FACTORS INFLUENCING SUSTAINABILITY OF SMALLHOLDER TEA PRODUCTION: A CASE OF WOMEN FARMERS IN IRIAINI TEA FACTORY, OTHAYA DIVISION, NYERI COUNTY

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A PROJECT REPORT SUBMITTED TO THE INSTITUTE OF ANTHROPOLOGY,
GENDER AND AFRICAN STUDIES IN PARTIAL FULFILLMENT FOR THE
REQUIREMENT OF THE AWARD OF THE DEGREE OF MASTER OF ARTS IN
GENDER AND DEVELOPMENT STUDIES OF THE UNIVERSITY OF NAIROBI

SEPTEMBER 2015

DECLARATION

This project other university		vork and has not been presented for examina	ition at any
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DEDICATION

This work is dedicated to my	family for all their support as	I pursued my studies.

ACKNOWLEDGMENTS

I would like to salute my supervisor, Dr. Owuor Olungah, for his continued support and guidance all through this research project.

Special thanks to extension officers of Iriaini tea factory and the Public Relations Department for their invaluable assistance.

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List of Abbreviation and Acronyms

CPDA Christian Partners Development Agency

FFS Farmers Field School

GAPs Good Agricultural Practices

GDP Gross Domestic Product

GOK Government of Kenya

ILO International Labour Organization

KES Kenya Shilling

KG Kilogram

KHRC Kenya Human Rights Commission

KPAWU Kenya Plantation and Agricultural Workers' Union

KTDA Kenya Tea Development Agency

MOA Ministry of Agriculture

NGO Non-Governmental Organization

SACCO Savings and Credit Organization

SCDA Special Crops Development Authority

SPSS Statistical Package for Social Sciences

TBK Tea Board of Kenya

TESA Technical Extension Service Assistant

TRFK Tea Research Foundation of Kenya

UK United Kingdom

ABSTRACT

Tea is the most popular drink in the world making the tea industry a booming global business. Kenya is the fourth top tea producer nation in the world and earns billions from the industry. The tea sector is mainly supplied by smallholder tea farmers who produce about 62 per cent of total tea production. Tea production is labour intensive and the industry provides jobs in remote rural areas, whereby millions of livelihoods around the world depend on tea picking and processing. It also improves the gender-imbalance in employment in rural communities through provision of large-scale livelihood for women who are favoured in the picking operations.

The study investigated the factors influencing sustainability of tea farming for smallholder women. It focused on smallholder tea farmers in Nyeri County and was guided by the three main objectives; that is assessing how collective bargaining, economic benefits and regular farmer training influences women's continued engagement in tea production.

Descriptive survey design was used as the research methodology for this study. A structured questionnaire and in-depth interviews were used as the principal data collection tools. The main findings of the study were that collective bargaining, economic benefits and training all interact to influence women's engagement in tea production.

The study recommends that, a deeper understanding of the variables surrounding gender issues in tea production by the policy makers and tea related institutions is necessary in order to plan adequately for the smallholder tea women farmers. Further, the Ministry of Agriculture, Livestock and Fisheries, the Tea Board of Kenya, the Tea Research Foundation of Kenya and the KTDA should institute appropriate policies and infrastructure to support the tea sector and especially women farmers. Further research areas have also been highlighted.

1.0 CHAPTER 1: BACKGROUND TO THE STUDY

1.1 Introduction

The tea industry is a booming global business. With 3.5 million tons of tea produced each year - including 1.6 million tons for export. Tea harvesting is an important source of income for millions of workers across the globe. India and Kenya are two of the world's top four teaproducing nations, earning hundreds of millions of pounds in exports each year. In spite of the massive revenues tea sales generate, workers who pick and pack the leaves face horrendous working conditions and earn far below a living wage (Morser, 2010).

Wal (2008) noted that tea is the second most popular drink in the world after water. Overall, 3.5 million tons of tea is produced annually, of which 1.6 million tons are exported (Wal, 2008). Kenya and India are two of the largest producers and exporters of tea in the world, and together produce more than half of the tea drunk in the United Kingdom (UK). The UK is the second largest importer of tea, accounting for nearly 10% of world tea imports by volume. The UK buys 16% of India's exported tea, and 19% of Kenya's (CPDA, 2008). Although countries such as Kenya and India are major tea producers, the structure of the global supply chain means that the lion's share of profits is captured by large multinational corporations. Tea producing countries have also been hit by a decline in tea prices, as a result of global supply exceeding demand.

Tea was first introduced to Kenya in 1903 from India by a European settler G.W.L. Cain (KHRC, 2008). The early settlers and the colonial government restricted tea growing to large-scale farmers and multinationals, ostensibly to maintain quality. However, the main reason was to lock out Africans from the then very lucrative cash crop farming. Kenya's attainment of independence in 1963 saw the passing of various Land Reform Bills which have had far reaching impact on agriculture. Tea growing for instance was made open to the local farmers. The crop has since spread across the country and is currently an important economic mainstay for many smallholder farmers (CPDA, 2008).

Within the tea sector in producing countries, the smallholders' sub-sector is an important segment world-wide. In Sri Lanka, which is the leading black-tea exporter, with more than 400,000 smallholders, the sub-sector constitutes about 64 per cent of total area under tea and 76 per cent of total production. In Kenya, the third black-tea exporter, with an estimated

560,000 smallholders, about 62 per cent of the total production is derived from the sub-sector (Banerjee, 2011).

Tea is an important commodity in terms of jobs and export earnings for a number of developing countries. Tea production is labour intensive and the industry provides jobs in remote rural areas, where millions of livelihoods around the world depend on tea picking and processing (Wal, 2008). In several producing countries, the sector also corrects the gender-imbalance in employment in rural areas by providing large-scale livelihood to women who are preferred in the picking operations (Sankaran & Madhav, 2011).

Research has shown that most smallholder tea is produced by women (Sen, 2001); therefore, they have a significant role in sustainable smallholder tea production. In tea production, 80-90 per cent of the women workers are employed as pickers and that tea-picking account for 60-70 percent of the work. The remaining are factory workers, nurses and support staff. According to Kagira et al., (2012) the reason for this is women's effectiveness at picking which is estimated to be 150 per cent that of men. Men do pick, and in peak season, both men and women are involved in harvesting leaf. Yet, the preference is for women workers, as their work is more consistent in both quantity and quality.

Even with the preference for women tea pickers in the sector, this does not translate to their support and provision of benefits in order to reward them. For example, as noted by Wal (2008), majority of tea pickers in Kenya are women, however, the income they earn from the tea is taken by their husbands who are the owners of the land and usually the one who has the tea registration number which the factories use for payments. Kagira et al., (2012) pointed out that with the global trend toward empowerment of women, it is important that their marginalization in sharing of income from the tea sector is reversed. This will be one way of ensuring the sustainability of the smallholder tea sector since women rights are now regarded as a criterion for trade in some countries. Therefore, identifying the factors that influence the sustainability of the smallholder tea sector for women farmers was an important aspect in rewarding these producers and helping them improve the quality of their lives and consequently providing a way to enable them to break the cycle of poverty.

1.2 Statement of the Problem

According to Kimathi & Muriuki (2001), when Kenya attained its independence in 1963, it put in place legal and policy instruments to not only promote the smallholder tea sector, but

also to cushion it against internal and external threats. The first significant measure the government took in 1964, was to replace the Special Crops Development Authority (SCDA) with the Kenya Tea Development Authority (KTDA), a parastatal established under the Agriculture Act, whose mandate would be to encourage and support smallholder tea farming (Kimathi & Muriuki, 2001). This enabled the smallholder tea farmers across the country to have an autonomous government institution that would assist them in developing their farm husbandry skills, educate them in the best tea farming practices, co-ordinate the plucking and collection of the tea, establish processing factories, and take full charge of the marketing and export of the manufactured tea.

In 1964, there were about 20,000 smallholder farmers officially recorded as suppliers of green leaf, (Kimathi & Muriuki, 2001). By 2004, as noted by Owuor et al., (2005) smallholder farmers were over 447,617 with 45 operating factories and producing 192 thousand metric tons of made tea. Today, tea is one of the leading cash crops in Kenya and makes significant contribution to the economy. In the year 2010, the country produced 399 metric tons of black tea (TRFK, 2011). It exported over 95% of the tea mainly in bulk earning over 97 billion Kenya shillings in foreign exchange. This represented about 26% of the total export earnings, and about 4% of Kenya's GDP (TRFK, 2011).

Ironically, the returns for smallholder farmers have historically remained lower than that for the plantations and other big producers. CPDA (2008) noted that this was attributed to the high management fees charged by KTDA, the many taxes imposed on smallholder tea farming, the high cost of production, the long and inefficient supply chain and general mismanagement. The situation is made worse by the fact that the smallholder farmers have remained at the bottom of the hierarchy in terms of participation, influencing and contribution to decision making in the sector.

The smallholder tea sector was established with the hope that family units would manage their farms (M'Imwere, 1999). Indeed, most of the decisions on the smallholder tea farms are made by the key members of the family unit (Kavoi et al., 2003). The main use of labour in tea production is in harvesting. However, tea production in the smallholder sector has grown to an extent that in most farms, hired labour is used. Although most smallholder tea farmers use male and female workers, there are some farms hiring females only, as they are easier to control.

The data put together by Owuor et al., (2005), showed that most smallholder tea is produced by women; therefore, they have a significant role in sustainable smallholder tea production. As women make up a large part of the labour force in smallholder tea schemes (Kavoi et al.,2003). It is vital to consider gender in relation to extension service, transfer of skills, choice of technology and effects of subsistence crops (Lamb & Muller, 1982). Even with the high number of women employed in the smallholder tea sector, little research has been done on how to make tea production a sustainable enterprise for them. It is with this background that this study set to interrogate the factors that influence the sustainability of smallholder tea production with specific reference to women farmers.

1.3 Research Questions

The study was guided by the following research questions:

- 1. How does collective bargaining influence sustainability of smallholder tea production for women farmers?
- 2. To what extent do economic benefits influence sustainability of smallholder tea production for women farmers?
- 3. To what extent does training influence sustainability of smallholder tea production for women farmers?

1.4 Objectives of the Study

1.4.1 Overall objective

The overall objective of this study was to find out the factors that influence sustainability of the smallholder tea production for women farmers.

