PRODUCTION AND MARKETING OF COFFEE IN KENYA: A CASE OF
GIKONDI LOCATION, NYERI COUNTY.

BY

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APRIL 2015
DECLARATION

Declaration by the Candidate

I hereby declare that this project is my original work and has not been submitted to any other university for the award of a degree.

Signature

Charity Njeri

Reg: C153/PT/CTY/27199/2011

This project has been submitted with my approval as the University Supervisor,

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1st supervisor

Signature

2nd Supervisor,

Mr. Weldon Ng’eno.

Signature

Department of Public Policy & Administration of Kenyatta University.
DEDICATION

This research project is dedicated to late my father, Mr. David Kimathi Waigera, a solid rock in my life and a renowned coffee farmer and leader in Nyeri County. Your valuable insights as a father and a mentor live on long after you are gone. Because of you, I will go the distance.
I am grateful to God for the support and advice accorded to me in the course of my studies by the entire faculty of Public Policy and Administration. I specifically want to acknowledge Dr. Felix Kiruthu and Mr. Weldon Ngeno who were my supervisors for the key role they have played in shaping my work and guiding me in every step of this project, my sincere gratitude to you.

Finally, I salute my family, friends, librarians and many others for the invaluable assistance they have extended to me in support of this project, God bless you.
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<td>Department For International Development</td>
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<td>International Coffee Organization.</td>
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<td>Kenya Farmers Association.</td>
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<td>International Coffee Agreement.</td>
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<td>SLF</td>
<td>Sustainable Livelihoods Framework.</td>
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<td>KPCU</td>
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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Coffee is a leading foreign exchange earners in the world with Brazil, Vietnam, Colombia and Indonesia being leading producers. Coffee has provided many countries' national governments with workable ingredients for developing agricultural export economies (Baffes, 2004). Capital generated by coffee exports has allowed already established local economic interests to accumulate huge fortunes which have in turn seen them gain a foothold in both local and international markets. Today, Coffee continues to generate significant public and private revenues with more than 5.5 million metric tons being produced per year (Rice, 2006). In most of the coffee producing countries, the crop is grown by small holders on acreages of less than 5 acres. It therefore significantly impacts on the livelihoods of a large number of the population in the coffee producing countries. Coffee as a cash crop has enjoyed popularity in East Africa as well as across the continent for many years being grown by diverse countries. In Africa, the leading producers of coffee are Ethiopia, Uganda, Ivory Coast, Tanzania and Kenya.

In Kenya, the target country of the study, Coffee had for a long time been the country's leading foreign exchange earner. In 1986 it accounted for 40% of total foreign exchange earnings, but this was to remain the highest earnings thereafter. After that, coffee contribution dropped continuously to stand at only 3% in 2010 (Mwangi & Okibo, 2010). For most of the last decade, the coffee industry in Kenya has been under great stress occasioned by both a decline in prices in the international market as well as falling production at home. According to (Owino, 2000), the major problems facing the
coffee industry have been brought about by structural changes, the decline in the volumes of coffee production and adverse fluctuation in the world prices of primary commodities. Additional challenges include declining soil productivity, mismanagement and reduction in the land acreage available for coffee growing.

These challenges are, however, not unique to Kenya. According to Gowa (2001), Uganda, another major exporter of coffee in Africa, faces similar challenges in the sector such as acute shortages of inputs and soaring inflation, growing domestic and external debts, decaying infrastructure, massive capital flight and declining per capita income among others. These challenges emanate both from within the country as well as from the external environment. Olukoshi, (1991) observes that Structural Adjustment Policies (SAPs) are believed to have contributed to crises which have manifested themselves not only in terms of rapidly declining output and productivity in the industrial and agricultural sectors but also in terms of worsening payments and budget deficits. Specifically, SAPs had a devastating effect on coffee production in Kenya because they affected its cost of production by removal of agricultural subsidies, making it too expensive for farmers to produce. As a result, farmers could not afford input and, therefore, the actual tonnage produced plummeted.

Structural Adjustment Policies were introduced in Kenya in 1980/1981 as policy tools for economic management. The adoption of SAPs was aimed at restoring efficiency in all sectors of the economy and consequently raising the rate of economic growth. This was in response to economic challenges that came to the fore in the 1970s and which were complicated by the oil crisis. Other challenges facing the economy then included the fluctuating prices of the country’s major exports, low levels of technology, drought and famine, high population growth, the collapse of the East African Community, high
urbanization rates, increasing debt, land fragmentation and widespread poverty among others (Rono, 2002).

In Kenya however, SAPs failed to generate the expected conditions for sustainable recovery. A number of economic sectors, agriculture included, continued performing dismally in the face of removal of price controls, lack of agricultural subsidies and attendant economic mismanagement. This poor performance was also recorded in coffee growing. Beginning the 1990s, the government liberalized the coffee sector as part of SAPs in the hope that this would generate increased production and lend the sector to better management. However, more than two decades later, coffee production remains depressed and the industry mired in disillusionment and retrogression.

Coffee production in Kenya is done at two levels; large scale plantation agriculture accounting for 35% and small scale holdings, accounting for about 65% of the output (Karanja & Nyoro, 2002). The small scale farmers are organized into cooperatives for ease of marketing. However, cooperatives have been bedeviled by mismanagement and politics, leading to further decline in coffee output.

In Gikondi location of Nyeri County, the site of the current study, coffee remained the sole cash crop and livelihood source for the rural population for much of the post independent years. When the coffee crises set in the 1980s, farmers were adversely impacted, leading to falling standards of living, increasing poverty levels and attendant socio-economic challenges. This rural population, like others in Kenya has not been able to recover from these shocks and remains extremely vulnerable today. The location has a total population of 18,533 people (Kenya National Bureau of Statistics, 2010). It is made up of five sub–locations being Thimu, Karaba, Kiirungi, Karindi and Muthuthini.
1.2 Statement of the Problem

Decline of the coffee sector is also attributed to poor management (Mbataru, 2003). The vulnerability context that coffee farmers in Gikondi location of Nyeri County find themselves in today is as a result of the coffee shocks and stresses that begun in the 1980. These shocks and stresses are characterized by price fluctuations, declining acreage, mismanagement of marketing channels and declining soil productivity among others. This study sought to establish the nature of these challenges as they have manifested among these farmers and how they have responded to them to restore and enhance their livelihoods. Specifically, the study sought to find out how the challenges in the coffee sector have impacted on production and marketing of coffee. It also sought to establish the coping mechanisms and corrective strategies that farmers have adapted to respond to these challenges.

1.3 Research Questions.

1. What are the production challenges experienced by coffee farmers in Gikondi location?

2. What are the marketing challenges experienced by coffee farmers in Gikondi location?

3. What are the alternatives to coffee farming that farmers in Gikondi location have adapted to earn a livelihood?

1.4 Study Objectives.

This study sought to;
1. Establish production challenges experienced by coffee farmers in Gikondi location.

2. Examine marketing challenges experienced by coffee farmers in Gikondi location.

3. Determine what alternative sources of livelihoods farmers have adopted and therefore providing competition to coffee farming.

1.5 Research Premises

1. Coffee farmers in Gikondi location face challenges in coffee production that are both generalized and context specific; unique to the socio-economic and political realities of the area.

2. Coffee farmers in Gikondi location face challenges in coffee marketing that are both generalized and context specific; unique to the socio-economic and political realities of the area.

3. Coffee farming in Gikondi location faces competition from alternative livelihood sources.

1.6 Significance of the Study

Due to the long running challenges facing the coffee industry and the emergence of new products in agriculture, coffee growing and management does not attract as much interest from the public as it once did. In spite of this neglect, coffee continues to be the source of livelihood to a number of small scale farmers who still rely on its proceeds despite the down turn in fortunes. Therefore, it is important that studies such as these
continue to be undertaken to determine what ails the coffee sector. In Nyeri County, while farmers have in recent years diversified into other cash crops like tea, horticulture and dairy farming, coffee still continues to be the lead cash-crop and the major livelihood source of the majority of the small scale farmers that dominate the population of the County.

Gikondi location is located at the periphery of Nyeri County, bordering Murang’a County. The location does not enjoy as good a road infrastructure as other parts of the county due to its peripheral location. Therefore, the population has not been very quick to benefit from some of the diversification initiatives that have been picked up elsewhere in the County and which require good road infrastructure like dairy farming and horticulture growing. Therefore, coffee still remains the population’s economic mainstay in spite of the challenges. The depressed state of coffee production and attendant low income has led to a rise in social delinquency especially among the youth occasioned by high rates of school dropout and unemployment. This study was therefore crucial as it interrogated these challenges and proposed ways of reviving the sector and restoring the population’s livelihood source.

