

ASSESSING THE IMPACT OF TEA PRODUCTION ON THE ECONOMIC  
DEVELOPMENT OF LOCAL COMMUNITY: A CASE STUDY OF KAYONZA TEA  
FACTORY IN KAYONZA SUB- COUNTY KANUNGU DISTRICT

BY

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## DECLARATION

I TUKWASIBWE JOAB hereby declare that I have compiled this research proposal myself. It has never been submitted to any other university for the award of Bachelor of Science with education.

Signed-----    -----Date: 04/08/2019

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### **APPROVAL**

This research proposal about the impact of tea production to the economic development of the local community of Kayonza sub-county in Kanungu district was done under my supervision and is ready for submission.

Signed  \_\_\_\_\_

Date: 09/08/19

MR AINOMUGISHA JEREMIAH  
SUPERVISOR



### **DEDICATION.**

I dedicate this work to my dear family members and friends for their tireless contributions rendered to me, both financially and encouragement in my academic struggles, the teaching staff and my mentors in learning fraternity.

MAY THE ALMIGHTY REWARD EVERY HAND ABUNDANTLY.

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## **SUMMARY OF THE STUDY**

This study assessed the impact of tea production to the economic development of the local community of Kayonza Sub County in Kamungu District, a case study of Kayonza grower's tea factory. The objectives of the study were to identify the factors that have favoured tea production, find out the contributions of tea production and investigate the challenges affecting tea production in Kayonza Sub County in Kanungu District. The study was carried out in Kanungu District where tea has been promoted as a strategic enterprise since 2004. Descriptive research design was used where the researcher used different data collection methods which included interviewing, questionnaire, and observation methods and a sample of 60 respondents were used for the study. The study findings show that the factors that have favoured tea production were land availability which is a major factor consisting 90% of the respondents, farm labour, relief, agro-input use and the growing promotion as a strategic agricultural enterprise, the contributions of tea production in Kayonza sub county Kanungu District were source of income which is the major contribution of tea production (97%), employment opportunities, foreign exchange earner for the county, contribute to food security, infrastructural development, and the challenges affecting tea production in Kayonza sub county Kanungu District were pest and diseases which is the major challenge to tea production (90%) cost of production, lack of comprehensive policies, , poor road networks and infrastructures, poor agricultural technology, marketing and valueaddition constraints, climatic changes and seasonal effects and poor access to information. The government of Uganda under the ministry of agriculture initiated a strategy to support priority agricultural enterprises at zone level and it is under this approach that tea production has been promoted over the years in Kanungu District. However more actions should be taken to improve quality and increase quantity of tea produced through supply of inputs by the government, adoption of new technologies and provision of more advisory services, improving the market both local and international, putting in place comprehensive policies such as large scale production as well as improving infrastructures for easy transportation of both green leaf tea and processed tea.

## **ABBREVIATIONS;**

**AT:** Uganda Ltd: Appropriate Technology Uganda Limited

**CC:** Community Connector

**FAO:** Food and Agriculture Organization

**KDDP:** Kanungu District Development Plan

**KDTPD:** Kanungu District Tourism Development Plan

**KGTF:** Kayonza Growers Tea Factory

**NAADS:** National Agricultural Advisory Services

**MAFAP:** Monitoring African Food and Agricultural Policies

**SSA:** Sub-Saharan Africa

**UBOS:** Uganda Bureau of statistics

**MAAIF:** Ministry of agriculture, animal industry and fisheries

**MT:** Metric Tones

**NAADS:** National Agricultural Advisory Services

## **CHAPTER ONE:**

### **GENERAL INTRODUCTION**

#### **1.0. INTRODUCTION:**

The study was to assess the impact of tea growing to the economic development of the local community, the case study of Kayonza growers Tea factory in Kayonza sub-county, Kanungu district. The major components in this chapter are; Background of the study, statement of the problem, purpose of the study, objectives, definition of key terms, research questions, scope, limitations and significance of the study.

#### **1.1: Background of the study.**

Popular for thousands of years, tea is believed to have originated in China and with high demand. With such high demand, it is understandable that tea needs to be produced on a mass scale and across the world in varied locations in order to cater to growing requirements for the plants required to make different varieties. The world tea production is about 3 billion kgs and East African countries of Kenya, Uganda and Tanzania contribute about 11 %. The largest producer is India with about 28% of the world's production and the largest Tea exporter is China with about 17% of the world's total exports.(statista.com 2017).

The introduction of tea to Africa goes back to the end of the 19th century. It first originated in South Africa where the English started its cultivation to secure new sources of supply world. Then, German settlers experimented with its cultivation on the slopes of Mount Cameroon and in Tanzania. (SJ Kosgei ,1981 ). Throughout the 20th century, numerous countries began to grow tea, and today, the African continent is an important player in the world tea market. Kenya is ranked third in the tea world production and the leading in Africa. (Tea Production Regions around the World, Lindsey Goodwin).