1.4.2 Specific objectives

- To determine how collective bargaining influences sustainability of smallholder tea production for women farmers.
- To examine the extent to which economic benefits influences sustainability of smallholder tea production for women farmers.
- To assess the extent to which training influences sustainability of smallholder tea production for women farmers.

1.5 Justification of the Study

The information obtained from the study justifies the need for appropriate interventions to improve the plight of smallholder tea producers. The study is of importance in contributing information on gender issues in the smallholder tea production and provides areas for further research to enhance women's role in the tea sector. In addition, the information generated from the study can be used by the advocates of female economic rights to advocate for their freedom and put an end to the exploitation and continued subordination.

The study helps in the provision of information that the government can use in the formulation of agricultural policies on tea production and other key organizations in the tea industry to identify the factors influencing sustainability of women in smallholder tea production in the sub-sector.

1.6 Scope and Limitations of the Study

The study focused its investigation on the smallholder households participating in tea production in Othaya division, Nyeri County. The researcher specifically targeted the female members of the households that were sampled for the study. These were the women farmers that supply tea leaves to the Iriaini tea factory.

The study was limited by the willingness of the participants to freely engage in the study and provide detailed personalized information. Even in situations where they did agree to provide the information, the study lacked the capacity to verify the authenticity of that information. Another limitation was that some participants actualized their right to withdraw from the study hence delaying the process and leading to the recruitments of other respondents hence leading to longer duration of fieldwork than originally anticipated.

1.7 Study Assumptions

- Collective bargaining influences the sustainability of smallholder tea production for women farmers.
- Economic benefits positively influences sustainability of smallholder tea production for women farmers.
- Training enhances sustainability of smallholder tea production for women farmers. .

1.8 Opeartional definition of key terms

Collective bargaining: the process of negotiations between employers and a group of

employees who are the women smallholder tea producers aimed

at reaching agreements to regulate working conditions.

Social benefits: This is the increase in the welfare of a society that is derived from the

work by small holder tea production. These are total benefits of an

economic activity to an individual. They include; health, security,

time-off etc.

Sustainability: promoting farming practices and methods that are profitable,

environmentally sound and good for communities. It rewards the true values of the producers and their products. It is economically viable,

improves the quality of life of farmers and is ecologically sound.

Training: these are the learning processes introduced to the women farmers in

relation to their daily activities that will enable them achieve certain

goals in their activities.

Tea Production: refers to the weighed tea produced by the smallholder tea farmers

who fall under the umbrella of KTDA.

2.0 CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter focused on the review of related literature. The review was done in line with the specific objectives. Also included in this chapter is the theoretical framework that guided the study and a conceptual framework showing the relationship between the variables.

2.2 Concept of Smallholder Tea Production

Tea is produced in several countries across the world, the status and health of the tea sector for some countries has major macro-economic implications. Tea production for countries such as Sri Lanka, Kenya and Vietnam, which export the majority of their production, is a significant component of its export earnings. The value of tea exports comprises about 3 percent of the gross domestic product (GDP) of both Sri Lanka and Kenya (Banerjee, 2011). Tea exports comprise 16 percent of the total export income of Sri Lanka. As for China, India, Turkey and Iran which have large domestic markets (although China and India also exports large quantities in absolute terms) it is a labour-intensive industry providing jobs in remote rural areas to indigenous populations. In several producing countries, the sector also corrects the gender-imbalance in employment in rural areas by providing large-scale livelihood to women who are preferred in the picking operations (Sen, 2001).

Within the tea sector in producing countries, as noted by Mwaura & Muku (2007), the smallholders' sub-sector is an important segment world-wide. Consider first, the two leading black-tea exporting countries Sri Lanka and Kenya. In Sri Lanka, with more than 400, 000 smallholders, the sub-sector constitutes about 64 percent of total area under tea and 76 percent of total production. In Kenya, with an estimated 560, 000 smallholders, about 62 percent of the total production is derived from the sub-sector.

The industry in China, the world's largest producer of tea (principally green tea) producing 1,475 million kilograms in 2010, is essentially smallholder-dominated as is the case of Vietnam. Smallholders account for 43 percent of the area under tea and 23 percent of production in Indonesia. In India, the world's second largest producer of tea and largest producer and consumer of black tea, an estimated 160, 000 smallholders account for over 26 percent of its production of 966 million kilograms (Banerjee, 2011).

The smallholders are producers of green leaf, a perishable input that has to be processed in a tea factory to convert to "made tea". The definition of smallholder or small grower varies

across countries. In most countries, the definition is based on holding size. In Kenya, according to Kagira et al., (2010), it means a grower cultivating tea in a small piece or pieces of land who does not possess his own tea processing factory. In Sri Lanka, "small-holding" means an area of land less than 50 acres (20.2 hectares). In India, a small-grower is one who cultivates 10.12 hectares or less and not possessing his own tea processing factory. In Indonesia, smallholders/small growers are those who grow tea on land size between 0.8 to 2 hectares and sell tea without processing (Sankaran & Madhay, 2011).

However, the average holding sizes in most countries, irrespective of the upper limit, tend to be on the lower side, for example, less than 0.4 hectares in Indonesia and between 0.7 to 4 hectares in different growing regions in India, with an average holding size of 1.6 hectares. More than 80 percent of smallholders in Sri Lanka hold less than 0.2 hectares (Banerjee, 2011). The smallholders are producers of a perishable product, which is plucked from geographically dispersed areas and which is the major input for the processing unit, the tea factory.

The green-leaf must be collected from far-flung areas, brought-in by the pickers to collection centres and to prevent loss of quality of the made-tea, it must be ensured that it is transported appropriately and quickly despatched to the tea factory and processed as soon as possible. Smallholders typically sell their green leaf through four possible avenues of primary sale (Sankaran & Madhav, 2011). These are: indirect through middlemen/leaf agents/collectors, or direct through; stand-alone privately-owned processing units (known as Bought Leaf factories in India and usually a small/medium enterprise); integrated plantation units (large tea gardens or tea estates plantations); cooperative/collectively-owned units with smallholder participation.

In countries and regions where smallholders do not have collective ownership of factories and regulations and institutions do not intervene, they are left to the vagaries of an unorganized imperfect market for green leaf. The first-ever survey on small tea growers in Assam in North-East India, which is in this category, revealed that unregulated agents play an important role in the sector, selling 93 percent of the green leaf produced by small tea growers (Panhuysen & Reenen, 2010). There is an asymmetry in information leading to poor bargaining power of smallholders since they are not organized. Similarly, the smallholders are unable to negotiate with suppliers of inputs as their requirements are individually small. There is also often a miss-match between supply of green-leaf and processing capacity of

private processing factories and their location, measured by the distance from the smallholders' plots, which affects the quality of the leaf and the consequent price fetched.

Nyangito (2001) defines smallholder farmers as those who farm in less than eight hectares of tea farms. Smallholder tea growing was allowed by law in 1963 (CPDA, 2008). By 2005, smallholders had more acreage in tea, covering sixty six percent of the total area under the crop (Mwaura & Muku, 2007). Latest statistics show that, approximately 62 percent of the total tea crop in Kenya is produced by more than 562,000 smallholder farmers.

Smallholder farmers produce and sell their tea through the KTDA, which is the largest single tea agency in the globe with sixty two tea factories. The rest of tea is produced by large-scale tea plantations that operate thirty nine factories. A few of these large-scale tea firms include Unilever Tea, James Finlay, Kakuzi and George Williamson. Smallholder tea farmers are generally price takers and sell their green leaf to collectors, plantations or processors (Nyaga & Doppler, 2009).

The main challenges in the smallholder tea sub sector include: low farm gate prices; poor extension services; limited marketing channels; poor access to credit and low level of farmers' organization (Chan et al., 2010). The cost of production for smallholder farms is lower than plantations because of concealed family costs and the fact that they do not bear social costs. Smallholder farmers use family labour in planting, plucking and delivery to collection centres (buying centres). Chan et al. (2010) have noted that Kenya and Sri Lanka have become more productive on the global market because of increased smallholder production.

However, Medhi (2006) argues that the activities of smallholder farmers are less environmentally friendly and thus it is hard to incorporate them in the export market supply chains that call for increased quality, social and environmental standards. Tea industry in Kenya is similar to Japan in that smallholders contribute the biggest percentage of the output. It is different in Bangladesh where the majority of tea fields are owned by companies, however, when it comes to selling tea, Bangladesh and Kenya are similar in that they use the auction system (Sivaram, 2008).

2.3 Collective Bargaining on Sustainability of Smallholder Tea Production for women farmers

Collective bargaining is a process of negotiations between employers and a group of employees aimed at reaching agreements to regulate working conditions. The interests of the employees are commonly presented by representatives of a trade union to which the employees belong. The collective agreements reached by these negotiations usually set out wage scales, working hours, training, health and safety, overtime, grievance mechanisms, and rights to participate in workplace or company affairs (Wilkinson et al., 2014). The combination of increasingly globalizing agricultural markets, rapidly modernizing local value chains, and urbanizing distribution channels presents African smallholders with considerably more complex challenges than those faced by Asian producers during the Green Revolution era.

Wal (2008) noted that African smallholders today not only need to produce more efficiently but also need to contend with far more logistically complex and competitive markets. Growing specialization in distribution channels and logistics, rapidly changing and differentiated consumer preferences, and increasingly complex norms, standards, and other technical specifications place increasing demands on the production and management skills of the average smallholder. Due to their large number and geographic dispersion, smallholders are facing significant physical, institutional, and technical constraints in accessing technologies, markets, and services.

In Malawi, Kenya, Vietnam and Indonesia, trade unions are either absent, compromised or ineffective. The high and increasing level of casual workers in this industry adds to this problem, because they are not unionized at all (Nyaga & Doppler, 2009). In Malawi, for instance, there are no effective trade unions, there is no opportunity for workers to bargain collectively, and most of the workers in the field are employed on a temporary basis (hence are not unionized). On the large estates surveyed in Kenya, one of the major complaints of the workers was that inefficiency of the union had led to a lack of effective worker representation. The branch of the Kenya Plantation and Agricultural Workers' Union (KPAWU) in the area surveyed turned out to have no work plan, no transportation and no direct access to funds. Most of the workers interviewed for the study were not aware of their rights at the workplace nor of the activities of their union (Mwaura & Muku, 2007).