The study’s finding was aimed at helping the area achieve the millennium’s development goals because once the coffee sector is revived and farmer can access decent income, extreme levels of poverty will be eradicated and children will not only have access to an education, but will also stay in school hence eradicating child labor. Gender equality and women empowerment will be achieved as most farmers in Gikondi division are women and youth, who if gainfully employed, social indicators like health, security and education would go up translating to improved standard of living which would create a conducive environment for and both local and international development.
partnerships which is in line with Kenya’s Vision 2030. This study was of main help to coffee farmers in Gikondi as well as coffee marketing institution as it highlighted challenges and proposed solutions. The study is also of importance to policy makers, especially at the county level as they would come up with relevant specific policies to address these challenges and more so those in the agricultural sector as it grapples with some of the challenges they have been attempting to isolate in the sector.

1.7 Scope and Limitations of the Study.

The study focused on the challenges faced by farmers in the coffee sector in Gikondi location during production and marketing of their produce. It also examined alternatives available to farmers both in terms of agricultural commodities and other activities. The research locale was confined to the area of jurisdiction of Gikondi location, and in its five sub-locations namely Thimu, Karaba, Kiirungi, Karindi and Muthuthi-ini. The study spanned between years 2000 and 2010, examining the challenges the coffee farmers have faced and the competition the sector have faced from other sectors within that time.

Carrying out a research on the challenges facing coffee farmers in Gikondi could have been limited by non-cooperating respondents as a result of lack of trust with the intention of the research. Unwillingness of the respondents to reveal information as it was on the ground which could lead to poor quality of data which could fail to address the study’s objectives. To counteract this, the researcher assured respondents of anonymity and confidentiality of any information given. The researcher further assured the respondents, that the study would be for academic endeavor and for policy formulating purposes and would not be traced back to them. Furthermore, the
respondents were informed of the important role the information availed could play in terms of formulating policies which would in turn help improve the conditions in the coffee sector. Data was also corroborated from various sources to eliminate bias and gaps that could have arose in the course of data collection.
CHAPTER TWO: LITERATURE REVIEW.

2.1 Introduction

In this chapter, the Department For International Development’s (DFID) Sustainable Livelihoods Framework and Social Capital Theory were used to provide a framework for understanding challenges facing coffee farmers and why they make the choices they do in order to deal with these challenges. The chapter also examined literature related to challenges facing coffee farmers in Kenya in order to understand what had already been done in this field and identify gaps which the study sought to fill.

2.2 Theoretical Framework

This study was guided by the Social Capital Theory, as advanced by Pierre Bourdieu and Robert D. Putnam. Social Capital may be defined as those resources inherent in social relations that facilitate collective action. Social capital resources include trust, norms, and networks of association representing any group which gathers consistently for a common purpose. A norm of a culture high in social capital is reciprocity, which encourages bargaining, compromise, and pluralistic politics. Another norm is belief in the equality of citizens, which encourages the formation of cross-cutting groups (Garson, 2006).

As already observed above, Social Capital is a broad concept that encompasses the norms and networks facilitating collective actions for mutual benefits. This broad definition, however, lends itself to various interpretations and usage. At one end of the spectrum is the notion that social relations have the potential to facilitate the accrual of economic or non-economic benefits to the individual. According to Coleman, one of the
leading proponents of the theory, social capital is one of the potential resources which an actor can use alongside other resources like their skills and expertise. However, social capital is not owned by the individual, rather it arises as a resource which is available to them out of interactions with their environment (Coleman, 1988).

Bourdieu (1992) another leading proponent, notes that social capital is the sum of resources, actual or virtual that accrues to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition. Social capital is context specific and takes many forms including obligations within a group, trust, norms sanctions with underlying assumptions that the relationship between individuals is durable and subjectively felt. The relationship themselves form the complex web of interactions and communications. As a result, people belonging to a group are able to volunteer their time and services for the benefit of all participants (Coleman, 1988). Based on this theory, people come together and form groups like marketing institutions for mutual benefits. These institutions for example coffee co-operative societies are expected to serve their needs, both economic and social to the benefit of all members.

Coffee farming has been the economic back bone of farmers in Nyeri County (Mbataru, 2003). This means that it is through coffee proceeds that children could go to school, farmers could access medical help, and business in the area thrives with the proceeds from coffee as capital and with farmers as major market targets. With the introduction of SAPs, coupled with the fall of coffee prices, and the split of the former Mukurwe-ini co-operative society, most farmers in Gikondi have since either abandoned coffee farming or pay scanty attention to the crop as it is no longer profitable. This has led to the decline of the people’s way of life; insecurity in the area has soared, children have
dropped out of school due to lack of school fees, the youths in the area have become disillusioned and have resulted to consumption of cheap illicit brew while others have joined the outlawed Mungiki sect; what was once a booming economy declined as farmers purchasing power was greatly reduced and had limited access to livelihood alternatives. The living standards of what was once a proud and prosperous community has greatly declined leading to high poverty levels.

Bourdieu (1986) states that Social Capital is generated when people come together in groups and networks that are based on reciprocity and from which they can mutually derive benefits. In rural and poor communities such as that of Gikondi and partially because of the sorry state of coffee farming in the area, farmers are organized in groups based on kinship, social interests, economics and other variables to tackle the myriad challenges that they face on a daily basis. Organizing for collective action in these groups leads to improved bargaining power for higher prices, and better treatment from marketing institutions, confidence in the way farmers deal with each other and authorities in the area especially with regards to coffee growing and generally, exchanging information all which lead to empowerment of the farmers.

2.3. Empirical Review

2.3.1 Coffee Production

After independence, the government adopted policies that favored heavy state intervention in the economy. Consequently, parastatals and marketing boards were set up to oversee the production and marketing of most cash crops and other production sectors. These were fully financed and controlled by the government. In the agricultural sector, there were about 41 organizations and they controlled what was
produced, how it was produced and where it was to be marketed. In some cases like in tea and sugar industry, the organizations also set both the consumer and producer prices. Coffee growing and marketing was heavily controlled by cooperatives and the Kenya Planters Cooperative Union (KPCU), a parastatal. This economic model worked for the first one and a half decades but from late 70’s and early 80’s, it was evident that economic growth had not only stagnated but they were indications of a downward trend. However, this problem was not unique to Kenya but a common phenomenon to many young African nations then (Mbataru, 2013).

Olukoshi (1998) notes that as a response to the economic challenges and state directed economy, the Word Bank and the International Monitory Fund (IMF) introduced the Structural Adjustment Programs (SAPS) and ‘recommended’ them to African countries. These programs aimed to liberalize markets and cut back on state intervention in the economy, confining to an enabler rather than a competitor for the private sector. In agriculture and coffee to be precise, immediate effect was felt when all subsidies in chemicals and fertilizers were scrapped. This meant that production cost increased as farmers absolved all the cost. Around the same time, due to politics of the day, trade treaties like the International Coffee Agreement were scrapped. Also, countries like Vietnam and some part of Asia entered the market with massive production. This meant that Kenya was hit by high production costs as well as a flooded coffee market at the time.

Rono (2002) argues that SAPs not only failed to achieve their target, but led to high income inequalities, inflation, unemployment, declining agricultural output and other negative impacts which have lowered living standards, especially those relating to the material resources in the family. Furthermore, SAPs in Kenya have been linked to
increased deviant and crime rates, ethnic hatred and discrimination as well as welfare problems, especially in the areas of education and health. Making a similar case on the negative impact of SAPs in Kenya, Kiriti and Mariara (2002) argue that the policies failed to create the conditions necessary for sustainable recovery in the country. Consequently, poverty increased, and social indicators like life expectancy, child mortality and primary school enrolment showed negative trends in the adjustment period.

The above studies on coffee production are important because not only do they point out that SAPs negatively affected the agricultural sector but they also show how this also negatively impacted on Kenyans socially. They were therefore important to this study as they point out in what ways SAPs affected the sector. However, since none had been done on Gikondi location, the study contributed to a context specific analysis of the impact in the area since it is widely recognized that there were unique and context specific nuances in different coffee growing areas that arose out of the generalized challenges of the sector. These unique responses whether in production, marketing or introducing alternatives were some of the coping survival mechanisms that this study interrogated and subsequently made recommendations for their enhancement (Kiriti & Mariara, 2002).

Over the years, there have been many reforms in the industry aimed at both easing the production cost and fetching better prices for the farmers. These reforms included the government removal of Kenya Planters Co-operative Union (KPCU) monopoly and licensing of private millers. In the Kibaki regime, debts to the tune of six billion owed to the Kenya Farmers Association (KFA) were cancelled. This was meant to induce farmers to better production as the debt weighed heavily on them. The Coffee Act
(2002) was put in place to allow for a coffee development fund accessible to farmers in form of soft loans. Closely tied to that, there were talks of how farmers could have a guaranteed minimum returns per kilo of the cherry delivered. However, due to the complexities of marketing and production, this initiative never saw the light of day. These reforms are just a few of the many that have been proposed, while some are still operational and beneficial to the farmers, majority of good policies lack political goodwill from the government or are frustrated by powerful cartels who benefit from the status quo, (Mbataru, 2013).

