CHALLENGES FACING SMALL SCALE TEA FARMERS IN KENYA:

A CASE STUDY OF RUKURIRI SMALL SCALE TEA FARMERS

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF MANAGEMENT AND LEADERSHIP IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR OF MANAGEMENT AND LEADERSHIP OF THE MANAGEMENT UNIVERSITY OF AFRICA

SEPTEMBER, 2017
DECLARATION

Declaration By The Student

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

Signature.......................................................... Date..........................................

Nyaga Susan Wambeti

ODL-BML/5/00166/1/2015

Declaration of the Supervisor

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

Signature.......................................................... Date..........................................

DR. Leonard Wambua

The Management University of Africa
DEDICATION

I dedicate this research project to my husband Francis Njiru for his mutual support both financially and morally; I also thank my parents Mr. and Mrs. Nyaga Kamwea and my siblings for their encouragement.

To All of You: Thank You.
ACKNOWLEDGMENT

First and foremost I thank the Almighty God for giving me the grace and strength to carry out this research project. Secondly, my sincere appreciation goes my research supervisor Dr. Leonard Wambua for his patience, guidance and advice which helped in shaping, focusing, analyzing and hence facilitating its completion. Thirdly, the management, staff and farmers of Rukuriri tea factory for their assistance and cooperation in conducting the interviews. I greatly appreciate. Fourthly, this project would not have been possible without the countless sacrifices of my husband; I greatly appreciate his encouragement and support. I also owe my gratitude to my parents, siblings, classmates and friends for their spiritual and moral support. I also thank everyone who in one way or another contributed to helping me complete this project.

To all of you, Thank You.
ABSTRACT

The study was to find out the challenges facing small scale tea farmers in Rukuriri Tea factory with specific objectives being: marketing strategies; production costs; climate change; And government regulatory policies all to the small scale tea farmers.

A descriptive research design was used. Multistage random sampling technique with an aspect of stratified sampling technique was used to establish the sampling technique. Primary data collected by administering questionnaires to the small scale tea farmers was analyzed using descriptive statistics with the help of excel software.

The research findings were expected to open up avenues for rukuriri management and farmers, the Government of Kenya, the Tea Board of Kenya, TRF of Kenya towards streamlining their operations to improve efficiency and effectiveness.

The study recommends that clear government policies should be spelt out by the government. Further, involvement and participation of the farmer on the policy formulation should be addressed.
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ACRONYMS AND ABBREVIATIONS

EATTA  East African Tea Trade Association
EPZA  Export Processing Zones Authority
FAO  Food and Agriculture Organization
GDP  Gross Domestic Product
KMD  Kenya Meteorological Department
SAN  Sustainable Agriculture Network
OPERATIONAL DEFINITION OF TERMS

Agriculture : This involves farming of crops such as tea, coffee, flowers, cotton. Agriculture provides the largest foreign exchange from export earnings of agricultural products.

Tea : It is the main cash crop of Kenya. Plucking standards is strictly 2 leaves and a bud at 7-9 days interval.

SmallScale tea farmer: Farming owned by local growers where their farm is less than 8 hectares of tea farm

LargeScale tea farmer: These are tea plantations where the owners are mostly producers and international company’s

Factory : A plant where tea is processed and packaged. It processes green tea leaf into made tea ready for human consumption.

Price : Amount for which tea proceeds is paid

Export : Sale of made tea to other countries overseas or abroad

Challenges : Problems or hindrances affecting the cultivation, processing and marketing of tea
CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter covers the background of the study, statement of the problem, objectives of the study, research problems, the significance of the study, the limitations and the scope of the study.

1.1 Background of Study

The performance of the tea industry is vital to the Kenyan economy. Tea is the largest foreign exchange earner in Kenya contributing over Kshs 114 billion. The tea industry contributes about 4% to the GDP and more than 20% of the foreign exchange. More than 650,000 Kenyans directly earn a living from tea. Tea is grown in 15 countries and is therefore an effective catalyst for development. Tea is also the only cash crop grown widely in geographically dispersed areas in Kenya. The small scale tea farmers account for over 66% of Kenya's production with the rest being produced by the medium and large size tea estates (Batiano, 2004).

According to Nyangito (2001) Tea accounts for approximately 26% of Kenya's export earning and is the leading foreign exchange earner with leading buyers being Pakistan, Egypt, United Kingdom, Afghanistan and Sudan. Kenyan tea is of such a high premium in some consuming markets that the importers keep track of the auction trends on a weekly basis and will make purchase orders for a specific plantations or garden marks.

Tea has assisted to fund the maintenance of rural roads through tea cess and voluntarily provides health benefits and education facilities to rural populations. The upward and downward trends in tea prices are a cyclical and dependent on supply and demand
situation. This cannot be easily controlled. However, what is within the purview and control of the legislative is the reduction of the ad valorem. This shall reduce the suffering of the farmers that has been worsened by the declining tea prices.

Kenya is currently the world's third largest producer of tea after India and China but the leading exporter of black CTC tea. Earnings received from Kenya, the exports total are more than 20% contributed by the country through foreign exchange earner hence making tea a very strategic sector. The extension services and technology adoption is a major avenue of information dissemination and feedback collection at TRFK. It addresses most of the challenges faced by growers through advisory visits, field days. Scientists in the department are also involved in exhibiting during the field days and undertaking studies for tea growing in various catchments. The company has continued to face a lot of challenges ranging from an increase in fuel prices, increase in salaries and wages. However, it is favored by an increase in tea prices and favorable exchange rates. The short term and long term strategies are aimed at increasing the production efficiency. The company's activities expose it to a variety of financial risks, including credit risk, changes in market prices and interest rates. The companies risk management programme focuses on the identification and management of risks and seeks to minimize potential adverse effects on its financial performance (TRFK, 2006).

The company has policies in place to manage the liquidity and seeks to maintain the interest rates within acceptable levels. Income from sale of processed tea is recognized upon delivery and customer acceptance. It represents the fair value of the consideration receivable for sale of goods and services, and is stated net of value-added tax. Interest income is recognized on a time proposition basis using the effective interest method.
Dividends are recognized as income in the period in which the right to receive payment is established. The company undertakes certain transactions denominated in foreign currencies. Exchange rate exposures are managed within approved policy parameters. The attributes such as leaf appearance, taste and liquor will determine the price for a particular tea. More broadly factors affecting the price movements include tea supply, buying activity in import markets, world auction prices, availability of cash and currency fluctuations. (Sekaran, 2003)

1.2 Statement of the Problem

As recognized by Thompson (2010) Agricultural sector country is currently facing many challenges faced by agricultural sector are affecting the economy negatively. In 2013 although macro-economic environment was stable and the country enjoyed it; different results appear in agricultural sector. With a number of problems of economic related nature being experienced by the economy which is the backbone of the country, with some of them including prices fluctuations, currency exchange rate differences. With this in 2013 there was slow down of agricultural in 2.9% according to a survey of economic compared to 2014. Also with the global market experiencing decline of major agricultural cash crops such as tea and coffee, the prices continue to become poor resulting to less produce in the market. Farmers production recent years dropped and falling supply has been brought about by cold weather season and the pruning that is usually done in farms. The rise in tea prices is good news since farmers will experience increased market for their produce, thus increased prices in market and economy growth. As is tea industry goes through this, the factory is actively engaged in exploring new markets to absorb the growing volumes of tea. Rukuriri tea factory and other players are
actively engaging the government to initiate and implement strategies that will cushion tea farmers against price fluctuations. Despite the slight improvements in prices witnessed currently, still earnings from tea in 2014 would be affected. But with the commitment and endeavor in improving the productivity and profitability of tea, they will work towards that through dedication. It is time that the government listened to views of the tea sector. The government has been requested to create an enabling environment for value addition by eliminating the multiple taxes and levies that are responsible for what is ailing the tea industry today. Unauthenticated pronouncements and perceptions cannot be solutions to the challenges facing the tea industry in Kenya (Rainforest Alliance, 2007).