At one of the James Finlays estates, there were also reports of workers being sacked because they participated in a strike and that workers were scared to take up leadership in the event that they would be targeted, as their former colleagues had been (GoK, 2009).

Union tradition is still very weak in the Indonesian tea sector. While some companies might support union activity, companies normally intervene to ensure that union leaders are loyal to company management. For instance, when unions were formed, the union executives on state plantations were elected by company management.

There are no independent trade unions in Vietnam; they are all affiliated to the Vietnam General Confederation of Labour under the leadership of the Communist Party and maintain cooperative relations with state and other socio-political organizations. About 20 unions belonging to the Vietnam National Union of Agricultural and Rural Development Workers are active in the tea industry (Sankaran & Madhav, 2011). In most tea companies, the chairman of the trade union is also the vice-director. This union functions well in terms of organizing social activities (staff retreats, paying visits to sick workers, etc.) but there is concern, however, whether trade unions are really representing the rights of the workers.

Although the plantation workers in the Indian tea sector are highly organized, there may be strong rivalry between the various unions on the tea plantations, which is not always to the advantage of the workers (Koshy & Tiwary, 2011). Labour unrest is not always sustained and often turns out to benefit the management. The 'elected' union leaders do not always represent the interests of the plantation workers. Plantation workers generally belong to the lowest socio-economic groups, while union leaders are often 'outsiders' from the middle class. In India and Sri Lanka, plantation workers often originate from specific ethnic, tribal and/or lower caste groups, which make their position even more vulnerable (Sankaran & Madhav, 2011).

2.4 Economic Benefits on Sustainability of Smallholder Tea Production for women farmers

In Kenya, tea pickers completely lack economic security. They are employed on a day-to-day basis so they can be easily laid off when their labor is not required. This forces them to seek new employment each day, making their lives extremely precarious (GoK, 2008). They wake up not knowing how far they will have to walk to find work, or if there is any work to be

found. They have no benefits at all, and missing a day's work for illness or any other reason often means they cannot afford to eat that day. Although factory workers have slightly more secure conditions than tea pickers, the majority are hired on a casual basis (the exceptions being managers and specialized workers such as engineers). Factories are keen to keep workers on temporary contracts because casual workers are not eligible for any employment benefits.

In contrast, a permanent employee is entitled to the full range of benefits, including sick pay, maternity leave, paternity leave and paid annual holiday. Under Kenyan law, workers are entitled to a permanent contract after three months on the job (GoK, 2009). In order to avoid having to provide the benefits guaranteed to permanent employees, factories lay off workers before they complete a three-month term, only to rehire them immediately afterwards. This legal loophole is ruthlessly exploited year after year by factory management. This loophole denies workers any sense of economic stability.

In India, most workers live on the large plantation estates where they work. This means that they do not need to search for work on a daily basis. However, the increasing use of temporary contracts mirrors the Kenyan problem (MoA, 2008). If workers are not permanent, the plantation does not have to provide benefits such as medical facilities, maternity leave and food rations. Temporary workers are forced to pay out of pocket for these services or benefits.

Sivaram (2008) noted that Indian workers face the additional threat of owners closing or abandoning tea estates, which has left some workers in India completely destitute. Tea estates are large and often geographically isolated, making their workers completely dependent upon them for their livelihoods. When owners abandon estates, workers can starve. The work of tea laborers is arduous in addition to being lowly paid and insecure. Tea pickers are on their feet all day with heavy baskets on their backs, often on uneven terrain and in harsh weather conditions. Injuries are common, as are respiratory and water-borne diseases (Wal, 2008). There is often exposure to pesticides and insecticides, which the International Labour Organization (ILO) cites as one of the major health and safety hazards tea workers face.

Additionally, Medhi (2006) pointed out that tea pickers work long hours, six days per week. They are also expected to work without breaks, because they are paid per kilogram, and extra hours such as long trips to the tea factory's buying centres are not paid. Tea factory workers face similar problems. Despite being entitled to tea and lunch breaks during the day, casual workers are generally denied a lunch break. When harvests are high during the rainy season, overtime is compulsory.

Workers can be forced to put in as many as 74 hours a week. Although overtime is paid, payment is determined by management and it is never explained to workers how this is calculated. Women face the burden of responsibility for the housework and child care in addition to their employment (Sen, 2001). Working hours in India are similar to those in Kenya, and women labourers have to face the difficulty of performing cooking, cleaning and child care duties in addition to spending eight or more hours in the fields.

Time off is very limited. Indian plantation workers are also entitled to one day of paid leave for every 20 days worked, although the workers had never even heard of this right, let alone being granted it. Instead, they received three and a half days off annually for major holidays (Medhi, 2006).

2.5 Training on Sustainability of Smallholder Tea Production for women farmers

Paulo Freire, an internationally renowned educator, applies his philosophy of human consciousness into the domain of rural extension in Latin America. Specifically, he refers to agrarian reform to explain how "extension" is contrary to "communication", thus incomparable with education. Hence one objective of this study was to enquire into how education level of smallholder tea farmers influences tea production in Nyeri County. Impact of education, according to Freire (1973), is for the purpose of humanizing others through conscious action for the purposes of transforming the world.

In his analysis, Freire makes some assumptions that warrant further discussion. First, all recipients of extension, according to Freire's own definition of extension, are demeaned as not only passive, but incapable of questioning. His definition of the term 'extension' assumes an inability of the recipients to choose to adopt or to refuse new knowledge. This study attempted to establish whether this applies to Nyeri tea farmers. Freire also discusses reasons for resistance to new knowledge. He focuses on the peasant community and magic aspects of

their culture. Super-imposing another thought stimulates a natural defensive reaction of mistrust and rejection. Freire stresses the importance of the educator to be familiar with and involved in the learner's view of the world. What may appear as a physical problem to the observer may be of deeper cultural meaning to the learner.

Wrongful extension comes into play when the observer superimposes his/her own equally cultural perception upon the other. Again this begs the question, can't the act of communication itself be viewed as offensive to a culture? If it is deemed as offensive, would Freire (1973) suggest forcing dialogue. Freire (1973) responds to another critique regarding the impossibility of communication on scientific or technical information. In retort, he states that the methods of dialogue are to include a confrontation of technical knowledge to their physical reality in its relation to their lives. In terms of agrarian reform, Freire stresses the inter mix of technology and culture. Technical trainers become agents of change as they participate in relationships with human beings and nature. In his own words, "all development is modernization, but not all modernization is development," (Freire, 1973:130).

A study by Kavoi et al., (2000) found out that the extension staff recognized the need to have extension courses for the farmers. Their study on how extension staff perceived policies influencing tea production and extension activities concluded that the staff's impact could be enhanced through administration of regular courses to the extension staff. The staffs were supposed to transmit the education received down to the farmers. According to Freire (1973), the role of the extension agent is construed as extending one's knowledge and technical capacities. This study therefore, explored whether farmers in Nyeri County receive tea related trainings and the impact of the training in their performance.

It was also important to establish whether there existed a training program for the farmers. Previous studies have observed that in the smallholder tea sub-sector, production is heavily dependent on appropriate production technologies reaching the farmers, especially the farm operators (MoA, 2008). On the extension policy, the researchers pointed out that, a policy that is user friendly is a prerequisite for ease of adoption. Instances where policies tend to be autocratic normally meet weak acceptance or face rejection. MoA (2008) study highlighted that the description by majority of the tea extension staff suggested that there was an urgent need to restructure the extension system so that it is both staff and farmer friendly. This study

therefore, sought to establish how the technologies reach the farmers and how they influence tea production.

2.6 Theoretical Framework

The study was guided by the women empowerment framework proposed and popularized by Sara Hlupekile Longwe. The theory is discussed in details below.

2.6.1 Women Empowerment Framework

The Women Empowerment Framework was developed by Sara Hlupekile Longwe in 1991. Longwe defines women's empowerment as activities enabling women to take an equal place with men, and to participate equally in the development process in order to achieve control over the factors of production on an equal basis with men (March, Smyth & Mukhopadhyay, 1999). In the Longwe framework, development means enabling people to take charge of their own lives, and escape from poverty; poverty is seen as arising not from lack of productivity, but from oppression and exploitation.

Longwe's framework is based on the notion of five different 'levels of equality'. The extent to which these are present in any area of social or economic life determines the level of women's empowerment. The framework centres on the concept of five 'levels of equality', which indicate the extent to which women are equal with men, and have achieved empowerment. The levels of equality can be used to assess the likelihood of particular development interventions promoting equality and women's empowerment. The levels of equality are Welfare, Access, Conscientisation, Participation and Control (March, Smyth & Mukhopadhyay, 1999). This framework was relevant to the study as it was used as a guide to look at the poverty of women farmers as arising from oppression and exploitation in the tea sector and not from their lack of productivity. The oppression and exploitation were seen as arising from the gender division of economic and social roles. Women were seen as having to do majority of the work in the tea farms, however they were getting little rewards as producers. In addition to the division of labour, the approach also considered the inequality in the present systems of allocations, such as extension trainings, use of agricultural technologies, distribution of market information among others. These conditions among women farmers were seen from two 'levels of equality,' namely the access and participation levels to identify the oppression and exploitation of women in the smallholder tea sector. The five levels of equality are explained below.

Welfare: Longwe defines this as the level of women's material welfare, relative to men.

Access: This is defined as women's access to the factors of production on an equal basis with men; equal access to land, labour, credit, training, marketing facilities, and all public services and benefits. Longwe points out that equality of access is obtained by applying the principle of equality of opportunity, which typically entails the reform of the law and administrative practice to remove all forms of discrimination against women.

Conscientisation: This is understood in the Longwe Framework as a conscious understanding of the difference between sex and gender, and an awareness that gender roles are cultural and can be changed. 'Conscientisation' also involves a belief that the sexual division of labour should be fair and agreeable to both sides, and not involve the economic or political domination of one sex by the other. A belief in sexual equality is the basis of gender awareness, and of collective participation in the process of women's development. The model argues that cultural definitions of roles are discriminative against women's participation in access and management of resources within the household.