2.3.2. Marketing of Coffee.

The last few decades have seen coffee prices experience price volatility due to a convergence of reasons mainly being market liberalization, globalization, end of trade treaties like the International Coffee Agreement (ICA), Climatic and weather changes as well as a shift in market dynamics brought about by cartels formed by coffee roasters and other market stakeholders (Pirotte, Pleyers & Poncelet, 2006). This price volatility is mostly felt among peasant farmers who form the bulk of coffee producers and are mostly found in Central America, Africa and Asia. Kenya, Uganda and Tanzania are East African countries where coffee fetches a substantial amount of foreign exchange, share similar policies on coffee and were affected and responded to coffee crisis in the early 90’s in almost similar ways which included diversification of alternative cash crops, reduction in production volume and policy reforms in the sector, (ibid).

In Kenya, small-scale farmers contribute about 65-70 % of total coffee produced, while plantations contribute about 25%. Apart from marketing, plantations largely operate outside the Coffee Act mostly to their advantage. Small-scale farmers are by law
required to belong to a co-operative society, marketing institutions, which supervises production process and market the produce. The impact, reaction and eventual readjustment of the big planters after the crisis were noted to be different from small scale growers. While big producers like Sasini diversified vertically by branding their coffee and growing coffee variants like Ruiru 11 which require less inputs and chemicals, most small scale farmers became increasingly frustrated as they could no longer meet the cost of production (Mugambi, 2006).

Co-operative societies are the major channel that markets coffee from small scale farmers in Kenya. The co-operative movement is governed and controlled by the government and for a long time, it has been the only channel through which small-scale farmers could market their produce. While the cooperative movement is the bedrock of small scale coffee farmers in Kenya, it is also an arena of challenges that impede the development of the coffee sector in the country. According to Institute of Economic Affairs (ICA, 2000), the cooperative societies in Kenya face a number of challenges ranging from unprofessional management, political interference and exposure to uncontrollable external shocks including low and unpredictable coffee prices. As a result, many members have become disillusioned with their management with a number of farmers opting to hawk coffee or all together abandon its growing. To restore faith in the sector, the societies should serve farmers with credit, inputs, training and funds for coffee rehabilitation. Additionally, they should be democratically and professionally run.

International Coffee Organization (ICO, 2010) notes that coffee market often displays price volatility which is deeply felt by the suppliers or the producers but the same is not conveyed to the consumer as their prices remain relatively the same. ICO further notes
that between years 1990 and 2008, due to over production, coffee bean prices on the
future market fell by 57 percent while retail prices in the same period dropped only by
10%. The reason behind this is noted as a marketing strategy devised by roasters and
other middlemen to cushion retailers from constant price volatility and also enhance the
said cartels to maximize optimally from any over-production experienced. While
growers are languishing in poverty, roasters and international coffee industries dealing
in canned coffee are reaping record profits as they take advantage of the low prices and
technology. According to Rice (2003), modern manufacturing technology has now
allowed the roasters to substitute ‘Arabica’ a premium quality blend with ‘Robusta’ a
blend known to be of lower quality and attain the same premium taste. This leaves them
enjoying abnormally high profits at the expense of the producer.

2.3.3 Coffee’s Competition.

Due to the continued disappointment of coffee farming, farmers in Nyeri County and
the wider central region have diversified production to crops and activities that were
previously used for subsistence consumption. In some parts of Meru County, which
neighbors Nyeri County, coffee bushes were cleared and used to burn charcoal. While
this was not common in many parts of Kenya and can be termed as extreme, cases of
coffee bushes being used to tether livestock are common. In Nyeri County, after
coffee’s performance went down, farmers from areas that tea could grow immediately
switched to growing tea. However, their relief was short lived as the tea industry was
soon in crisis of its own. Dairy farming is one of the biggest and most promising
competitor to coffee farming as almost the whole of Nyeri County is conducive for
dairy farming. Furthermore, farmers can access continuous and timely payments as well
as credit facilities from the diary organizations Mbataru (2013).
Closely tied to dairy farming, is poultry farming, farmers in Nyeri and especially Mukurweini division have switched to poultry rearing for commercial purposes. Horticulture farming has also become popular in the region due to a conducive climate and soils and a ready market. Genetically modified green bananas have also been introduced in the county though farmers have not fully embraced their production due to fears that they are not safe for consumption. Though these activities are currently helping the farmers cope with the hard economic times, they have not been developed to a scale where coffee growing had reached. Therefore, they have not been able to cushion farmers from the negative impact of the fall of the coffee sector, especially in Nyeri (Njuguna, 2012).

According to Mbataru (2013), unless a new major crop is introduced in the area, efforts in diversification will most likely be at individual level and based on quick diffusion of innovations. Since small-scale farmers lack the resources and marketing expertise to navigate in new markets with alternative crops, diversification will be dominated by established actors. As a result, small scale farmers will continue to languish in poverty unless the coffee sector is revived and revamped.

2.4 Summary & Gaps in Literature Review

The studies in the reforms of coffee production are important because they provide insights into responses to the challenges. However, this study interrogated how the farmers of Gikondi Location specifically interacted with these reforms and what so far have been their impacts on the farmers' livelihood strategies. Studies dealing with the impact of coffee marketing on farmers are important because they highlight the challenges emanating from cooperatives, price fluctuations in the international markets, the negative role of coffee cartels as well as technology negatively impacting on price.
They however had not discussed these challenges from the farmers’ perspective but from a co-operative point of view, this study have discussed these marketing challenges among others as experienced by the farmers from their perspective. The study has also discussed how farmers have utilized their capitals and assets to cope with these vulnerabilities and strengthen their livelihoods from coffee, a gap that has been addressed by this study. Studies focusing on competition that the coffee industry is facing in Nyeri make the point that while there is increasing diversification among small scale farmers, the new sectors have not been able to restore them (farmers) to where they were in the golden age of coffee. Therefore, people still recognize that coffee still has a major role to play towards sustainable livelihoods and therefore the need to rehabilitate the sector. This recognition made this study extremely relevant. A challenge with the works on diversification and competition is that they do not interrogate the linkages between them and the coffee sector as a way of supporting both sectors, an issue this study interrogated.
2.5 Conceptual Framework.

DFID Sustainable Livelihoods Framework (SLF)

![Conceptual Framework Diagram]


Key

H = Human Capital
N = Natural Capital
F = Financial Capital
S = Social Capital
P = Physical Capital

Figure 1. Conceptual Framework.

The SLF seeks to understand how people operate within a vulnerability context that is shaped by different factors like shifting seasonal constraints and opportunities, economic shocks and longer term trends. Within the context of vulnerability, people draw on different types of livelihood capitals (assets) like social, human, natural, financial or physical capital depending on what is at their disposal. The choice of the livelihood capital is influenced by the vulnerability context, a range of institutions and
processes and how they use their asset base to develop a range of livelihood strategies to achieve desired livelihood outcomes (De Stage et al., 2002).

The utility of the SLF to this study was in its recognition of the vulnerabilities suffered by poor people like the farmers of Gikondi. These vulnerabilities include stresses like drought, poor pricing policies and fluctuating markets. Within this vulnerability context, the farmers rely on a range of assets like skills, knowledge, health for productive labor, access to credit and financial resources, arable land, physical infrastructure and production equipment which are accessible to the farmers to varying degrees. Of the many capitals the framework identifies, it recognizes that social capital can assist smallholder farmers to access and strengthen all the other capitals. A livelihood, the framework concludes, is strengthened when it can cope with and recover from stresses and shocks while maintaining and enhancing its assets and capabilities.

As a livelihood, the study through this framework interrogated how the coffee farmers in the face of the vulnerabilities of coffee prices fluctuations, unfavorable weather, rising production cost which threatened production, and other challenges had drawn on the different assets at their disposal to recover and cope with these stresses. The study especially interrogated how the farmers had employed or not employed social capital to collectively address their challenges in a bid to strengthen and enhance their livelihoods as further discussed above.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter addressed the research methodology. The research design, determination of the target population and the sample size, data instruments that were used and the data analysis methodologies were discussed herein.

3.2 Research Design

The study employed a descriptive research design which was ideal for a case study as it allowed the researcher several angles to the information, as well as focus on discovering and understanding the experiences, perspectives and thoughts of people concerned. Critical cases study in this case was used to make a logical generalization with regard to farmers, management’s and other stakeholder’s perspectives of challenges facing coffee sector post the demise of the giant co-operative societies.