For a long time, Uganda has been known to be favourable for Tea growing. The tea plant was introduced in the country by 1900. By mid 1950's, tea had become Uganda's Estate crop, owned by mainly Asians and Europeans, with a very Small number of African Growers. At the time of Uganda's independence in 1962, the country was still

a long way from realizing the full potential in the development of its Tea industry (UGATEA, 2011). Tea being an important export product, the Government of Uganda considers it as one key area through which the country's export earnings could be boosted, and people's social-economic conditions improved. So in 1988, the government of Uganda with the support from the European Union began the Smallholder Tea Rehabilitation Project (STRP). Production In Africa, Uganda is the third leading producer and exporter of tea (45,000MT) after Kenya (295,000MT) and Malawi (55,000MT) (MAAIF, 2010). Some of the areas identified are in the districts of Kabarole, Bushenyi, Kanungu, Rukungiri, Mityana, Kibaale, Hoima, Kisoro, Wakiso, Mbarara, and Nebbi /Zewu. Tea is largely grown along the Lake Victoria Crescent and lower slopes of the Rwenzori Mountains as well as above the Western Rift Valley. (UGATEA, 2011).

Tea is one of the oldest cash crops grown in Kanungu district and at a national level it's the second cash crop to coffee for export (UBOS, 2010) and tea is predominantly grown in areas of Mpungu, Kayonza, Kanyantorogo, Butogota Town Council, Kirima, Kanungu town Council, Rugyeyo, Rutenga, Kinaaba and to a smaller extent Kambuga Sub county (NAADS, 2012) due to prevailing conditions that favor tea growing in these units. The mode of production includes, estates which are owned by the factories in the district (Kayonza growers tea factory and Kinkiizi development company) and out growers who account for 95% of the green leaf supplied for processing in these two factories mentioned above (NAADS, 2012). About 4072 smallholder farmers existed by 2007 and cultivated over an area covering approximately 2000 hectares (Canter, 2007). This was a situation before tea promotion was emphasised under NAADS programme in 2008. Many more farmers were brought on board and most of the tea farmers that existed then also expanded on their tea gardens with tea promotion project. Farmers have been interested to be in tea production the fact that it has a reliable market provided by the tea factories, more stable prices and provides a regular and reliable income to farmers. On the environmental perspective, tea is one of the suitable crops to grow on the fragile soils within the hilly terrain that cover most parts of the district. It establishes bush cover which protects the soil from erosion keeping the soils productive for a long time. The Kanungu Local government through NAADS program, under public private partnership arrangement has worked closely with the management of private tea factories to promote tea production within the district. The objective of the partnership

was and is still to promote planting of quality tea clone, increase tea green leaf production and enhance household income and food security for the different categories of farmers (small, medium and large-scale producers) through sales of tea green leaf. Currently over 65,000 farmers exist in the tea growing areas of the district (KGTF, 2012).

## **1.2 Statement of the problem**

Tea growing has been in existence in Africa and in Uganda, in particular, since 1960s (Rusike & Eicher, 2012). The promotion of tea enterprise was much more emphasized since (2008) where the local government under NAADS program in partnership with private companies have procured and given out tea seedlings to farmers indiscriminately at a free cost to establish new tea fields or to expand on their earlier existing tea fields. Little attempt has been made to provide factors that influence of tea production and its implications on the local community. Tea growing contributes to the improvement of the farmer's income and standards of living and extension service has a role to play in bringing changes in tea growing. However, due to shortage of extension workers for facilitation of dissemination of agricultural information, extension worker/farmer ratio sometimes makes it difficult to reach out to all the farmers as it is a typical case in many developing countries including Uganda especially in Kayonza sub county, Kanungu District. Nevertheless, it is not the case in some regions. According to Williams (2005), extension officers have been deployed to serve farmers, tea farmers inclusive in the country. This therefore suggests that the extension worker/farmer ratio is insufficient for effective and efficient extension service. However, the economic condition of the tea farmers remains unchanged. It is based on this background that this study was carried out to assess the impact of tea production to the economic development of the local community of Kayonza Sub County in Kanungu district.

## **1.3. Purpose of the study.**

To assess the impact of tea production to the economic development of the local community of Kayonza sub-county in Kanungu district

## **1.4. Specific objectives.**

The study depended on the following three objectives;

1. To identify the factors that have favoured tea production in Kayonza sub-county in Kanungu district

14. To find out the contributions of tea production to economic development of in Kayonza sub-county in Kanungu district.
- iii. To identify the challenges facing tea production in Kayonza sub-county in Kanungu district.

### **1.5. Research questions.**

This study was guided by the following questions;

1. What are the factors that have favoured tea production in Kayonza sub-county in Kanungu district?
2. How has tea production contributed to economic development of Kayonza sub-county in Kanungu district?
- iii. What are the challenges that are affecting tea production in Kayonza sub-county in Kanungu district?

### **1.6. Scope of the study.**

To ease the process of research study, the researcher divided the study into three scopes;

Geographical, Content and Time

#### **1.6.1 Geographical scope.**

The study was conducted in Kayonza sub-county in Kanungu district. The selected study area was Kayonza growers tea factory in Kayonza sub-county.

#### **1.6.2 Content scope.**

The study focused on the factors favouring, contributions of and the challenges facing tea production.

#### **1.6.3 Time scope.**

The study was conducted between February 2019 and August 2019 within which all the activities needed to complete the research process were carried out.

### **1.7 Significance of the study.**

The study would be of great value to various groups of people such as policy makers, government, farmers and future researchers in the following ways;

1. The study on the impact of tea production to the economic development can be use full to policy makers in giving guidance to the government on the necessary course of action to enhance economic development of people.
11. The study will enable the farmers to understand the importance of tea production towards their economic status as well as enables the government to find how to intervene to help farmers to solve their challenges such as high cost of seedlings
111. Lastly, it will enable future researchers in identifying priority areas to carry out research about economic development.