Participation: Longwe defines this as women's equal participation in the decision-making process, in policy-making, planning, and administration. It is a particularly important aspect of development projects, where participation means involvement in needs-assessment, project formulation, implementation, and evaluation. Equality of participation means involving women in making the decisions by which their community will be affected, in a proportion which matches their proportion in the wider community.

Control: This term denotes women's control over the decision-making process through ownership. This is essential as it helps to achieve equality control over the factors of production and the distribution of benefits. Equality of control means a balance of control between men and women, so that neither side dominates.

The study focused on two levels of equality, namely access and participation. Under the access level of equality, the level of women's access to factors of production was looked into. The researcher investigated the women's lack of land (relative to men), their level of education, lack of skills training, lack of access to market, limited access to agricultural information, among others. In addition to this, the study also investigated the fact that the women's lack of access to various factors may be tied in with their reproductive roles (more domestic location and duties). The study also considered the traditional culture of women

staying on the farm which restricts their movement outside the homestead. With restricted movement, women lacked the freedom to move about and access trainings, information, and agricultural technology among others. On the other hand, men have more freedom of movement to access schooling, information, markets, among others.

Under the participation level, the study engaged women committee members of the local tea collection centers in understanding their level of influence in decision-making as committee members and also their ability to make decisions for farmers as their representatives. In relation to this, the researcher investigated if this has led to more women farmers having interest in being elected into the collection centers committees. Finally, the study delved into the women farmers' level of knowledge and involvement in cooperatives or farmer groups in order to influence decisions on collective bargaining.

Intervening variables

2.4 Conceptual Framework

Independent variables

Dependent Variables

Government **Collective bargaining** Policies &KTDA **Policies** Farmers groups or cooperatives Sustainability of Smallholder **Tea Production Economic Benefits** Increased wages Pension Wages Improved health and safety Pension Health and safety **Training** Improving yields Farming methods

Figure 1: Conceptual Framework

Source: Author (2015)

3.0 CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology that was used to conduct the study and answer the questions that were described in chapter one of this study. It highlights the study site, research design, target population, sampling procedures and sample size, data collection methods, data processing and analysis and ethical considerations.

3.2 Research Design

The researcher used the descriptive research design. In using this design, the researcher was able to describe the present state of affairs as it exists for the women tea farmers. It helped the researcher to analyze the data in more depth and to present it in a way that it can be understood. This was done through interviewing and administration of questionnaires to a sample of women farmers. This design gave the researcher an opportunity to extract pertinent information from the women tea farmers due to the opportunity of being able to probe further on key issues that came up.

3.3 Study Site

Nyeri County is located in the former Central Province of Kenya, about 150 kilometers north of Nairobi. It covers an area of 3,337 square kilometers. Nyeri shares its borders with five other counties; Kirinyaga to the east, Nyandarua to the west, Muranga to the south, Laikipia to the north and Meru to the north east. The county is divided into 8 administrative subcounties that include Kieni East, Kieni West, Mathira East, Mathira West, Nyeri Central, Tetu, Mukurweini and Othaya, (Nyeri County Integrated Development Plan, 2013).

The county experiences equatorial type of climate with two rainfall seasons; the long rains are experienced between March and May and short rains from October to December. The higher slopes of Mt. Kenya and Aberdare ranges trap the moisture-laden winds hence the increase in rainfall. Mean and annual temperatures on the higher slopes of Aberdares are less than 13 degrees but rises to 17 degrees. The coldest months in the district are June and July where temperature falls as low as 8 degrees Celsius while hottest months are between January and March where temperatures rise up to 28 degrees Celsius. Rainfall and temperature have a strong influence on agricultural patterns in the county. The rainy seasons favour the growth of tea with the highest production during the two seasons (Githinji, 2003).

YERI NORTH ore than 2000 pe

Map 3.1: Map of Nyeri County showing Othaya Sub-county

Source: www.kenyampya.com, 2014

Farming is the major industry in Nyeri County, most of which utilizes traditional farming methods. The county has a total area of 987.5 square kilometers and 758.5 square kilometers of arable and non-arable land respectively. The larger part of the land is used for food crop while the rest is used for cash crop farming, livestock rearing and farm forestry. The mean holding size is one hectare for majority of the small holders. The main food crops grown in the county are maize, beans, Irish potatoes and vegetables whereas the major cash crops are coffee, tea, horticulture and cut flowers.

The county is renowned for its high production of tea and coffee, which are grown mainly for export. These crops earn farmers billions of shillings every year. Coffee and tea are grown mainly by smallholders who are organized into quasi-private state-supported and supervised co-operatives or companies for farm input distribution, basic processing and marketing purposes (Nyeri County Integrated Development Plan, 2013).

Tea is grown in the upper zone next to Aberdares and the Mt. Kenya forest in Othaya sub-county. The division is the richest tea growing region in the county. It has three factories out of 45 factories in the country these are Chinga, Iriaini, and Gitugi tea factories. Othaya has five wards namely Iriaini, Chinga, Mahiga, Karima and Mumwe.

3.4 Target Population

The target population for a survey is the entire set of units for which the survey data are to be used to make inferences. The target population defines those units for which the findings of the survey are meant to generalize (Cooper & Schindler, 2003). The study was conducted among the women farmers at Iriaini tea factory, Othaya division of Nyeri County who are smallholder tea producers. Most of these women were household representatives who offered labour to the farms owned by their husbands and in most cases the men are the registered members of Iriaini tea factory. The study's target population was around 6, 424 members of the tea factory (Iriaini Tea Factory, 2014).

3.5 Sampling Procedures and Sample Size

Sampling refers to the process of selecting a number of individuals for a study in such a way that the individuals selected represents the large group from which they are selected (Mugenda & Mugenda, 2003). Given the large number of the target population, the researcher used cluster sampling to group the population in-terms of their gender and further to their tea collection centres then conveniently select 10 women from each of the six tea collection centres in Iriaini tea factory. This gave a sample size of 60 women.

The researcher purposively sampled the women committee members of the 6 tea collection centers for key informant interviews. Each of the collection centers had about one woman committee member, therefore 6 women members were sampled for the key informant interviews.

3.6 Data Collection Methods

Under primary data collection methods, the researcher used both qualitative and quantitative research methods to gather data. Secondary data formed the basis of the literature review and the background information to the enquiry.

3.6.1 Primary sources of data

Data was collected through administration of questionnaires and in-depth interviews.

3.6.1.1 Questionnaire

Questionnaires are commonly used to obtain important information about the population (McMillan & Weyers, 2007). Under the quantitative method, the researcher administered questionnaires to the sample population which included 10 women from each of the 6 collection centres. The questionnaire was designed to investigate the factors influencing sustainability of smallholder tea production for women farmers. They contained both structured and unstructured questions.

3.6.1.2 Key Informant Interviews

Under the qualitative method, the researcher conducted in-depth interviews with key informants targeting the women members of the collection centre committees. In-depth Interviews were conducted on a face to face basis. Key issues that were looked into included the level of knowledge and participation of women in farmer groups; specific initiatives/support targeting women farmers through the tea factories; challenges that hinder women farmers such as land ownership, cultural stereotypes, and local politics among others.

3.6.2 Secondary sources of data

Secondary data was sourced from relevant published books, periodicals, official reports, journal articles, internet publications, dissertations, newspapers, government documents including policy documents and the constitution. These sources have continually been used throughout the study. Additional sources were included as researchers continued to publish new evidence before the completion of the study.

3.7 Data Processing and Analysis

Qualitative data was analyzed thematically using descriptive approach. The qualitative data applied concept analysis where the researcher analyzed the information collected under various themes comprehensively. For the quantitative data, the researcher used the Statistical

Package for Social Sciences (SPSS) version 21 to undertake statistical analysis. The researcher used descriptive statistics (Mean, Mode and Median) and data was presented in graphs and tabular format.

3.8 Ethical Considerations

Social and business researches often require information from individuals who have their rights to participate or not participate in a study. The study addressed the informed consent, confidentiality and anonymity of the study respondents. According to Piper and Simons (2005), informed consent implies that those interviewed or observed should give their permission in full knowledge of the purpose of the research and the consequences for them of taking part.

Administratively, the researcher sought authority of undertaking the research from the National Commission of Science, Technology and Innovation at the Ministry of Education, who are responsible for granting research permits to researchers.

The researcher sought the respondent's informed consent to engage them in interviews and questionnaires. There was a consent explanation form to inform the women farmers of the objectives and the purpose of the study and any other concern before the exercise took off. Written consent was sought from the women farmers. They were informed of their right to disqualify themselves from the study at any stage of the data collection process. The researcher maintained confidentiality and anonymity of the interviewees. This final outcome will be shared with the wider scientific community via publications and where possible, feedback sessions with the farmers will be organized. The project paper from the exercise will also be available for public reading at the University of Nairobi library.

4.0 CHAPTER 4: SUSTAINABILITY OF SMALLHOLDER TEA PRODUCTION IN OTHAYA DIVISION

4.1 Introduction

This chapter reports the findings of the study, their implications and comparison with past researches in a form of a discussion. The findings are arranged along the lines of the specific objectives as set out in chapter one. Findings are presented in form of frequency tables, bar graphs and pie charts as well as verbatim quotes to amplify the voices of specific key informants. The chapter is divided into subsections where basic demographic characteristics of the respondents such as age are highlighted. This is followed by results based on each of the specific objectives.

4.2 Basic Demographic Characteristics of Respondents

Response Analysis

During data collection 60 questionnaires were issued by the researcher, out of which 55 questionnaires were returned and considered for analysis. This gives a 91.7% response rate as illustrated in figure 4.1 below.

Response rate

8.33%

Returned Questionnaires

Unreturned
Questionnaires

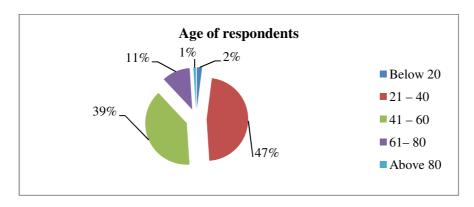
Figure 4.1 Response rate

Source: Primary data

Age of the respondents

Majority of the respondents (47%) were aged between 21 to 40 years followed closely by women aged between 41 and 60 years who represented by 39% of the respondents as illustrated in the figure 4.2 below.