3.3 Site of study

The research was conducted in the five sub-locations of Gikondi location, Nyeri County. The five sub-locations are Thimu, Karaba, Kiirungi, Karindi and Muthuthiini. The location has a total population of 18,533 people (Kenya National Bureau of Statistics, 2010). It is located in the periphery of Nyeri County, bordering Murang’a County. The road infrastructure is poor compared to other parts of the county with no major roads passing through the location. It is however a fertile area with deep red volcanic soils and adequate rainfall that can support the growing of diversified crops.
The major livelihood source is agriculture; (coffee and food crops growing) and dairy farming.

3.4 Target Population

The population of a study can be defined as a complete set of individuals, cases or objects with some common observable characteristic (Mugenda & Mugenda 2003). While the primary targets of the research were farmers in the location, the study zeroed down and sampled those who had at least two acres of land under coffee cultivation. This is because these were the farmers who were more likely to invest substantially in coffee growing, thus taking a keen interest in the crop as a source of livelihood. These farmers number about 900 hundred in the location.

<table>
<thead>
<tr>
<th>Sub-location</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thimu</td>
<td>180</td>
<td>20</td>
</tr>
<tr>
<td>Muthuthi-ini</td>
<td>180</td>
<td>20</td>
</tr>
<tr>
<td>Karindi</td>
<td>180</td>
<td>20</td>
</tr>
<tr>
<td>Kiirungi</td>
<td>180</td>
<td>20</td>
</tr>
<tr>
<td>Karaba</td>
<td>180</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>900</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 1. Target Population Table.
3.5 Sample Size

<table>
<thead>
<tr>
<th>Sub-location</th>
<th>Frequency</th>
<th>Sample ratio</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thimu</td>
<td>180</td>
<td>0.1</td>
<td>18</td>
</tr>
<tr>
<td>Muthuthi-ini</td>
<td>180</td>
<td>0.1</td>
<td>18</td>
</tr>
<tr>
<td>Karindi</td>
<td>180</td>
<td>0.1</td>
<td>18</td>
</tr>
<tr>
<td>Kiirungi</td>
<td>180</td>
<td>0.1</td>
<td>18</td>
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<tr>
<td>Karaba</td>
<td>180</td>
<td>0.1</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>900</strong></td>
<td></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

Table 2. Sample Size Table

A sample consists of a small number of population collected from the target population. The sample chosen has to be accessible and must be large enough to represent the characteristics. A representative sample size is scientifically taken to be at least 10 per cent of the population (Mugenda and Mugenda, 2003). Therefore, the sample size for the study was 10 per cent of the 900 farmers with at least two acres of land under coffee. The sample size of 90 was distributed equally among the five sub-locations. Therefore, there were 18 respondent farmers per sub-location. These were identified using purposive and snowball sampling.
3.6 Research Instruments

The study employed guided questionnaires with a mix of both open and closed ended questions. They were orally administered by a group of research assistants who had been trained on data collection and under the supervision of the researcher. While closed ended questions would be important for reliability of the questions across different respondents, open ended questions will seek to probe further various issues in the questionnaire.

3.7 Data Collection procedures and methods

With regards to the procedure for data collection, the principle researcher obtained an authorization letter from Kenyatta University registrar’s office allowing research to be conducted in the designated area of research. This letter was presented to the area chief who in turn informed the sub-chiefs of the sub-locations of the interviews undertaking as well as intentions and modalities of the research. Once proper introductions to the authorities had been made and permission to conduct the research had been granted, data collection commenced. However, in the period before research commences, an exercise to identify and train research assistants who were to help out during the research was carried out.

Primary data formed the backbone of this research. As explained elsewhere, it was collected from 18 farmers in each of the five sub-locations who had been identified as having at least two acres of land under coffee cultivation. Once identified, the respondents were approached by the interviewer who introduced themselves and the research, and assured them of confidentiality should they chose to take part in the
research. Once he/she had consented, the interview proceeded in a relatively private place. The interview took no more than one hour.

Secondary data which complemented the primary data was derived from sources like books, journals, both print and electronic, monographs, newspapers and publications from scholars in this field. These materials were obtained from Kenyatta University’s Post Modern library.

3.8 Data Analysis

Data from collected from the field was organized and compared with data from other sources in the same field to check on consistency and reliability and finally analyzed in to charts and graphs. Further, data collected was subjected to content analysis to establish major and common themes and issues emerging. Some of the major categories included challenges facing farmers during coffee production, marketing and issues of competition of the sector from other livelihood sources. Once the categories and themes had been established from the data, the organized data was then subjected to data triangulation, then descriptive and interpretive analysis and then writing of the project commenced.
CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter represents data collected and analyzed for the study. The data collection and analysis is aligned to the study objectives and falls within the broad categorizations of coffee production, marketing and its competition from alternative livelihoods in the study area. The analysis is guided by the Social Capital Theory and Sustainable Livelihood framework.

4.2 Response Rate

Mugenda and Mugenda (2003) argue that a response rate of 65% is good enough and the results are validated. This position is also supported by Holbrook, Krosnick & Pfent (2007) who observe that a survey whose response rate is lower than 50% cannot be considered accurate. The sample size of this study was 90 respondents who were fairly equally distributed among the five sub-locations of Gikondi location. A response rate of 100% was achieved in this study as purposive and snowballing sampling methods were used and farmers were willing to offer information upon being approached.

4.3 Characteristics of Respondents

4.3.1 Respondents' Gender

Out of the 90 farmers – all registered as shareholders with the local marketing institutions - who were our respondents, 72 were men (80%) while only 18 were women (20%). These findings support the popular notion that while women and children provide the bulk of agricultural labor, men are still the owners of the means of
production, including land, and, therefore, largely control how the proceeds from coffee are utilized.

**Table 3: Respondents Gender**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Male</td>
<td>72</td>
<td>80</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source: Research Data (2014)**

### 4.3.2. Respondents Age

The study’s respondents were mainly between 46-60 years of age represented by 39% as illustrated in the diagram below. These findings are consistent with earlier findings (Chege, 2010) asserting that coffee farmers are generally ageing as the youth have shunned the practice and mostly either moved to urban areas in search of better prospects and opportunities or taken to other income generating practices in the rural areas and which are acting as livelihood competitors to coffee growing.
4.3.3 Respondents' Marital Status

The pie chart below shows the marital status of the respondents. 72% percent of the people interviewed were married, 20% were widowed while 8% were single and mostly women who were above 45 years of age.
4.3.4 Respondents’ Family Size

The figure below illustrates family sizes of the respondents. As illustrated, majority of families (51%) had 3 to 5 children. Families with less than five children were 49% which who belonged mostly to young farmers below 45 years of age. This is a common phenomenon observed throughout the country where families with parents under 45 years are much smaller compared to their counterparts of over 60 years (Nyachomba, 2012).
4.3.5. Respondents' Education Levels

As illustrated in the diagram below, 61% of the respondents had attained post primary education with 11% of them having a university degree. 17% of the respondents had received college training in different careers, especially teaching. Among the sampled population, there were no cases of illiterate farmers. All had basic literacy skills, having at least primary school level education.

![Figure 4: Respondents' Education Level](image)

Source: Research Data (2014)

4.3.6. Duration of Coffee Farming in Years

The study found out that 53% of the respondents have been farming coffee for more than 20 years as illustrated in the diagram below. Only 7% of respondents, most of who
were below age of 30 years, indicated that they had been in the business for less than 5 years. This is illustrated in the figure below.

![Experience in Coffee Farming](image)

**Figure 5: Experience in Coffee Farming.**

*Source: Research Data (2014)*

### 4.4. Challenges Experienced by Coffee Farmers

Challenges experienced by coffee farmers are discussed here below and guided by the study objectives. They have been categorized into production and marketing challenges as well as those emanating from competition from other livelihood alternatives to coffee.

#### 4.4.1. Challenges Experienced During Coffee Production

The study sought to establish the major challenges faced by coffee farmers during coffee production. Farmer cited a number of these challenges which were both internal; emanating from their own environment as well as external, attributable to issues that
were beyond their control. Some of these challenges included land fragmentation (13%), low soil productivity (14%), high cost of farm inputs and lack of credit facilities (28%), expensive labor (8%) especially during coffee picking period and climate related challenges (15%). The figure below shows the rankings of these challenges as ranked by farmers.

