand affect the market price of Kenyan tea at the Mombasa tea auction. The extent price and pricing strategy affect market price of Kenyan tea at the Mombasa tea auction. To what extent product features affect market price of Kenyan tea at the Mombasa tea auction.

The research adopted a descriptive research design and the population for the study encompassed there 166 member's participating at the Mombasa Tea Auction. Stratified random sampling method was used and this resulted into a sample of 117 respondents which include heads of department, managers and assistant managers. The tool used to collect the data was a structured questionnaire. The Statistical Package for Social Sciences (SPSS Version 25) data analysis software was used to analyze data based on descriptive and inferential statistics. The study also used a correlation analysis and regression analysis that established the relationship between the dependent variable and the independent variables and data was presented using tables and figures.

The research analyzed the relationship between the dependent variable (pricing) against market demand. The results showed that 9.3% of the variation in tea pricing was explained by the variations in market demand. ANOVA analysis results of the regression between tea pricing and market demand at 95% confidence level, the F critical was 9.051 and the P value was (0.003) therefore below 0.05 this implied that it was statistically significant and can be used to assess the association between tea pricing and market demand. The regression equation illustrated that that a unit change in market demand would lead to a 0.457 positive change in tea pricing.

The research analyzed the relationship between the dependent variable (pricing) against pricing strategy. The results showed that 0.3 % of the variation in tea pricing was explained by the variations in pricing strategy. ANOVA analysis results of the regression between tea pricing and pricing strategy at 95% confidence level, the F critical was .301 and the P value was (0.585) therefore above 0.05 this implied that it was not statistically significant and couldn't be used to assess the association between tea pricing and pricing strategy. The regression equation illustrated that taking pricing strategy into account and

other factors held constant a unit change in pricing strategy would lead to a 0.084 positive change in tea pricing.

The research analyzed the relationship between the dependent variable (pricing) against product features. The results showed that 23.8 % of the variation in tea pricing was explained by the variations in product feature. ANOVA analysis results of the regression between tea pricing and product feature at 95% confidence level, the F critical was 27.435 and the P value was (0.000) therefore below 0.05 this implied that was statistically significant and could be used to assess the association between tea pricing and Product features. The regression equation established that taking product feature into account and other factors held constant a unit change in pricing strategy would lead to a 0.710 positive change in tea pricing.

It was concluded that issues such as competition has highly enabled the auction offer value to the customers therefore affect the tea prices. Pricing decisions are very important for managers at the Mombasa Tea Auction in setting up tea prices and there is a very high capability of developing perceived value thus influence tea prices. Secondly, auctions define a high price initially and then able to reduce it systematically over time and the customers see the prices of products as a high quality indicator. Lastly, the tea sector has professionalism and availability of personnel and the sector enjoys quality and efficiency of the infrastructure. Flows of goods, information and finance through the various stages of the chain are evaluated and the producers are price takers and hardly negotiate.

It was recommended auctioneers should strive to offer value to the customers therefore positively influence the tea prices. Managers should also ensure they have a high capability of developing perceived value. It was also recommended that high price initially suggested should not deviate too much from the intended pricing and auctions need to maintain a balance between the advantages of the product and its possible price for the best price offers. Lastly, there is a need to also improve on marketing for auctionaires to retain existing profitable customers.

ACKNOWLEDGEMENT

I would like to firstly give thanks to God for his unending favours. I also give special thanks to my family for the support and to my supervisor Dr. Elizabeth Kalunda, for the guidance throughout this research proposal.

DEDICATION

I would like to dedicate this research project to my parents for their inspiration, motivation and support as without them this would not be possible.

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LIST OF ABBREVIATIONS

CFTC	Commodity Futures Trading Commission
DCC	Dynamic Conditional Correlation
GARCH	Generalized AutoRegressive Conditional Heteroskedasticity
GDP	Gross Domestic Product
IMF	International Monetary Fund
NSE	Nairobi Securities Exchange
OLS	Ordinary Least Squares
REER	real effective exchange rate
S&P 500	The Standard & Poor's 500
SUR	Seemingly Unrelated Regression system
UK	United Kingdom
UNCTAD	The United Nations Conference on Trade and Development
USA	United States of America
WTI	West Texas Intermediate (Crude Oil Prices)
WTO	World Trade Organization (WTO)
MIS	Management Information System

<center>**CHAPTER ONE**</center>

1.0 INTRODUCTION

1.1 Background of the Study

A commodity exchange market is a market which multiple buyers and sellers trade commodity-linked contracts on the basis of rules and procedures laid down by the exchange (Winfield, 2016). In developed countries, such exchanges typically act as a platform for trade in futures contracts, or standardized contracts for future delivery. In the developing world, a commodity exchange may act in a broader range of ways to stimulate trade in the commodity sector (Dey & Maitra, 2011).

In the commodity sector, price volatility provides a measure of the possible variation or movement in a particular economic variable. Prices change as rapid adjustments to market circumstances. Wide price movements over a short period of time typify "high volatility" (Meyers, 2009). Previous studies on price volatility is driven by factors such as yields and stock levels; weather and changing weather patterns with their related impacts; cycles in key markets; policy driven developments including large purchases by the governments; developments outside the agricultural sector such as exchange rate and oil price movements; trade policies and their transmission; investment in agricultural production. Commodities for which the demand is inelastic, such as agricultural products, tend to be more volatile. Long-term structural changes are also responsible for the increase in price variability, although their effects are not immediate (Trostle, 2008).

Sands, Jones and Marshall (2014) show in the recent volatility of agricultural commodity prices, the volume of productions, the projected population growth have been absorbed by changes in productivity growth through compensating responses in yield, cropland area, crop prices and international trade. Worldwide high and volatile prices reflect global forces of supply and demand that are only slightly responsive to national economic or competition policies – although in some cases, policies such as export bans have exacerbated the problem significantly (Fung, Xiaoqing & Xu, 2003). In addition, speculative activity on commodity markets often anticipates global forces and may result in more short-run volatility but less in the medium term. However, there is little evidence that such activity influences average prices over a significant period (Liu & An, 2011).

<center>1</center>

Zhang and Buongiorno (2010) revealed that an increase in exchange rate variability of 1% led to a short run decrease in export quantity of 0.3-0.4% and to a short run decrease in export price of 0.1% and with exchange rate level, exchange rate volatility may not be a major policy issue for US forest product exports. Commodity price volatility may have implications for the volume of agricultural commodity trade when individual countries adopt policies that restrict imports or exports like export bans, as a method of coping with price variations. Although the consequences of exchange rate volatility on trade have extensively been examined and are at the center of debate, research on the effects of commodity price volatility on international trade such as volume is limited. Volatility in the world market prices can have major effects on agricultural trade since agricultural products and agricultural industry have many characteristics, such as perishable nature of products and less supply responsiveness to short term price fluctuation that distinguished them from other industries. Uncertainty in the world agricultural market has a greater impact on farm income in both developed and developing countries (Koo & Kennedy, 2007) and food security in developing and low-income countries (IFPRI, 2011).

In developed countries, large increases in commodity prices do not necessarily have the same impact on final product prices because most of the food consumed has been processed. In fact, only 20 to 25 per cent of the retail food prices rely on commodities prices, the rest covers costs related to labor, processing, marketing and advertising, transportation, distribution and taxes (Schaffnit-Chatterjee, 2011). Food prices are said to be "vertically integrated and concentrated" meaning that the commodity price transmission is rather weak in developed countries. However, in the LDCs most consumed food is not processed or at least, less than in the developed countries. Therefore, following the 2007-2008 prices surges in agricultural commodities, the affordability of food products was more worrying in developing countries than in the developed ones. Rapsomanikis (2011) shows that; although world price swings reflect in domestic prices in developing countries, the price adjustment from world level to the domestic level is slow. In fact, for the net food importing countries, the full adjustment period to world price levels is estimated to nine to ten months (Rapsomanikis, 2011). Besides, crisis events such as the food commodity peaks in 2008 are transmitted much faster at the global scale.

Following the peak of the 2007/08 economic crisis, commodity markets have generally experienced high and volatile prices. Increasing demand of grains for food, feed and bio-energy, coupled with a slow growth in agricultural productivity, are likely to continue putting upward pressure on prices and generate more volatility (OECD-FAO, 2011). Currencies of major export markets for example Russia and the Middle Eastern Countries that buy tea from Kenya slipped against the dollar. The purchase of tea dropped from the key importers accompanied by a large amount of volume withdrawals from the tea market. The tea prices increased to their highest point in 2009 and have remained higher than the 2006 prices. The fluctuations of tea prices affect the public expenditure of the country, foreign reserve holdings, terms of trade and the government fiscal revenue (Tanui, Feng, Shen & Xinghui, 2012).

Baek and Koo (2009) studied the short and long run effect of macroeconomic variables such as agricultural commodity prices, interest prices and exchange rates on the U.S. farm income using autoregressive distributed lag approach. Results reveal that commodity prices and interest rates have been significant factors in influencing U.S. farm income in both the short and long term. They also show that exchange rates play a crucial role in determining long-run behavior but have little effect in the short term. Kalkuhl (2014) analyzed how global commodity prices influence domestic food prices in developing countries using the autoregressive distributed lag model. Empirical analysis revealed that 90% of global poor live in countries where domestic food prices are influenced by international prices.

The price of all agricultural commodities depends on the available information. Farmers with access to market prices in their locality or other markets got higher sales prices for their products, compared to those who do not have access to the same information (Edwardo,2013). Proximity to individuals who have the information however does not make a difference to such farmers.

According to Antonaci, Demeke and Vezzani (2014), firms operating in the agricultural sector faces risks that are specific to this branch of the economy. Agriculture is not only prone to input and output price variability, but it also faces high financial risks resulting from the peculiarity of the production cycle. Given the long spantime between the beginning of the production cycle (sowing) and the marketing of the output, farmers are

exposed to output price risks and financial constraints. Antonaci *et al.,* (2014) adds that this peculiarity can result in insufficient cash being available to satisfy basic needs and to pay for production expenses, such as inputs. The lack of well-developed financial systems exacerbates these circumstances resulting in insufficient liquidity, loss of income and high interest rates. Moreover, agricultural producers have to deal with risks associated with negative outcomes mainly deriving from extreme weather shocks, such as drought, floods or cold waves.

Auctions to buy and sell large volumes of agricultural commodities such as wheat, rice, tea, coffee, and soybeans are an important part of the global agricultural supply chain in diverse regions of the world. In an effort to improve efficiency, agricultural auctions have been experimenting with online formats, where the physical auction environment is simulated almost exactly in an online setting (Ghosh, 2010). According to Noemi (2012) the projected benefits of the online environment include lower transaction costs for buyers and sellers, 7 days-a-week operations, better price and product information, better visibility of the price formation process, less collusion among buyers, less exploitation by intermediaries, and a more streamlined agricultural supply chain. Mahalik *et al.,* (2010) notes however that In spite of these benefits, online commodity auctions in most of Africa are in their infancy and governments have been cautious in granting permission without adequate protection for the producers. A major concern is whether the benefits of the online platform actually translate to higher commodity prices for the producers.

Commodity exchanges would also have great effects on the farmer as agricultural commodity demands and supply is inelastic (Khosla, 2012). Inelasticity in demand and supply means that should the supply of tea decrease, the demand of the tea would increase. This however would not have any effect on the prices of the Kenyan tea. If the supply of tea increases, the price of tea would reduce. This is because of the competition experienced in the global market. This would therefore have a negative effect on the farmer as they will earn less though the production of the tea was high.

Although the effects of exchange rate volatilities on international agricultural trade have been examined for long time, the effects of price determination have not been examined at large. Most of the recent studies (IFPRI, 2011; Braun & Tadesse, 2012; Weersink *et al.,* 2008; OECD & FAO, 2012) on commodity price volatilities reviewed the reasons for

agricultural commodity price volatility. Therefore, this research project shall solely focus on the physical commodity whereby tea will be the principal underlying commodity to be traded. Price determination of the underlying commodity being traded, that is tea, will be examined.

Tea is one of the leading export commodities in Kenya. Kenya's tea is one of the most marketable in the world market. Currently, Kenya is the third leading exporter of tea, controlling about 15% of the world export market. Other key exporters are Sri Lanka (21%), China (18%), mainly green tea and India (11%) (OECD, 2016). In 2017, Kenya earned 129 billion shillings from tea exports (Agriculture and Food Authority, 2018). Top buyers of Kenyan tea include Britain, Afghanistan, Egypt, Sudan and Pakistan. Kenyan officials have also been holding marketing trips to Asia in a bid to increase sales of the commodity to countries like China (Reuters, 2016). Tea exporting in the country acts as a source of income to the farmers, creates jobs in the rural areas of the country, encourages improvement of rural infrastructure and increases export earnings to the country. A good tea price creates better living standards for a farmer and opportunities for tea agribusiness companies. In 2009, rural incomes in tea exporting countries increased due to an increase in export earnings (FAO, 2010). In 2011, 78% of Kenyans lived and worked in rural areas (Khosla, 2012).