1.3 Research Objective

The general objective of the study was to investigate the challenges facing small scale tea farmers in Rukuriri.

1.3.1 Specific Objectives

The specific objectives of the study were:

i. To examine the role of marketing strategies on the rukuriri small scale tea farmers

ii. To determine the effect of production cost on rukuriri small scale tea farmers

iii. To examine the effect of climate change on rukuriri small scale tea farmers

iv. To establish the effect of government regulatory policies on rukuriri small scale tea farmers

1.4 Research Questions

The research questions for the study are:-

i) To what extent does marketing strategies affect rukuriri small scale tea farmers?

ii) How does production cost affect rukuriri small scale tea farmers?
iii) How does climate change affect rukuriri small scale tea farmers?

iv) What is the effect of government regulatory policies to rukuriri small scale tea farmers?

1.5 Significance of the study

The study is hoped will benefit the following groups:

1.5.1 Management of Rukuriri Tea Factory

The research may assist in shedding more light and provide a basis for greater understanding of the challenges facing small scale tea farmers, thus enabling the managers to provide a suitable environment for crop cultivation.

1.5.2 Tea Research Institute

This research may assist the tea research institute in developing improved clones of tea, including issues of value addition and product diversification. On issues of climate change of climate change, new technologies can be developed to bring new varieties that are resistant to climate change to avoid negative impacts of the environment, and measures to mitigate against such as conserving the environment can be implemented.

1.5.3 Community of Embu County

The Kenyan population especially the people of Embu county will benefit since it will contribute to employment creation resulting to improved livelihoods, increased farmers income, and also improvement in food security from the increased crop production thus promoting healthy living. Employment creation brought about because tea cultivation is labor-intensive

1.5.4 The government and other stakeholders
The research will help policy makers in that the information obtained from the study will provide a rational basis for information and development of appropriate policies and strategies for the development in improving the crop production. The research will help other organizations and stakeholders. This research will also help future researchers as it will form part of the literature review they will have to review in case of further studies needed to find out similar challenges.

1.5.5 Academicians and Scholars

The findings may act as a reference point to other researchers in the same field thus facilitating their studies. To academicians and scholars, It may form basis for future research on the subject, providing a critical examination of the field. The findings will provide future researchers interested in this area with references and relevant literature to complete their research work, including help in identifying the research gaps to be filled. The study may provide a deeper understanding and training for agricultural representatives aimed at improving their performance. This in turn will open up more avenues for referencing point purposes

1.6 Scope of the Study

This study focused on assessing the challenges facing small scale tea farmers in Rukuriri tea factory. The study was carried out in rukuriri sub location, The researcher had a target population of 120 and the target population was composed of rukuriri small scale tea farmers. The study took a period of two months from July 2017 to August 2017.

1.7 Chapter Summary

Chapter one of this study introduced the challenges of small scale tea farmers and background upon which this was done has been explored to figuring what was the
problem of the research studied. The research objectives of the study which were identified gave way to establish the research questions which became the fundamental variables to ensure the study is established.

The chapter was important as a guide through which literature will be reviewed, research design and methodology carried out and data analysis made. The study concluded how they affect the production, the problem the researcher studied, the research objectives questions used, scope of study, and its scope are discussed.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

The chapter shows a review of the related literature on the subject under study. This is an important area of research writing since it gives an overview of what has been done by other researchers in the same subject. According to Mugenda and Mugenda (2003), review of literature involved the systematic identification, location, and analysis of documents containing information related to the research problem being investigated. Materials were drawn from several sources which are closely related to the objectives of the study. Studies by various past writers, authors and researchers were reviewed to assist the researcher meet the objectives of the study. This is in line with giving the study problem in question a theoretical perspective and conceptualization that would aid in carrying out the study. Moreover, literature review helped determine new approaches and stimulated new ideas.

2.1 Theoretical Literature Review

2.1.1 Innovation theory on small scale tea farmers

High revenues in tea are in most cases as a result of high volumes of tea leaf delivered to the factory. These high yield are attributed to favorable weather, enhanced factory capacity and farmer's field schools programme. Also the payout rates per kilo can slightly drop because of exchange rate fluctuations. The exchange rates, though stable impacts negatively on the total revenues earned from the sale of tea. Good and sustainable agricultural practices of tea production involves nursery establishment where planting materials should be sourced from reputable institutions like TRFK. They should also be
disease free, avoidance of sourcing of nursery soil from the forest, and avoidance of using reeds for top-shade so as to protect the wetlands (Porte, 2007).

During field planting, ensuring that tea is planted in areas with the right soil and slope of less than fifty percent, considering brown-line and planting tea in areas that are ecologically suitable. Also establishing vegetative barriers between tea and roads and other residential areas. When planting old polythene tubes have to be collected for recycling. In bringing young tea into bearing, use of pegs in has to be discouraged as it uses a lot of trees leading to destruction of environment. In plucking, ensure you maximize on the quality and quantity and use of proper plucking equipment. Worn out PPE has to be disposed properly to avoid negative environment impacts. The information technology infrastructure in the factory needs to be upgraded for ease of communication. Importation of fertilizer through technology should also be done to ensure we improve on quality and yields of the tea produce. The factory staff should be committed, professional and dedicated team keen on advancing and safeguarding the ultimate interests of the farmers and ensuring that they gain maximum benefit from tea farming (Gesimba, 2002).

2.1.2 Motivation theory on small scale tea farmers

According to Kalunda (2007), the 2013/2014 financial year difficult as it experienced low prices at the mombasa tea auction due to high production of the tea during the year. The increase in production was not matched by consumption. Additionally, at the auction, Kenyan tea are subjected to Ad Valorem taxation, which is not the case for teas from Uganda, Rwanda and Tanzania. Buyers find these teas as a better buy as a results. Some of the key markets like Egypt and others have been politically unstable, and this has negatively affected our the tea business. However, we continue to work hard, and
also looking for new markets in Africa and overseas. Despite the challenges, we continue
to aspire to provide an improved, effective and efficient services to the farmers by
ensuring that we are meeting the obligations.

Tea representatives met to deliberate on the way forward following low tea prices at the
mombasa auction. Tea prices for the last three months have stagnated and if the current
low prices offered are not sufficient to cover the cost of production. The sharp drop in
prices at the world's largest auction centre ranged from overproduction of tea last year by
up-to 30% following heavy and well distributed rainfall in the region. For the first time in
the last four years, global production was higher than consumption and more so in the
markets served by African teas. (KARI, 2002)

The political and economic difficulties experienced in some of the key export markets
such as Egypt, Pakistan, Afghanistan, Sudan and Iran was also cited as some of the
causes of low prices. It was observed that the newly introduced Ad Valorem tax
contributed to the depreciation of the prices of the Kenyan tea compared to other African
teas. He urged that the Kenyan Government to waive the Ad Valorem tax on Kenyan tea.
The stakeholders explored ways of dealing with the declining tea prices like considering
the production of orthodox teas, encouraging value addition, introducing new products
and seeking new markets in Africa and beyond, intensifying promotion of Kenyan tea
and considering credit facilities to direct tea buyers (Jaetzold & Schmits, 1983).

2.2 Empirical Literature Review

2.2.1 Marketing Strategies

The CTC made tea is mostly sold through the Mombasa tea auction in bulk to various
destinations in the world such as UK, Pakistan, Egypt, Afghanistan, Yemen etc. Some tea
is also bought by local tea packers and blenders such as Ketepa. The factory also sells to the tea farmers and local community through factory door sales. The main challenge of unpredictable markets resulting to low prices affecting farmers earnings, fluctuating exchange rate. To mitigate against such measures, product diversification and tea value addition should be implemented. Rukuriri's role is to ensure operations and other departmental operations at minimum cost and consequently optimize market output to the shareholders, ie the tea growers. As such, effective and efficient management of the tea factories is paramount for the objectives to be achieved. Further, the Agency undertakes to ensure that, through the functions of its well established Marketing Department and linkages with various tea buyers either directly or through tea brokers registered with the manufactured tea due to its high quality, fetches high prices in various market outlets worldwide. This calls for all stakeholders to be brought on board and embrace good corporate governance. (FAO, 2012).