### **1.8 Definition of key terms.**

**Tea;** Tea is a predominantly grown crop in places of high altitude that have a chill climate all year round.

The tea plant is an evergreen, tropical plant from the Camellia family; tea (*Camellia sinensis*) has green, shiny pointed leaves - not dissimilar to privet hedges seen in Britain - and was originally indigenous to both China and India. In its wild state, tea grows best in regions which enjoy a warm, humid climate with heavy rainfall. Ideally, it likes deep, light, acidic and well-drained soil. Given these conditions, tea will grow in areas from sea level up to altitudes as high as 2,100 metres above sea level. Agriculture. Agriculture is defined as the science of crop cultivation and livestock husbandry (Hurst, 197 4; Sykes, 1976; and Ohara, 1983).

**Small holding.** The term smallholding is defined as a farm ranging between 0.2 and 12 hectares (ha) of land (Kenya, 1983 and 1986). The term also refers to a small-scale farm in this research. Environment refers to the external, physical, biological and socio-economic conditions influencing the growth and development of crops in an area. The concept defines

the totality of immediate external conditions which impinge on the life and development of an organism, a community or an object (Obara, 1988).

**Production.** According to Obara (1983), Production is defined as area multiplied by yield. This definition is adopted in this research and Tea Production (Kg) refers to hectarage under tea (Ha) multiplied by yield (Kg/Ha).

**Tea processing** is the method in which the leaves from the tea plant *Camellia sinensis* are transformed into the dried leaves for brewing tea. The categories of tea are distinguished by the processing they undergo. In its most general form, tea processing involves different manners and degree of oxidation of the leaves, stopping the oxidation, forming the tea and drying *it*. Ramaswamy (September 1998).



## **CHAPTER TWO:**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter presented literature related to the study. Outlined what the scholars have written about the factors that have favoured tea production, the contribution of tea production to economic development and the challenges facing tea production. It was presented in order of the specific objectives as earlier stated in chapter one.

#### **2.1 Factors favouring tea production.**

Agricultural production and growth are strongly associated with equitable asset and resource distribution (Jayne, Mather and Mghenyi, 2010). The smallholder farmers who are resource constrained are usually limited in terms of what they can produce. Smallholder farmers are constrained differently in terms of land, labour, agro inputs and this affects their potentials to produce. In turn this affects their incomes since most of the smallholder farmers in Africa depend on mainly on their production for food and income during most time of the year (Kgutha, et al. 2010).

#### **Farm labour.**

Farm labour is a vitally important component of small farm assets. Shortage of farm power seriously constrains increase in agricultural production (Sims and Kienzle, 2006). It should be noted that mechanization of agriculture is still low in Sub-Saharan Africa (SSA) and there is too much reliance on human power using simple tools. For example according to IF AD (2013), it was estimated that 65 percent of the land in sub-Saharan Africa is prepared by hand power. Hand tools are the most important implements for smallholder farmers throughout SSA. They are used everywhere for land clearing and primary tillage, and thereafter for variety of agricultural jobs, from weeding to harvesting (Sims and Kienzle, 2006). The agricultural systems in Uganda over the years are characterized by dependency on human power with simple tools for production (UBOS, 2010). High transaction costs for labour saving technologies has forced smallholder farmers to continue relying on labour intensive means than capital intensive (Bagamba, Burger and Kuyvenhoven, 2007). Even the labour saving technologies are not readily available and supplied to farmers in some areas.

There is minimal use of draught animal and mechanical power in Uganda and therefore smallholder farmers mainly depend on man power with simple tools (UBOS, 2010). According to Action Aid Uganda (2010), women contribute 70 percent of the agricultural labour therefore continued reliance on man power increases drudgery to women who have to balance agricultural work with other domestic work (Bagamba, Burger and Kuyvenhoven, 2007). Evers and Walters (2000), put it forward that even women have taken over some of the roles that were traditionally for men. They perform tasks that were traditionally outside their domain and most men are unwilling or unable to share women's work in most cases. Smallholder farmers would contribute more to the economy especially women if there were solutions to back breaking activities through use of efficient means in agricultural production. With improved technologies we are able to increase production per unit area, expand on the area under cultivation where land is available and reduce on drudgery (Sims and Kienzie, 2006).

### **Land availability**

Land is a fundamental factor of production in the agricultural sector. According to Kgutha, et al., (2010), in countries where land is not communally owned, the size of land owned by a family or a household becomes an important asset as it determines the amount that can be produced for family in terms of crops at any given time. In Kanungu district there are disparities in distribution of available land for agricultural land. The average household land holding is at 2.5 acres although extremes exist with over 20 acres (2%) and the land less (5%) according to the District survey (2012). Many farmers fail to produce and realise their full potential because they are constrained with land. The household size landholdings are dwindling year after another mainly due to increased population pressure and traditional inheritance practices that make land to be divided and subdivided into small portions that are less economical to operate on (KDDP, 2012-2015). Jayne, Mather and Mghenyi (2010), show that there is an existing strong relationship between access to land, agricultural commercialization and household income in southern and eastern Africa. Landlessness therefore, means lack of an important resource and a sign of low incomes and poverty (Kgutha, et al., 2010).