Kenya Agricultural Commodity Exchange (KACE) is a private sector firm in Kenya. It was established in 1997. KACE primarily functions as an information service to enhance price discovery as well as a spot exchange. KACE collects, processes, updates and disseminates market information daily to farmers and other market intermediaries through the Management Information System (MIS). Market information includes prices of commodities in different markets, and commodity offers to sell and bids to buy, as well as short extension messages. Through the offers and bids function, farmers are able to advertise their stocks or for sale or their demands or for farm inputs such as fertilizers and improved seeds. KACE monitors the usage of the MIS and receives feedback which it uses to continuously refine and improve the system (KACE, 2004). The Mombasa market is dominated by a few large buyers, reflecting the concentration of Kenya export volume into the key markets of Pakistan, Egypt and the UK. The market is however very competitive, with some client contracts changing hands for a few cents difference in

price. The job of the buyer is to meet his clients' requirements as efficiently and as cheaply as possible, or risk losing clients to competing buyers.

The global market for tea is currently estimated to be around US$ 15.4 billion (2013), in terms of production value (World Tea News, 2014) and US$ 40.7 billion in terms of retail value (Euromonitor International, 2014). World tea production has increased significantly over the past two decades. This may be due to several reasons such as increasing population sizes, the increasing social acceptance of tea as the drink of choice, an increase in the area of tea cultivation, improved varieties of tea cultivation by selective breeding (cultivars), advanced technology and improved cultivation practices (Majumdar et al, 2012). In Kenya, the volatility of the tea prices has had a negative effect on the farming of tea. Some farmers choose to abandon the planting of tea and plant crops that experience more returns. Kenya is one of the leading markets in the production of tea. The reduction on the growth of tea would have major effects on the GDP. Tea currently gives the highest return ($957M) in exports as compared to other exported commodities (OEC, 2016). This would reduce the country's economic growth as export earnings.

1.2 Problem Statement

The Kenyan tea commodity market has witnessed both long- and short-term movements in prices presenting a challenge for Kenya to improve the tea pricing since the country heavily relies on this commodity. The reduction and volatility of prices creates uncertainty to the individual producers of tea, businesses involved in agribusiness and the government of Kenya. A positive and stable tea pricing would improve the country's terms of trade, public expenditure, government fiscal revenue and foreign reserve holdings.

Chirchir, Muse and Jagongo (2015) studied to investigate exchange rate volatility and export performance of tea firms in Kenya indicated that exchange rate volatility and domestic tea prices were some of the variables that influence export performance of tea firms in Kenya to the world markets. However, the tea substitute's prices did not influence the export performance of tea firms to the importing countries. The study

further realized interdependence between exchange rate stability, macroeconomic stability and export performance.

Jebitok (2010) study investigated the impact of real exchange rate volatility on Kenya's exports of tea in an export demand framework which included foreign incomes (foreign economic demand), domestic tea prices, domestic coffee prices (tea substitute) and volatility. The results indicated a negative though relatively significant relationship between the volatility and the volume of tea exported. Foreign incomes and tea prices were found to be significant variables in the study.

Mohammed, Mwenda, Musundi and Njoroge (2015) analysis of the volatility of real exchange rate and exports in Kenya for the year 2005-2012 revealed that exchange rate volatility affected exports for tea, coffee and horticulture to the European Union. The study also established that foreign income played an important role in explaining tea and coffee exports to the UK and EU respectively. From the studies highlighted above, agricultural commodity prices, interest prices and exchange rates, real GDP, population, urbanization, and inflation among other factors affect pricing of agricultural commodities. Locally there is limited literature on issues of pricing of tea as an agricultural commodity. This study therefore aimed to establish whether the same factors affect export of tea in Kenya.

1.3 Purpose of the Study

The purpose of this study was to establish the factors affecting tea prices at the Mombasa Tea Auction in Kenya

1.4 Research questions

The study sought to answer the following 3 questions:

1.4.1 To what extent market demand affect the market price of Kenyan tea at the Mombasa tea auction?

1.4.2 How does pricing strategy affect market price of Kenyan tea at the Mombasa tea auction?

1.4.3 To what extent does product features affect market price of Kenyan tea at the Mombasa tea auction?

1.5 Significance of the Study

This study will be of significane to various groups as follows:

1.5.1 Researchers and Academicians

The findings of this study will be beneficial to researchers and academicians as it will not only contribute towards the existing body of knowledge in the field of commodity trading but will also act as a reference point for further research in related topics in the financial sector. The findings of the research will also act as a reference point to other commodity exporters in Kenya and other developing countries.

1.5.2 Tea Development Authority

This study will be helpful to policy makers who include the senior executives of tea processing firms in Kenya to assist them in formulating policies aimed at increasing tea export growth. The Tea development authority will borrow from the findings in order to set up the relevant structures and policies that will promote the growth of the industry thus enhance Gross Domestic Product. The findings will also help other East African countries who look up to the Kenyan market for experience and knowledge.

1.5.3 Tea Exporters in Kenya and the Management of the East African Tea Traders Association

Based on the area of focus in commodity export it provides a basis that tea exporting firms can utilize during recruitment for key positions. In addition, through this study, the management will better understand the market needs and hence create the necessary strategies within the institutions.

1.6 Scope of the Study

The scope of this research was focussed on market demand, price and pricing strategy and product features and their influence on tea pricing at Mombasa auction. The study took place between January and June 2018 and primary data was utilised to achieve the objective of the study. Questionnaires were adopted as part of the research tools used used to gather information. A major limitation was the willingness of respondents to take part and as mitigation, the researcher introduced and communicated to the respondents the purpose of the study which is purely for academic purposes.

1.7 Definition of Terms

1.7.1 Market Demand

Market demand is the total amount of goods and services that all consumers are willing and able to purchase at a specific price in a marketplace. In other words, it represents how much consumers can buy from suppliers at a given price level in a market (World Tea News, 2014). For this study, this represented the factors affecting the markets.

1.7.2 Pricing Strategy

A pricing strategy considers segments, ability to pay, market conditions, competitor actions, trade margins and input costs, amongst others (Noemi, 2012).

1.7.3 Product Features

Product features are characteristics of your product that describe its appearance, components, and capabilities (Khosla, 2012).

1.7.4 Market Price

The tea price refers to the monetary value at which the tea auction or buying and selling of tea equates to a kilo gram of tea. This process happens on a regular basis on a platform at a specicifed location, either physical or virtual. (East African Tea Brokers Association)

1.8 Chapter Summary

This first chapter outlines the background and statement of the problem. It provides a clear and brief statement representing the purpose of the study and states the objectives of the study in research questions format that are to guide the study. The significance and scope of study are also described in this chapter as well as key terms to be applied are also defined. Chapter two will look at the literature review, while chapter three covers the methodology and in chapter four presents the results and findings from the data analysis, while in chapter five the summary, conclusion and recommendations will be presented.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews relevant literature on the topic of the study. The discussion takes an approach of addressing each specific research question and expounding in subsequent sections.

2.2 Market Demand And Price of Kenyan Tea

This section presents literature of market demands and how they impact price of Kenyan tea. This section therefore covers issues of competition, competitor prices and government policy.

2.2.1 Competition

The purest form of competition is known as perfect competition. Perfectly competitive markets consist of a large number of buyer's and sellers to whom perfect information is always available. Neither producers nor consumers can individually impact price; thus, all market participants are price takers (Horngren, Foster, Datar, 1996). All costs of production are known, and no external costs or benefits accrue to parties outside the transaction. Consumer's are not able to discern any differences among goods supplied by different sellers of identical goods, and firms can freely enter or exit the industry (Omondi, 2017). All goods or services bought and sold in this type of market are fully excludable; consumers who do not pay cannot consume the good/service. Consumption is rivalrous, and therefore consumption of the good/service by one consumer implies that another consumer will be required to purchase his/her own product to consume. All firm's are assumed to produce the quantity of output that will maximize profits, subject to technical and market constraints and parameters (Ayozie, 2008).

Volume represents the total amount of trading activity or contracts that have changed hands in a given commodity market for a single trading day (Srinivasana, 2010). The greater the amount of trading during a market session the higher will be the trading volume. Higher volume bar on the chart means that the trading activity was heavier for that day. Alternatively, volume represents a measure of intensity or pressure behind a price trend. The greater the volume the more we can expect the existing trend to continue

rather than reverse. Technicians believe that volume precedes price, meaning that the loss of upside price pressure in an uptrend or downside pressure in a downtrend will show up in the volume figures before presenting itself as a reversal in trend on the bar chart (Gulati, 2012).

Wanjiru, Wangare, Muchina and Kimani (2018) paper explored the effect of the marketing strategies on creating sustainable domestic markets and on the return to the smallholder tea enterprise in Kenya. The paper was guided by secondary tea sector data obtained from smallholder tea farmers sampled from KTDA managed factories in the Nyeri and Kirinyaga counties. The findings indicated that the domestic market of the Kenyan tea is shrinking due to unfavourable marketing strategies. Brand awareness locally is ignored and the efforts geared towards creation of a foreign markets were also not sustainable. The paper recommended that the strategies that would increase awareness of tea locally to the advantage and benefit the mallholder tea enterprise and ensure sustainability of domestic Kenyan market.

Price is a key determinant of tea volume availed for sale. In primary economic theory, price and volume are correlated for normal goods, lower prices will result in higher quantities demanded and vice versa (Omondi, 2017). The volume of tea produced will be a factor of different variables including weather, price of other agricultural produce and government policy. Pricing decision is a crucial decision every organization has to make, because this will eventually affect their corporate objectives, either directly or indirectly (Monroe, 2003). For every business entity, irrespective of their line of business and objective, cost minimization and profit maximization is a general factor to be considered and for non-profit making organizations, there will always be the need to reduce cost at all means and to maximize output.

Chepkemoi (2008) study investigated smallholder tea production and its effects in Konoin, Bomet County in the period 1954 - 2002. The objectives of the study were: To investigate the factors that led to the introduction of tea growing in Konoin, Bomet County; To analyse the effects of smallholder tea production on food crop production and to examine the role of KTDA on the expansion of Smallholder tea production in Konoin, Bomet County from 1954 to 2002. Purposive sampling technique was used to identify the informants with vital information. These included the people who witnessed the introduction of tea growing in Konoin Bomet County. The research tools for the study

were interview schedule and observation schedule. Data was collected from farmers, and those practicing tea related activities sampled from the study area. Data analysis entailed corroboration of secondary data with primary data. Finally, data was presented qualitatively. The study established that smallholder tea production impacted adversely on food production as too much land was put under cash crops production. This, therefore made people to rely on the market for purchase of food hence their living standards was compromised. KTDA was also found to have had a positive impact in the development and expansion of smallholder tea production in Konoin, Bomet County.

A business whether small or big, simple or complex, private or public, is created to provide competitive prices (Ayozie, 2008). According to Hilton (2005), setting the price for an organization's product or service is one of the most crucial decisions a manager faces, and one of the most difficult, due to the number of factors that must be considered. Some of the factors that influence pricing decision are demand, competitors, cost, political, environmental, legal and image-related issues. Horngren *et al.,* (1996) stresses this point by stating that managers are frequently faced with decisions on pricing and profitability of their products. Some of the objectives of business enterprises vary from maximization of profit, minimization of cost, maximization of shareholders fund, becoming a market leader, etc. From the various objectives of business organizations, the primary objective of any business enterprise is to maximize profit and minimize cost, except for charity organizations that are set up primarily not to make profit, but there will be need to minimize cost by all means, therefore the need to set prices, which therefore connotes that pricing decision arises in virtually all types of organizations, irrespective of their level of activities.

2.2.2 Competitor Prices And Price of Tea

The volume of tea produced and subsequently the price is constrained by competition for land, inadequate labor and climate change. Analysis has shown prices are very volatile in other parts of the world (Gunathilaka & Gurudeo, 2015). Agricultural factors such as total harvest price, price of competing items, total cultivated extent, irrigated area and chemicals and fertilizer as explanatory variables in the modelling of tea production and price elasticity of supply (Khan & Mukhtar, 2013). Increasingly, a numbers of people are enjoying tea in many different situations from formal meetings to informal gatherings. Tea originates from the younger portions of the shoots of Camellia sinensis, an evergreen

shrub or small tree (Hilal & Engelhardt, 2007; Rahman, 2007). Different types of tea are produced based on levels of oxidation during the manufacturing process. Black tea is fully oxidized, green tea is non-oxidized, while oolong tea is semi oxidized. Tea consumption globally is expected to grow by 3 percent to 4.14 million tons by 2023. Open interest is the total number of outstanding contracts that are held by market participants at the end of each day. Where volume measures the pressure or intensity behind a price trend, open interest measures the flow of money into the futures market (Kerkar & Sri Ram, 2017).