Price determination is influenced by many factors including manufacturing parameters which influence the quality of the finished product; post processing handling; market forces, supply and demand factors; currency fluctuations among others. Rukuriri thus has the task of managing all these factors to enhance market output from tea production for the small scale tea growers through the functions of various departments and the Factory Boards. Dynamic pricing is the preferred policy in the Tea Trade. Buyers concern and interest for and in prices is. The factors such as maximum current profit, maximum current value, maximum sales growth and maximum market skimming among others. Orodho (2009) structures the term marketing as one that is directly concerned with demand: it is recognition, anticipation, creation, stimulation, and finally satisfaction of
the customers demand. To achieve these objectives, the producer must address productivity to enhance consistency in market output. This involves synchronization of all marketing activities that make the customer buy more and more at increasing prices to enhance profitability, growth and survival of the business. According to a national field survey done by Somo (1985) to estimate crop losses caused by maize stem borers in Kenya, it suggested that the value of crop losses is heavily influence by the high fluctuation of the market price. The efficiency and effectiveness of field and factory operations in collection and manufacture of the green leaf raw materials, ready for the market may affect the production and eventual market output of the small scale tea farmers, as it may have direct implications on the quality of the finished product as well as the cost of production and thus the market output to the tea suppliers.

Chan et al. (2009) say that, many companies have a challenge of shifting from product- and sales driven approach into a true market driven approach thus building a creative marketing organization. The more aggressive a company is customer focused, the higher its productivity and eventual market output. Marketing activities summarized in terms of the marketing mix are classified into four major groups. They represent sellers or producers view of the marketing tools available for influencing buyers. This has an impact on the production and market output when the buyer buys more of the product at a higher price.

According to CBS (2005), a product orientation view of marketing wherein the focus is on selling whatever has been producing. Quantity of tea production by the smallholder tea sector per unit area has been consistently lower than that produced by the estates subsector. A study to estimate the smallholder supply function of tea and to determine the
factors that influence it so as to facilitate policy intervention. This is because green leaf supply was found to be quite elastic; the quantity supplied being quite responsive to tea price changes.

2.2.2 Production Cost

A study was done by Morris (2001) to estimate the high production costs especially electricity, fuel, labour and farm inputs. Mitigation factors such as wood fuel project where the company should procure its own land to develop wood fuel plantations. Power company in partnership with other factories has been established to put up a small hydro power project. Automation in production should also be implemented. The high production costs in tea farming and manufacture is prohibitive, hindering the farmer from reaping maximum benefit for their produce.

Kothari (2004) indicated that the cost of improved varieties of tea seedlings and technology, labor, farm inputs, transportation costs due to escalating costs on fuel and high electricity tariffs all impact negatively on the returns to farmers as the net market output is adversely affected. Price of resources has an adverse effect on the price of the end product and eventually affects the market output to the tea suppliers Nitrogen has been identified as one of the main elements limiting agricultural productivity. It is possible to alleviate nitrogen deficiency by the application of nitrogenous chemical fertilizers; however, the high cost of such fertilizer has not allow edits extensive use by many poor small scale farmers in Kenya.

According to K.A.R.I (2001) Farmers know the benefits of inorganic fertilizer but their use is limited by high cost of fertilizer and low returns from the land. The objective was to clarify and explain the particular factors at work in Kenya which have led to relatively
strong growth in fertilizer use over the last decade. The study found out that increased use of fertilizer in Kenya has been assisted by a stable policy environment and Kenya's small farm sector has primarily increased its use of fertilizer on maize, horticultural crops, sugarcane and tea. The study revealed that the rukuriri system of fertilizer application marketing channel in Kenya is an interlinked approach where participating farmers receive fertilizer from rukuriri which recoup its loans from farmers when they sell their output to rukuriri. The process of acquiring fertilizer by the farmer starts from estimates made by the tea extension assistants on the amount of tea requirements by each farmer at the factory level.

As recognized by Mubaya, and Mugabe (2008), complaints that soils were being affected by this kind of repeated application adversely. In 2001, a research conducted in Roret Division confirmed that low soil fertility was a constraint to crop production and that enhanced soil fertility improves farm productivity. Research done revealed that, the farmers had limited knowledge on soil productivity and nutrients dynamics. Availability and application of soil fertility improvement resources was associated to who headed and made farm decisions.

The study concluded that there are several technologies and resources at farm level, hence a need through participating method, to identify and document them. The study revealed that by adopting conservation tillage, a farmer saves 50% in labour costs. Use of herbicides improves crop yields by 30% over conventional tillage while fertilizer improves crop yields by 50%. The research was carried out with an objective to review crop systems and address constraints to train farmers on crop protection methods (KARI, 2003)
2.2.3 Climate Change

James and Wilfred (2005) argues that the impact of climate change has resulted to unpredictable weather. The factory organizes for free tree planting where indigenous tree are planted. The factory also has a tree nursery and sells the seedlings at a highly subsidized rate. The changing climatic conditions experiences fluctuating rainfall and increased and decreased temperatures. Soil water deficits also affects the yields of tea. Prices in the year 2013 to 2014 reduced significantly and were triggered by over supplying of tea due to better and favorable climatic weather conditions, thus leading to increased crop output in areas that experienced these good favorable climatic weather conditions. Although the farmers earnings were lower than the previous years, the prices of tea received was higher resulting to better prices and profit was made by majority of farmers whose also cost of production they were able to meet from the revenues of tea (Stephens, Othieno, Carr & M.K.K, 1992).

The factory has tried to mitigate against climate change by implementing a tree planting programme incorporating institutions such as primary and secondary by planting trees. The event is spearheaded by the factory to mark tree planting. This ensures the environment is conserved and will curb the effects of climate change. The factory also sometimes donates tree seedlings to the community to plant (Vroom, 1983).

2.2.4 Government Regulatory Policies

For factories that have avenues to international markets, in order to be able to fetch higher prices, through international market access, international certifications are required to access the tea exports. For instance, factories that produce tea in an environmental friendly manner are awarded certifications by rainforest alliance.
Measures that are put in place to farmers and factory to ensure tea is produced ethically through avoidance protection from farm level of plucking through to processing to ensure high quality product for consumption. Sustainable agriculture practices for sustainability of tea production. The farmers field schools methodology should be inline (TRFK, 2002).

2.3 Summary and Research gaps

Factories harnessing available technology will help reduce production costs. Business processes within the factory needs to be automated, and continuous fermentation units. The factory is investing in small hydro power projects with hopes in cutting down the cost of energy incurred by the factories. Also with the enabled processed, the specialty to make tea farming a lucrative venture is vital. Efficiency and effectiveness in overall production process will thus significantly be increased (Kotler, 2003).

The investment in power project of hydro power, It is hoped that the energy costs which contribute to 30% of the factory's total expenditure will significantly reduce. With the factory being able to generate its own power, production costs will significantly be brought down thus reducing operational costs of the factory (Vroom & Penguin, 1983).

2.4 Conceptual Framework

This is a structural composition consisting of concepts. The variations of the analytical tool consists of theories of representation between context and variables under research are shown between them. It makes it easy in making distinctions between ideas. The figure shown on figure 2.1 indicates the effect of independent variables which are; marketing strategies, production cost, climate change, and Government regulatory policies. While on the other, dependent variable is small scale tea farmer. Independent
variables are the cause while dependent variable is the outcome. Figure 2.1 illustrates the relationship between the research variables.