![Production Challenges](image)

**Figure 6 Challenges related to coffee production**

**Source:** Research Data (2014)

With regard to the high cost of inputs, farmers (28%) felt that with liberalization and the cessation of subsidies, most inputs like fertilizers and pesticides kept skyrocketing and were out of reach for most farmers. As a result, they were forced to either do without them or improvise cheaper alternatives. One farmer narrated to the researcher how he mixed a variety of wild plants and fermented them for a couple of days to be used as pesticide. In place of fertilizer, farmers relied completely on compost and farmyard manure instead of using all three combined as before. The net effect was poor yields, in
both quantity and quality, leading to reduced income in the already troubled coffee sector. This in turn produces a vicious cycle as there are credit facilities for fertilizer and pesticides which are sometimes extended to farmers by the marketing cooperatives but based on the output of the previous crop. Low yields have, therefore, meant that farmers cannot access these credit facilities, even if they wanted to.

Complicating the problem of high cost of inputs is land fragmentation. In Nyeri, the average land acreage was 1.5 ha in 2008 and continued to be subdivided by the day (Mbataru, 2008). Further, the population density of the County is 208 persons per Km² compared to the national average of 78 persons per Km² (World Bank, 20II). This means that the area is highly densely populated. The high rate of land fragmentation has forced farmers to shift to other crops and activities that require less land like poultry and rabbit keeping as opposed to growing coffee.

Even with reduced land available for coffee farming, coffee farmers (22%) have not sufficiently embraced high yielding varieties that can be grown on smaller pieces of land but produce higher yields. Farmers in Gikondi continue to plant the traditional varieties of Scot Laboratory (SL) 28 and SL 34 which were introduced before independence (Mureithi, 2008). These varieties are not particularly high yielding and require a lot of land. Furthermore, they are not resistant to coffee berry disease, leaf rust, mealy bug and other pests and diseases. These varieties are also not drought resistant and whenever there is prolonged drought, the yields are very poor and some plants dry up from the roots. While a relatively new breed, Ruiru 11, was introduced in Gikondi in the late 1980s, farmers have not fully embraced the variety. The farmers interviewed observed that while the breed was resistant to coffee berry disease and leaf rust, it was inferior to both SL 28 and SL 34 resulting in lower prices in the coffee
market. Furthermore, its cherries are not as heavy as those of the other two varieties and weigh less compared to a similar amount of the latter. Ruiru 11 is also vulnerable to drought and dries up much faster than the other two varieties. As a result, most farmers were reluctant to plant this improved variety.

High cost of labor is another challenge facing coffee growing in Gikondi (8%). Coffee is a labor intensive crop, especially around the harvesting season between October and December. Due to rural urban migration especially among the youth, excessive alcohol intake by men and the low birth rates in the area, labor has become scarce and, therefore, very expensive. The average wages paid to a laborer per half day; 8.00-1.00 PM is Ksh250. During the peak harvesting period, coffee can be picked as many as three days in a week with the number of laborers depending on how much coffee is ripe. These dynamics have made picking coffee a very expensive exercise. As a result, farmers who do not have family labor may prefer to let the red cherries dry up on the trees and sell them as inferior mbuni variety. As Mr. Kinyua, an old coffee farmer who has been in the business for more than 20 years observed;

"Tending many coffee bushes is proving to be a challenge as labor is no longer forthcoming. The young generation only wants to live in cities and want nothing to do with hard manual labor and the ones left behind are too lazy to work and all they do is drown in alcohol all day long. We are already old and manual labor is beyond us now". (O.I. Mr. Kinyua Nduati, 17\textsuperscript{th} September 2014)

Changing and shifting Climatic and weather patterns have also had an adverse effect on coffee growing (15%). In recent years, it has become increasingly difficult to forecast weather patterns. Sometimes, short rains that facilitate the flowering season in February
are either late or absent altogether meaning that coffee does not flower properly. Sometimes, the cold season and rains may extend up to September leading to cherries being affected by blight. Also, the increasingly cold season around July/August in recent years has created a ripe environment for pests and diseases to thrive. Against a background of inability to afford pesticides, unfavorable weather patterns have colluded with pest and disease challenges to further downgrade coffee yields.

Other challenges cited by the farmers included poor grasp of current coffee production processes, lack of advice from agricultural extension officers and inability of farmers to take and act on advice concerning production.

4.4.2. Marketing Challenges

The Coffee sector in Kenya is characterized by a co-operative system of production, processing, milling, marketing and auction. These cooperatives federate small holders’ produce nearly 70 per cent of Kenyan coffee (European Commission, 2013). Coffee produce from small-scale farmers by law has always been marketed through co-operative societies. These laws have existed from independence until recently when the Coffee Act 2002 was introduced. While this has been the practice in Kenya, farmers generally and specifically in Gikondi, have expressed their displeasure at the way cooperatives are managed. This suspicion has been confirmed as 44% of the respondents quoted displeasure with the leadership of coffee marketing channels which by law are co-operative societies.

Asked about the challenges they faced in coffee marketing, farmers generally grouped their challenges into four broad categories being leadership, financial management,
political interference, coffee hawking and theft related challenges. The following figure shows how farmers weighted these challenges.

Figure 7. Challenges related to coffee marketing

Source: Research Data (2014)

Leadership was rated highest at 44% by farmers who complained that their leaders lacked transparency and accountability with regards to handling of coffee. They also complained that the leaders were corrupt and hardly listened to the views of the farmers in management. Often times, these leaders, especially the Chairperson would rig himself into office if he was an incumbent or would collude with political leadership in the area or a section of the farmers to be installed into the office. Asked why farmers colluded with inept leadership, one farmer named Wangai who has been farming coffee for about ten years confessed the benefits he gets from the collusion:
“Office holders ask us to mobilize people to vote and pass particular agenda during farmers meetings and in return we get free farm inputs and sometimes cash depending on what they are offering.” (O.I. Mr. Wangai Gaitho, 19th September 2014)

Once in office, he does the bidding of his ‘political godfathers’ or the few influential farmers that installed him in office. As a result, farmers had become disillusioned with the regular cooperative elections and many boycotted them.

According to Wangai, the leaders then often colluded with unscrupulous coffee millers and marketers to fleece farmers off their coffee proceeds. Farmers said leaders would also market the produce through their preferred millers even if they did not offer competitive prices because they suspected the leaders were given bribes in form of cash and farm inputs. Other times, the leaders at the factory level would conspire to steal money through bloated overheads and sitting allowances. In the 2012/2013 budget, farmers observed that the management of Ruthaka Cooperative Society, the local marketing channel and co-operative, had allocated themselves Ksh20 million as sitting allowance, an excessive amount given that coffee payments were very low during that period with a kilo going for as low as Ksh10.

Another leadership related challenge as noted by respondents was lack of information and exposure to make informed decisions among management. While the law clearly stipulates that elected leadership, more so those holding crucial positions must be sufficiently literate, most farmers complained that a majority of the leadership had very basic education, most of them primary school drop outs. They were, therefore, not in a position to understand and engage with the complex processes and procedures that entail coffee marketing. As a result, millers and dealers would often take advantage of
the illiteracy and lower the grade of the coffee which would then fetch a lower price. Furthermore, the leadership was not also in a position to identify and disseminate relevant information with regards to coffee marketing dynamics due to their lack of education related skills.

Closely related to leadership challenges was poor financial management skills as rated by 28% of farmers interviewed. Respondents complained about the lack of capacity to manage finances of the leaders, both elected and employed. As a result, there was a lot of pillage and misuse of farmers’ money and miscalculation of the actual amount of produce. One farmer complained of how the manual counting system used to collate kilos in readiness for payments had regularly miscounted her kilos. Sometimes, the kilos would be undercounted at which times she would go to management to complain. At other times, they would be over counted by as much as 500 kilos. During such times, she would pocket the extra money and not say a word. In 2008 in one of the factories, after a serious dispute with farmers over the collating of their kilos, the factory office burned down in mysterious circumstances. Farmers blamed the management although these allegations were never proved. More recently in 2012, farmers were never paid even after delivering their produce to the factory (Waitathu, 2014). The reason given by management was that the coffee fetched very low prices and all the money went to clearing the factories’ overheads and the debts the farmers had accumulated. Farmers, however, pointed accusing fingers at management saying the coffee was bought at normal prices but there was a lot of factory mismanagement, thus the lack of payment.

Farmers also complained about political interference (17%) in the coffee sector, more so at the factory and cooperative society’s levels by local political leadership. As the leading source of income in the area for most people, politicians often interfered with
its management as a way of gaining relevance and popularity among the farmers. As a result, farmers and the management would often be split into rival camps supporting different politicians. The most recent case that farmers cited was the taking over of coffee marketing by the Nyeri County Governor, Nderitu Gachagua in February 2014 without any legal framework for engagement (Waitathu, 2014). Farmers complained that the Governor working with society management and without their knowledge or consent had taken over coffee marketing and delayed the payment of the 2013 crop in 2014. Ordinarily, farmers would be paid by April. Under the new arrangement however, farmers were only paid in September after a bitter struggle. To his credit however, the farmers said that they had received a record payment of over 60 shillings per kilo, a fete that had not been witnessed in the area.