Figure 4.2: Age of the respondents



Source: Primary data

Marital status of the respondents

In this study, 67.2% of the women involved were married, 21.8% were unmarried, 5.5% of the women were widowed, 3.6% were separated, and 1.8% were divorced. Majority of the married and unmarried women do not own land or tea bushes, these are usually owned by their husbands or family members (parents). Women were mainly the source of labour for tea picking. A committee member from Ruruguti electoral zone said "women may own the land after the husband dies, but this is not always the case. Sometimes the land ownership will go back to the husband's family, usually a male relative, until the woman can prove she can look after the tea bushes. She does this by maintaining or increasing the tea leaf picked. If she does a good job, she is given ownership of the land." Another committee member from Kihuri electoral zone said, "Most women here do not own land. Our culture still looks down on women and men do not believe they can run the tea business well. That is why whether you are married or not, you cannot own land. You can spend all your days in the farm, looking after the tea bushes, but at the end of the day, the farm still belongs to a man."

CPDA (2008) showed that women are recognized owners of land in instances where the spouse dies. The legal system allows the land title deed to be transferred to the woman.

Marital status of respondent is illustrated in the figure 4.3 below.

Marital Status

21.8%

Married

Divorced

Widowed

Separated

Unmarried

Figure 4.3: Marital status of the respondents

Source: Primary data

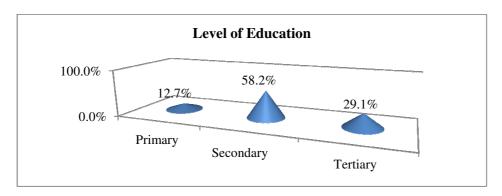
Many of the married women share a tea account number with their husbands. In fact, the accounts are usually registered in the husbands' name. This is highlighted by Thunguri electoral zone committee member who said, "We usually have an understanding between husbands and wives to have the account number in the husbands' name. The men being the head of our homes, it is good they have that authority. Although after getting paid, we consult each other on how to use the income to meet the family needs." Being that many of the married women do not have a tea account of their own, this implies that they may not necessarily have much control over their income.

Highest level of formal education attained

Most of the respondents attained secondary education as represented by 58.2%, 29.1% attained tertiary education and 12.7% attained primary education. A committee member from Iriaini electoral zone highlighted that "In this area, many women did not bother to attain tertiary education because the tea business seemed promising. Considering almost all farmers from this region are in tea farming which is also a family business, many people just assumed that is what they would spend their life doing. That is why higher education was not emphasized by our parents." In another instance, a fellow committee member from Kihuri electoral zone said, "in our community, we are so engrossed in tea farming that no one bothers to think outside the box. It is like we are slaved to it. Especially us women, it has provided us with work to do each day and earn for our families. The tea business is what most of us know and we do not ever bother to think what life can be without it."

Figure 4.4 below shows the education levels.

Figure 4.4 Highest level of formal education

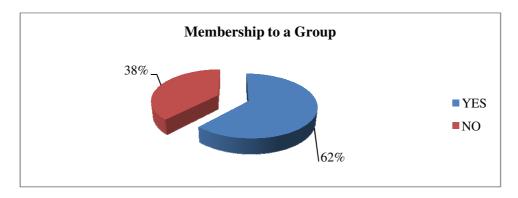


4.3 Influence of collective bargaining on sustainability of smallholder tea production for women farmers

Membership to a group

At 62%, majority of the women were members of a group while 38% were not members of any group. Group membership of women farmers is illustrated in the figure 4.5 below.

Figure 4.5: Membership to a group



Source: Primary data

Many of the women in groups indicated they were in *chamas*. In these *chamas*, women come together and contribute monies whether bi-weekly or monthly in order to assist themselves financially. In the *chamas*, women help each other financially through savings for loans and venturing into business, for example, buying sheep, rearing and selling them for profit. Women have found it necessary to invest like this because the income they earn from tea farming is never enough, therefore they have to supplement it. Additionally, *chamas* serve women well due the volatility of tea prices which of late has drastically fallen. Thus, farmers are getting low returns from tea.

Women prefer to join *chamas* because they can also get loans without providing collateral unlike in financial institutions like banks and SACCOs. They are also not charged processing fees and high interest rates. A committee member from Ruruguti electoral zone said that "financial services are also available from different SACCOs, but they are only enjoyed by those who can afford them. This is why many of the chamas here are mainly for women because they lack collateral and guarantors to take loans." Majority of women prefer chamas or "merry-go-round" which they form and manage themselves.

In asking this question, the researcher was hoping that the women would identify that they were in groups through the tea collection centres. Every tea account holder is a member of a specific tea collection centre where tea is collected. These centres have a committee that is annually elected by farmers. According to the tea regulations Cap 343 section 3 (2) (2002), committee members are tasked with monitoring the smooth running of the collection centre, act as liaison between factory management and farmers and liaise with extension officers to promote good husbandry. Committee members ensure quality of tea picked by advising farmers on when to pick tea, collection schedule of the factory lorries and training days working closely with the agricultural extension officer. In these centres, members (farmers) are able to raise their issues and the committee members solve or forward them to the factory management.

However, committee members who were interviewed noted that farmers were not satisfied with their representation when liaising with the factory management. This is because they were unable to fully implement their functions due to certain obstacles caused by the factory management to frustrate their efforts. A committee member from Gitundu electoral zone indicated that the factory management continuously undermined and compromised their capacity. She said, "Our opinions are not considered especially when it has to do with farmers' issues. If you are an outspoken committee member on farmers' grievances, directors usually look for a way to sabotage your position which you end up losing to someone who is more cooperative with directors."

Another committee member from Thunguri electoral zone supported this by saying, "....directors are not interested in what we have to say. They just call us for meetings and alert us on information they want us to pass on to farmers. Other than that, we are just like farmers with no way to voice our concerns." Among the key grievances highlighted were lack of proper scheduling of tea leaf transportation, late arrival of factory lorries for

collection of tea leaf and poor weighing machine used by the clerk which gave false reading of weighed tea leaf. Wal (2008) highlighted that tea collection centres and the tea factories negatively affects tea quality and incomes for farmers. In her research, critical issues that affected farmers ranged from poor transportation affecting tea quality, poor tea sacks resulting in loss of tea, too few staff at collection centres resulting in farmers having to wait for long periods and/or, not being served at all due to fraud and theft.

Committee members also perceived that many of the farmers felt they usually compromise their positions as collection centre leaders for their own interests. Farmers had on several occasions accused them of abandoning their grievances due to pressure from the factory management while at the same time accepting rewards (monies or personal favours such as payment of school fees for their children or having their children admitted to secondary school) for the same. Iriaini electoral zone committee member said, "Farmers always think that every committee member is bribed by factory management so as to drive the factory's agenda of ignoring farmers' grievances. It is true that some of the committee members accept money or favours, but not everyone is like that. It becomes difficult to prove this to farmers when your fellow committee members have accepted the bribes. However, those leaders who accept bribes are farmers like us who are struggling to make ends meet and sometimes people become desperate and look after their own interests." Tea collection centres leadership was observed as pedestals where elected officials use their positions to gain personal interests from the factory management while at the same time compromising the leadership of the collective (farmers). Their leadership was found to be ineffective in the roles they were assigned to play.

Furthermore, CPDA (2008) found that farmer representation was lacking, poor or compromised. There is completely no farmer representation by elected officials as they were found to be largely ineffective and compromised.

4.4 Influence of economic benefits on sustainability of smallholder tea production for women farmers

Number of hours a woman works in a day

Majority of the women (41%) work between 8-10 hours per day in the tea farms, while 28% work for 6-8 hours. 22% work between 4-6 hours while 6% work between 2-4 hours as shown in figure 4.6 below.

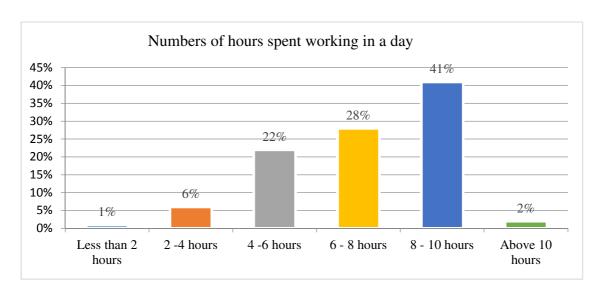


Figure 4.6: Number of hours worked per day

This study found that majority of the women work for around 8-10 hours (8.00 am - 6.00 pm) in a day without any exception as to whether a woman is pregnant or has small children. This is because, payments are made based on the number of kilograms of tea picked and their payments range between KES 9-10 per kilogram of green tea leaf picked. Thus, the longer a tea picker spends in the farm, the more tea they are likely to pick and therefore, the more they expect to get paid.

Tea picking constitutes majority of the work in tea farming. This is highlighted by a committee member from Gitundu electoral zone saying, "In tea picking, tea bushes are divided into sections whereby picking takes place in each section after 7-10 days. This is to give the bushes time to grow new shoots which mature into two leaves and a bud. Each tea bush is picked about 4 times a month. Tea bushes require both application of fertilizer and pruning done once a year, preferable July during the cold season, while weeding is done as required. Farmers usually use family labour (husband, wife and grown children) to conduct their farming. Family labour is usually engaged in the picking, application of fertilizer and weeding. In addition, they hire tea pickers on causal basis to assist them in picking tea. A fellow committee member from Gamba electoral zone said, "Picking tea constitutes majority of the work and this is why we usually hire people to assist us." Christian Partners Development Agency (2008) in their study found out that most smallholder farmers use family labour although casual labour is engaged during peak production periods.

Even though women spend considerable time in the farms, it is difficult to comprehend the economic rewards they receive in return. Considering that on average, they pick 25 kilograms on tea leaf per day and are paid KES 10 per kilogram, this implies they earn about KES 250 per day and KES 6,500 per month (working 26 days a month excluding Sundays). This amount is supposed to support a family (of approximately 4 members, 2 parents and 2 children) and additionally, tea farming may be their sole business venture. This therefore means that these farmers are living in extremely poor conditions.