**Figure 2.1: Diagram showing the relationship between theory, independent and dependent variables**

**Conceptual Framework**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
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<tbody>
<tr>
<td>Marketing Strategies</td>
<td>Small Scale Tea Production</td>
</tr>
<tr>
<td>Production Cost</td>
<td></td>
</tr>
<tr>
<td>Climate Change</td>
<td></td>
</tr>
<tr>
<td>Government Regulatory Policies</td>
<td></td>
</tr>
</tbody>
</table>

**Source: Author (2017)**

**2.5 Operationalization of Variables**

**2.5.1 Marketing Strategies**

A strategy is a plan of how to get from one point to another. It encompasses the what and how it will be done. It involves deploying of resources in order to achieve a particular set of goals. Most organizations are in business to make profit. A brand strategy is a long term plan that leads to the development and growth of a brand resulting in increasing sales, increasing sales, increasing market share and implication increasing profit ability. The famous 4 p’s that are synonymous with brands are on product, promotion, pricing
and place. In terms of product, the strategic focus of increasing offerings is for more products to be available to increase revenue streams. (Phillip Kottler, 1999).

In terms of pricing, when brands are priced higher than the average competitor’s, there is a specific market segment that may or may not purchase the brand. In terms of promotion, the brand promotion also depends on brand strategy and here strategy is dependent on the identification of market segment, life cycle position of the brand and the competitive environment. The P of place or distribution may have the potential to succeed. Occasionally there maybe more than one strategy that has the potential to succeed and careful assessment of both external and internal factors. In order to generate sales and increase revenues, the product needs to meet customer needs and expectations and without this, the strategy would not succeed. Delight your customers and you will see the impact (Mwaura, Nyabundi, & Muku, 2005).

2.5.2 Production Cost

Nyangito (1999) argues that high production cost affects or reduces the overall revenue for the tea proceeds. High fuel costs, high labour costs, increase in salaries and wages and other administration cost remain a challenge. During the 2016 financial year, the company increased its asset base through procurement of additional fleet, various machinery items, computers, printers and other tools. These short term and long term strategies are aimed at reducing the production costs of the company and increasing production efficiency of the factory. As a way forward, the company needs to make progress both in short and long terms modernization and cost control. Due to high cost of production and unreliable supply in the world market, we believe the survival and growth will greatly depend on the measures put in place to reduce the overall cost of production.
One of the measures is modernization of the factory machinery and equipments to ensure efficiency and higher returns to the growers, and this is a continuous process implemented in the strategic plan of the factory.

The second measure is acquiring more fuel woodlands to ensure availability of firewood which greatly the percentage of power consumption is much less than using electricity. Also another measure, is hydro power generation to be owned by neighbouring factories within the zone, and this will in turn the electricity consumption expenses. The cost of production can also be cut down by measures such as minimizing plucking cost by paying pluckers based on the amount of kgs plucked instead of daily rate, In terms of minimizing the pruning costs, the use of effective technologies like machine pruning which saves up to 70 percent , it is also efficient, effective and faster. In terms of minimizing the fertilizer costs, application of fertilizer should be done once per year instead of split applications which entails extra costs in terms of storage. Leave the pruning to rot in situ as it acts as manure once it is rotten. In terms of minimizing the weeding costs measures, maximize on plant population capacity. All gaps ought to be filled up. Once the tea mature its canopy covers the ground hence zero weeding cost. (Ronno, W.K & Wachira, 2005).

2.5.3 Climate Change

Impacts of climate change across the planet is a problem recognized internationally. It has been set that climate change is occurring naturally, with the human activities impact on current activities where changes in unnatural way are occurring at a faster pace than before. The normal climatic conditions caused by these unnatural and human problems is
having negative impact on conditions such as rainfall and temperature because pressure placed on planets natural environment (Winter, Nelson & Temmy 2002).

The impact on agriculture is significant and can be felt (Simbua, Loconto, & Notenbaert, 2010). With the earth getting warmer due to the release of green house gas emissions, major changes are caused by warmer temperatures. This results to occurrences of issues such as droughts, floods, destructive storms and loss of agricultural harvests and disruption of water supplies. Thus the agricultural sector is greatly affected where incidents of soil fertility affects the environmental stability since tea depends on cooler environments and consistent rainfall patterns. The mitigation measures for tea can be done through improvement of water and soil management, conserving the environment by planting more trees, and planting clones which are drought resistant. (Tea Research Foundation of Kenya, 2013).

Disruptions being caused by human activities in the natural balance with deforestation occurring due to cutting down of trees and vegetation cover being removed. Changes in land usage are occurring leading to climate change. Also continuous fertilizer application is greatly affecting the soil fertility making it more acidic leading to organic matter being slowly decomposed and compressed. (Tea Research Foundation of Kenya, 2013).

2.5.4 Government Regulatory Policies

As recognized by TRFK (1997), There are legislations and standards which the factory is supposed to comply with. Legal standards needed also include environmental management and coordination, and ISO certification standards. In order for the tea sector to be sustainable, the factory is required to comply with these legislations. In order for you to enter the market, these standards are considered a criteria. Thus it is important to
comply so that market access entry in developed nations can be easy. However, in most cases, these certifications are an added advantage since buyers will be interested in buying the products of factories who have these certifications in place. This is because it puts the factory in front line since the product is of high quality and ethically produced. However, these regulatory standards are expensive since they need to be renewed so as to ensure the factory is in compliance with the operations.

Also with the fluctuating tea prices it negatively affects tea farmers and measures that can be put in place to address these problems could include value tea addition, market diversification and improvement on quality. (TRFK, 2002).

2.6 Chapter Summary

The chapter has discussed the literature review of the study on challenges facing small scale tea farmers. The main aim it to provide researcher and reader with an understanding of the body of literature as it relates to the current or proposed research (Wallen, 2000).

The review has also helped in defining the areas under study in terms why the review was important. It has also defined the historical perspectives and helped in understanding of previous knowledge, research gaps and further studies needed. The chapter has covered both theoretical and empirical literature.

Finally it has established the research gaps in the study topic.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction
This chapter outlines the research design and methodology to find out the type of research study being carried out. The target population of the study, the sampling technique being used, data collection instruments and data analysis procedures are defined. The chapter is thus organized in the following subsections: research design, target population, sample size and sampling procedure, data collection instruments, data design, data analysis and research ethics (Mugenda & Mugenda, 2003).

3.1 Research Design
The research design used is descriptive survey in that shows the characteristics of a particular individual or group under study. A descriptive design is appropriate for a problem which is specific (Kothari, 2004).
Case studies are used for collection and analyzing of data about a typical subject and an organization is selected to be studied so as to arrive at a conclusion.
In gathering quantitative and qualitative data, descriptive research design was adopted to describe the factory. From reliable data gathered, the study considers the design is appropriate since the characteristics were well defined.

3.2 Target Population
Mugenda and Mugenda (2003) argues that target population can be described as a universal set of study of all members of a real or hypothetical set of people, events or objects to which an investigator wishes to generalize the results.
Population is the targeted group, that is, the groups about which are used by researcher in getting and drawing conclusions. The research targeted the 9000 small scale tea farmers of Rukuriri Tea Factory, in Embu district. The accessible population was tea farmers in 4 of the 52 leaf collection centres, spread within the catchment. The target population was thus be 70 small scale tea farmers (Kotler, 2003).

The target population of the study is the small scale tea farmers at rukuriri tea factory and is a large clientele. The choice of population's suggestions were guided by (Kombo and Tromp, 2006) on quality of good accessible sample as diversity, representation accessibility and knowledge of what is being investigated, on whom questionnaires will be distributed.