## **Relief**

### **Agro input use**

According to Jayne, Mather and Mghenyi (2010), over the last 40 years, income has risen through the rest of the world, yet has remained stagnant in Africa. And explanations for this are many, although they usually center on low input use. It's explained also that, there is limited use of fertilizers and improved cul ti vars most especially in Sub Saharan Africa and Uganda is not any different. Uganda is said to have low adoption rate for use of improved inputs (Okoboi, 2012) and programs like NAADS and other agencies that are involved in promoting use of modem agricultural technologies have an uphill task of providing. There is a need to persuade farmers that use of these technologies not only enhance yields but also increases farm profits. Although use of improved inputs in production is desirable, not all farmers use these inputs due to various reasons like limited knowledge among farmers, limited access to credit, poor distribution systems for agro inputs among others (Okoboi, 2012). Use of inputs like improved seeds & fertilizer is reported to be low in Kanungu District, only about 15 percent of the fanners use these improved technologies (KDDP, 2012- 2015). Recent studies (C.C, 2012), indicate a decrease in production and productivity among smallholder farmers. Fanners are getting much less yields on farm compared to the research station. Soil exhaustion coupled with limited use of improved inputs among others are greatly contributing to low yields among smallholder farmers (C.C, 2012).

### **The tea growing promotion as a strategic agricultural enterprise.**

The government of Uganda under the ministry of agriculture 2001/2002 initiated a strategy to support priority agricultural enterprises at zone level to increase volumes and quality for both national and export market. The argument put forward by the ministry is not for large scale agricultural production for the selected enterprise per say, but rather for both agro-industrial development and sustainable trade. To attract investors into agro-processing of a particular commodity requires assurances that the commodity in question will have adequate supply. This can come from small, medium and large-scale producers and, if they are in the same zone or locality, transaction costs incurred in moving commodities from sparsely located production points can be minimized (Kraybil and Kidoido, 2009). Under this approach, tea enterprise has been promoted over the years in Kanungu district as a strategic enterprise to improve on household incomes in fight to curb down poverty levels in the district. Tue Kanungu Local government through NAADS program, under public private partnership arrangement has worked closely with the management of private tea factories to promote tea production within the district. The objective of the partnership was and is still to promote planting of quality tea clone, increase tea green leaf production and enhance household income through sales of tea green leaf. (KGTF, 2012). In order to boost tea production, since 2004 the government in partnership with the private sector, have promoted the tea enterprise by supporting all categories of farmers with free quality tea plantlets to enable farmers expand on their gardens and increase quality and quantity of tea green production that can fetch them more money to increase on their household income. This is evidenced with the expansion of the tea processing production lines within the existing tea factories and a new factory recently established and operating in Butogota Town council to accommodate processing of extra green leaf produced by the farmers as a result of the tea promotion intervention in the district. By the year 2011, about 7.9 billion Uganda shillings (2.6 million euros) had been invested in the tea project. However it should be noted that this project is ongoing. (Adapted from Kanungu District local government NAADS annual report (2012).

### **2.2 Contributions of tea production.**

Tea production has strongly been a fundamental base for the development of the local community due to its contribution which include;

**Employment opportunities.**

Close to 80,000 farming households are involved in tea growing and approximately 1,000,000 people directly derive their livelihood from tea growing in Uganda. It supports over 150,000 skilled as factory managers, engineers and transporters and about 800,000 unskilled workers in planting, weeding, pruning, harvesting as well as casual workers in the factory. According to IF AD (2013). The estates own the tea plantations, employ their own staff and provide other benefits to staff like medical care. The average estate employs 6,000 7 ,000 staff. Another 150-200 people are employed in tea processing factories. The estates grow about 90 percent of the tea they sell, with the balance brought in from small-scale growers. Each farmer has 15-30 employees, depending on the farm size, while others employ over 100 as tea pickers. Tea processing companies transfer payments to farmers' bank accounts, and the farmers Digital Financial Services in Uganda 2015, Action Aid Uganda (2010)

**It is an important foreign exchange earner for the country.**

Tea is the third agricultural foreign exchange earner after coffee and fish. In 2015, it contributed US Dollars 89.95 million from export of 58,000 MT. in tea production. Today, tea is Uganda's second largest foreign export earner (after coffee), with over 21,000 hectares of land dedicated to its growth and harvest. The tea sector produces over 10,000 metric tons of tea per annum, about 90 percent of which is exported. This has to large extent improved the balance of payment for the Uganda's economy (UBOS, 2010).

**Contribute to food security.**

Tea growing may contribute to food security as it generates foreign currency through exports which currency is used to import food or invest in domestic production by local investors. Agriculture exports contribute to substantially to the economy of Uganda as it the major source of income to most of the residents. The main crops exported from Uganda are; coffee followed by tea and others include vegetables and fruits, spices, cotton, tobacco and many others. These cash crops generate over 80% of the dollar value that is necessary for food importation such as rice, parked food (F AO, 2013).

### **Infrastructural development**

Ogot and Ochieng (1995) history study observed that post independent Africa kept increasing its cash crop production to earn foreign exchange. This has helped to improve infrastructures that ease transportation of inputs, harvests and processed good as well. Also technical assistance has been directed to towards reviving cash crops. As Africa has invested heavily on cash crops, it has forced more investments in infrastructures so as to increase cash crop production. Infrastructures include roads, schools, health centers such as Rugyeyo Health Centre, and factories like kayonza growers' tea factory and Rugyeyo tea factory.