Employed to pick tea

According to the study, majority of the respondents were employed to pick tea as represented by 62% while 38% of the respondents were not. Among the category that was employed to pick tea in other farms, they picked tea in their own farms as well. This was in order to increase their income. In their own farms, women have no control of the income earned as it goes to the husband who is registered on the tea account. They may however, have some degree of control on the money they earn as tea pickers because it is paid in cash on a daily basis. A tea picker earns KES 10 per kilogram of tea picked while the farmer earns KES 14 per kilogram of tea. This implies that the tea picker get 71% of what the farmers are paid per month per kilogram of green leaf sold to the factory. As for those not employed in tea picking, they mainly engage in their own tea farms. This is illustrated in the figure 4.6 below.

Employed to Pick Tea

38%

Employed

Not Employed

Not Employed

Figure 4.7: Employed to pick tea

Source: Primary Data

Women were employed on casual basis not on contractual basis. A committee member from Gitundu electoral zone said, "...unfortunately, women here work on casual basis. This means that you go to work when there is work, especially during the peak seasons. On other days, you look for work elsewhere." Due to the fact that many of the women work on casual basis, they have no provision of benefits such as medical cover, sick leave, paid leave, maternity

leave, job security among others. Wal (2008) also had the same findings pointing out that with casualization of tea labour, workers were not guaranteed job security (contracts) and other benefits such as pension rights and access to medical care for themselves and their children.

On average a woman in Iriaini picks between 20-30 kgs of tea in a day which implies they earn between KES 200 - KES 300 per day (KES 6,000 - 9,000 per month). These wages are considerably low compared to the needs of the women and their families. This in turn leads them to spending significant time (7-10 hours per day) picking tea, however with the continual falling of tea prices, they still earn little. What they earn is used for their basic family needs such as food, clothing and payment of school fees. There is little to none left for savings or venturing into other farm enterprises or businesses. Iriaini electoral zone committee member highlighted this saying, ".....we spend a lot of time farming this tea, but when you look at us, you cannot see anything we have gained from it. What we earn is barely enough to meet our necessities at home, let alone venture in something else. We just do what we can with what we get."

Thus, farmers cannot afford to get involved in any other income generating activity. This situation is worse for women farmers who lack alternative income with very few of them owning tea bushes or having a tea account. Smallholder farmers have much of their land under tea farming and leave very small or no portions for subsistence farming of vegetables (kales, maize, arrow roots, cabbage, fruits etc.). Ownor et al., (2005) found that many of the smallholder farmers are mainly engaged in tea farming as their sole enterprise. Farmers without alternative enterprises allocate most of their labour to tea enterprise.

On further inquiry, it was noted that majority of the work in tea farming is performed by women. Even though men still own the farms, women are the ones providing most of the labour. Gamba electoral zone committee member said, "Men seem to have stopped actively engaging in tea farming because of the falling tea prices. Tea volatility has left them frustrated and they have taken to congregating at town centres to pass time by politicking and/or drinking alcohol. Therefore, the load has been left to women to become the breadwinners having to provide for their families. Another committee member from Kihuri electoral zone said, "....it has become frustrating for women here. You spend all day in the field working and when you get home, you still have to take care of the family needs. In

addition, your husband spends all day drinking with his friends in the town centres and he also expects you to provide for him too."

Even with women doing all the hard labour in the tea farms, men are the ones controlling the income earned. Many of the tea accounts were in the men's name and therefore, they were the ones collecting the paychecks. Unfortunately, men were prioritizing their personal needs (e.g. drinking and entertaining friends) over the family needs (food, clothing, school fees etc.) and to the exclusion of their wives who earned the money. This has resulted in marital disputes becoming commonplace. These disputes, in some instances, have brought about the registration of two (2) tea accounts in families, one for the husband and one for the wife. This way, the wife gets monies to provide for her children.

In view of this, a committee member from Iriaini electoral zone said, "Men show little interest in picking, so now a few homesteads are starting to register for 2 tea accounts, one for the husband and the other for the wife. When the wife picks about 50 kgs of tea leaves, payment of 40 kgs goes into her account while 10 kgs to the husband's account. This way, she has money to cater for her family's needs and thus reduces conflicts with her husband."

Overtime arrangements

This study found out that women tea pickers were hired on casual basis and they were paid per kilogram of green leaf picked and not based on the number of hours worked. None of them indicated any overtime payment. One can pick an average of 20-30 kilograms in a day. After picking tea, it is taken to the collection centre for weighing and transportation to the factory. In peak periods, the queue at the collection centre is long and frequently the factory lorries get delayed in collection. The delay leads to women spending extended periods waiting at the collection centres. The collection schedule of the lorries is not known, thus women are forced to spend considerable amount of time waiting for it. A committee member from Gitundu electoral zone mentioned that the situation is also made difficult because, "Collection centres have only one clerk weighing the tea and this prolongs the time wasted which is not factored in the payment for the employed woman. The weighing clerk, who also is the driver of the collection lorry, has to visit five collection centres each day and this results in farmers wasting a lot of time at the collection centres." Another committee member from Gamba electoral zone said, "... there is no overtime. You work until you feel you have picked enough tea to pay you well for the day." Unfortunately, women are not paid for all the hours they spend at the collection centre waiting for the factory lorries to collect tea. Leaving your green leaf unattended results in other farmers stealing it in order to increase their kilograms of tea.

Ordinarily, when employees work beyond an agreed number of hours (usually 8 hours) per day, the extra hours worked are considered overtime. Overtime hours are usually compensated with payments above the normal pay rate employees receive during normal working hours. However, in tea farming, this is not the case. Tea pickers are paid based on the number of kilograms of green leaf picked per day and not on the number of hours worked in that particular day. Therefore, an employee is the one who determines how much they will earn per day based on their efforts in the tea farms.

Morser (2010) noted that tea pickers are paid per kilogram of green leaf picked. There are no payments for overtime, especially time spent at the collection centre waiting for transportation of the green leaf to the factory.

Medical cover provided and common injuries in tea farming

The study showed very few women have medical covers as illustrated in the table below.

Table 4.1 Number of women with medical covers

Response	Number	Percentage
YES	7	12.7%
NO	48	87.3%
Total	55	100%

Source: Primary data

Few women (12.7%) had medical cover while majority (87.3%) of women did not. A committee member from Ruruguti electoral zone said, "The factory provides Kinga Mkulima health insurance for farmers whereby they pay an average of KES 300 per month (for both husband and wife) and an additional KES 60 for each child in the family." Another committee member from Thunguri electoral zone said, "there are no medical insurance provided for employed women who pick tea, this would be due to ignorance of both parties i.e. the employer and the employee or due to lack of finances." Medical insurance fees were unaffordable to many of the farmers because what they earned could barely cover their basic needs let alone medical insurance. As noted earlier, farmers earn KES 14 per kilogram of tea leaf sold to the factory.

Women sustained various ailments and injuries while picking tea including joint aches including lower back pains (due to prolonged carrying of picking basket), knees aches, arthritis, headaches, inflammations and scarring of fingers (picking spots), nasal congestion, colds and coughs (due to prolonged exposure during the cold season). In cases where there is a shortage of medicines in the government run health facilities, patients are given prescriptions to go buy it elsewhere. For example, many women suffer from arthritis and have to buy their medication from pharmacies and one month doze for Arthritis is around KES 500 which they find unaffordable. Therefore, they buy the dose when they can afford it.

Additionally, it was noted that many of the women working long hours do so without taking proper meals prior and during working hours. Gamba electoral zone committee member noted, ".....many women farmers feed poorly before heading out to the farms even when they know they will be spending all day there. For instance, they have strong tea for breakfast and then spend all day starving while working and have a proper meal in the evening. This is why many are suffering from malnutrition problems like arthritis." Another committee member from Iriaini supported this view by saying, "....women have poor eating habits. Many do not eat fruits and vegetables as often as they should which are key in giving one vitamins. Now, many women here believe they get arthritis from the cold weather, but it is because they do not feed well. How else do you explain that our parents did the same work as we do, but one barely heard a case of arthritis among them."

Morser (2010) had earlier found the work of tea labourers to be arduous in addition to being low paid and insecure. Tea pickers are on their feet all day with heavy baskets on their backs, often on uneven terrain and in harsh weather conditions. Common injuries ranged from fractures, back injuries, major skin bruises, respiratory and water-borne diseases.

Protective equipment offered when picking tea

Majority (72.73%) of the women were not provided with any protective equipment while the 27% were as illustrated in the table below.

Table 4.2 Provision of protective equipment when picking tea

Response	Respondents	Percentage	
Yes	15	27.27%	
No	40	72.73%	
Total	55	100	

The factory provides protective equipment (which includes overalls, gumboots and hats) to farmers at a cost or on credit. For example, according to Kihuri electoral zone committee member, "a pair of gumboots is sold at KES 500 which most farmers find unaffordable." Tea is grown in cold areas and it is essential to keep warm when picking tea in the early chilly mornings, especially in the cold season from June to August.

Overalls (protects one from skin scratches and bruises) and other protective gear like gloves should be availed to the farmers and casual labourers. Gloves protect the fingers from the liquid substance while picking tea leaves. The substance stains fingers and leads to a rough and cracked fingers. A committee member from Gamba electoral zone said, "There are no overalls designed for the females which is a major concern for tea picking women. This is because, the male designed overalls are big and do not fit them well." According to another committee member from Iriaini electoral zone, "protective equipmentis are expensive and are normally a challenge for some women to afford gumboots and the aprons and hence they use their normal attire while working which exposes them to injuries." Many of the women farmers cannot afford to purchase the protective gear for picking tea, thus they suffer these injuries due to lack of protection.

4.5 Influence of training on sustainability of smallholder tea production for women farmers

Training on tea production

Majority of the women farmers (54.54%) had received training on tea production while 45.46% had not. This is illustrated in the figure 4.7 below.