Table 3.1 Table showing the Research Target Population

<table>
<thead>
<tr>
<th>Name of Tea Centre</th>
<th>Population Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kanja Buying Centre</td>
<td>328</td>
</tr>
<tr>
<td>Mugui Buying Centre</td>
<td>204</td>
</tr>
<tr>
<td>Njeruri Buying Centre</td>
<td>179</td>
</tr>
<tr>
<td>Mufu Buying Centre</td>
<td>193</td>
</tr>
<tr>
<td>TOTAL</td>
<td>904</td>
</tr>
</tbody>
</table>

Source: Author (2017)

3.3 Sample and Sampling Technique

A sample is a sub-group drawn from the target population with relevant characteristics. According to Kothari (2004), where it is not always appropriate or possible to study the whole population, a sample may be drawn. Sampling procedures are the definite plans of
obtaining and considering a sample from a given population. The researcher considered
definite and indefinite types of population, the sampling unit based on social and physical
factors, the acceptable levels of the sample sizes, available resources, and the parameters
of interest. Data for this study were obtained the tea farmers of Rukuriri tea factory.
According to Mugenda & Mugenda (2003), a sample that is representative of the entire
population is the one that is at least 10%. Thus a sample size of 10.04% of the farmers of
rykuriri tea factory were a true representation sample of the target population
In determining the appropriate sample, Fischers’ formula \( n = \frac{z^2pq}{d^2} \) was used.
Probability sampling method of simple random was then applied in selecting the specific
populations for the study, application of Fischer’s formula used to get the desired sample
size. Purposive sampling was also used.

Table 3.2 : Table showing the Research Study Sample Size

<table>
<thead>
<tr>
<th>Name of Tea Centre</th>
<th>Population Frequency</th>
<th>Population ratio</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kanja Buying Centre</td>
<td>328</td>
<td>0.1</td>
<td>28</td>
</tr>
<tr>
<td>Mugui Buying Centre</td>
<td>204</td>
<td>0.1</td>
<td>15</td>
</tr>
<tr>
<td>Njeruri Buying Centre</td>
<td>179</td>
<td>0.1</td>
<td>13</td>
</tr>
<tr>
<td>Mufu Buying Centre</td>
<td>193</td>
<td>0.1</td>
<td>14</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>904</strong></td>
<td></td>
<td><strong>70</strong></td>
</tr>
</tbody>
</table>

Source: Author (2017)
3.4 Data Collection Methods

Questionnaires were used to collect data. Primary data was collected using research tools such as interviews, observation as outlined by (Kothari, 2004). The researcher came up with the questionnaire, typed, printed it for purposes of collecting data directly from the respondents. To ensure they have a sense of confidentiality with no fear of victimization. The questionnaires had both structured and unstructured, open ended and closed ended questions. Structured questions comprised list of options to choose from. The unstructured questions gave the respondent complete freedom of responding. Questions were formulated in English. (Kombo & Tromp, 2006).

3.5 Pilot Study

The study fundamentally employed primary data. A structured questionnaire was developed. Using a questionnaire has an advantage that the respondents will remain anonymous, can be truthful and has more time to think about the questions and this will result to more meaningful answers. (Piel, 1985). The questions were then be distributed to various tea farmers within the factory.

3.5.1 Validity Test

Expert validity from views and suggestions of the farmers were incorporated in the questionnaires which aimed at capturing specific information from the respondents. These questionnaires were then sent to the respondents to fill and send them back for evaluation. Validity was achieved by checking if questions measured effectively. Validity relates to the quality attributed to the measure it ought to have measured (Wallen, 2000).

3.5.2 Reliability Tests
Reliability of data tools was undertaken through a methods and tools of data collection. The developed questionnaire was sent to some selected sample respondents and the information acquired was evaluated to assess their reliability, which was then achieved through consistency of information within the instruments.

Wallen (2000), states that reliability indicates the extent to which a measure is free from random error. Random error occurs when effectiveness of measured variable is influenced by other factors besides conceptual factors of interest besides the main variable. A pilot test totaling to 70 farmers who were randomly selected were used in the pilot test. The pilot test tested the ability of the questions to measure the desired concept, the degree of accuracy of the measuring tools, and the researcher’s interpretation of data. This exercise helped refine the tools more for accuracy and was done two weeks before the real data collection period. This test was conducted twice, to ascertain its reliability.

3.6 Data Collection Procedure

The sample population situated in the Rukuriri tea factory is where the research was carried out from. This explains to the respondent the reason for the research and enhances the confidentiality of the data collected from them. (Kottler, 1999)

A questionnaire with both open and closed ended questions was used to gather primary data. It was given to the respondents randomly to answer questions to the questions consisting of a collection of original data collected by the researcher directly through surveys, interviews and direct observation. This is information that is collected specifically for the purpose of a research project. Although it is more expensive to obtain than secondary data, it is more current and relevant to the research project.
This information is economical in terms of effort and expenses, and helps to improve the understanding of the problem (Orodho, 2009).

3.7 Data Analysis and Presentation

According to Kombo & Tromp (2006), Information is generated through analysis of raw data that is collected. Manageable size of data was developed through analysis and summaries of statistical techniques applied. Data analysis was done using both qualitative and quantitative analysis. Qualitative, because it is important to obtain data on the study by trying to establish trends, patterns, and relations from the information gathered. The procedure included recording results from respondents and, evaluating the accuracy and relevance of data. Quantitative analysis was used since the distribution of measures or scores needs to be extensively described using descriptive statistical analysis, as these are suitable in giving the findings as revealed in research.

Descriptive statistics was used in organizing and describing a set of data while excel was used to present the analysis in tables, graphs, pie charts, percentages, to give meaning to the responses. The objective here is to develop sufficient knowledge to describe a body of data (Kothari, 2004)

Data Presentation

Presentations of analyzed data inform of qualitative and quantitative formats were considered. Measures of variation, and tendencies of standard deviation, and other data were presented in bar graphs, histograms, tables, and pie charts. There was also qualitative presentations informs of direct quotation and pictures from the respondents. (Kotler, 2003).
3.8 Ethical Considerations

Relevant permission was sought from the respondents for this study before embarking on fieldwork. All information pertaining to this study was explained to informants in terms of its objectives, scope, as well as the intended gathered beyond academic purpose receive informed consent. Consent was then sought before the main interview began. This was maintained throughout the study process and at the reporting and publication levels. Respondents were duly informed of their rights to withdraw at any stage of the study, and were also informed of dissemination plans through publication and means of accessing the outcome of the study. (Kothari, 2004).

This study involved human subjects, thus ethical considerations were highly considered. Wallen (2000) defines ethics in research the ability of a researcher to report exactly what happened.

3.8.1 Informed Consent

Participants were informed and their consent sought for study purpose only.

The informed consent included; expected duration of research, and right of participants to decline or withdraw during the process.

3.8.2 Voluntary Participation

The participants were given free will to volunteer in giving information. It was not mandatory imposed on them.

3.8.3 Confidentiality

Measures were taken in place not to reveal the information. Explanations were made to the respondents that the data gathered in the course of the study would be treated with confidence and that the findings were for purposes of the study only.
3.8.4 Privacy

There was respecting privacy of participants by assigning them unique identifier codes to protect their identity and the responses that will have given. The study generalized the finding, thus information could not be associated to an individual.

3.8.5 Anonymity

Anonymity, according to Mugenda and Mugenda (2003) only occurs if identity of participants is central to ethical. The respondents were accorded due respects to ensure their identity is not revealed. They were picked randomly without any discrimination. Before conducting research and in accordance with social research protocols, the identity and research time, were protected. The study assigned unique identifies for the respondents.

3.9 Chapter Summary

This chapter has discussed the methodology that was used in the study, it has critically analyzed the research design, target population, the sample design, data collection techniques, validly and reliability test and the application package for data analysis.
CHAPTER FOUR
RESEARCH FINDINGS AND DISCUSSION

4.0 Introduction
This chapter presents the findings of the study, which was to determine the challenges facing small scale tea farmers. The chapter has been sectioned into; response rate, response demographics, the descriptive statistics on the specific objectives which are: an evaluation of marketing strategies, an examination of effect of production costs, an establishment of effect of climate change, a determination the effect of government regulatory policies on all in rukuriri tea factory have been clearly defined both in terms of tables and figures. (Kothari, 2004). Also the limitations of the study have been defined.