### **Source of income to farmers**

Fanners' realization that tea has ready market and gives a steady income to their households compared to food crops and other farmers see tea as a security crop which they can use as collateral to get loans compared to annual food crops, the majority of them irrespective of household land holding size and household's tea field size have preferred tea growing as the most important source of their household income. It's this income that is mainly tagged to finance household major expenses most especially school fees, medical care and other household essentials like clothing and fuel (kerosene). Again on rare occasions it's spent on foods which they can't produce at household level and even not produced by their immediate neighbours. NAADS annual report (2012).

### **2.3 Challenges affecting tea production.**

Although tea growing in kanungu to a some extent has been successful but there are still challenges facing the effective production. Therefore this course discusses the challenges that are being faced by tea fanners in kanungu and Uganda at large.

#### **Cost of production.**

The cost of production (COP) of Uganda tea is considered high when compared to other tea producing countries. This is causing uncertainty in the future of tea farming in Uganda and it could be sad if this industry collapses the way the South African tea industry did. The cost of production in Uganda is USD 1.20 per Kg of made tea. This compares poorly with other tea producing countries like Vietnam (USD 0.81 per Kg) Indonesia (USD 0.58 per Kg), Tanzania (USD 1.16 per Kg), Malawi (USO 1.14 per Kg) and Zimbabwe (USD 1.11 per Kg).

The main factors contributing to the high cost of production are; high labour demand, high cost of fann inputs particularly fertilizers, high cost of energy/fuel at the factories and Power shortages that affects processors, high cost of transport due to poor road and rail transport system and numerous taxes and levies. Tea is a high labour demand crop because of the activities that have to be undertaken. Labour is needed for plucking that should be done at least once a week, weeding, fertilizer and manure application, tipping and pruning that are necessary for high yields and this leads to high cost of production. Tea production takes the third place in terms of total costs among the major tea producers. Tanzania Tea Competitiveness Study (2007)

#### **Lack of comprehensive policies that address the tea value chain development**

Farmers do not practice modern agribusiness techniques in tea farming. This is as a result of inadequate delivery of tea extension/advisory services, little support and limited extension services as well as inadequate supply of high yielding tea clones and quality plantlets for establishment of new plantations or replacement of the old tea trees particularly from UTGC. Mechanisms should be initiated where other stakeholders contribute to provision of needed services. Some of the stakeholders who could participate are the buyers, packers, blenders, and TBK through the Tea Research Foundation. Small-scale tea fanning in Uganda is expanding resulting in less and less availability of extension services. The effect of this is an overall decline in quality of tea and hence low returns to producers and other industry players; (MA AIF, 2010).

#### **Pests and Diseases**

There is a loss of about 10 cent in tea production due to pests and diseases as most of farmers do not follow the practices of integrated pest management in their plantations. However most of farmers use over dose of pesticides that lead to environmental contamination, risk of pesticide residues as well as ecological disturbance. Due to poor monitoring and limited use of pesticides has generally led to low output and poor quality tea by some of the farmers. On the other hand there is poor monitoring over the pesticide dose and the interval between the spray and plucking. Njogu, W.E (2002)

### **Poor road networks and infrastructure in remote areas where tea is grown**

Most of areas are remote with poor roads that limit tea transportation. On the other hand, poor transportation methods used lead to further losses of green tea leaf while in transit. One reason for this is because the factory has few green leaf tea collection trucks. This causes the factory to use alternative means of transportation that are not suitable for ferrying. This inevitably leads to withering losses of the green leaf in transit to the factory. Secondly, because of few tea collection trucks green tea is collected long after it has been delivered to the TCCs. Because of the long wait, the tea withers before delivery to the factory. This is due to poor management of distribution and delivery processes. (MAAIF, 2010). Other challenges are associated with inadequate infrastructure for value-addition processes including marketing, storage and distribution, inadequate access and feeder roads; the high cost of doing business, uncoordinated efforts among public sector implementing agencies, poor quality of public investment in agriculture; inadequate institutional coordination and linkages. (MAF AP) review of Food and Agricultural Policies in Uganda (2005-2011) Country Report.

### **Poor Agricultural technology**

Uganda's agriculture is characterized by low yields and this is partly a function of low application of modern technology. Fertilizer use, for instance, at an average of 2.1 kg of nutrients per ha is among the lowest in the region and the world, compared to Kenya's 29 kg/ha, Rwanda's 6.8 kg/ha and Tanzania's 5.0 kg/ha (Figure 12) (SID 2012). The proportion of farmers using fertilizer is also low amounting to only 1 percent. The use of other improved inputs is also minimal. For instance, only 6.3 percent of farmers use improved seeds, while only 3.4 percent use agrochemicals (SID, 2012).

### **Marketing and value-addition constraints**

These constraints arise mainly from poor infrastructure and lack of information on opportunities for value-addition. Serious constraints exist to successful marketing, realization of profits and thereby affordability of basic livelihood assets. Low and fluctuating prices resulting from seasonal fluctuations in the supply and demand for agricultural produce coupled by forced sale due to demand for cash to meet basic needs (health, education and food), do not allow farmers to strategically sell produces when prices are high. In many districts, ready markets are not available for sale of produce and purchase of inputs.