Therefore, to determine the total open interest for any given market we need only to know the totals from one side or the other, buyers or sellers, not the sum of both (Stéphane & Ming-Hsiang, 2010). Each trade completed on the floor of a futures exchange has an impact upon the level of open interest for that day. For example, if both parties to the trade are initiating a new position (one new buyer and one new seller), open interest will increase by one contract. If both traders are closing an existing or old position (one old buyer and one old seller) open interest will decline by one contract.

In a study carried out by Dockner and Fruchter (2004) paper presented a theory that defines the concept of the speed of diffusion as the percentage increase in the number of adopters (or decrease in the number of nonadopters) resulting from a one percent decrease in the remaining length of the product life cycle. Using this concept, the study explored the impact of the speed of diffusion on the pricing policy of a firm that sells a consumer durable either in a monopoly or in an oligopoly market. The result of the analysis conducted showed that, in the case of strategic (oligopolistic) competition, the speed of diffusion have an important influence on the optimal pricing policy. It can be said therefore that in a monopolistic market, when essentials are sold, competition is not considered when setting price. Dockner and Fruchter (2004) study introduced a dynamic model in which they study the link between pricing policies, speed of diffusion and number of competitors in the market. It was established that when firms are engaged in strategic competition, a higher speed of diffusion causes the individual firm to decrease the price, thus competition either directly or indirectly has an influence on the price of products, but vary from company to company, depending on the nature of the product and the industry in which the company operates.

According to De Toni and Mazzon (2013), price decisions are one of the most important decisions of management because it affects profitability and the companies' return along with their market competitiveness. Thus, the task of developing and defining prices is complex and challenging, because the managers involved in this process must understand how their customers perceive the prices, how to develop the perceived value, what are the intrinsic and relevant costs to comply with this necessity, as well as consider the pricing objectives of the company and their competitive position in the market (Hinterhuber & Liozu, 2014).

In this way, Nagle and Hogan (2003) argue that companies which do not manage their prices lose control over them, impairing their profitability and cost effectiveness mainly due to the customers will on paying a determinate price, which not only does it depend on the perceived value, but also depends on the prices set by the leading competitors. Consequently, mistaken or inexistent pricing policies could lead buyers to increase the volume of information while allowing themto augment their bargaining powerthusforcing price reductions and discounts. The difference between conventional price setting and strategic pricing consists on setting prices by reacting to the market conditions or managing them proactively, being their sole purpose to exert the most profitable pricing by generating more value for customers without the obligation of increasing the business' sales volume (Nagle & Holden, 2003).

Ngatia (2011) study was carried out to establish the relationship between supply chain management practices and performance of KTDA managed tea factories. The study sought to achieve two specific objectives: to determine the supply chain management practices of KTDA managed factories in Kenya and to establish the relationship between supply chain management practices and performance of KTDA managed factories in Kenya. The study took the form of a survey of the tea factories. Primary data was successfully collected from 40 tea factories out of the 63 targeted factories. The data was analyzed using frequencies, percentages, mean, descriptive statistics and regression analysis. The findings reveal that good customer relationship management, outsourcing of noncore products and activities, reduction of cycle times across the supply chain and supplier development are the most common and popular among the tea factories followed by other supply chain management practices such as sharing information across the supply chain, purchasing quality products, reduction of lead time and process integration

that are adopted to a very great extent. This study therefore sought to establish the impact of competitor prices on market price of Kenyan Tea.

2.2.3 Government Policy and Market Price of Tea

Exports restrictions, quotas, tariffs and bans on food products are widely instituted to insure domestic food security. Unfortunately, they have often triggered instability and worldwide increases in prices. They also have a market clearance function and therefore, discourage incentives from the farmers. Despite the World Trade Organization (WTO) Doha negotiations and other bilateral agreements to regulate trade-distorting domestic policies, importers remain deeply concerned about supply unreliability (WTO, 2008).

Changes in the terms of trade represent changes in relative prices, so they do not directly affect the standard measure of the level of real output (i.e. real GDP) although, as discussed below, they are likely to have substantial indirect effects. An increase in export prices relative to import prices means that a larger volume of imports can be purchased with a given volume of exports, thus increasing the real purchasing power of domestic production (WTO, 2008). The increase in purchasing power flowing from a rise in the terms of trade can be illustrated by comparing real GDP with real gross domestic income (GDI). For any given pattern of real output and expenditures, a rise in the terms of trade will, however, have a direct effect on the trade balance and on the current account position.

Most price control regimes base prices on past costs or expected costs, and prohibit the regulator from adjusting prices according to new information for a set period of time, typically 4-6 years (Jamison, 2007). According to Jamison, the initial idea of regulators was through adopting price regulation policy and allowing firms to keep for a period of time their profits to improve efficiency. Thus, the regulating body will be allowed to set regulated prices that will reflect the companies' true abilities (Jamison, 2007). Unfortunately, price cap regulation did not work out as planned and the theoretical reasons for that result are the information asymmetry, also known as principle-agent problem and moral hazard (Jamison, 2007). The author concludes that in some situations a hybrid system applying different aspects forms of regulation are crafted to form a regulatory scheme that will regulate institutional, political, andeconomic situation more efficiently.

At the same time, under government regulations it is very complicated the evolution of macroeconomic indicators to be identified and clearly predicted. Bulow and Klemperer (2012) developed a model testing the consumer gains from price controls through formulas that measure consumer surplus. They tested it under different types of supply elasticity. Their results indicate that it is unlikely that consumer surplus will be enhanced by any price control, whether resources are randomly allocated or through a greater search or other rent-seeking behavior by higher-value consumers. This study therefore seek to establish the impact of government policy on market price of Kenyan Tea.

Mutegi (2013) study sought to examine the factors that influence tea export earnings in Kenya for 40 years, running from 1973 to 2013. The specific objective was to estimate the significance of exchange rate, inflation rate, foreign income, and agriculture value addition, price of tea and volume of tea exported in determining tea export earnings in Kenya. Various time series methods of regression including heteroscedasticity, multicollinearity, autocorrelation, stationarity and cointegration were used in the analysis. The results showed that the regression did well in regard to the goodness of fit with an R2 of 98.57 % implying that 98.57 % of the variation in the Tea export earnings was explained by the explanatory variables under study.

Mutegi (2013) established that in the long run, exchange rate, agriculture value addition, price of tea and volume of tea are significant in determining tea export earnings. Foreign income was found to be significant in determining export earnings in the short run. The study recommends legislation of laws that will enhance provision of inputs at subsidized rates and credit to tea growing areas so as to increase volume of tea produced in Kenya, for exports. In addition, there is need for marketing Kenyan tea to many foreign countries by the Ministry of Foreign Affairs and International Trade. Further, the government through the Competition Authority of Kenya should ensure anticompetitive conduct at Mombasa Tea Auction is removed so as to allow the market to determine the price for tea.

2.3 Pricing Strategy and Market Price of Tea

2.3.1 Premium Pricing and Market Price of Tea

The intense competition causes to new information being instantaneously reflected in stock prices which makes it difficult for any participant to possess comparative advantage in the acquisition of information that can outperform the market by generation of

abnormal returns, which is an aspect that enhances stock market efficiency (Cuthbertson, 2005). New information is in the form of news, announcements, expectations, opinions, stories, and even lack of news which should be continuously incorporated in stock prices if the market is deemed to be efficient (Stefan, 2009). Thus profiting from bonus announcements which are expected to already be incorporated in stock prices would constitute an anomaly in the NSE which is expected to be efficient.

According to Hinterhuber (2004) the impact of price levels on profitability is high, which means that even the impact of small increases of price on profits and corporate profitability by far exceeds the impact of other leverages in managing best results. Thus, indicate that of all the elements available to managers, the price is what has the larger impact on corporate results, reflecting on representative gains (Kohlia & Surib, 2011). Evidence of this nature suggests that managers should abandon the rationale of having a greater market share and an increased business volume (sales, revenues) in favor of a vision more focused to profits (Simon *et al*., 2008). The results indicate that companies that practice a higher price against the price of their competitors obtain greater profits, which probably isrelated to superior customer value. This justifies the charge of higher prices and, as a result, enhances the business performance.

As reported in a study developed by Milan *et al.,* (2013) on market penetration-based pricing strategies, meaning the practice of lower or smaller prices, presented a significant and negative relationship with the business performance of the companies investigated. Such fact could be explained by its relationships to offering lower pricesthan the competition. Therefore, low prices are more strongly associated with lower profits and vice versa (Simon *et al.*, 2008).

2.3.2 Customer Value-Based Pricing Strategy and Market Price of Tea

Value establishment can be defined as the offer of benefits of equal orsuperior value to the sacrificesincurred by the purchaser for a product and/orservice. Within the possible sacrifices, there is the financial sacrifice, which is translated by the price to be charged or actually paid by the buyer (Juran & De Feo, 2010). Besides, the process of value settlement includes the transformation of the results from the organizationalstrategy on programs aimed to extract and deliver value to the company's customers. In addition, it identifies the benefits and costs (or sacrifices) of products and experiences resulting from the relationship between the customers and the organization.

The superior value proposal represents an offer for the customers which increases the value or solves a problem in a better way than those offered by similar competitors (Payne & Frow, 2014). Perceived value-based pricing is a pricing practice in which the managers take decisions based on the perception of benefits from the item being offered to the customer and how these bene- fits are perceived and weighted by the customers in relationship to the price they pay (Ingenbleek, Frambach, & Verhallen, 2010). Therefore, as a cultural orientation of businesses, value-based pricing is derived from a set of routine philosophies and organizational strategies that a specific company could use in order to focus on customer satisfaction and, as a result, increases their profitability (Cressman, 2012). Because of this, Liozu (2013) highlights that using prices based on customer's perception of value is a more modern pricing approach, although sometimes it incites a profound organizational change on the established organizational structure, the current corporate structure or the pre-existing processes and systems.

Ingenbleek, Debruyne, Frambach and Verhallen (2003) affirm that perceived value-based pricing, along with pricing practices that refer to the use of information about costs and competitors' prices, are intimately related to the product's performance, the service and the business as a whole. These authors demonstrated that the usage of value-based pricing is a key pricing practice for obtaining larger returns and for creating some kind of comparative advantage for the companies offers. This was demonstrated in a study conducted by Füreder, Maier and Yaramova (2014), on medium-sized companies in Austria which used with higher frequency the perceived value-based pricing strategy. These authors identified that these companies had larger contribution margins, between 11–30%, against 0–10% of those companies that did not use this same strategy. Thus, the approach of a value-based pricing strategy is considered superior to other approaches in relationship to the results obtained by other companies (Hinterhuber, 2004; Ingenbleek *et al*, 2003; Liozu & Hinterhuber, 2013).

The constant changes in the market, influenced by technological advances and by increasing change in the customers' expectations, are leading organizations to constantly search for new products in order to continue being profitable and competitive (Boehe, Milan, & De Toni, 2009). The innovation and development of new products are ways of adding value to the products or services while differentiating them from their competitors, thus providing better results. Therefore, in order for a business to maintain itself as competitive and profitable in the market, the development of new products (DNP), and

the innovation of their products and processes are fundamental factors for an organization's performance (Cooper & Kleinschmdt, 1987). Thus, a new product that grants value to the customer, due to its quality, cost reduction or innovation constitutes a competitive advantage contributing to a better performance of the organization.

In a study developed by Milan, De Toni, Larentis and Gava (2013) did a study on 150 companies in the metal-mechanic sector situated in the Northeast of Rio Grande do Sul State, Brazil by integrating customer value-based pricing strategies, competition-based pricing strategies and cost-based pricing strategies with price levels (high and low) and performance with respect to profitability. The authors identified that the factor that mostly influences an organization's performance is related to the achievement of their objectives by the development of new products. Boehe *et al.,* (2009) also concluded that businesses that achieved their sales, market participation and profit margins objectives exhibited a better organizational performance. Therefore, it is identified that the success of many organizations is linked to the development of new products that add customer value. It is observed that a company which adopts a constant innovative strategy, mainly on the products released on the market, can add more value to the customer and, consequently, obtain better profitability (De Toni, Milan, & Reginato, 2011).