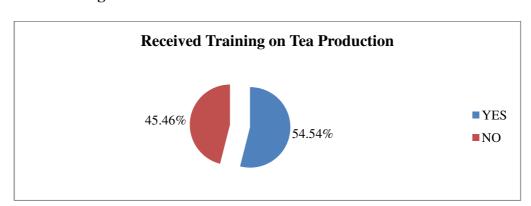


Figure 4.8: Training on Tea Production

Iriaini tea factory offers regular training to farmers through farmer field schools (FFS). These trainings were implemented by KTDA in 2010 and are conducted through the tea factories. Trainings are conducted by KTDA extension officers (tea extension services assistant {TESA}) attached to the factory. In these trainings, farmers are taught on improving productivity of tea leaf through application of fertilizer, pruning of tea bushes, and appropriate time for picking tea among others. These trainings are offered to assist farmers not only to increase their productivity by improving on the quality, but also to increase quantity of tea leaf picked. Trainings target all tea farmers who are members of the tea factory and not specifically women farmers.

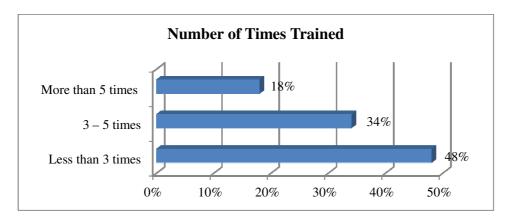
A committee member from Gamba electoral zone said, "The factory usually provides training to farmers throughout the year. It is up to a farmer to decide if they want the trainings and sign up for them. Usually, we are taught on improving our farming methods in order to increase productivity by the factory TESA".

Farmer field schools are conducted throughout the year and cover a range of topics. Hiller et al., (2011) noted that each factory is to conduct 6 FFS per year among all tea factories. FFS are facilitated by TESA and invited resource persons. Training topics range from Rainforest Alliance principles, Good Agricultural Practices (GAPs) for tea production, empowerment, alternative sources of income, as well as other social and non-social issues.

Number of times trained

As noted above, of the 54% women who were trained, 48% of those had been trained less than three times, 34% have been trained three to five times and 18% have been trained more than five times. This is illustrated in the figure 4.8 below.

Figure 4.9: Number of Times Trained



Women farmers found it difficult to regularly attend trainings because of the timing. A committee member for Gamba electoral zone noted, "...women spend most of their time in the farms picking tea. They work every day except Sundays and spend all day in the farm. When they get home, in spite of being tired, they have to do housework. So they don't have time to attend training." Since many of the women actively engage in tea farming, they lack the time to attend trainings, this could be the reason many have had less than three trainings. The trainings are usually held on timings that women are usually in the farms picking tea, conversely, women spend all their days in the farms with the exception of Sundays. Women had a difficult choice between attending the trainings and working to get paid in order to provide the day's meal to their families.

Facilitators of the training

Table 4.3 below shows the facilitators of the trainings. Facilitators were either extension officers from the factory or Fair Cup project which was a partneship between CPDA and Traidcraft.

Table 4.3 Facilitators of trainings offered to farmers

Training Facilitators			Respondents	Percentage
Factory	(Farmer	Field	18	60%
School)				
CPDA/Traidcraft (Fair Cup			12	40%
Project)				
Total			30	100%

Source: Primary data

Most of the trainings (60%) were implemented by TESA in farmers field schools organised by the factory management. TESAs act as a link between tea researchers and farmers. They operate as facilitators by ensuring that appropriate knowledge is availed and implemented to obtain the best results.

In 2014, the Fair Cup project under the joint partnership of CPDA and Traidcraft worked with smallholder tea farmers through holding trainings on farmer rights awareness. The training aimed at assisting farmers to become aware and take full advantage of their farmer rights. Additionally, farmers were trained on diversification of livelihoods such as dairy and horticulture farming. CPDA/Traidcraft also trained hundreds of farmer representatives on leadership, management and conflict resolution at the tea collection centre level.

Context of the training

Among the trainings received from both the factory and CPDA/Traidcraft, 28.91%, were trained on farm management, fertilizer application (25.73%), pruning and tea picking (21.64%), financial literacy (8.1%), farmer rights and responsibilities (7%), alternative livelihoods (3.64%), and leadership, management and conflict resolution (5.45%) (this was a training offered to collection centre committee members only). This is summarized in the table below.

Table 4.4 Context of the training

Context of the Training	Percentage
Farm management	28.91%
Fertilizer application	25.73%
Pruning and tea picking	21.64%
Financial literacy	8.1%
Farmer rights and responsibilities	7%
Alternative livelihoods	3.64%
Leadership, management and conflict resolution	5.45%
Total	100%

Source: Primary data

Due to the continued fall in tea prices, farmers were being encouraged to venture into other farm enterprises. A committee member from Thunguri electoral zone noted, "Tea is doing badly and many farmers are suffering because of this. Now they are being trained to do other

businesses so that they are not affected much if tea prices will keep falling." In the training on alternative livelihoods, women were trained on dairy cows, poultry farming, horticulture farming of avocados, carrot, spinach, kales and cabbage etc. Since many farmers buy their foods from produce markets, training in subsistence farming should help them provide food for their family and at the same time be able to save from spending on foods.

Farmers were also trained on financial literacy including farm record keeping, savings and budgeting. Farmers have been known for poor keeping of farm records and many of them cannot even calculate the profit versus losses they make in tea farming. This was clearly brought out by a committee member from Ruruguti electoral zone who said, "Farmers here learnt farming from their families and do it to keep from being idle. Many waste their money, especially the annual bonus, by going after leisure activities and then when the money is done; they remember they had not paid school fees". Farmers lacked the knowledge of proper financial management of lump sum because of impulsive buying demonstrated by their spending patterns.

Improvements on tea-leaves yields as a result of the training

Farmers indicated that the trainings were very useful and they also trained fellow farmers on the new skills acquired. The farmers were able to pick more tea (29.1%) compared to before receiving the training. Other farmers (34.63%) were earning income from atlernative livelihoods for example through poultry farming and growing vegetables. Farmers are doing this at a minimal scale which mainly services the family needs. This has been summarized below.

Table 4.5 Results of the training

Response	Percentage
Increased quantity of tea picked	29.1%
Improved quality of tea	27.27%
Diversification leading to increased income	34.63%
No change experienced after the training	9%
Total	100%

Source: Primary data

A farmer from Gamba electoral zone who received some training on tea production said, "with the training, I now understand that I am supposed to give tea bushes about 10 days rest in between picking leaves in order to give them time to grow new shoots." Another farmer from Ruruguti electoral zone said, "...now I have made room for a small kitchen garden for my home needs. I grow green vegetables there that my family enjoys eating every day. I no longer have to buy them from mama mboga. In fact I even sell some to my neighbours and get to earn a little money."

Rating the number of annual trainings offered

According to the study, majority (47%) of the respondents indicated that the trainings offered annually was not enough, 22% found it fair, 15% found it enough, 9% found it excessively many and 7% found it more than enough. In the ratings of the annual trainings, the various categories had the following implications: **Not enough** – farmers perceived that the annual trainings did not assist them in improving their tea yields, thus they were in further need of more trainings being provided; **Enough** - farmers perceived the annual trainings received as adequate in assisting them in increasing their tea yields with the implication of increased income; **Fair** - farmers were not decisive if the annual trainings were adequate in assisting them increase their tea yields with the implication of increase their income; **More than enough** - farmers perceived annual trainings as more than adequate in assiting them increase their tea yields with the implication of increased income; **Excessively many** - farmers perceived annual trainings as overly adequate in assiting them increase their tea yields with the implication of increased income; **Excessively many** - farmers perceived annual trainings as overly adequate in assiting them increase their tea yields with the implication of increased income. This is illustrated in the figure below.

Rating the Number of Annual Trainings Offered

9%

15%

15%

Not enough

Enough

Fair

More than enough

Excessively many

Figure 4.10: Rating the number of annual trainings offered

Source: Primary Data

Evaluating life after the training

Most of the women (57%) indicated that they were much better off now after the training, 26% are somewhat better now, 10% are the same while the remaining 7% are somewhat worse off as illustrated in the figure below.

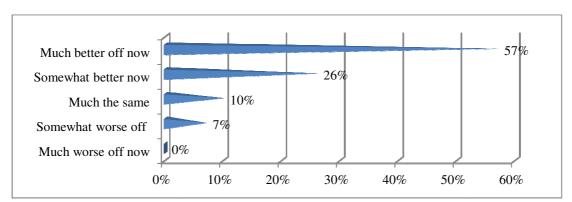


Figure 4.11: Evaluating life after the training

Source: Primary Data

Those who indicated life was better after the training is not because they had all been able to adopt the trainings; for others it was due to the attained knowledge. A committe member from Gitundu electoral zone said, "these trainings are good becasue they give people ideas. Even if you do not have the money to start another business, at least you can start saving for it." For example, some women who received trainings from CPDA/Traidcraft on alternative livelihoods had begun subsistence farming of green vegetables, cabbages and arrow roots. Though done at a minimal scale, it is serving the nutritional needs of the family.

Ideas to improve productivity in smallholder tea production

Capacity building of farmers in certain key areas was highlighted not only in tea production, but also in other areas such as;

- 1. Approaching tea farming as a business. Tea farming is a family business which has been passed down from generation to generation. Farmers thus learnt tea farming from their families who practiced traditional agriculture. Therefore, many of the farmers need the skills to operate it as a business.
- 2. Training of farmers on their civic rights.
- 3. Alternative livelihoods such as dairy goats, dairy cows, poultry farming and horticulture farming.
- 4. Water harvesting of rain water for horticulture farming.

Other ideas suggested by respondents for the tea sector included:-

- 1. Tea pickers should be compensated by their employers for time spent delivering tea to the collection centres and waiting for transportation to the factory.
- 2. Iriaini tea factory should develop a strict tea collection schedule to ensure there are no delays in picking up tea from collection centres.

5.0 CHAPTER 5: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introductions

This section has the summary of findings, the conclusions based on the study and the sets of recommendations emanating from the findings.

5.2 Summary of Findings

5.2.1 Collective Bargaining on Productivity of Women

Majority of the women (62%) in groups indicated they are in chamas. Women use *chamas* to contribute monies whether bi-weekly or monthly in order to assist themselves financially. However, they did not consider themselves to be in farmer groups through their respective tea collection centres.