Long distances to produce markets, impassable roads and lack of affordable transport, especially in the rainy season, further hamper market access. High market dues for produce and sales in general which lead to low incomes and profits. NAADS. (2012)

#### **Climatic change and seasonal effects**

Tea is very sensitive to climate change. Tea cultivation has its specific temperature and precipitation requirement; therefore change in climate is a great threat to the tea production. Untimely rainfall, low or no rainfall in crop season, prolonged dry spell, sometime flood like situations, increasing temperature are major challenges in almost tea gardens. Therefore the annual operation cycle is reduced from 9-10 months to 8-9 months or lower. The climate change affects the quality as well as quantity of tea production, untimely low or low intensity of insects and disease attack, improper growth of new buds, loss of soil fertility. The tea production is not constant round the year due to changes in climatic conditions. Climate affects both growing and production of leaf harvest. Talbott, I.D, (2002).

#### **Poor access to information**

Small holder farmers have lacked information on better tea farming methods since the tea sector was liberalized in 1990s. During the days of government control of the sector, farmers used to get extension services from ministry of agriculture. After liberalization farmers are required to pay for these services which most of them are not capable to pay or they are ignorant about their usefulness. The information flow is poor and at times lacking especially that relating to pricing. Further farmers at the bottom of the pyramid are the most disadvantaged as they receive little information and their feedback hardly reaches the top and when it gets there, it is misrepresented. According to CPDA (2008)

## **CHAPTER THREE.**

### **RESEARCH METHODOLOGY.**

#### **3.0 Introduction**

This chapter described the methodology of the research. It dealt with procedures and methods of investigation that was used to carry out the study. It focused particularly on the research area, research design, population and sampling, instrumentation or data collection tools, data collection procedures, data presentation and analysis as well ethical considerations that were used to achieve the research objectives.

#### **3.1 Research area**

The research was carried out in Kanungu district which is located in south western parts of Uganda with seventeen lower administrative units (Sub counties/ Town councils). The district is divided into three agricultural zones that is to say; Low altitude, mid altitude and high altitude which range between 1000m-1300m above sea level, 1400m-1700m and 1800m-2100m above sea level respectively (KDDP, 2012). The three agricultural zones have a few distinctive characteristics that differentiate one from another. Tea is grown in the mid and high altitude and therefore it's in here that the sub county of Kayonza was selected for the research.

#### **3.2 Research design.**

The study was both qualitative and quantitative in approach in order to collect data related to the research topic from both primary and secondary sources and was based on both Literature and empirical data through desk study and field work respectively.

#### **3.3 Target population.**

The study used the population in Kayonza sub-county which consisted of the Administrative officers, stakeholders, workers and farmers who provided the necessary information to fulfil the objectives.

**3.4 Population sample size.** The researcher used a sample of 60 respondents, where 10 stakeholders, 5 administrators, 15 factory workers and 30 farmers whose views were used to generalize the opinion of the entire population in the area of the study.

### **3.5 Population sampling techniques.**

Sampling is the process of selecting a representative part of a population for the purpose of determining parameters or characteristics of whole population. The researcher employed cluster and random sampling techniques to select the respondents that provided the necessary information during the study. Cluster sampling involved grouping respondents into stakeholders, administrators, workers and farmers. Random sampling at the same time was applied in selection of respondents from each category to give opinions that represent the views of the entire population in Kayonza sub-County.

### **3.6 Sources of data.**

The data was collected from both; primary and secondary sources. This enabled easy comparability of secondary data available with responses from primary data sources that were generated from the field in order to derive meaningful interpretation of findings.

#### **3.6.1 Primary data sources.**

Primary data was gathered from respondents including stakeholders, administrators, workers and farmers who were interviewed and some given questionnaires while other information was collected through direct observation.

#### **3.6.2 Secondary data sources.**

Here the data was gathered from the textbooks, journals from Kanungu district, newspapers, publications from different libraries, websites (Google) and Kayonza sub-county reports.

### **3.7 Data collection methods.**

Data was collected using interviewing, questionnaire and direct observation methods because of their advantages such as optimizing collection of quality data.

### **3.7.1 Interview method.**

The researcher carried out face to face verbal conversations with the selected respondents because some of the respondents would fail to interpret the information in the question and other respondents not having enough time to read and fill the questionnaires as well.

The researcher used interviews to derive information from most of the participants and this enabled face to face interactions with respondents which was an advantage to interviewer to gather relevant information. The use of interviews also avoided misinterpretation of the questions by the respondents as the researcher assisted the respondents to interpret questions and they were properly understood since immediate responses were obtained.

### **3.7.2 Questionnaire method.**

The researcher distributed questionnaires to the respondents like stakeholders, administrators, workers and farmers by hand who responded to the questions in writing. The questionnaires contained both the open and closed ended questions. The researcher used questionnaires because they are confidential, flexible, reliable and time saving. The researcher got immediate responses and this enabled him to get the required information within the given time frame and thus completing the study in time.

### **3.7.3 Observation method.**

The researcher used this method to collect data whereby he was physically in the area of study to identify the factors that have favoured tea production, how it has contributed to the local community of Kayunga sub county Kanungu district. The observation helped the researcher to look at the observable physical factors as well as contributions and relate the information with responses from other methods hence deriving the required information valid for the study. This method was preferred by the researcher because of limited bias since it was based on what the researcher observed. It also studied people's attitudes which were expressed verbally and thus provided first-hand information.

## **3.8 Data collection procedures.**

The researcher obtained an introductory letter from the research coordinator faculty of education Kabale University. This availed the researcher the permission to conduct the study. The letter was taken to relevant authorities after which questionnaires were administered to the selected respondents such as stakeholders and administrators on the agreed upon days.