4.1 Presentation of Research Findings

4.1.1 Response rate
From sample taken of 71 respondents, all the questionnaires were printed and sent out. Sixty eight questionnaires were received back and thus the researcher managed to receive a good response rate of 99% because of good follow-up through telephone and face to face request in regard to filling up the questionnaires. Fig 4.1 shows the study response rate.

Table: 4.1.1: Table Showing Research study response rate

<table>
<thead>
<tr>
<th>Name of Tea Centre</th>
<th>No of questionnaires sent out</th>
<th>No of questionnaires returned</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kanja Buying Centre</td>
<td>22</td>
<td>21</td>
<td>99</td>
</tr>
</tbody>
</table>
Table 4.1.1 indicates that out of 71 issued questionnaires 70 were responded to, which was considered a good number for the purpose of the analysis the collected data.

According to the researcher, the returned questionnaires were adequate to make a comprehensive analysis and conclusions.

**4.1.2 Demographic Characteristics**

The socio economic demographics of respondents aid researchers in knowing the background of respondents. The study sought to find out information that describes basic characteristics such as gender, age brackets, marital status and highest education levels of the responds.

**4.1.2.1 Gender of Respondents**

This sought to determine the gender of the respondents.

**Table 4.1.2.1: Table Showing the Gender of the Respondents**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>37</td>
<td>53</td>
</tr>
<tr>
<td>Female</td>
<td>33</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author (2017)
Figure 4.1.2.1: Diagram showing the Gender of the respondents

Source: Author (2017)

Table 4.1.2.1 and Figure 4.1.2.1 are graphical illustration of the age of respondents.

This revealed that 53% of the respondents were male, while 47% of the respondents were female. More males participated in the study than female. This implies that slightly more of the farmers who own tea bushes are male.

4.1.2.2 Age bracket of respondents

This sought to find out the age bracket of respondents

Table 4.1.2.2: Table Showing the Age of the Respondents

<table>
<thead>
<tr>
<th>Period</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-30 years</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>31-40 years</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>41-50 years</td>
<td>32</td>
<td>46</td>
</tr>
</tbody>
</table>
Table 4.1.2.2 and Figure 4.1.2.2 are graphical illustration of the age of respondents. From the above data, 11% of respondents are between 18-30 years, 14% of respondents are between 31-40 years, 46% of respondents are between 41-50 years, 20% of respondents are between 51-60 years and 9% of respondents are above 61 years. This implies that very few farmers below 30 years are getting into tea farming. This could be due to the dissatisfaction in production and market output among the small scale tea farmers and also most young people value white collar jobs as opposed to farming.
4.1.2.3 Marital status of respondents

This sought to find out the marital status of respondents

Table 4.1.2.3: Table Showing Marital status of the Respondents

<table>
<thead>
<tr>
<th>Period</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Married</td>
<td>58</td>
<td>83</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author (2017)

Figure 4.1.2.3: Diagram Showing Marital status of the respondents

Table 4.1.2.3 and Figure 4.1.2.3 are graphical illustration of the marital status of respondents. From the above data, 17% of respondents are single while 87% are married. This implies that majority of the tea farmers are married.
4.1.2.4 Highest education level of respondents

This sought to find out the highest level of education of the respondents

Table 4.1.2.4: Table Showing the Highest education level of respondents

<table>
<thead>
<tr>
<th>Period</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary level</td>
<td>22</td>
<td>31</td>
</tr>
<tr>
<td>Secondary level</td>
<td>26</td>
<td>37</td>
</tr>
<tr>
<td>Diploma level</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>University level and above</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Author (2017)

Figure 4.1.2.4: Diagram Showing the Highest education level of respondents

Source: Author (2017)

Table 4.1.2.4 and Figure 4.1.2.4 are graphical illustration of the highest education level of respondents. As per the data above 31% of respondents were of primary school level,
37% were of secondary school level, 26% were of diploma level and 6% were of university level and above. This analysis implies that most of the small scale tea farmers are secondary and primary school leavers who are not able to further their education, probably due to the low income from the tea proceeds sales.

4.2 Descriptive Statistics

This section presents the descriptive results on marketing, production cost, climate change, and government regulatory policies.

4.2.1 Marketing Strategies

This sought to find out the extent to which the respondents agree that marketing strategies affects them as tea farmers

Table 4.2.1: Table Showing Extent to which marketing strategies affects rukuriri small scale tea farmers

<table>
<thead>
<tr>
<th>Extent</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td>62</td>
<td>89</td>
</tr>
<tr>
<td>Great extent</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Low extent</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Author (2017)

Figure 4.2.1: Diagram Showing Extent to which marketing strategies affects rukuriri small scale tea farmers
The respondents were asked to indicate the extent to which they agree that marketing strategies affect them as tea farmers. The results in table 4.2.1 and figure 4.2.1 shows that 89% of the respondents indicated that, to very great extent does marketing strategies affect them as tea farmers, 8% of the respondents indicated that, to great extent does marketing strategies affect them as tea farmers, 3% of the respondents indicated that, to moderate extent does marketing affect them as tea farmers and 0% of the respondents indicated that, to low extent does marketing strategies affect them as tea farmers.

4.2.2 Production Cost

This sought to find out the level to which the respondents agree that production cost affects them as tea farmers.

Table 4.2.2: Table Showing Level to which production cost affects rukuriri small scale tea farmers

<table>
<thead>
<tr>
<th>Level</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Great extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low extent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>61</td>
<td>87</td>
</tr>
<tr>
<td>---------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Agree</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Neutral</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>70</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author (2017)

**Figure 4.2.2: Diagram Showing Level to which production cost affects rukuriri small scale tea farmers**

The respondents were asked to indicate the level to which they agree that production cost affects them as tea farmers. The results in table 4.2.2 and figure 4.2.2 shows that 87% of the respondents strongly agree that production cost affect them as tea farmers, 12% of the respondents agree that production cost affect them as tea farmers, 1% of the respondents agree that production cost affect them as tea farmers, 1% of the
respondents are neutral that production cost affect them as tea farmers and 0% of the respondents disagree that production cost affect them as tea farmers.

4.2.3 Climate Change

This sought to find out the extent to which the respondents agree that climate change affects them as tea farmers

**Table 4.2.3: Table Showing Extent to which climate change affects rukuriri small scale tea farmers**

<table>
<thead>
<tr>
<th>Extent</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td>68</td>
<td>98</td>
</tr>
<tr>
<td>Great extent</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Low extent</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Author (2017)

**Figure 4.2.3: Diagram Showing Effect to which climate change affects rukuriri small scale tea farmers**
The respondents were asked to indicate the extent to which they agree that climate change affects them as tea farmers. The results in table 4.2.3 and figure 4.2.3 shows that 98% of the respondents indicated that, to very great extent does climate change affect them as tea farmers, 1% of the respondents indicated that, to great extent does climate change affect them as tea farmers, 1% of the respondents indicated that, to moderate extent does climate change affect them as tea farmers and 0% of the respondents indicated that, to low extent does climate change affect them as tea farmers.

4.2.4 Government Regulatory Policies

This sought to find out the extent to which the respondents agree that government regulatory policies affects them as tea farmers

Table 4.2.4: Table Showing Extent to which Government regulatory policies affects tea farmers

<table>
<thead>
<tr>
<th>Level</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>
The respondents were asked to indicate the extent to which they agree that government regulatory policies affects them as tea farmers. The results in table 4.2.4 and figure 4.2.4 shows that 7% of the respondents indicated that government regulatory policies are excellent, 17% of the respondents indicated that government regulatory policies are good,
64% of the respondents indicated that government regulatory policies are average and 12% of the respondents indicated that government regulatory policies are poor.