2.3.3 Competition-Based Pricing Strategy and Market Price of Tea

Competition-based pricing uses as key information the competitors' price levels, as well as behavior expectations, observed in real competitors and/or potential primary sourcesto determine adequate pricing levels to be practiced by the company (Liozu & Hinterhuber, 2012). The main advantage of this approach is considering the actual pricing situation of the competitors, and its main disadvantage is that the demand related aspects are not considered. Furthermore, a strong competitive focus among the competitor's can increase the risk of starting a price war among competitors in the market (Heil & Helsen, 2001).

Liozu, Boland, Hinterhuber and Perelli (2011) conducted a research mapping the pricing processes of companies which based their prices on competitors and they found that managers use their knowledge and experiences to define prices, as well as models of costs, contribution margin goals, and well-structured profit goals. In addition, these companies were strongly considering the prices of their main competitors while adding a price reward by always sharing the decision based on the manager'sintuition, which is not a scientific method to define prices. In this sense, competition-based pricing strategies are

very dangerous because the company does not effectively have clear cost or profit information from its competitor who, in some instances, may be working with very low margins (Nagle & Holden, 2003).

In some situations, the competitor developed a more efficient production process, thus the costs would not be equivalent, even because of the scale gains. Therefore, by following this strategy, the company is at risk of operating with minimal margins or even having negative profits. Pricing reduction strategies based on competition, in which companies may seek to increase the volume ofsales, can also encourage the competitors to lower their prices while contributing to a predatory competition and a price war, resulting in reduced profit margins and smaller companies' profitability (Diamantopoulos, 2005). Besides, in highly competitive markets, the price information from competitors becomes obsolete very quickly (Ingenbleek *et al.*, 2010). In this case, it is necessary to manage the capacity that competitor's have to react to the pricing strategy defined by the company, while noting that in competitive markets this can increase the risk ofstarting a price war and decreasing profitmargins (Simon *et al.,* 2008).

2.3.4 Cost-Based Pricing Strategy and Market Price of Tea

Cost-based pricing is the simplest and popular method for setting prices. Historically, it is the most common pricing strategy because it carries a sense of financial prudence (Simon *et al.,* 2008). This involves adding a profit margin on costs, such as adding a standard percentage contribution margin to the products and services. First, the sales level (revenue) is determined, and then the unit and total costs are calculated, followed by checking the company's profit objectives and finally establishing the prices. Thus, for the professionals involved in this process, it is necessary to show to customers enough value on products and commercialized services in order to justify the prices charged by the company (Urdan, 2005).

According to a study by Guilding, Drury and Tayles (2005) in 187 companies in the United Kingdom and in 90 companies in Australia, three factors that can interfere with a cost-based strategy were identified: (i) intensity of competition: in a highly competitive market, the intensity of competition may result in a loss of contribution and profit margins due to the pressure to equal their prices to the competition, which turns costs in a highly relevant element since it provides the limits of prices to be charged; (ii) company size: larger companies have a greater capacity of influencing prices, because they have

the propensity to act as a guide for the price ranges prevailing in the market, even because they frequently have scale gains; and (iii) type of industries: manufacturing industries have higher expenses due to their high investments on physical facilities and on resources used in manufacturing processes, which makes it difficult to accurately define the individual costs of products and potentially force an increase on the total cost.

Similarly, a study of 84 companies performed by Milan *et al.,* (2013) showed that in these companies there is a greater focus on price setting based on costs. Thus, this strategy encourages companies to use better expenditure techniques. In addition, Liozu *et al.*, (2011) conducted a study on fifteen small and medium-size American companies by interviewing forty-four of their managers. In such study, they addressed the three main pricing strategies: customer value-based pricing (in four companies), cost-based pricing (in six companies) and competition-based pricing (in five companies). They identified that the majority of the companies basing their prices on costs developed advanced cost models, all of which used contribution and profit margin goals in order to set their prices.

2.4 Product Features on Market Price of Tea

2.4.1 Quality and Market Price of Tea

Price increases both perceived quality and perceived sacrifice of paying more, and the trade-of between perceived quality and perceived sacrifice affects perceived value. When the price is high, consumers perceive that the quality of the product is high. With respect to price discounts, according to the price quality value model (Monroe and Krishnan 1985) and means-end model (Zeithaml 1988), consumers should perceive that more highly discounted products are of lower quality. However, researchers have found inconsistent results in the efects of price discounts on perceived product or service quality. Huang *et al.*, (2014) and Rungtrakulchai (2013) found a positive relationship where a high price discount led to a perception of high product quality, Garretson and Clow (1999) found a negative relationship a high price discount led to a perception of low quality, and Grewal *et al.,* (1998) found no relationship between price discounts and product quality. A possible reason for these inconsistent results is that the price –quality -value model and means-end model consider only the momentary effect of price, but price discounts have an affective effect that can create positive feelings.

Chandon *et al.*, (2000) identifed the hedonic benefts of price promotions, including the value expression (self-perception of being smart or good shoppers), exploration

(stimulation to explore a variety of new products due to the price promotion), and entertainment benefts (fun to use the price promotion). Consumers' perceptions of product quality and monetary sacrifce are derived from consumers' perceptions of price. Consumers infer that a higher price signals a higher quality, but at the same time, the higher price indicates a greater monetary sacrifce in purchasing the product. Consequently, the trade-of between perceived quality (i.e., gain) and perceived sacrifce (i.e., loss) results in perceived value. Finally, customers base their purchase decisions on perceived value, and their willingness to buy increases as their perception of value increases (Rungtrakulchai, 2013).

Knowledgeable modern consumers are increasingly demanding high quality in their food products, including fresh produce, and, yet, they may be unaware of the great distances the food has traveled through intricate supply chains and the length of time from the initial production or "picking" of the fruits and vegetables to the ultimate delivery (Nahmias, 2011). Moreover, consumers, faced with information asymmetry, may not know how long the food may have been lying on the grocers' and retailers' shelves, even once delivered and unpacked. The great distances traveled create issues in terms of quality since fresh produce is perishable (Nagurney *et al.,* 2013). As noted in Yu and Nagurney (2013), food supply chains are distinct from other product supply chains in that the quality of food products is decreasing with time, even with the utilization of the most advanced facilities and conditions (Zhang, Habenicht & Spie, 2003).

Amorim, Costa, and Almada-Lobo (2014) utilized demand functions that depend on product quality and also price and then construct demands for different products based on age. They propose deterministic and stochastic production planning models that capture consumers' desire for fresher products. Liu, Zhang, and Tang (2015) also utilized a demand functions that depend on price and quality but they depend continuously on time. The authors determine the dynamic pricing and investment strategies to reduce the deterioration rate of the quality for perishable foods. However, there has been only limited research done in terms of farmers' markets, which are examples of short supply chains. Fabbrizzi, Menghini, and Marinelli (2014) provided an excellent setting in which quality can be captured over time since consumers can obtain information directly from the producers, that is, the farmers. This study therefore seeks to establish the impact of quality on market price of Kenyan Tea.

2.4.2 Value Chain and Market Price of Tea

The value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production that involves a combination of physical transformation and the input of various producer services, delivery to final consumers, and final disposal after use.

Value chain analysis is the process of breaking a chain into its constituent parts in order to better understand its structure and functioning (United Nations Industrial Development Organization, 2009). It helps to understand how and where enterprises are positioned in economic processes. It also helps to identify new business opportunities and possible leverage points for upgrading solutions. The analysis consists of identifying chain actors at each stage and discerning their functions and relationships; determining the chain governance, or leadership, to facilitate chain formation and strengthening; and identifying value adding activities in the chain and assigning costs and added value to each of those activities. The flows of goods, information and finance through the various stages of the chain are evaluated in order to detect problems or identify opportunities to improve the contribution of specific actors and the overall performance of the chain (United Nations Industrial Development Organization, 2009).

Ketchen *et al.,* (2008) conducted a research that attempted to develop the best value chain that can help firms realize their best value chain practices. They found that the best value chains leverage strategic value chain management, agility, adaptability, and alignment not simply to create low costs, but also to maximize the total value added to the customer they further suggested that firms should ensure consistency in performance across supply chain management aspects such as strategic sourcing, logistics management, supply chain information system and relational management.

Mwirigi (2012) carried out a study to interrogate the key value chain activities that characterized the sea food industry along the Kenyan Coastline. The aim was to establish their completeness and efficiency and identify the gaps that exist in the chain recommending measures that can be implemented to improve these chains. The main challenge in seafood sector in the Kenyan coast is value addition contributed by lack adequate value adding facilities, marketing channels are insufficient and have fairly weak linkages, market exploitation due to lack of international markets and weak value chain nodes as they are underdeveloped.

Nezhad, Bavarsad and Mousazadeh (2013) sought to explore the relationship between the four components of value chain, namely, marketing, research and development (R&D), supplies and performance with product quality and innovation. This research was performed across several manufacturing and service firms of Khuzestan Province in 2010. Samples were selected by stratified multistage sampling and analyzed by SPSS, Eviews and Lisrel software. Findings showed that marketing, R&D, supplies and performance were significantly associated with product quality and innovation. 79% of changes in product quality and 75% of changes in product innovation could be accounted for by value chain activities. Thus, to enhance product innovation one might improve the focus on customer and supplier management; and to elevate product quality, one might improve the focus on customer, supplier management and process management.

Tuffa (2016) study sought to investigate supply and value chain analyses of *warqe* food products in relation to post-harvest losses. The supply and value chain of *warqe* foods and associated post-harvest losses were analysed in this thesis and hotspots for losses were identified, based on two surveys conducted in Ethiopia in 2013 and 2015. The first survey targeted nine groups of farmers, four groups of traders and four research institutions throughout the country. Based on the results, the second survey concentrated on analysing two supply routes to central market. A total of 522 respondents, including producers, food processors, traders, transporters and consumers, were randomly selected for that survey. The results indicated that farmers, collectors, processors, wholesalers, retailers and consumer's are the principal value chain actors. In addition, some transporters and open market dealers are involved in the supply chain and logistics process. Product and information flows between actors in both the supply and value chains were found to be weak (Tuffa, 2016).

Hailu (2016) research attempted to analyze value chain of vegetables in Ejere district, Oromia Region of Ethiopia focusing on potato and onion crops. Potato and onion plays a significant role in increasing food security and income for the poor farmers of Ethiopia. Data for the study were collected from both primary and secondary sources. The primary data were generated by household survey using a pre-tested structured questionnaire and key informant interview using checklists. The data were collected from 120 farmers, 30 traders and 35 consumers' and analyzed using STATA software. Vegetables value chain actors identified in the study include input suppliers, producers, rural collectors, brokers, and retailers, wholesalers, and processors and consumers. The chain is governed mainly

by wholesalers with the assistance of brokers. Producer's are price takers and hardly negotiate the price due to fear of post-harvest loss, in case the product is not sold.

2.4.3 Marketing and Market Price of Tea

The process of growing and manufacturing tea and its subsequent markefing involves complexities and distinguishing factors not associated with any other commodities. Options are limited in the business of tea at every stage and this in turn brings some of the constraints necessitating careful attention. Tea being a perishable product should be disposed of as quickly as possible. The economic viability of tea industry depends crucially on profitable disposal of its products. The marketing system of Indian tea deals with marketing channels and Government regulations on tea disposal. It refers to the complex system of institution and operations, which intervene between the producers of tea on one hand and ultimate consumer who drinks his cup of tea, on the other hand.

Among the alternative means of disposal, the producer chooses the channel which brings the best price to him within the purview of Government regulations. The marketing channel in tea is the pathway of movement of teas through intermediaries from production in the garden to the hand of the ultimate consumers within or outside the country.

Tawalbeh and Rumman (2015) research aimed to investigate the impact of marketing oriented on the product mix pricing strategies on complementary, bundling and customer value which is defined as dependant variables. The study used Jordan's telecom sector as the population of the study, and sample included 121 employees from three companies: Zain, Orange and Umniah. Hypothesis testing was done using simple regression, stepwise regression and hierarchal tests. The results showed that there is a significant impact of the overall of marketing oriented pricing on the overall product mix pricing and after performing a stepwise regression the results showed that there are a significant impact of the marketing orientated pricing on the complementary, bundling and customer value.

Porto, Costa and Watanabe (2017) study sought to dynamically assess the effectiveness of marketing activities in the generation of product sales, revenue and profitability in a micro-enterprise. A longitudinal multilevel study was conducted using daily panel data for 5,800 products sold and monthly time series on the business level, involving 26 months of commercial and financial records for a micro-enterprise (a drugstore). Panel and time series regressions were performed. The research shows that marketing activities,

in particular price elasticity generate product sales, the aggregated estimate of total marketing activities predicts monthly company revenue and profitability, and lastly in the investigated company, if marketing activities are intensified in the same proportion to increase costs in products and goods, they are not efficient in generating profit.