Oral interviews were conducted with the workers at kayonza growers' tea factory and farmers in kayonza sub-county. The researcher collected and compiled data and then continued forward to analyse and interpreted it.

### **3.9 Data analysis.**

The data collected from the field using research methods and tools was transformed into meaningful report using both qualitative and quantitative methods. Data was edited, checked, corrected to remove errors and then presented statically in fonn of tables using frequencies and percentages. AH the data collected by the researcher from respondents was kept confidential as it was only for study purposes.

### **3.10 Ethical considerations.**

Ethics affects the rights of the researcher and the participants (Emory and Cooper, 1991 ). It is therefore important to address the ethical issues prior to the start of data collection as well as during data analysis thus the researcher ensured that, to all those involved in granting permission, he observed maximum cooperation and abided by rules and regulations that govern people in their communities. The researcher also observed confidentiality, anonymity and protection of respondent's integrity in respect to the information that will be provided.

### **3.11 Limitations**

The following were the limitations of the study and delimitations of the study.

1. The researcher faced the problem of travelling long distances with hills as well as bad weather like too much rainfall while collecting data from the field however he tried to rent near the area of study to reduce on transport and for the case of rainfall he purchased an umbrella.
2. Limited financial capabilities by the researcher to finance activities such as printing, transport, meals and rent and this was catered for by looking for financial support from friends and colleagues.
- iii. Delayed work by respondents especially where questionnaires were used, taken by respondents and not returned on time and even some were not returned back. The researcher tried to collect them himself and used the ones collected as time as limited.

- iv. Inadequate data since the respondents were scared of their confidentiality being kept and even some were ignorant about the necessary information however the problem of respondents being scared was minimized by presenting to them the letter from the university which assured them that I was a student and any information was for academic purposes only.

## CHAPTER FOUR

### DA TA PRESENTATION, ANALYSIS, INTERPRETATION. 4.1.

#### INTRODUCTION.

This chapter gave a detailed presentation, analysis, interpretation and discussion of findings based on the order of the objectives of the study.

#### 4.2 DATA PRESENTATION, ANALYSIS AND INTERPRETATION.

A total of 60 respondents (sixty) were sampled for the study. The researcher considered the age, sex, position and Education Level of the respondents. This biographic data was very important for the researcher carrying out the study to describe the best respondents who were selected for the study as presented below.

##### 4.2.1 Age of the respondents.

This researcher considered the age of the respondents to find out whether the sampled population were worth to be used in the study and the results were recorded in table 1 below.

**Table 1: Age of the respondents.**

Age (years)	Frequency	Percentage
20-30	12	20
31-40	28	47
41-50	15	25
Above 50	05	08
Total	60	100

**Source: Author's computations from field data, July 2019.**

The study results shown in table 1 above indicated that of the 60 respondents, 12 respondents (20%) were between the ages Of 20-30, 28 respondents ( 47%) which was the highest number of the respondents were between 31-40, 15 respondents (25%) were between 41-50 while 5 respondents (08%) which was the least number of respondents were above 50 years.

The aim of the research to consider the age of the respondents was to find out whether all the respondents were in the age bracket for the working class as well as acquiring data in relation to their understanding which implied that respondents who were between 3 I -40 years were strong and had experience in tea production as they contributed the highest percentage of the respondents.

**4. 2.2. Sex of the respondents.**

The researcher also considered sex of the respondents and the results obtained were recorded below in table.

Sex	Frequency	Percentage
Male	40	67
Female	20	33
Total	60	100

**Source: Author's computations from the field data, July 2019**

The study results presented in table 2 above showed that the highest percentage of the respondents were males who consisted 67% of the respondents where as 33% of the respondents were females which implied that male participation in tea production is greater than female participation. This implies that males dominate in the tea production due to their strength and hard working as well as ownership of farmlands.

**4.2.3 Position in the factory.**

The researcher considered the position of the respondents among the aspects in the bio data and the results were recorded in the 3 below.

Position	Frequency	Percentage
Stake holders	10	17
Administrator	05	08
Factory worker	15	25
Farmer	30	50
Total	60	100

**Source: Author's computations from the field data, July 2019**



From the results presented in table 3 above, 17% of the respondents were stake holders, 8% which was the least number of respondents were Administrators, 25% of the respondents were factory workers while 50% which was the highest number of respondents were farmers. According to the results presented, it implied that farmers take the highest percentage in tea production and the aim of the researcher to collect data about the position was to find out the position held by the respondents in tea production.

**4.2.4. Level of education of the respondents.**

The researcher also considered the levels of education attained by respondents and the results obtained were recorded in table 4 below.

Education Level	Frequency	Percentage
Primary	20	33
Secondary	10	17
Tertiary	18	30
Graduate	08	13
Non- Formal Education	04	7
Total	60	100

**Source: Author's computations from field data, July 2019**

The study findings indicated that 33% of respondent which was the highest number of respondents had gone under primary education where as 7% the lowest number of respondents had under gone non-formal education and other 17% had attained secondary education, 30% had attended tertiary education and the remaining 13% were graduates. The researcher considered the respondents' highest level of education in order to find out the relevant data collection tools to be used based on their level of education and understanding and this means that the respondents who had acquired primary level were much involved in the production since they had limited activities other than getting involved in tea farming.