Based on the responses from the study, every tea account holder is a member of a specific tea collection centre where tea is collected. The factory groups farmers in tea collection centres for ease of tea collection and easy management of farmer affairs. In every collection centre, farmers elect committee members as their representatives to liaise with factory management. Committee members also ensures quality of the tea picked by advising on when to pick tea, collection schedule of the factory lorries and training days working closely with the agricultural extension officer. In these centres, members are able to raise their issues and the committees solve them or forward them to the factory management. However, performing these tasks is proving difficult because factory directors undermine their effort. This may be why farmers do not consider these representatives as effective since the committee members are not in a position to act in their full capacity and be able to make a difference.

5.2.2 Economic Benefits on Productivity of Women

Women farmers earn KES 14 per kilogram of green leaf picked of which KES 10 is paid to tea pickers. About 62% of women are hired on casual basis and pick about 20-30 kilograms of green leaf per day. They work for several hours (8.00 am – 3.00/6.00 pm) a day without the exception of being pregnant or having small children. Since they are hired on casual basis, they have no benefits such as medical insurance, sick days, maternity leave among others. Unfortunately, what they earn is not enough to support their family needs and this is why they form *chamas*. Another reason why they join *chamas* is because of their sole

dependency on tea income. Many of the farmers have put much of the land under tea farming with little to none left for subsistence farming. They usually buy their foods from the produce market.

There are no overtime arrangements in place as tea pickers are paid per kilogram of green leaf picked and not based on the number of hours worked. After picking, tea pickers take it to the collection centre for weighing and transportation to the factory. In peak periods, the queue at the collection centre is long and usually factory lorries get delayed in collecting the tea leading to wastage of farmers' time in the process of waiting for the transport.

Majority of the women farmers (87%) do not have medical covers and usually visit local government dispensary for free treatment. Injuries sustained while picking tea included lower back pains, headaches, inflammations and scarring of fingers, nasal congestion, colds and coughs. Many of these injuries/ailments are sustained due to prolonged exposure to cold and rainy weather especially between June and August.

5.2.3 Training on Productivity of Women

Roughly 60% of the women had been trained on tea production through farmers field schools. These trainings are facilitated by extension officers both at the farm level and at field schools level. The FFS are among the trainings organised by the factory management on tea production, farm management, fertilizer application, tea picking, financial management among other courses. While 40% had received training from Traidcraft/CPDA on farmer rights and responsibilities, alternative livelihoods, as well as leadership, management and conflict resolution for collection centre committee members.

About 29% of those who received training reported increased tea production while 27.3% reported improved quality. The 34.6% who trained on alternative livelihoods had started growing green vegetables, cabbages and arrow roots. Though done at small scale, the additional income is beneficial to women farmers.

5.3 Conclusion

In conclusion, Iriaini tea factory groups farmers in tea collection centres for ease of tea collection and management of farmer affairs. However, leaders of these collection centres seemed ineffective and served their own personal needs as opposed to serving the collective needs of the farmers. Their ineffectiveness not only comes from serving their personal needs

but also from intimidation from factory management to abandon farmers' grievances. This is facilitated through bribes such as monies and personal favours.

Women barely earn enough income to support themselves, let alone their families. On average, women tea pickers are earning an average of KES 9,000 per month. Additionally, women are not paid for overtime hours as payment is based on the number of kilograms of tea leaves picked. This is why they are earning such low wages which does not afford them even the most basic of needs such as a well-balanced meal and healthcare provision.

Training programmes run by the Iriaini tea factory are done when most of the women are out in the farms. Due to the fact that women's daily meals and family needs depend on the them working everyday, many of the women cannot afford to miss a day of work. As for those who have attended trainings, many of them perceived the trainings as inadequate to meet increased production of their tea yields.

Therefore, from the study findings, women farmers continued involvement in tea farming is due to necessity of the upkeep of their families as opposed to it being a viable business. Many of the women engage in it mainly because it is what they have grown up doing and everybody else in the region is doing it too. Tea farming as a business seems to be loosing its viability as shown by not only the meagre earnings women receive, but by also the poor conditions they live and work in. Women farmers should really consider venturing into alternative farm entreprises in order to reduce their sole dependance on tea farming.

5.4 Recommendations

The following recommendations are made based on the research findings;

- 1. Building capacity of tea collection centre committee members in terms of leadership, governnance and management in order to increase their effectiveness.
- 2. Arrangements have to be made to ensure that the time wasted by farmers at collection points is either compensated or reduced.
- 3. Building capacity of women farmers in other farm enterprises other than tea farming in order to have alternative income generating activities.
- 4. The factory should consider monetary compensation of women farmers during training days in order to encourage more of them to attend regular training sessions.

5.5 Suggestions for Further Research

The researcher suggests that further studies should be done on the following topical issues:

- 1. Comparative analysis of tea farming and other farm enterprises thus highlighting understanding of the viability of tea as a business.
- 2. Net benefit of tea farming for smallholder farmers' families and community.
- 3. Evaluation of how democratic the processes of electing officials in the tea sector is and if this hinders elected officials from carrying out their responsibilities in full capacity.

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APPENDICES

APPENDIX I: CONSENT FORM

Introduction

My name is Morrine Gakaria, a postgraduate student in the Institute of Anthropology, Gender

and African Studies at the University of Nairobi. I am conducting a study among women

farmers' on the Factors Influencing Sustainability of Smallholder Tea Production: A

case of women farmers in Iriaini Tea Factory.

Purpose of the study

The purpose of the study is to investigate the current state of women in the tea sector and the

challenges they face as women farmers.

Procedure

On voluntarily agreeing to take part in the study, a questionnaire will be administered to you

by a research assistant. The research assistant will be present throughout the filling in process

for any questions where you do not clearly understand a particular question.

Your name will not appear anywhere. The information you will give will be confidential and

will only be accessible to the interviewer and the principal investigator.

The data collection will take 20-30 minutes.

Benefits of the study

The findings of this study will provide information on the current situation of women farmers

in the smallholder tea sector. This information may help advice policy makers in the

agricultural sector on tea production leading to improved policy formulation and

implementation.

Risks

There are no risks involved in this research activity.

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Rights

Participation in this study is entirely voluntary. You will not be compelled or paid to answer any questions. You reserve the right to withdraw from the research activity at any time. You have the right to ask any question and seek clarity about the study.

Contacts

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Morrine Gakaria (principal investigator) on 0714 104 588

For further enquiries, please contact:

Institute of Anthropology, Gender and African Studies/University of Nairobi – Ethics and Research Committee, the Commission of Science, Technology and Innovation, P.O. Box 30623, 00100 Nairobi, Telephone: 020310571/0202241349

The study topics, objectives and purpose have been explained to me and I have understood them. I understand that this exercise is voluntary and that I do not have to answer questions that I am not comfortable with. I have also understood that I can withdraw from the study anytime during the interview.

I have not been promised any material gain to be included in this study. I therefore voluntarily consent to participate in this study.

APPENDIX II: QUESTIONNAIRE FOR WOMEN IN SMALLHOLDER TEA **PRODUCTION**

To be filled by respondents who are workers in Iriaini Tea Factory. Please answer all the questions. You are kindly requested to take time and provide the information asked as accurately as possible. Your honesty will be highly appreciated. The information is purely educational and will be treated with utmost confidence.

SECT	ION A:	BACKGRO	UND INFORM	IATION			
1.	Please i	ndicate your	age				
Below	20[]	21 – 40 []	41 – 60	0[]	61-80[]	Above 80	[]
2.	Marital	status					
		a)	Married				
		b)	Divorced				
		c)	Widowed				
		d)	Separated				
		e)	Unmarried				
3.	What is	your highest	level of formal	education?			
	((a) Primary	(b) Secondary	(c) Tertiary	(d) None		
SECT	ION B:	COLLECTI	VE BARGAIN	ING ON PR	ODUCTIVIT	Y OF WOM	EN
4.	Are you	a member o	f a group?				
		Yes []	No []			
5.	If yes, v	which ones?					
6.	Kindly	list the b	enefit you re	eceive from	the above	menrtioned	groups?

SECT	ION C: ECONOMIC BENEFITS ON PRODUCTIVITY OF WOMEN
7.	How many hours do you normally work in a day?
8.	Are you employed to pick tea? If yes, proceed to question 8 and 9. If no, go to 11.
	Yes [] No []
9.	Are there any overtime arrangements in place?
10.	What medical cover/provisions are provided for you?
11.	What are the common physical injuries sustained while picking tea?
12.	What protective equipment is offered when picking tea?
SECT	ION C: TRAINING ON PRODUCTIVITY OF WOMEN
13.	Have you ever been trained on tea production?
	Yes [] No []
14.	How many times have you been trained?
	[]Less than 3 times

	[]3-5 times
	[]More than 5 times
15.	. Who facilitated the training?
16.	. What was the training all about?
17.	. Would you say the training influences the productivity of women in smallholder teaproduction?
18.	. How has the training improved your tea-leaves yields?
19.	. How would you rate the number of annual trainings given to you?
	a) Not enough
	b) Enough
	c) Fair
	d) More than enough
	e) Excessively many
20.	. Considering the trainings you have received, how do you say you are doing now?
	a) Much worse off now
	h) Somewhat worse off

	c)	Much the same			
	d)	Somewhat better now			
	e)	Much better off now			
21	21. Do you have any other suggestions that can assist the smallholder women tea farmers				
	of tea pickers	s to improve on thier productivity?			

THANK YOU FOR YOUR PARTICIPATION

APPENDIX III: KEY INFORMANT INTERVIEW GUIDE

- 1. How well-informed are women here about unions and how good are they in joining them?
- 2. Describe any problems affecting women in the tea sector here? Probe: working conditions; economic benefits received from tea production; volatility of tea prices etc.
- 3. Is there anything being done to alleviate these challenges by the tea factory or other organizations? (If not, why?)
- 4. What economic benefits are provided to women by the factory?
- 5. If no economic benefits are provided, why is this so?
- 6. Describe any services/support targeting women in the tea sector that the local tea factories offering? (Agricultural inputs; training; social; etc.)
- 7. Are the above services adding value in terms of productivity? (If not, why?)
- 8. Describe any kind of women specific services would you expect from the tea factories? (Are the services useful?)
- 9. Are the above services adding value in terms of productivity? (If not, why?)
- 10. Describe any support services available for women by the factory to increase their productivity?
- 11. Is there any other undertaking that the factories are doing to enhance the female productivity in the tea sector?

THANK YOU FOR YOUR PARTICIPATION