2.5 Chapter Summary

This chapter presents literature review based on research questions; to what extent market demand affect the market price of Kenyan tea at the Mombasa tea auction? To what extent does price and pricing strategy affect market price of Kenyan tea at the Mombasa tea auction? To what extent does product features affect market price of Kenyan tea at the Mombasa tea auction? Chapter three will discuss research methodology that will be used in the study to collect data.

<div align="center">**CHAPTER THREE**</div>

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out the methodology of the study and the following subsections are included; research design, target population, data collection instruments, and data collection procedures and data analysis.

3.2 Research Design

Research design is defined as the framework and structure of an investigation aimed at finding answers to research questions (Cooper & Schindler, 2014). The research design is also in line with the research purpose and specific research questions of the study. Specifically, the research used a descriptive research design. A descriptive study attempts systematically to describe a problem or provide information on a phenomenon (Ranjit, 2014). Therefore, a descriptive research design is appropriate for this study. This study adopted this design because the study aimed at collecting information from respondents on their perceptions in relation to internal factors affecting market tea prices. Further, the correlational approach was adopted as the study sought to describe relationship between the market demand, price and pricing strategy, and product features on the market price of Kenyan tea at the Mombasa tea auction?

The study intended to obtain the views of the respondents from Producers, Brokers, Buyers and Warehouses. The study used quantitative research to gain a better knowledge and in-depth understanding of the results. The main objective of this study was to provide a clear understanding of factors affecting market price of tea in Kenya.

3.3 Population

3.3.1. Target Population and Sampling Design

Population is defined as the whole collection of individuals or items from whom the research aims to make conclusion on (Cooper, & Schindler, 2014). It is upon the population that the research obtains the individuals or items to include in the study as a sample. It is also on the population that the researcher postulates, applies or generalizes the results of the study (Cooper & Schindler, 2014).

The population for the study encompassed 166 members participating at the Mombasa Tea Auction as at 31st December 2017. This comprised of 69 producers, 10 brokers, 72 buyers and 15 warehouses (Kenya Tea Board, 2017).

Table 3.1: Population Distribution

Department	Frequency	Percentage
Producers	69	42
Brokers	10	6
Buyers	72	43
Warehouses	15	9
TOTAL	**166**	**100**

3.3.2 Sampling Design

3.3.2.1 Sampling Frame

Cooper and Schindler (2014) define a sampling frame as a list of elements in the population from which the sample is actually drawn. Sampling frame is defined as the entire set of sources materials whereby the research sample is selected from (Turner et al., 2003). The purpose of this frame was to provide an outline whereby particular members of the target population can be chosen to participate in the survey. An ideal sample frame ought to be complete, accurate and most of all up-to-date. Thereby drawing conclusion on the factors affecting pricing in the Kenyan Tea Auction Market and this involved all the 166 participants.

3.3.2.2 Sampling Technique

Sampling technique denotes the process utilized by a researcher to select a sample depending on the quality intended by the study. If a sample is to be used, it is necessary that they be a representative of an entire population in order to get an accurate report (Barratt, 2009). The sampling technique used was stratified random sampling method. This entails dividing the population into mutually exclusive groups, in this case producers, brokers, buyers and warehouses. Then random samples were drawn from each group.

3.3.2.3 Sample Size

From the initial target population of 166, this being more than 100 but less than 500, and guided by the rule of thumb, the study used stratified random sampling and a sample size was drawn from each strata using the Yemane 1967 formula.

The desired level of confidence to be considered was 95% and a 5% margin of error was applied as the study was based on a heterogeneous population. This gave the sample population as 117 as shown in Table 3.2.

$n = N/1 + (e2)$

Where n was the sample size, N was the population size, 1 was the constant and e2 was the margin of error, which was 5% for 95% confidence level.

n=   166

[1+166(0.05^2)]

n= 117.314

Table 3.2: Sample Size

Department	Population	Sample	Percentage
Producers	69	49	42
Brokers	10	7	6
Buyers	72	51	43
Warehouses	15	11	9
TOTAL	**166**	**117**	**100**

3.4 Data Collection Method

Data is defined as row facts that are yet to be processed to be reliable information for design making. Kothari (2010) describes a data collection instrument as a device used to collect data in an objective and a systematic manner for the purpose of the research.

This study administered open and close-ended questionnaire to the respondents as a data collection tool, this was effective in collecting large amounts of information from huge sample in a limited period. In addition, the method is also cost effective. The study instrument utilized a five-point Likert scale to ask respondents to express their opinion on given statements, and they will be expected to either agree, strongly agree, remain neutral, disagree, or strongly disagree. The likert scale was preferred as they were easy to understand, and draw conclusions from. The questionnaire was divided into five sections

with the first addressing the demography, the second, third and fourth sections addressing the objectives of the research while the last section addressed the dependent variable. Drop and pick method was used during the administration of the questionnairesand the respondents were given a week to fill the questionnaires, this was considered an ample time.

3.5 Research Procedure

The researcher undertook an analysis to determine the validity of the instruments used for the study. Validity is the extent or degree at which study findings actually represented the subject under investigation (Mugenda & Mugenda, 2012). It is the accuracy of inferences based on the research findings. To ensure validity the researcher ensured that the results obtained from the research is credible and defensible. The degree of generalizability is one of the central concepts that determine whether the study is of high standard. Therefore, the generalizability of the results is a measure of the quality of research and subsequently higher validity of the research (Golafshani, 2011).

The researcher determined that reliability of the instruments, according to Orodho, (2009), reliability is the accuracy or consistency of research instruments. The data collected eas entered into SPSS data sheet and run for reliability statistics. Rubin and Babbie (2011) also highlight that it is necessary to uphold ethical issues. They explain that ethical issues relate to moral standards that the researcher should consider in all research approaches in all the research phases and the research. Ethical conduct promotes cooperation, social responsibility, advances the goals of research (Shammo & Resnik, 2009).

Ethical guidelines have been developed to guide new and emerging methods of conducting research that does not focus on biomedical research (Hedge, 2015). In this research, the researcher propagated proper conduct related to the processes and conduct of the research. The research, the participants had informed consent, which ensured that they understood the aim of the research and confidentiality of their data from the researcher's side.

3.6 Data Analysis Method

The method for analyzing data involves the utilization of the right analytical tools to address the research questions of the study. The study involved an assessment of factors affecting tea prices at the Mombasa Tea Auction in Kenya. Data collected from the study

was sorted, edited and coded to have the required quality and accuracy. Data cleaning ensured that the data is unbiased, representative, and appropriate for the statistical analyses required in the study (Babbie & Babbie, 2013). It was then entered into SPSS (Version 21) for generation of frequency tables, charts, correlations and regressions which helped in the analysis.

The multiple linear regression analysis was applied to examine the extent of influence of the independent variable on the dependent variables. The regression model is a multivariate model stating the price of tea as a function of the selected determinants of tea auction at Kenya tea auction market. The study adopted the following regression function that includes the dependent variable and independent variables;

$$Y = \beta 0 + \beta 1 X_1 + \beta 2 X_2 + \beta 3 X_3$$

Where:

Y= Pricing of Commodity Tea, the value of the dependent variable.

$\beta 0$ - Constant/Y intercept

X_1 – Market demand

X_2 – Pricing strategy

X_3 – Product features

ε - Error term

3.7 Chapter Summary

This chapter has introduced and discussed the methodology used in carrying out the study. It has elaborated on research techniques, population, data collection including techniques and procedures used or adopted in data processing and analysis. Ethical issues to be considered have also been discussed. The following chapter presents and discusses in detail the findings of the study; chapter four presents the data analysis for the study.

CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the results established from the data analysis done. This included results relating to the demography and specific research objectives aimed at establishing the factors affecting tea prices at the Mombasa Tea Auction in Kenya.

4.1.1 Response rate

The research issued a total of 117 questionnaires and a total of 90 were filled and returned giving a response rate of 76.7% as indicated in table 4.1

Table 4.1: Response Rate

Variable	Frequency	Percentage
Filled and returned	90	76.7
Non-response	27	23.3
Total	**117**	**100**

4.2 Demographical Factors

The research analysed data with regard to the demographic factors and the results were presented as follows:

4.2.1 Level of Education

An analysis of the education levels indicated that 49% had college education while 36% had university qualification. It was however revealed that 16% were secondary education credentials as shown in Figure 4.1
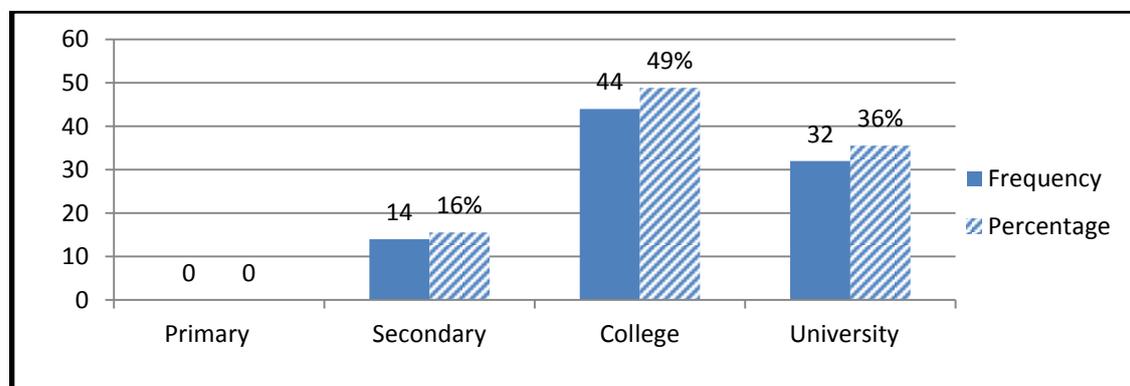
Figure 4.1: Level of Study

4.2.2 Gender of Respondents

An analysis of respondents' gender revealed that majority accounting for 60% were male while 40% were female as indicated in Figure 4.2
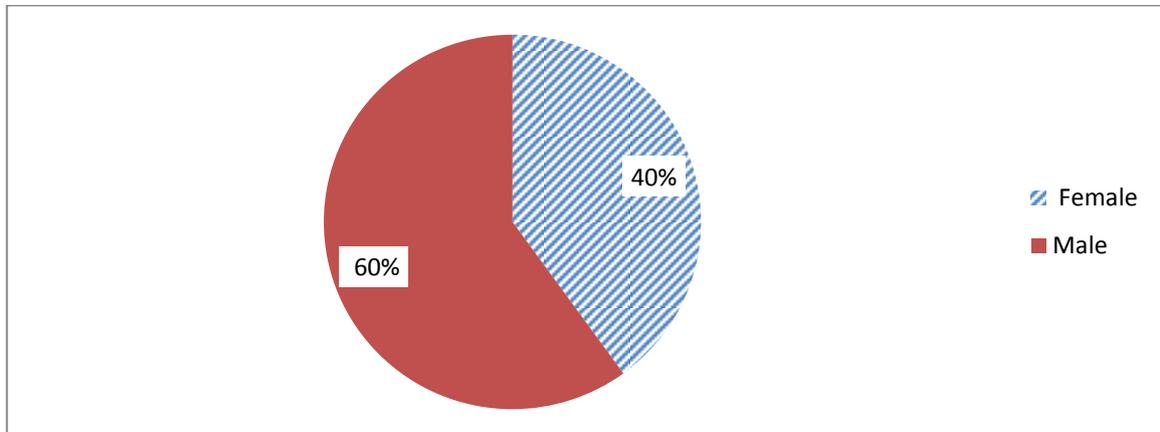
Figure 4.2: Gender of Respondents