Coffee hawking and theft was rated by 11% as a major challenge faced by coffee farmers in Gikindi location. People would hawk cherries to other farmers or buyers originating from outside the area, even if it was illegal. Further, the problem with hawking is that farmers often ended up getting lower prices than even what they get from the cooperatives. Asked why some farmers did it, an old man who has been farming coffee for 20 years confessed to doing it often said that;

"Though hawking coffee is prohibited, it’s beneficial to us as you can access instant cash and offset temporary challenges as compared to the money from the cooperatives that takes forever to get to the farmers". (I.O. Mr. Gachangi Muchina, 20rd September 2014)

Closely related to coffee hawking has been theft of coffee while drying at the factories. This has become so common that these incidents are reported on a weekly basis. Prime suspects are thought to be individuals who operate private coffee factories as they look
for the right volume to break even and make profits. Lack of awareness of farmers' rights and what they are entitled to from their coffee production is also a major challenge hampering marketing. Farmers do not know that they should be consulted with regards to how their coffee is marketed. As a result, they have often remained powerless and helpless when facing management. Asked why they cannot engage, most farmers cited their lack of information about coffee marketing, the fact that most educated persons have left the village and do not take interest in coffee affairs, and also lack of an effective system to organize farmers to petition for their rights collectively.

4.4.3. Coffee's Competition from Alternative livelihood Sources

During the golden era of coffee growing in the 1970s to mid 1980s when coffee income accounted for 40% of Kenya's foreign exchange earnings, widespread commercial production of alternative crops was largely non-existent (Mbataru, 2013). Indeed even the production of food crops was threatened, with farmers opting to put much of their land under coffee and then buy food from other places in Kenya, more so the Rift Valley. However, after the coffee crisis beginning the mid 1980s, real opportunities for horizontal diversification set in form of food and cash crops that would be grown for income. Farmers also began engaging in other agricultural activities like dairy farming and poultry keeping, which became a threat to coffee growing. In Gikondi area like other parts of Nyeri County, the smaller the land, the more farmers diversified to maximize on the small acreages and spread the risks. As a result, coffee has been facing more competition from other livelihood sources in the last decade alone than in the entire history of coffee farming in Gikondi location in the wider Nyeri County. This stems from a combination of both the failure of coffee industry and the introduction of livelihood alternatives that are more appealing to the farmers. Land, capital, water and
access to markets among others were highlighted as the important factors in the efforts to forge new strategies and alternatives to coffee in diversification.

The figure below shows some of the crops and activities farmers have undertaken as part of diversification.

![Livelihood alternatives adopted by farmers in Gikondi Location](image)

**Figure 8 Livelihood alternatives adopted by farmers in Gikondi Location**

**Source: Research Data (2014)**

Dairy farming rated by 44% of respondents is by far the most embraced alternative to coffee farming in Gikondi location and the wider Mukurwe-ini sub County. Dairy farming, however, is not entirely a new activity as it has always been practiced but considered for household consumption and hardly for commercial purposes. In the same light, dairy farming was considered as a ‘women affair’ which only played a support role to the male dominated coffee farming. With the collapse of coffee economy however, dairy farming has now taken the centre stage and has become the economic backbone of farmers in Gikondi and the wider Mukurwe-ini sub County. On
average, the study found that there are two grade cows per household which supply milk for both consumption and commercial purposes. Again on average, each house spares about 3-4 litres per day for sale. A litre of milk goes for about Ksh40, per day, amounting to about Ksh160 and Ksh4,800.00 per month and around Ksh57,600.00 per year. This may appear modest, but it is three to four times what farmers realize from coffee on a good year save, for years like 2012 where coffee farmers went without pay. This cash goes to pay school fee and to cater for other family needs. Another important benefit is that farmers can access loan facilities in both cash and dairy feeds based on litres of milk delivered to Wakulima Dairy Society, a dairy co-operative society where farmers in Gikondi sell their milk. Again, the access to credit facilities works for farmers as they are able to cater for their needs even without cash at hand, something that coffee farming no longer offers.

Climatic and weather conditions in Gikondi Location and the wider Nyeri County has always been favorable for horticulture (22%) which ranges from sukumawiki (kales), tomatoes, cabbages and capsicum, among others. However, horticulture farming was never taken seriously until the collapse of coffee economy and its currently number two after dairy farming in terms of alternatives to coffee farming. The most attractive trait about these crops is that they take no more than three months to mature and harvest and that the market is ready as the target is both the local community and nearby towns. The most preferred is tomato and sukumawiki farming. A farmer notes that with quarter an acre of land under tomatoes, you can earn a minimum of Ksh150,000.00 after three months. However, he notes that tomato farming is both capital and labour intensive as well as very susceptible to weather changes. Sukumawiki, on the other hand, is less lucrative and it's not as demanding as tomatoes. While most farmers grow kales for
their household consumption, it is however noted they would be a rewarding venture if
grown for commercial purposes.

Compared to coffee, horticulture is more favorable as the weather is more conducive
compared to coffee farming. Besides, most horticulture crops are mature and ready for
harvest within three months of planting, giving them a comparative edge over coffee
which takes at least two years to flower and a year or more before harvesting begins.
Market for horticulture products is usually ready and easily accessible within the
County. More attractive is that payment is mostly on the spot. This is a great contrast to
coffee as farmers – who are also not privy to price setting - wait for at least four to five
months after delivering the produce to factories for payment.

Poultry farming (17%) was noted to have picked up within the last five years as one
farmer, Njoki noted:

"My chama members and I decided to keep poultry for meat (broilers) because have
limited space we and also that we could access loans from the bank. We now supply
chicken to Mukurwe-ini town hotels, and even in Nyeri town."( O.I. Ms Njoki Waigera,
20th September 2014)

Poultry farming, for both meat and eggs, rated at third place by 17% of respondents, has
picked up, especially among young and educated farmers because it is sensitive and
needs a keen and dedicated eye. Because of its high risk investment and susceptibility
to diseases, it requires a farmer who is versatile in nature and one who has access to
information, mostly from the internet as well as other sources, making the younger
generation more suitable for it. Poultry farming is perhaps the most lucrative business in
Gikondi location currently but also the riskiest so far. However, this alternative is not
popular with the old generation for reasons discussed earlier. Again, comparing poultry farming to coffee farming, the former is favored over the latter as it has near instant proceeds as it takes about four months for chicks to mature and be ready for market unlike coffee which require about three years. Another advantage of poultry farming over coffee is that poultry farming occupies a very small part of land hence more economical as compared to coffee which occupies quite a chunk of land.

Fruit farming (11%) which is mostly passion fruit and avocado is also slowly being embraced as an alternative income generating activity. But the older generation, who form the bulk of farmers in Gikondi location, are predictably slow to shift from age-old mentalities and view things from a different perspective. However, a few young farmers like Gituku (who specializes with passion fruits) are quick to embrace and try out new ideas, says fruit farming is rewarding especially if the target Market is Nairobi. Gituku notes that a sack of passion fruit fetches around Ksh6,500.00 (which he describes as a very good price) at Marikiti Market in Nairobi. Mr. Gituku grows passion fruits for commercial services together with his self help group members who are mainly farmers mainly under 45 years of age who favour fruit farming over coffee farming, mostly because they are able to select markets and influence the prices they receive for their products. Not surprisingly, Gituku notes that if coffee does not improve in the near future, he will uproot the few bushes of coffee he has in favor of passion fruits.

Commercial avocado farming is also taking toot in the area although previously, farmers did not have much regard for it as one farmer, Mr. Karithia explained:

Commercial avocado farming is picking up though slowly as the young farmers among us are open to its farming. Personally I don't care much for its commercial value as the crop is dormant for most part of the year and cannot
really sustain me, however, I have a few trees that cater for my household consumption. (O.I. Mr. Karithia Ngare, 26th September 2014)

The study, however, noted that young generation farmers are the ones taking up commercial avocado farming unlike the older generation who refer to avocado as *Maguna Ngui*, a derogatory term meaning ‘food for dogs’. Unfortunately, avocado is a seasonal fruit that peaks between July – September and remains dormant for the most part of the year. This long passive period could have influenced farmers to shun the crop.

Other activities include fish farming which although new in the area is proving to be quite popular among young farmers. However, by the time this study was being conducted, the establishment of fish ponds was still in progress and so no statistics were available to indicate how it compares in terms of returns to other farming ventures.
CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION & RECOMMENDATIONS

5.1 Introduction

In this chapter, summary of findings, conclusion and recommendations have been derived from the study carried out on challenges faced by coffee farmers in Gikondi Location. The summary, conclusion and recommendations will be informed by both Social Capital Theory and Sustainable Livelihood Strategy Framework, which the research is based on.