4.2.5 Challenges facing small scale tea farmers

This sought to find out the challenges facing rukuriri small scale tea farmers

Table 4.2.5: Table Showing Challenges facing rukuriri small scale tea farmers

<table>
<thead>
<tr>
<th>Level</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Strategies</td>
<td>25</td>
<td>36</td>
</tr>
<tr>
<td>Production Cost</td>
<td>22</td>
<td>31</td>
</tr>
<tr>
<td>Climate Change</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>Government Regulatory Policies</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Author (2017)

Figure 4.2.5: Diagram Showing Challenges facing rukuriri small scale tea farmers

Source: Author (2017)
The results in table 4.2.5 and figure 4.2.5 indicated that marketing strategies, as a challenge facing rukuriri small scale tea farmers was at 36%, production cost, as a challenge facing rukuriri small scale tea farmers was at 31%, climate change, as a challenge facing rukuriri small scale tea farmers was at 21%, and Government regulatory policies as a challenge facing rukuriri small scale tea farmers was at 12%.

From this data, it can be concluded that marketing is the biggest challenge facing small scale tea farmers. If market is available and prices for the tea is high, the high returns in terms of sales will be able to cater for costs of production.

In terms of climate change, if kilograms reduce but price per kilogram is high, the revenue for the farmer will still be high. Also with high prices, the effect of government regulatory policies will slightly be felt.

4.3 Limitations of the Study

4.3.1 Bureaucracy procedures

All company policies and procedures had to be followed and in some instances it took a longer period than planned

4.3.2 Confidentiality

Some respondents felt that the information requested by the researcher was too confidential to reveal despite the assurance by the researcher.

4.3.3 Illiteracy of some respondents.

Some respondents had challenges in responding to questions and also filling in the questionnaire considering that most of them had an education level of secondary and primary education
4.3.4 Lack of cooperation

Some respondents failed to respond to the questionnaires and therefore the selected sample size might not be achieved.

4.3.5 Geographical spread of the respondents

The entire catchment is wide and thus the researcher has to cover a wider area. Also challenges in transport since the areas mode of transport are motorcycles.

4.4 Chapter Summary

This chapter has covered the presentation of research findings in terms of response rate and response demographics. It has also covered the effects of marketing strategies, production cost, climate change and government regulatory policies.
CHAPTER FIVE
SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

5.0 Introduction

This chapter addresses the summary of the major findings as regards to the main objectives of the study. It then proposed the study recommendations and conclusions.

5.1 Summary of Findings

This section provides a summary of the findings from the analysis. This is done in line with the objectives of the study. The study was to investigate the challenges facing small scale tea farmers in Kenya.

5.1.1 Marketing

The first objective of the study was to determine the marketing as a challenge facing small scale tea farmers.

From the data, results shows that 89% of the respondents indicated that, to very great extent does marketing affect them as tea farmers, 8% of the respondents indicated that, to great extent does marketing affect them as tea farmers, 3% of the respondents indicated that, to moderate extent does marketing affect them as tea farmers and 0% of the respondents indicated that, to low extent does marketing affect them as tea farmers. Thus it emerged that majority of respondents at 89% agree that marketing greatly affects the challenges facing small scale tea farmers.

5.1.2 Production Cost

The second objective of the study was to determine the effect of production cost on challenges facing small scale tea farmers. From the data, results shows that 87% of the respondents strongly agree that production cost affect them as tea farmers, 12% of the
respondents agree that production cost affect them as tea farmers, 1% of the respondents are neutral that production cost affect them as tea farmers and 0% of the respondents disagree that production cost affect them as tea farmers. Thus it emerged that majority of respondents at 87% strongly agreed that cost of production greatly affects the challenges facing small scale tea farmers.

5.1.3 Climate Change

The third objective of the study was to determine the effect of climate change on challenges facing small scale tea farmers. From the data, results shows that 98% of the respondents indicated that, to very great extent does climate change affect them as tea farmers, 1% of the respondents indicated that, to great extent does climate change affect them as tea farmers, 1% of the respondents indicated that, to moderate extent does climate change affect them as tea farmers and 0% of the respondents indicated that, to low extent does climate change affect them as tea farmers. Thus it emerged that majority of respondents at 98%, to very great extent agreed that climate change greatly affects the challenges facing small scale tea farmers.

5.1.4 Government regulatory policies

The fourth objective of the study was to determine the effect of government regulatory policies on challenges facing small scale tea farmers.

From the data, results shows that 7% of the respondents indicated that government regulatory policies are excellent, 17% of the respondents indicated that government regulatory policies are good, 64% of the respondents indicated that government regulatory policies are average and 12% of the respondents indicated that government regulatory policies are poor.
Thus it emerged that very few respondents at 7% believed that government regulatory policies are excellent, thus they are a major contributor and greatly affects the challenges facing small scale tea farmers.

5.1.5 Challenges facing small scale tea farmers in Kenya

It was revealed that among the overall factors that contribute to challenges facing small scale tea farmers, marketing was the greatest contributor at 36% as per the respondents. production cost, as a challenge facing small scale tea farmers was at 31%, climate change, as a challenge facing small scale tea farmers was at 21%, and Government regulatory policies as a challenge facing small scale tea farmers was at 12%.

The least factor was government regulatory policies at 12%. Thus the farmers need to intervene for more marketing avenues from different countries so as to increase revenue from the sales of tea proceeds. With increased income from tea, the lives of the tea farmers will be impacted positively coupled with improved living standards. Children will be in a position to further and complete their studies.

5.2 Recommendations

Based on the findings of the study made, the following recommendations were proposed;

i) New marketing avenues should be looked into. This could be done by properly marketing the product to new international markets as well as enhancing diversification and value addition to maximize market output.

ii) Considering that the production cost has really sky rocketed especially electricity and fuel. The high cost of production, since it is an expense will eventually reduce the revenue from tea sales. Cost saving strategies need to be aggressively addressed in
collaboration with all respective stakeholders and issues of alternative resources critically deliberated on.

iii) From the problems of climate change which are increased temperatures, reduced water content of tea crop, reduced productivity of subsistence crops for tea farmers, changing rainfall patterns and drought, hail storms, frost landslides, Suggestions for recommendations would be increase in forest and other vegetation cover by planting more trees (avoid deforestation), avoid farming nearest to river beds to improve water and soil management, Change of tea clones to plant more drought resistant tea species

iv) The government should also revisit the ways in which it can assist the small scale suppliers through revision and formulation of flexible government regulatory policies on market research. Taxes from the tea crop can be reduced so that the sales can increase and become more attractive from buyers. Also farm inputs to the farmer such as fertilizer can be supplied to tea farmers at subsidized prices

5.3 Conclusion

The study reveals the challenges that face small scale tea farmers in Kenya. From the study these include marketing, production costs, climate change and Government regulatory policies. The study has shown that with proper and desirable marketing, overall effectiveness, efficiency, productivity as well as meeting of the market needs; objectives of the farmers can be achieved. This results in enhanced market output. This has been demonstrated by the results in the way the respondents answered in regard to the different objectives, whereby marketing scored the highest.

The study has also shown that production cost is a factor affecting small scale tea
farmers. If measures can be put in place to reduce or minimize the production cost, then the revenue can be much higher.

The study also revealed climate change as a challenge facing small scale tea farmers. There is therefore a dire need for the agency in liaison with other stakeholders to aggressively explore ways and means of reducing the impact of climate change by planting more trees and more so planting more drought resistant trees, avoiding deforestation, and ensuring water and soil conservation management.