4.2.3 Respondents Age

An analysis of the respondents' ages revealed that those aged between 18-20 years were 9%, 21-30 years 33% representation while 31-40 years followed closely at 29% and respondents of 41-50 years had 22% representation. It was also established that respondents aged over 50 years were the least represented at 7%
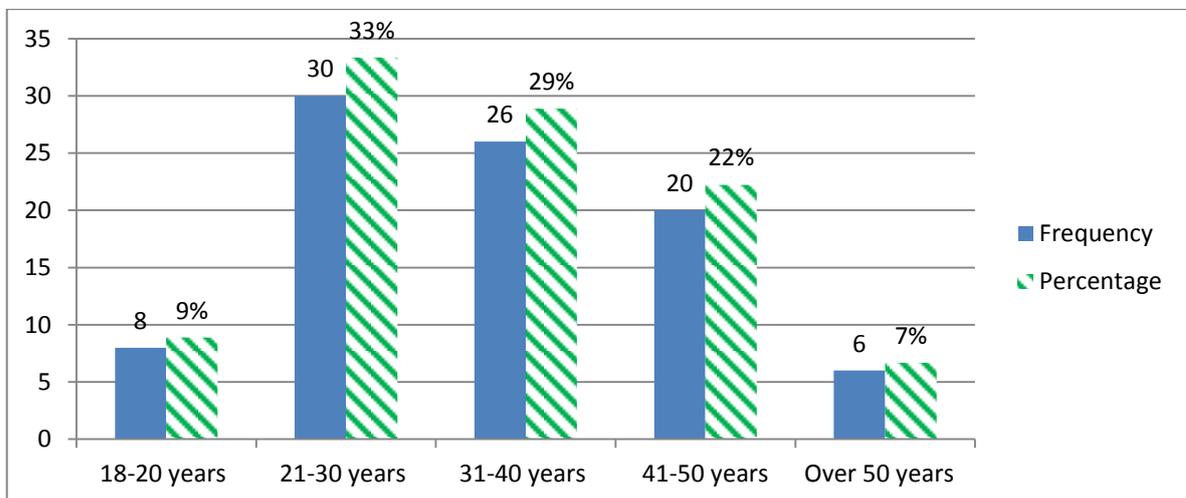
Figure 4.3: Respondents Age

4.2.4 Number of Years Worked

An analysis of the years worked revealed that those who have 1-4 years experience accounted for11% of the respondents, those with 5-8 years experience were the majority representing 56%. On the other hand, respondents with respondents with 9-12 years

experience accounted for 20% of the total while respondents with over 12 years experience accounted for 13% of the total.
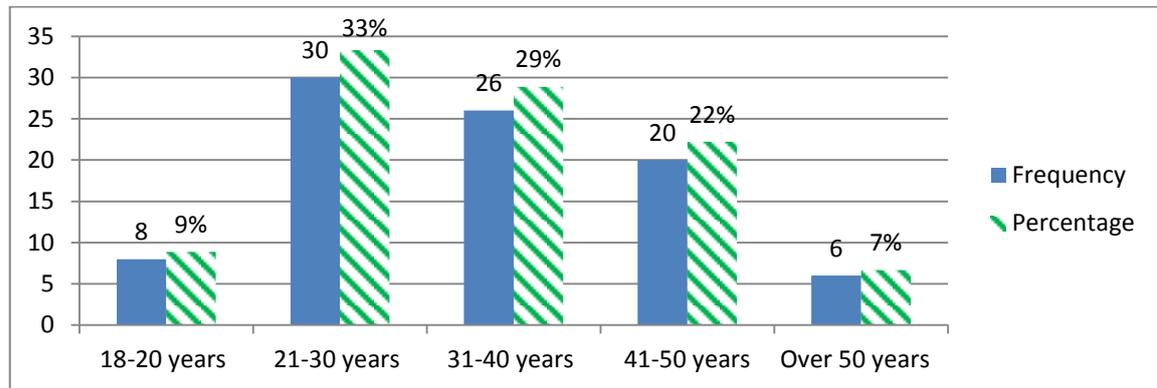
Figure 4.4: Number of Years Worked

4.3 Effect of Market Demand on Price of Kenyan Tea

The first objective sought to examine the effect of market demand on price of Kenyan tea. To achieve this, the respondents were requested to rate the extent to which they thought competition, competitor prices and government policy influenced price of Kenyan tea using a five point Likert scale where 1 - Strongly Disagree 2 - Disagree 3 - Neutral 4 - Agree 5 - Strongly Agree. The results are shown in the section that follows.

4.3.1 Competition

As shown in Table 4.2 mean and standard deviation were utilized to analyse the effects of competition on tea pricing and the results revealed that products had a very ease of access to the auction affects tea prices (Mean=4.28, SD=.897). Competition from other point of sales had a great effects on tea prices (Mean=4.44, SD=.499). It was also revealed that entry of new suppliers influence had a very high influence on tea prices (Mean=4.80, SD=.401) and change in price of substitutes highly influenced tea prices (Mean=4.62, SD=.489).

Study also revealed that competition has highly enabled the auction offer value to the customers therefore affect the tea prices (Mean=4.5, SD=.582). The finding also show that auctions advertise products and services therefore able to charge the best tea prices in the market (Mean=4.00, SD=1.183).

Table 4.2: Competition

Competition	N	Mean	SD
Products ease of access to the auction affects tea prices	90	4.28	.897
competition from other point of sales affects tea prices	90	4.44	.499
Entry of new suppliers influence tea prices	90	4.80	.401
Change in price of substitutes influence tea prices	90	4.62	.489
Competition has enabled us offer value to the customers therefore affect the tea prices.	90	4.52	.582
We advertise our products and services therefore able to charge the best tea prices in the market.	90	4.00	1.183
Mean		4.44	

4.3.2 Competitor Prices

As shown in Table 4.3 mean and standard deviation were utilized to analyse the effects of competitor pricing on tea pricing and the results revealed that price decisions are very important for managers at mombasa tea auction in setting up tea prices (Mean=4.28, SD=.831). It was also shown that managers were greatly aware of the intrinsic and relevant costs to comply in order to regulate tea prices (Mean=4.62, SD=.489) and managers had a very high capability of developing perceived value thus influence tea prices (Mean=4.51, SD=.606).

Table 4.3: Competitor Prices

Competitor Prices	N	Mean	SD
Price decisions are important for managers at mombasa tea auction in setting up tea prices.	90	4.28	.831
Managers are aware of the intrinsic and relevant costs to comply in order to regulate tea prices	90	4.62	.489
Managers are capable of developing perceived value thus influence tea prices.	90	4.51	.606
Mean		4.47	

4.3.3 Government Policy

A review on the impacts of government policy revealed that there was high transparency and stability of regulatory tax and economic policy in the tea sector therefore stablizing tea prices (Mean=4.48, SD=.503). There was however a disagreement over the government has invested in processing and innovation in the tea sector thus influence tea prices (Mean=2.54, SD=1.229) although it was agreed that tea tariff is favorable for the sector therefore influence tea prices (Mean=4.42, SD=.552).

Table 4.4: Government Policy

Government Policy	N	Mean	SD
There is transparency and stability of regulatory tax and economic policy in the tea sector therefore stablizing tea prices	90	4.48	.503
Government investment in processing and innovation in the tea sector thus influence tea prices	90	2.54	1.229
Tea tariff is favorable for the sector therefore influence tea prices.	90	4.42	.552
Mean		3.81	

4.4 Pricing Strategy and Market Price of Kenyan Tea

The second objective sought to examine the effect of pricing strategy on price of Kenyan tea. To achieve this, the respondents were requested to rate the extent to which they thought premium pricing, value-based pricing strategy, competition-based pricing strategyand cost-based pricing strategy influenced Price of Kenyan Tea using a five point Likert scale where 1 - Strongly Disagree 2 - Disagree 3 - Neutral 4 - Agree 5 - Strongly Agree. The results are shown in the section that follows.

4.4.1 Premium Pricing

A review on the impacts of premium pricing on tea pricing revealed that auctionnaires offer products at a higher price on the most important sectors of the market and a lower price by means of discounts in less important sectors (Mean=4.58, SD=.841). It was also revealed that auctions offer product sets (a set of various products) at a total price that allows customers to save money (Mean=4.52, SD=.459). It was also established that auctions define a high price initially and then able to reduce it systematically over time (Mean=4.41, SD=.636) and the customers see the prices of products as a high-quality indicator (Mean=4.44, SD=.819).

Table 4.5: Premium pricing

Premium pricing	N	Mean	SD
We offer our products at a higher price on the most important sectors of the market	90	4.58	.841
We offer product sets (a set of various products) at a total price that allows customers to save money	90	4.52	.459
We define a high price initially and then we reduce it systematically over time	90	4.41	.636
Our customers see the price of our products as a high-quality indicator	90	4.44	.819
Mean		4.48	

4.4.2 Customer Value-Based Pricing Strategy

A review on the impacts of the customer value based pricing on tea pricing revealed that respondents agreed that there is a high perceived value of the product by the customer (Mean=4.51, SD=.631). It was also established that auctions maintain a balance between the advantages of the product and its possible price (Mean=4.42, SD=.432). The study also indicated that compared to the competitors' products, auctions offer more value to customers (Mean=3.95, SD= .522).

Table 4.6: Customer Value-Based Pricing Strategy

Customer Value-Based Pricing Strategy	N	Mean	SD
We have a high perceived value of the product by the customers.	90	4.51	.631
We maintain a balance between the advantages of the product and its possible price.	90	4.42	.432
Compared to the competitors' products, we offer more value to customers.	90	3.95	.522
Mean		4.29	

4.4.3 Competition-Based Pricing Strategy

As shown in Table 4.6, a review on the impacts of competition-based pricing strategy on tea pricing revealed that most respondents indicated that they react to competitors' price by adjusting their prices (Mean=4.11, SD=.921). It was however not clear whether respondents try to have a price lower than the competitors' prices in the market (Mean=3.42, SD=.412) although majority agreed that the price of the competitor's products were similar to theirs (Mean=4.12, SD=.532).

Table 4.7: Competition-Based Pricing Strategy

Competition-Based Pricing Strategy	N	Mean	SD
We react to competitors' price by adjusting our prices.	90	4.11	.921
We always try to have a price lower than our competitors' prices in the market	90	3.42	.412
Price of our competitor's products are similar to ours	90	4.12	.532
Mean		3.88	

4.4.4 Cost-Based Pricing Strategy

This study also sought to establish the impacts of cost-based pricing strategy on tea pricing and as elaborated in Table 4.7, the findings indicated that the Profit margin percentage set by the company is in relation to the price of the product (Mean=4.21, SD=.921). At the same time the results indicated that the prices set cover the variable costs of the product (Mean=4.42, SD=.912). Respondents also indicated that they set prices to cover total cost of the product (Mean=4.69, SD=.589). Findings also show that the auctions utilize low price to leverage sales volume and to reduce costs through accumulated experience (Mean=4.75, SD=.291).

Table 4.8: Cost-Based Pricing Strategy

Cost-Based Pricing Strategy	N	Mean	SD
Our Profit margin percentage set by the company is in relation to the price of the product.	90	4.21	.921
We prices to cover the variable costs of the product	90	4.42	.912
We set prices to cover total cost of the product	90	4.69	.589
We define low price to leverage sales volume and to reduce costs through accumulated experience	90	4.75	.291
Mean		4.52	

4.5 Effect of Product Features on Market Price of Kenyan Tea

The last objective sought to examine the effect of product features on price of Kenyan tea. To achieve this, the respondents were requested to rate the extent to which they thought quality, value chain and marketing influenced price of Kenyan tea. This was made possible by using a five point Likert scale where 1 - Strongly Disagree 2 - Disagree 3 - Neutral 4 - Agree 5 - Strongly Agree. The results are shown in the section that follows.

4.5.1 Quality

A review on the impacts of quality on tea pricing revealed that respondents agreed that the tea sector has professionalism and availability of personnel (Mean=4.61, SD=.821). It was also revealed that there is availability of tea for sale (Mean=4.92, SD=.615). The study also indicated that the sector enjoys quality and efficiency of the infrastructure (Mean=4.29, SD=.789). It was also established that the there was an uncertainty of the respondents witnessing increased enterprise production efficiency and optimization of management structure (Mean=3.21, SD=.821).

Table 4.9: Quality

Quality	N	Mean	SD
The tea sector has professionalism and availability of personnel	90	4.61	.821
There is availability of tea for sale	90	4.92	.615
The sector enjoys quality and efficiency of the infrastructure	90	4.29	.789
We have increased enterprise production efficiency and optimization of management structure	90	3.21	.821
Mean		4.25	

4.5.2 Value Chain

An analysis of the impacts of value chain on tea pricing revealed that majority were in total agreement that the flows of goods, information and finance through the various stages of the chain are evaluated (Mean=4.31, SD= .721). Respondents also indicated uncertainty of the consistency in performance across supply chain management aspects such as strategic sourcing, logistics management, supply chain information system and relational management (Mean=3.42, SD=.712) although they agreed that producers are price takers and hardly negotiate (Mean=4.29, SD= .579).

Table 4.10: Value Chain

Value Chain	N	Mean	SD
The flows of goods, information and finance through the various stages of the chain are evaluated	90	4.31	.721
We ensure consistency in performance strategic sourcing, logistics management, supply chain information system and relational management.	90	3.42	.712
Producers are price takers and hardly negotiate	90	4.29	.579
Mean		4.0	

4.5.3 Marketing

An analysis of the impacts of marketing on tea pricing revealed that marketing has led to competitive pricing and therefore increase sales at the auction (Mean=4.61, SD=.571). It was also established that through marketing the auctions have been able to bring in new customers (Mean=4.42, SD= .612). The study also show that through the marketing team respondents have been able to create demand and therefore letting existing customers buy more (Mean=4.15, SD=.479) in addition, they have a specific groups or group of customers at whom the firm serves its products (Mean=4.19, SD=.671).