5.2 Summary of findings

5.2.1 Production

The foregoing research has established that the coffee sector though facing serious challenges in Gikondi is an important economic activity in the area in terms of income generation and employment creation. Further, the study has established that over the years, the impact of coffee has been felt in all spheres of life in the area. There have been backward linkages with farm input suppliers, forward linkages with the transport sector, savings and credit institutions as well as through consumption of goods and services like education, health and other social services. Even politically, coffee has impacted the political environment, first through elections and other political activities at the factory and society level, and then at the level of local politics like parliament and local authorities. These linkages have been created in spite of the various challenges that the sector has faced.
In production, farmers identified challenges like lack of farm inputs and credit facilities which was rated highest by farmers at 28%, poor coffee varieties was rated second by 22% of the respondents while poor climatic and weather conditions came in third at 15%. Land fragmentation (14%) and low soil productivity (13%) came in next at a close tie. Poor environmental factors like lack of manpower, especially during peak harvesting periods, among others, was rated last at 8%. The livelihood structural frame advocates for farmers to make use of different types of capital assets to mitigate the above mentioned vulnerabilities and short comings. These could be making use of human capital asset of family and relatives for labor during coffee peak periods as well as throughout the year.

5.2.2 Marketing

In marketing of the coffee produce, the vulnerabilities and challenges cited by farmers included leadership which was ranked the highest at 44%. Financial management came in second at 28%, while political interference and coffee hawking and theft were rated at 17% and 11% respectively.

Social Capital is formed and strengthened when different key players in the society coming together and form social networks informed by norms that work for the better of everyone in the society. With regard to marketing their produce, farmers and the society at large in Gikondi need to come together and form social network ties that will enable them look out for each other and avoid being exploited by a small group as is the current norm by marketing institutions.
5.2.3 Alternatives to Coffee

To cope with the collapsed coffee economy in Gikondi location, farmers have developed mechanisms of exploiting alternative livelihoods to cater for their needs. These alternatives include dairy farming which was rated highest at 44%, horticulture farming was rated second at 22%, poultry farming came in next at 17%, fruit farming came in second last 11% while other activities like fish farming among others came in last at 6%. As the sustainable livelihood framework indicates, farmers have taken different capital assets to absorb the shocks presented by the collapse of the coffee economy. Farmers have utilized the natural and physical capital assets at their disposals like good climatic conditions, rivers and roads to grow other crops like horticulture, poultry and fruit farming and access markets through the roads both within and without the county which helps them supplement their income.

5.3 Conclusion

The challenges and constraints faced by coffee farmers in Gikondi are not very unique and different from those faced by other farmers in Nyeri County. However, differences are witnessed in the way these challenges play out, especially given that the area is at the very periphery of the County and has not benefited from a developed a transport network like other parts of Nyeri. The distance from Nyeri town (about 50km) coupled with poor roads also makes the area an insignificant source of food especially fruits and vegetables and dairy for the Nyeri town market. This has some influence on the choice of alternative livelihood sources to coffee.
5.3.1. Production

The study established that coffee farmers in Gikondi location face many and varied vulnerabilities during coffee production. These vulnerabilities emanate both from localized sources as well as international shocks. These stresses included unaffordable farm inputs and lack of access to credit as pointed out by 28% of the farmers, poor coffee varieties (22%), poor climatic conditions (15%), land fragmentation (13%) and poor transport network especially during the rainy season (8%) among others.

As a result of these challenges, farmers have continued to realize low yields and profits from coffee growing, sometimes, going without pay in spite of them delivering coffee to the factories. To mitigate the challenges they face, farmers try to maximize on the various forms of capital at their disposal, however little, to be able to increase their income from coffee and reduce their vulnerabilities.

Human capital is perhaps the most readily available. This is because farmers who on average have family sizes of seven are able to access and utilize free labor from their children especially on weekends. This is especially important during the harvesting season as labor in the area is very expensive. Financial capital is a challenge in Gikondi location as most coffee farmers cannot access bank credit due to the risky nature of the coffee business. To mitigate this challenge, most farmers have come together to form self help groups where they contribute and take small loans among other services they receive as a collective from these groups. These groups are also an important source of social capital as farmers come together, exchange information and generally, provide informal support to each other that is very vital in creating resilience in the face of income shocks and stresses.
The study also established that coffee farming has largely been left to the old people in the village as 72% of respondents were above 45 years of age. Only 28% of the respondents were below 45 years of age. The study further notes that among the 28% of farmers below 45 years, only 6% of the farmers were below the age of 30 years. This study reveals that young people have either left the village for greener pastures or opted to engage in more lucrative activities like horticulture growing. While this may be healthy for diversification, it means that the support farmers would get from the youth who are generally more educated and knowledgeable is lacking.

In conclusion, while coffee may be finally picking up from years of poor prices, a lot more needs to be done in terms of production in Gikondi for farmers to benefit from the renewed coffee prices. Equally, proper structures and processes including laws and policies must be put in place both by the county government and private sector to spur production and address some of the current challenges.

5.3.2. Marketing

The study established that coffee marketing is one area where farmers felt very helpless to influence and yet it had far reaching implications on the overall benefits farmers derived from coffee production. Major challenges in marketing revolved around leadership which farmers rated highest at about 44%, financial management was second, ranking at 28%, political interference rated third with 17%, while coffee hawking and theft came in last at about 11%.

These challenges especially existed because coffee was only legally marketed through cooperatives. Liberalization had not gone far enough to allow individual farmers to market their own coffee through individual initiatives and channels, yet the government
had not been able to prevent mismanagement of coffee sales proceeds by the cooperative societies. To mitigate the mismanagement at marketing level, farmers therefore felt that it was important for government to license coffee pulping to small scale farmers. This would increase competition and efficiency while removing the monopoly exercised by cooperative societies.

While cooperatives had become a source of disincentives for coffee farmers (44%), farmers felt that they potentially could be a source of strength if properly utilized. According to the farmers, the coming together of individual farmers at the cooperative level presented a unique source of social capital that would be used by farmers to advance and negotiate for better management practices with the cooperative management. However, this had not yet been realized as management routinely ignored farmers and also used the tactics of divide and rule to further dis-empower farmers. Further, vocal farmers could easily be bought off, even as the young and more educated farmers and people in the area kept off coffee farming. Farmers felt that if they properly organized and were sensitized on their rights and responsibilities in the marketing of coffee, then they would be able to streamline coffee marketing and stem coffee losses at that level.

Beyond the farmers themselves, the research established that there was need to improve and enhance the managerial capacities of cooperative society management. While some of the shortcomings at the management level were due to corruption, lack of requisite capacities in financial management and leadership skills also contributed substantially to the dismal performance of the Saccos. These inadequacies also made them vulnerable to external interferences and thus, the case of local political operatives constantly meddling in coffee affairs in Gikondi.
The research, therefore, established that there was a lot more room for improvement with regards to how coffee was marketed. The improvements were especially needed in the structures and processes involved in coffee marketing, including laws, policies and institutional cultures in order to guarantee increased and sustainable incomes from coffee as a source of livelihood.

5.3.3 *Competition from alternative livelihood sources*

As has been observed elsewhere in this study, horizontal diversification is a recent phenomenon in Gikondi and other coffee growing areas, picking up mainly in the last two decades after the fall of coffee prices in the international market and the subsequent prolonged crisis. During the golden era of coffee growing that stretched from the 1960s to the mid 1980s, widespread commercial production of alternative crops was largely non-existent. Indeed even the production of food crops was threatened with farmers opting to put much of their land under coffee growing and then buying food form other places in Kenya, more so the Rift Valley.

Beginning the mid 1980s, farmers begun to venture out into growing alternative crops both as a source of income as well as food. This was necessitated by the fact that coffee could no longer provide money to purchase food as before. The choice of alternative activities for cash was premised on a number of factors; those crops that could ensure higher returns on the ever diminishing acreages, whose returns would be realized immediately or within a relatively short time, were early maturing and also whose markets were assured whether locally or internationally were the most favored. As a result, farmers ventured into varied agricultural activities at different intensities. Dairy farming has been recorded as the leading alternative venture ranking 44%, horticulture
farming was ranked second at 22%, poultry farming came in third at 17%, fruits farming and other activities were ranked at 11% and 6% respectively.

Dairy farming was especially popular with a ready milk market in the nearby Mukurwe-ini town as well as Nairobi, which is 2 hours away and where farmers could easily pack and transport the milk using public transport and which would find its way into the market as early as 6.00 am. Following the success of dairy farming, a number of cooperatives emerged through which farmers would market their produce and which would also give farmers access to credit and other farm inputs, in effect replacing the services that used to be offered by coffee growing in its golden era. Initially, a number of farmers, especially the young, uprooted coffee bushes to give way to planting of napier grass for dairy farming as well as other activities. However, as coffee begun showing signs of a return beginning 2013, farmers started intercropping napier grass with coffee and also utilizing manure from cows to enrich coffee growing; in a sense, establishing a symbiotic rather than competitive relationship between the two.