Government regulatory policies also affect small scale tea farmers. With increased government support by way of appropriate policy formulation and implementation would go a long way in enhancing market output for the small scale tea farmers.
REFERENCES


Martins Press Publishers


APPENDICES
APPENDIX I:
LETTER OF INTRODUCTION

Susan W Nyaga
0724045587
Management University of Africa
Embu Branch
5th July 2017

The Factory Unit Manager
Rukuriri Tea Factory
P.O Box 166
Runyenjes
Dear Sir/Madam,

RE: Request for research data on academic research project.
I am a student at the above mentioned institution pursuing a course in Bachelor of Management and leadership and currently doing my research project. In fulfillments of the requirements for the award of the above degree course, I am required to carry out a study and analyze the challenges facing small scale tea farmers from your organization as one of the respondents.
I therefore wish to request for your authority and assistance to interview some small scale tea farmers on issues related to my research topic to collect data through the questionnaires. All information shall be used for academic purposes only and shall not be shared with anyone except the examiners. Also, All information obtained in the course of this research study will be treated with outmost confidentiality.
Your approval shall be highly appreciated

Yours Faithfully

..............................
Susan W. Nyaga
ODL-BML/5/00166/1/2015
APPENDIX II:
RESEARCH STUDY QUESTIONNAIRE

Dear respondent

My name is Susan Nyaga pursuing a bachelor of management and leadership degree. As a requirement I am undertaking a research on challenges facing small scale tea farmers in rukuriri tea factory. I kindly request for your participation in answering the below questions. The information received from you will be used for this research study only. All information gathered will be treated with outmost confidentiality.

The questionnaire is brief and will not take a lot of your time. Kindly answer all questions as honestly and as simply as possible.

Your participation will be highly appreciated.

SECTION A: PERSONAL DATA

1.a) Gender

    Male [   ]

    Female [  ]

b) Kindly indicate your age bracket.

    Between 18-30 years [  ]

    Between 31-40 years [  ]

    Between 41-50 years [  ]

    Between 51-60 years [  ]

    Above 61 years [   ]

c) Marital Status

    Single [   ]
Married [ ]

d) Level of education
Primary level [ ]
Secondary level [ ]
Diploma level [ ]
University level and above [ ]
e) Reasons for being in tea farming
Lack of formal employment [ ]
Family occupation [ ]
Own choice [ ]

SECTION B: MARKETING STRATEGIES

Do you think marketing is a determinant in reaching the final sales of tea produce?
Yes [ ]
No [ ]

If Yes, Do you think the factory management is doing enough to source for as many market avenues as possible
Yes [ ]
No [ ]

Is the price paid by rukuriri tea factory high enough to meet your farm expenses and serve as sufficient income for your livelihood
Yes [ ]
No [ ]
If No, suggest what rukuriri tea factory should do to improve its market opportunities

i) .................................................................................................................................

ii) ....................................................................................................................................

iii) .................................................................................................................................

To what extent do you agree that marketing strategies affects you as a small scale tea farmer

<table>
<thead>
<tr>
<th>Extent</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td></td>
</tr>
<tr>
<td>Great extent</td>
<td></td>
</tr>
<tr>
<td>Moderate extent</td>
<td></td>
</tr>
<tr>
<td>Low extent</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION C: PRODUCTION COST**

Do you think the production cost incurred in processing the final produce is too high?

Yes [ ]

No [ ]

If Yes, what are some of the factors contributing to high production cost?

i) ......................................................................................................................................

ii) ....................................................................................................................................

iii) ....................................................................................................................................

.
What alternative measures needs to be put in place to reduce on the high production costs?

i).................................................................................................................................

ii).................................................................................................................................

iii).................................................................................................................................

To what extent do you agree that production cost affects you as a tea farmer?

<table>
<thead>
<tr>
<th>Level</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

SECTION D: CLIMATE CHANGE

Do you think the climate change have any effect on the output level of tea produced?

Yes [ ]

No [ ]

If Yes, How has the climate change negatively affected the output level?

i).................................................................................................................................

ii).................................................................................................................................

iii).................................................................................................................................

What are some of the factors you feel have contributed towards climate change?

i).................................................................................................................................
State measures that need to be put in place to mitigate or reduce the negative changes in climate change

To what extent do you agree that climate change affects you as a tea farmer?

<table>
<thead>
<tr>
<th>Extent</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very great extent</td>
<td></td>
</tr>
<tr>
<td>Great extent</td>
<td></td>
</tr>
<tr>
<td>Moderate extent</td>
<td></td>
</tr>
<tr>
<td>Low extent</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

SECTION E: GOVERNMENT REGULATORY POLICIES

Do you feel that the government assists you as a small scale tea farmer?

Yes [  ]

No [  ]

If Yes, Are you aware of any government regulatory policies and support services that assist you as a small scale tea farmer?

i)...........................................................................................................

ii)...........................................................................................................
To what extent does the government assist you as a small scale tea farmer in the following areas?

<table>
<thead>
<tr>
<th>Area</th>
<th>Very great extent</th>
<th>Great extent</th>
<th>Moderate</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsidized farm inputs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To what extent do you agree that government regulatory policies affects you as tea farmer?

<table>
<thead>
<tr>
<th>Level</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>
SECTION F: OVERALL CHALLENGES FACING SMALL SCALE TEA FARMERS

What do you think greatly affects the challenges facing small scale tea farmer

<table>
<thead>
<tr>
<th>Level</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Strategies</td>
<td></td>
</tr>
<tr>
<td>Production Costs</td>
<td></td>
</tr>
<tr>
<td>Climate Change</td>
<td></td>
</tr>
<tr>
<td>Government Regulatory Policies</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

Thank you for your cooperation
## APPENDIX IV:
### RESEARCH STUDY WORKPLAN

<table>
<thead>
<tr>
<th>Activity</th>
<th>Week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Proposal Writing</td>
<td>2</td>
</tr>
<tr>
<td>Correction and departmental presentation</td>
<td>3</td>
</tr>
<tr>
<td>Pilot study and data collection</td>
<td>4</td>
</tr>
<tr>
<td>Organization and data analysis</td>
<td>5</td>
</tr>
<tr>
<td>Draft findings</td>
<td>6</td>
</tr>
<tr>
<td>Findings Presentation</td>
<td>7</td>
</tr>
<tr>
<td>Writing draft project</td>
<td>8</td>
</tr>
<tr>
<td>Project presentation</td>
<td></td>
</tr>
<tr>
<td>Project correction and submission</td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX V: BUDGET

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Quantity</th>
<th>Unit cost (Ksh)</th>
<th>Total cost (Ksh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Proposal writing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Looseleaf pads</td>
<td>4</td>
<td>70</td>
<td>280</td>
</tr>
<tr>
<td></td>
<td>Typing</td>
<td></td>
<td></td>
<td>1,200</td>
</tr>
<tr>
<td></td>
<td>Binding</td>
<td></td>
<td></td>
<td>1,500</td>
</tr>
<tr>
<td></td>
<td>Bundles</td>
<td></td>
<td></td>
<td>3,500</td>
</tr>
<tr>
<td></td>
<td>Transport to gather information</td>
<td></td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>2</td>
<td>Pilot Study</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Questionnaires</td>
<td></td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Observation</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Interviews</td>
<td></td>
<td></td>
<td>2,800</td>
</tr>
<tr>
<td>3</td>
<td>Data Collection Procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 questionnaires</td>
<td></td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To and from Embu Mua library</td>
<td></td>
<td>1,800</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To and from farms</td>
<td></td>
<td>3,200</td>
<td></td>
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<tr>
<td></td>
<td>Miscellaneous</td>
<td></td>
<td>2,000</td>
<td></td>
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<td>4</td>
<td>Data analysis</td>
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<tr>
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<td>Computer / Laptop</td>
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<tr>
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<tr>
<td>5</td>
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<td></td>
<td>Binding</td>
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<tr>
<td></td>
<td>CD Burning</td>
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<td>800</td>
<td></td>
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<td></td>
<td>TOTAL</td>
<td></td>
<td></td>
<td>36780</td>
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