Table 4.11: Marketing

Marketing	N	Mean	SD
Marketing has led to competitive pricing and therefore increase sales at the auction	45	4.61	.571
Through marketing we have been able to bring in new customers	45	4.42	.612
Through our marketing team we have been able to create demand and therefore letting existing customers buy more	45	4.15	.479
We have a specific groups or group of customers at whom the firm serves its products.	45	4.19	.671
Through marketing we have Increased our market share	45	3.72	.512
Marketing has enabled us retain existing profitable customers	45	3.79	.479
Mean		4.14	

4.6 Pricing Kenyan Tea

The study also sought to examine the price of Kenyan tea. To achieve this, the respondents were given a set of statements and requested to rate the extent to which they influenced price of Kenyan tea. The results as shown in Table 4.10 indicated that majority were satisfied with the pricing of the tea in this category (Mean=4.11, SD=.141). It was also indicated that there is a possibility of market expansion for premium Kenyan tea (Mean=4.72, SD=.559). It was also shown that the most important factor affecting the price of a tea is its cost (Mean=4.35, SD=.379). Respondents also indicated that price sensitivity in the market influence tea prices (Mean=4.59, SD=.298).

Table 4.12: Pricing Kenyan Tea

Pricing Kenyan Tea	N	Mean	SD
I am satisfied with the pricing of the tea in this category	45	4.11	.141
There is a possibility of market expansion for premium Kenyan tea	45	4.72	.559
The most important factor affecting the price of a tea is its cost.	45	4.35	.379
Price sensitivity in the market influence tea prices.	45	4.59	.298
Mean		4.44	

4.7. Inferential Statistics

4.7.1 Correlation of Pricing and Cofactors

A Pearson correlation was done to establish the relationship between pricing and other factors and the findings revealed that there was a positive relationship between pricing and market demand (r=0.306, p<0.05), pricing strategy (r=0.058, p>0.05), product feature (r=0.488, p<0.05). It also revealed a significant correlation between market demand and pricing strategy (r=0.421, p<0.01), market demand and product feature (r=0.442, p<0.01). Therefore it was concluded that market demand, and product feature positively and significantly influenced tea prices. This is presented as shown in Table 4.22

Table 4.13: Correlation of Pricing and Cofactors

		Pricing	Market Demand	Pricing Strategy	Product Feature
Pricing	Pearson Correlation	1			
	Sig. (2-tailed)				
Market Demand	Pearson Correlation	.306*	1		
	Sig. (2-tailed)	.003			
Pricing Strategy	Pearson Correlation	.058	.421**	1	
	Sig. (2-tailed)	.585	.003		
Product Feature	Pearson Correlation	.488**	.442**	.311*	1
	Sig. (2-tailed)	.001	.002	.033	
	N	90	90	90	90

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

4.7.2 Multi Regression Analysis

The research analyzed the relationship between the dependent variable (tea pricing) against market demand, pricing straregy and product features. The results showed that R^2 value was 0.268 hence 26.8% of the variation in tea pricing was explained by the variations in market demand, pricing straregy and product features as illustrated in Table 4.23

Table 4.14: Model Summary of Tea Pricing and Co Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change
1	.517[a]	.267	.242	.31516	.267	10.448	3	86	.000

a. Predictors: (Constant), product feature, pricing strategy, market demand

4.7.3: ANOVA Analysis of Tea Pricing and Co Factors

ANOVA analysis results of the regression between tea pricing and market demand, pricing strategy and product features at 95% confidence level, the F critical was 10.448 and the P value was (0.000) therefore below 0.05 this implied that it was statistically significant and could be used to assess the association between tea pricing and market demand, pricing strategy and product features as illustrated in Table 4.24

Table 4.15: ANOVA Analysis of Tea Pricing and Co Factors

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.113	3	1.038	10.448	.000^b
	Residual	8.542	86	.099		
	Total	11.656	89			

a. Dependent Variable: pricing

b. Predictors: (Constant), product feature, pricing strategy, market demand

4.7.4 Coefficient of Tea Pricing and Co Factors

Table 4.16: Coefficient of Tea Pricing and Co Factors

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.505	.735		2.048	.044
	market demand	.249	.163	.167	1.526	.131
	pricing strategy	-.220	.146	-.155	-1.508	.135
	product feature	.673	.152	.462	4.438	.000

The regression equation illustrated in Table 4.15 established that taking market demand, pricing strategy and product features into account and other factors held constant a unit change in market demand led to a 0.249 positive change in tea pricing, at the same time a unit change in pricing strategy led to a 0.220 negative change in tea pricing, and a unit change in product feature led to a 0.673 positive change in tea pricing holding all factors constant.

$$Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Y = 1.505 + 0.249 X$_1$-0.220X$_2$+.673X$_3$+ 0.31516

Where:

Y is the dependent variable (tea pricing)

β_0 is the regression constant;

β_1, β_2, β_3 coefficients of independent variables;

X_1 is market demand, X_2 pricing strategy, X_3 product feature and ε is the error term.

4.8 Chapter Summary

This chapter presents the results obtained from the data analysis done. This includes results relating to the respondents' demography and the specific research objectives of this study based on the research questions which include questions effect of market demand on price of Kenyan tea, effects of pricing strategy and market price of Kenyan tea and product features on market price of Kenyan tea. The research utilised descriptive statistics such as mean and standard deviation to show data distribution. This information is presented in tables and figure to enable comparative discussion and interpretation. In the next chapter the conclusion, discussion and recommendations as per the objectives of this study are presented.

5.0 DISCUSSION CONCLUSION AND RECOMMENDATION

5.1 Introduction

This section offered discussions of the findings in line with the literature review on the factors affecting tea prices at the Mombasa Tea Auction in Kenya. The conclusion and recommendation are represented thereafter.

5.2 Summary

The purpose of this paper was to establish the factors affecting tea prices at the Mombasa Tea Auction in Kenya. The specific questions sought to establish the extent market demand affect the market price of Kenyan tea at the Mombasa tea auction. The extent price and pricing strategy affect market price of Kenyan tea at the Mombasa tea auction. To what extent product features affect market price of Kenyan tea at the Mombasa tea auction.

The research adopted a descriptive research and this determined if a relationship between the variables existed and it determined how often it occurred and also gave a description of the variables state. Tea pricing was the dependent variable while the factors affecting tea pricing which included market demand, pricing strategy and product feature were the independent variables. The population for the study encompassed there 166 members participating at the Mombasa Tea Auction. The sampling technique used was stratified random sampling method. This entails dividing the population into mutually exclusive groups, in this case heads of department, managers and assistant managers resulting into a sample of 117. The tool used to collect the data was a structured questionnaire. The statistical package for social sciences (SPSS Version 25) data analysis software was used to analyze data based on descriptive and inferential statistics. The study also used a correlation analysis and regression analysis that established the relationship between the dependent variable and the independent variables and data was presented using tables and figures.

The research analyzed the relationship between the dependent variable (pricing) against market demand. The results showed that 9.3% of the variation in tea pricing was explained by the variations in market demand. ANOVA analysis results of the regression

between tea pricing and market demand at 95% confidence level, the F critical was 9.051 and the P value was (0.003) therefore below 0.05 this implied that it was statistically significant and can be used to assess the association between tea pricing and market demand. The regression equation illustrated that that a unit change in market demand would lead to a 0.457 positive change in tea pricing.

The research analyzed the relationship between the dependent variable (pricing) against pricing strategy. The results showed that 0.3 % of the variation in tea pricing was explained by the variations in pricing strategy. ANOVA analysis results of the regression between tea pricing and pricing strategy at 95% confidence level, the F critical was .301 and the P value was (0.585) therefore above 0.05 this implied that it was not statistically significant and couldn't be used to assess the association between tea pricing and pricing strategy. The regression equation illustrated that taking pricing strategy into account and other factors held constant a unit change in pricing strategy would lead to a 0.084 positive change in tea pricing.

The research analyzed the relationship between the dependent variable (pricing) against product features. The results showed that 23.8 % of the variation in tea pricing was explained by the variations in product feature. ANOVA analysis results of the regression between tea pricing and product feature at 95% confidence level, the F critical was 27.435 and the P value was (0.000) therefore below 0.05 this implied that was statistically significant and could be used to assess the association between tea pricing and Product features. The regression equation established that taking product feature into account and other factors held constant a unit change in pricing strategy would lead to a 0.710 positive change in tea pricing.

5.3 Discussions

5.3.1 Extent Market Demand Affect the Market Price of Kenyan Tea

The study established that competition from other point of sales had a great effects on tea prices. Price is a key determinant of tea volume availed for sale. In primary economic theory, price and volume are correlated for normal goods, lower prices will result in higher quantities demanded and vice versa (Omondi, 2017). The volume of tea produced will be a factor of different variables including weather, price of other agricultural produce and government policy. Pricing decision is a crucial decision every organization has to make, because this will eventually affect their corporate objectives, either directly

or indirectly (Monroe 2003). For every business entity, irrespective of their line of business and objective, cost minimization and profit maximization is a general factor to be considered and for non-profit making organizations, there will always be the need to reduce cost at all means and to maximize output.

It was also established that change in price of substitutes highly influenced tea prices. According to De Toni and Mazzon (2013), price decisions are one of the most important decisions of management because it affects profitability and the companies' return along with their market competitiveness. Thus, the task of developing and defining prices is complex and challenging, because the managers involved in this process must understand how their customers perceive the prices, how to develop the perceived value, what are the intrinsic and relevant costs to comply with this necessity, as well as consider the pricing objectives of the company and their competitive position in the market (Hinterhuber & Liozu, 2014). In this way, Nagle and Hogan (2007) argue that companies which do not manage their prices lose control over them, impairing their profitability and cost effectiveness mainly due to the customers will on paying a determinate price, which not only does it depend on the perceived value, but also depends on the prices set by the leading competitors.

Study alsoestablished that competition has highly enabled the auction offer value to the customers therefore affect the tea prices. According to Hilton (2005), setting the price for an organization's product or service is one of the most crucial decisions a manager faces, and one of the most difficult, due to the number of factors that must be considered. Some of the factors that influence pricing decision are demand, competitors, cost, political, environmental, legal and image-related issues. Horngren *et al.,* (1996) stresses this point by stating that managers are frequently faced with decisions on pricing and profitability of their products. Some of the objectives of business enterprises vary from maximization of profit, minimization of cost, maximization of shareholders fund, becoming a market leader, etc. According to Lovelock and Wirtz (2004), the principal approach to an effective pricing strategy is to manage revenues in ways that support the firms' profitability objectives, which leads to the question; how well can we complement the various factors that influence pricing decision, to achieve our overall objective, which is maximization of profit.

The study established that price decisions are very important for managers at Mombasa tea auction in setting up tea prices. Mistaken or inexistent pricing policies could lead buyers to increase the volume of information while allowing themto augment their bargaining powerthusforcing price reductions and discounts. The difference between conventional price setting and strategic pricing consists on setting prices by reacting to the market conditions or managing them proactively, being their sole purpose to exert the most profitable pricing by generating more value for customers without the obligation of increasing the business' sales volume (Nagle & Holden, 2003).

5.3.2 Extent Price and Pricing Strategy Affect Market Price of Kenyan Tea

It was also established that auctions define a high price initially and then able to reduce it systematically over time. Perceived value-based pricing is a pricing practice in which the managers take decisions based on the perception of benefits from the item being offered to the customer and how these bene- fits are perceived and weighted by the customers in relationship to the price they pay (Ingenbleek, Frambach, & Verhallen, 2010). Therefore, as a cultural orientation of businesses, value-based pricing is derived from a set of routine philosophies and organizational strategies that a specific company could use in order to focus on customer satisfaction and, as a result, increases their profitability (Cressman, 2012). Because of this, Liozu (2013) highlights that using prices based on customer's perception of value is a more modern pricing approach, although sometimes it incites a profound organizational change on the established organizational structure, the current corporate structure or the pre-existing processes and systems.

A review on the impacts of the customer value based pricing on tea pricing revealed that respondents agreed that there is a high perceived value of the product by the customer. Ingenbleek, Debruyne, Frambach, and Verhallen (2003) affirm that perceived value-based pricing, along with pricing practices that refer to the use of information about costs and competitors' prices, are intimately related to the product's performance, the service and the business as a whole. These authors demonstrated that the usage of value-based pricing is a key pricing practice for obtaining larger returns and for creating some kind of comparative advantage for the companies offers.