In general, diversification in the area has helped to somewhat restore people to a standard of living close to what they enjoyed during the golden coffee era. As a result, more children are able to go to school and more people can afford healthcare, especially among the younger generation. Like coffee, these have also created both backward and forward linkages, further spurring the local economy. Credit facilities are now available, local transport has been improved, infrastructural facilities like water and electricity are now available and there is mushrooming of small and medium enterprises that are supported by the diversified agricultural activities. Horizontal diversification of agriculture has also helped rekindle social capital and its benefits in the area as a lot of
the alternative livelihood activities and strategies require people to come together and act as a collective.

5.4. Recommendations

The recommendations given by the study are informed by the reality that while coffee is an important cash crop for the people of Gikondi as is evidenced by their perseverance even when the coffee crisis hit hard and a number of farmers elsewhere uprooted the crop, it also faces a number of challenges including stiff competition from other livelihood sources. Therefore, the recommendations aim at improving the income generated from the crop as well as its relationship with other alternative livelihood sources.

5.4.1 Production

Coffee seeds and seedlings must be of the best appropriate cultivar quality so as to maximize on the reducing acreages and start with a strong crop. Also farm level agronomic practices and methods need to be improved through continuous and appropriate information dissemination and demonstrations. Here the role of government field based agricultural officers needs to be strengthened through County based policies and initiatives. Given the importance of rapid coffee transportation, roads, especially rural access roads, should be made all weather and easily accessible through grading, and building of bridges and culverts. Another recommendation is that credit to farmers should be availed through strategic partnerships with financial institutions as well as operationalizing the long proposed Coffee Development Fund.
5.4.2 Marketing

Farmers need to effectively organize so that they can bargain with factory management and millers when selling coffee. Using their strength in numbers, they should insist on transparency in milling operations by all the millers and immediate payment, preferably after two weeks, following coffee sales by the marketing agent. Farmers need to work closely with the county officials to pass laws and policies at the county level that will promote the proper management and marketing of coffee. These laws should address among other things; the nature of participation and consultation with farmers, minimum standards for coffee management members, guidelines on information dissemination among others. Farmers must also demand for information along the chain of coffee marketing and must seek to influence to their advantage every step of coffee marketing. Marketing of coffee should be further liberalized to ensure that small scale farmers are not unduly disadvantaged, towards this, pulping licenses should be availed to all that require them without delay. The perpetual problem of debt overhang to coffee farmers must be resolved to give them a fresh start, selective write offs should be part of the tools to address this issue.

5.4.3 Competition from alternative livelihood sources

Coffee growing and other livelihood activities adopted by coffee farmers should not necessarily be seen as competing. Strategies should be developed through awareness creation about how these activities can be carried out in ways that mutually enhance each other, working towards overall increment of income for farmers. More so, farmers should be educated on activities that can support each other, for example, coffee and
dairy, coffee and avocado growing; which can be carried out on the same piece of land and whose peak seasons are different so as to maximize on available labor, etc.

5.5. Area for Further Research

Research needs to be carried out into gender dynamics on coffee production in Gikondi location. While Nyeri County is seen as one area where advances in gender parity have been made and women are especially empowered, the research established that coffee growing and indeed control over other sources of livelihood is still heavily male dominated. While women provided labor for growing coffee, they did not control how the proceeds were used. Furthermore, land as a critical means of production was still largely owned and controlled by men, with women only having partial user rights. The proposed research would look into how ownership and control of livelihood sources including coffee by men adversely affects women's empowerment and how women have responded to this exclusion and dispossession.
REFERENCES


Africa Publishers.


Mbataru, P. (2009). *The Coffee Crisis*. Old Interest, New interest and Illusions of
Development.


Washington, DC, World Bank


APPENDICES

Appendix 1: Question guide

Bio data

I would like to start by asking you a few questions about yourself

1. How old are you? {Tick appropriately}
   - {Below 30 years} {31-45 years} {46-60 years} {Over 60 years}

2. Sex of the respondent (don’t ask)
   - {Male} {Female}

3. What is your marital status?
   - {Single} {Married} {Separated}

4. If married, how many children do you have?
   - {One or two} {Three to five} {More than six}

5. What is the highest level of education that you reached?
   - {Primary} {Secondary} {College} {University}

Challenges around coffee production

6. How long have you been a coffee farmer?
   - {Less than 5 years} {6-20 years} {More than 20 years}
7. What made you become a coffee farmer?

8. What is your current acreage under coffee? Has it changed over time? Why?

9. How can you compare coffee growing when you begun and now?

10. What have been some of the challenges you have faced as a coffee farmer?

11. How have those challenges impacted on coffee growing?

12. What assets and capitals (like human resource, financing etc) do you have to help you in coffee production?

13. How do you work with others, both in and outside your family towards coffee production?

**Challenges around coffee marketing**

14. How do you market your coffee?

15. Do you work with cooperatives? How?

16. Do you have information on how your coffee is marketed?

17. Do you have a say/choice in the channels through which your coffee is marketed?

18. Are you satisfied with how and the institutions that market your coffee? If no, why?

19. What improvements would you want to see in coffee marketing?

**Competition from alternative livelihood sources**
20. Do you supplement the income from your coffee? And if so, why?

21. What other activities and crops do you undertake and grow to supplement coffee income?

22. Out of all these activities including coffee, which is the highest income earner?

23. If not coffee, why do you continue to grow it?

24. How does your diversification affect the production of coffee?

25. In your opinion, what more could be done for you to benefit more from coffee?

Thank you for your time.
## Appendix II: List of Names of the Respondents.

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<thead>
<tr>
<th>Respondents Name</th>
<th>Gender</th>
<th>Date</th>
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<tbody>
<tr>
<td>Kinyua Nduatis</td>
<td>Male</td>
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<tr>
<td>Wangai Gaitho</td>
<td>Male</td>
<td>19.09.2014</td>
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<tr>
<td>Gachangi Muchina</td>
<td>Male</td>
<td>23.09.2014</td>
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<tr>
<td>Waitathu Kinya</td>
<td>Male</td>
<td>20.09.2014</td>
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<tr>
<td>Njoki Waigera</td>
<td>Female</td>
<td>20.09.2014</td>
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<tr>
<td>Gituku Kimathi</td>
<td>Male</td>
<td>16.09.2014</td>
</tr>
<tr>
<td>Mbanya Nyika</td>
<td>Male</td>
<td>17.09.2014</td>
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<tr>
<td>Lucy Muthoni Kiama</td>
<td>Female</td>
<td>02.10.2014</td>
</tr>
<tr>
<td>Mkenye Kabira</td>
<td>Male</td>
<td>24.09.2014</td>
</tr>
<tr>
<td>Stephen Kihara</td>
<td>Male</td>
<td>25.09.2014</td>
</tr>
<tr>
<td>Murathe Ndegwa</td>
<td>Male</td>
<td>25.09.2014</td>
</tr>
<tr>
<td>Deadan Kimathi</td>
<td>Male</td>
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<tr>
<td>Kinyua Kagio</td>
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<td>30.09.2014</td>
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<td>Njeri Muthuo</td>
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<td>Wambugu Kaigua</td>
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<td>Wanjiru Kaigua</td>
<td>Female</td>
<td>22.09.2014</td>
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<tr>
<td>Joseph Murira</td>
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</tr>
<tr>
<td>Maihua Kihuria</td>
<td>Male</td>
<td>30.09.2014</td>
</tr>
<tr>
<td>Kariithi Ngare</td>
<td>Male</td>
<td>22.09.2014</td>
</tr>
<tr>
<td>Waitathu Kinogu</td>
<td>Male</td>
<td>01.10.2014</td>
</tr>
</tbody>
</table>
Appendix III. Map of Gikondi Location
Appendix IV Research Permit.

THIS IS TO CERTIFY THAT:
MISS. CHARITY NJERI KIMATHI
of KENYATTA UNIVERSITY, 468-10103
Mukurwe-ini, has been permitted to
conduct research in Nyeri County
on the topic: CHALLENGES
EXPERIENCED BY COFFEE FARMERS IN
KENYA, A CASE OF COFFEE FARMERS IN
GIKONDI LOCATION, NYERI COUNTY.
for the period ending:
31st December, 2014

Applicant's
Signature

Permit No: NACOSTI/P/14/1116/4211
Date of Issue: 25th November, 2014
Fee Received: Ksh. 1000

CONDTIONS:

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming, and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.