The study also indicated that respondents react to competitors' price by adjusting their prices. Compared to the competitors' products, auctions offer more value to customers. As reported in a study developed by Milan *et al.* (2013), market penetration-based pricing

strategies, meaning the practice of lower or smaller prices, presented a significant and negative relationship with the business performance of the companies investigated. Such fact could be explained by its relationships to offering lower pricesthan the competition. Therefore, low prices are more strongly associated with lower profits and vice versa (Simon *et al.,* 2008).

The findings indicated that the profit margin percentage set by the company is in relation to the price of the product. According to Hinterhuber (2004), the impact of price levels on profitability is high, which means that even the impact of small increases of price on profits and corporate profitability by far exceeds the impact of other leverages in managing best results. Thus, indicate that of all the elements available to managers, the price is what has the larger impact on corporate results, reflecting on representative gains (Kohlia & Surib, 2011). Evidence of this nature suggests that managers should abandon the rationale of having a greater market share and an increased business volume (sales, revenues) in favor of a vision more focused to profits (Simon *et al*., 2008). The results indicate that companies that practice a higher price against the price of their competitors obtain greater profits, which probably isrelated to superior customer value. This justifies the charge of higher prices and, as a result, enhances the business performance.

It was established that respondents set prices to cover total cost of the product, Liozu, Boland, Hinterhuber, and Perelli (2011) conducted a research mapping the pricing processes of companies which based their prices on competitors and they found that managers use their knowledge and experiences to define prices, as well as models of costs, contribution margin goals, and well-structured profit goals. In addition, these companies were strongly considering the prices of their main competitors while adding a price reward by always sharing the decision based on the manager'sintuition, which is not a scientific method to define prices. In this sense, competition-based pricing strategies are very dangerous because the company does not effectively have clear cost or profit information from its competitor who, in some instances, may be working with very low margins (Nagle & Holden, 2003).

5.3.3 Extent Product Features Affect Market Price of Kenyan Tea
An analysis of the impacts of value chain on tea pricing revealed that majority were in total agreement that the flows of goods, information and finance through the various stages of the chain are evaluated. Ketchen et al. (2008) conducted a research that

attempted to develop the best value chain that can help firms realize their best value chain practices. They found that the best value chains leverage strategic value chain management, agility, adaptability, and alignment not simply to create low costs, but also to maximize the total value added to the customer they further suggested that firms should ensure consistency in performance across supply chain management aspects such as strategic sourcing, logistics management, supply chain information system and relational management.

Mwirigi (2012) carried out a study to interrogate the key value chain activities that characterized the sea food industry along the Kenyan Coastline. The aim was to establish their completeness and efficiency and identify the gaps that exist in the chain recommending measures that can be implemented to improve these chains. The main challenge in seafood sector in the Kenyan coast is value addition contributed by lack adequate value adding facilities, marketing channels are insufficient and have fairly weak linkages, market exploitation due to lack of international markets and weak value chain nodes as they are underdeveloped.

An analysis of the impacts of marketing on tea pricing revealed that marketing has led to competitive pricing and therefore increase sales at the auction. Tawalbeh and Rumman (2015) research aimed to investigate the impact of marketing oriented on the product mix pricing strategies on complementary, bundling and customer value which is defined as dependant variables. The results showed that there is a significant impact of the overall of marketing oriented pricing on the overall product mix pricing and after performing a stepwise regression the results showed that there are a significant impact of the marketing orientated pricing on the complementary, bundling and customer value.

 It was also established that through marketing the auctions have been able to bring in new customers. Porto, Costa and Watanabe (2017) study sought to dynamically assess the effectiveness of marketing activities in the generation of product sales, revenue, and profitability in a micro-enterprise. The research shows that marketing activities, in particular price elasticity generate product sales, the aggregated estimate of total marketing activities predicts monthly company revenue and profitability, and lastly in the investigated company, if marketing activities are intensified in the same proportion to increase costs in products and goods, they are not efficient in generating profit.

Huang *et al*. (2014) and Rungtrakulchai (2013) found a positive relationship where a high price discount led to a perception of high product quality, Garretson and Clow (1999) found a negative relationship a high price discount led to a perception of low quality, and Grewal et al. (1998) found no relationship between price discounts and product quality. A possible reason for these inconsistent results is that the price –quality -value model and means-end model consider only the momentary effect of price, but price discounts have an affective effect that can create positive feelings.

The finding also show that through marketing the auctions have increased their market share. Tea being a perishable product should be disposed of as quickly as possible. The economic viability of tea industry depends crucially on profitable disposal of its products. The marketing system of Indian tea deals with marketing channels and Government regulations on tea disposal. It refers to the complex system of institution and operations, which intervene between the producers of tea on one hand and ultimate consumer who drinks his cup of tea, on the other hand. Among the alternative means of disposal, the producer chooses the channel which brings the best price to him within the purview of Government regulations. The marketing channel in tea is the pathway of movement of teas through intermediaries from production in the garden to the hand of the ultimate consumers within or outside the country (Chandon *et al.,* 2000).

5.4 Conclussions

5.4.1 Extent Market Demand Affect the Market Price of Kenyan Tea

Tea products have ease of access to the auction. Competitong from other points of sale had a great effect on tea prices. Entry of new supplier's influence had a very high influence on tea prices and any change in price of substitutes highly influenced tea prices. Issues such as competition has highly enabled the auction offer value to the customers therefore affect the tea prices. Pricing decisions are very important for managers at Mombasa tea auction in setting up tea prices and there is a very high capability of developing perceived value thus influence tea prices. As it is, the tea tariff is favorable for the sector therefore influence tea prices.

5.4.2 Extent Price and Pricing Strategy Affect Market Price of Kenyan Tea

In the tea sector, sellers offer products at a higher price on the most important sectors of the market and a lower price by means of discounts in less important sector and offer product sets (a set of various products) at a total price that allows customers to save

money. Auctions define a high price initially and then able to reduce it systematically over time and the customers see the prices of products as a high-quality indicator. Most the time the auctions maintain a balance between the advantages of the product and its possible price. Profit margin percentage set by the company is in relation to the price andis able to cover the variable costs and total cost of the product.

5.4.3 Extent Product Features Affect Market Price of Kenyan Tea

The tea sector has professionalism and availability of personnel and the sector enjoys quality and efficiency of the infrastructure. Flows of goods, information and finance through the various stages of the chain are evaluated and the producers are price takers and hardly negotiate. Tea marketing has led to competitive pricing and therefore increase sales at the auction, this has attracted new customers thus creating demand.

5.5 Recommendations

5.5.1 Recommendation for Improvement

5.5.1.1 Extent Market Demand Affect the Market Price of Kenyan Tea

It was recommended auctioneers should strive to offer value to the customers therefore positively influence the tea prices. Managers should also ensure they have a high capability of developing perceived value. It was also noted that government also needs to invest more in processing and innovation in the tea sector. There should be an increased transparency and stability of regulatory tax and economic policy in the tea sector for more stability of tea prices.

5.5.1.2 Extent Price and Pricing Strategy Affect Market Price of Kenyan Tea

It is recommended that high price initially suggested should not deviate too much from the intended pricing and auctions need to maintain a balance between the advantages of the product and its possible price for the best price offers. Due to competition auctionnaires should react to competitors' price by adjusting their prices, however, this should be done after a serious analysis of the causes of the price change to avoid having a price lower than the competitors' prices in the market.

5.5.1.3 Extent Product Features Affect Market Price of Kenyan Tea

There is a need to analyze performance across supply chain management aspects such as strategic sourcing, logistics management, supply chain information system and relational management in order to improve the tea prices. There is a beed to also improve on marketing in order for auctionaires to retain existing profitable customers.

5.5.2 Recommendation For Further Research

For further study, similar research needs to be done in other tea auctions in order to be able to generalize the findings. In addition, there could also be a study to compare the effects of market demand, price and pricing strategy and product features in the various tea auctions.

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Data collected in this questionnaire is intended for academic purposes only and will be used in partial fulfilment of an MBA research project to investigate factors affecting tea prices at the Mombasa Tea Auction. All information gathered will be handled with strict confidentiality. There are five sections.

SECTION A
For each of the statements, kindly answer all questions either by ticking in the boxes or writing in the spaces provided.
1. Level of education (please tick one)
    Primary ☐   Secondary ☐   College ☐   University   ☐

2. Gender (please tick one)
    Female   ☐   Male   ☐

3. Age (please tick one)
    18-20 years ☐   21-30 years ☐   31-40 years ☐   41-50 years ☐   51-60 years ☐

    61-70 years ☐   71-80 years ☐

4. Number of years worked (please tick one)
    Between 1-4 ☐   Between 5-8 ☐   Between 9-12☐ Over 12 years ☐

Section B: Effect of Market Demand on Price of Kenyan Tea

What is your level of agreement to the following statements on the effects Market Demand on Price of Kenyan Tea (5- Strongly agree, 4- Agree, 3-Neutral, 2-Disagree, 1-Strongly Disagree)

Competition	1	2	3	4	5
Products ease of access to the auction affects tea prices					
competition from other point of sales affects tea prices					
Entry of new suppliers' influence tea prices					
Change in price of substitutes influence tea prices					
competition has enabled us offer value to the customers therefore affect the tea prices.					
We advertise our products and services therefore able to charge the best tea prices in the market.					
Competitor Prices	1	2	3	4	5
Price decisions are important for managers at Mombasa tea auction in setting up tea prices.					
Managers are aware of the intrinsic and relevant costs to comply in order to regulate tea prices					
Managers are capable of developing perceived value thus influence tea prices.					
Must understand how their customers perceive the prices					

Government Policy	1	2	3	4	5
There is transparency and stability of regulatory tax and economic policy in the tea sector therefore stablizing tea prices					
Government investment in processing and innovation in the tea sector thus influence tea prices					
Tea tariff is favorable for the sector therefore influence tea prices.					

Section C: Pricing Strategy and Market Price Of Kenyan Tea

What is your level of agreement to the following statements on the effects of Pricing Strategy on Price of Kenyan Tea (5- Strongly agree, 4- Agree, 3-Neutral, 2-Disagree, 1-Strongly Disagree)

Premium pricing	1	2	3	4	5
We offer our products at a higher price on the most important sectors of the market and a lower price by means of discounts in less important sectors					
We offer product sets (a set of various products) at a total price that allows customers to save money					
We define a high price initially and then we reduce it systematically over time					
Our customers see the prices of our products as a high-quality indicator					
Customer Value-Based Pricing Strategy	1	2	3	4	5
We have a high perceived value of the product by the customers					
We maintain a balance between the advantages of the product and its possible price					
Compared to the competitors' products, we offer more value to customers.					
Competition-Based Pricing Strategy	1	2	3	4	5
We react to competitors' price by adjusting our prices.					
We always try to have a price lower than our competitors' prices in the market					
Price of our competitor's products are similar to ours					
Cost-Based Pricing Strategy	1	2	3	4	5
Our Profit margin percentage set by the company is in relation to the price of the product.					
We price to cover the variable costs of the product					
We set prices to cover total cost of the product					
We define low price to leverage sales volume and to reduce costs through accumulated experience					

SECTION D: Effect of Product Features on Market Price of Kenyan Tea

What is your level of agreement to the following statements on the effects of Pricing Strategy on Price of Kenyan Tea (5- Strongly agree, 4- Agree, 3-Neutral, 2-Disagree, 1- Strongly Disagree)

Quality	1	2	3	4	5
The tea sector has professionalism and availability of personnel					
There is availability of tea for sale					
The sector enjoys quality and efficiency of the infrastructure					
We have increased enterprise production efficiency and optimization of management structure					
Value Chin	**1**	**2**	**3**	**4**	**5**
The flows of goods, information and finance through the various stages of the chain are evaluated					
We ensure consistency in performance cross supply chain management aspects such as strategic sourcing, logistics management, supply chain information system and relational management.					
Producers are price takers and hardly negotiate					
Marketing	**1**	**2**	**3**	**4**	**5**
Marketing has led to competitive pricing and therefore increase sales at the auction					
Through marketing we have been able to bring in new customers					
Through our marketing team we have been able to create demand and therefor letting existing customers buy more					
We have a specific groups or group of customers at whom the firm serves its products.					
Through marketing we have Increased our market share					
Marketing has enabled us to retain existing profitable customers					

SECTION E: Market Price of Kenyan Tea

What is your level of agreement to the following statements on the market price of Kenyan tea (5- Strongly agree, 4- Agree, 3-Neutral, 2-Disagree, 1- Strongly Disagree)

	1	2	3	4	5
I am satisfied with the pricing of the tea in this category					
There is a possibility of market expansion for premium Kenyan tea					
The most important factor affecting the price of a tea is its cost.					
Price sensitivity in the market influence tea prices.					