**4.2.5. Factors that have favoured tea production in Kayonza Sub-county, Kanungu District.**

**Table 5: Factors that have favoured tea production.**

Factor	Agree		Not sure		Disagree		Total		
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	
Fann labour	55	92	1	03	05	02	03	60	100
Land availability	56	93	1	03	05	01	02	60	100
Relief	40	67	06	10	14	23	60	100	
Agro-input use	42	70	05	8	13	22	60	100	
Tea growing promotion	30	50	1	08	13	22	37	60	100

**Source: Author's computations from field data, July 2019.**

According to table 5 above, the study finding indicated that 92% of the respondents agreed that farm labour favour tea production, 05% were not sure and only 3% disagreed, this showed that 92% the majority of respondents were in agreement with farm labour as the factor that has favoured tea production.

The study results showed that 93 % of the respondents agreed with land availability as a factor favouring tea production, 5% were not sure while only 2% disagreed with the factor for tea production. These study findings also indicated that 67% of the respondents agreed that relief contributes to tea production, 10% were not sure and 23% disagreed with the factor of relief. This means that majority of the respondents agreed that relief favours tea production.

From the study results, 70% of respondents agreed that agro-input use influences tea production, 8% were not sure and 22% disagreed. This implied that most of the respondents agreed that agro-input use contributes to tea production however the number of respondents who disagreed with the statement was high.

According to table 5 above, the research results revealed that 50% of the respondents agreed with tea growing promotion as a strategic agricultural enterprise, 13% were not sure and 37% disagreed. This implies that half of the respondents only agreed with the statement which meant that it is not much influential to tea production although it contributes to its production.

#### 4.2.6 Contributions of tea production to the economic development of Kayonza subcounty, Kanungu District

**Table 6: contributions of tea production**

contributions	Agree		Not sure		Disagree		Total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Employment opportunities	54	90	06	10	-	-	60	100
Foreign exchange earner	46	77	12	20	02	03	60	100
contribute to food security	42	70	06	10	12	20	60	100
Infrastructural development	56	83	04	07	06	10	60	100
Source of income	58	97	-	-	02	02	60	100

**Source: Author's computations from field data**

The study results indicated that 90% of respondents agreed that tea production provides employment opportunities and 10% were not sure and no respondent that disagreed with the point. This implies that tea production provides employment opportunities to the people. From table 6 above, 77% of the respondents agreed with foreign exchange earner, 20% were not sure and 3% disagreed. This implies that 77% the majority were in agreement that tea production is the foreign exchange earner to the country. According to the results in table 6, it was revealed that 70% of the respondents agreed that tea production contributes to food security, 10% were not sure and 20% disagreed. This implies also that most of the respondents were in agreement that tea promotes food security. The research results in table 6 revealed that 83% agreed with infrastructural development, 7% were not sure and 10% disagreed. This implies that 83% the majority of respondents were in agreement that tea production encourages infrastructural development. The study findings in table 6 revealed that 97% of the respondents agreed that tea production generates income, none of the respondents were not sure and only 3% disagreed. This implies that 97% the majority of respondents were in agreement that tea production is the source of income and due to the

highest percentage that accounted 97% it implied that income is the major contribution of tea production especially to fanners.

#### 4.2. 7 Challenges affecting tea production in Kayonza Sub-county, Kanungu District. Table

##### 7: Challenges affecting tea production

Factor	Agree		Not sure		Disagree		Total	
	Frequency	%	frequency	%	frequency	%	Frequency	%
Cost of production	52	87	03	5	05	8	60	100
Poor road networks and infrastructures	50	83	06	10	04	7	60	100
Lack of comprehensive policies	42	70	10	17	08	13	60	100
Pest and diseases	54	90	04	17	02	3	60	100
Poor agricultural technology	46	77	06	10	08	13	60	100
Marketing and value- addition constraints.	35	58	13	22	12	20	60	100
Climatic change and seasonal effects	43	71	10	17	7	12	60	100
Poor access to information	40	67	12	20	8	13	60	100

**Source: Author's computation from field data, July 2019.**

From table 7 above, the study findings indicated that 87% of the respondents agreed that cost of production is a challenge to tea production, 5% were not sure and 8% disagreed. This means that majority of the respondents were in agreement with cost of production. From the table 7 above, it was revealed that 83% of the respondents agreed with poor road networks and infrastructures, 10% were not sure while 7% disagreed. This implies that most of the respondents agreed that poor road networks and infrastructures affects tea production. The study findings indicated that 70% of the respondents agreed with lack of comprehensive policies, 17% were not sure and 13% disagreed. This implies that majority of the respondents were in agreement with the statement. Table 7 above also shows that 90% of the respondents

agreed that pests and diseases is a challenge to tea production, 7% were not sure and only 3% disagreed. This implies that pest and diseases is the major challenge to tea production as it takes the highest percentage of the respondents. The study results presented in table 7 indicated that 77% of the respondents agreed with poor agricultural technology, 10% were not sure and 13% disagreed. This implies that poor agricultural technology is a challenge to tea production since majority of the respondents agreed. Research findings indicated that 58% of the respondents agreed with marketing and value addition constraints, 22% were not sure and 29% disagreed. This implies that majority agreed with the statement however it is the weakest challenge since it takes the least number of respondents agreeing with it compared to other challenges. According to table 7 above, 71 % agreed with climatic changes and seasonal effects, 17% were not sure and 12% disagreed. This implies that majority of the respondents agreed that climatic changes and seasonal effects affect tea production. The study findings indicated that 67% agreed with issue of poor access to information, 20% were not sure and 13% disagreed. This implies that the majority of the respondents accounting for 67% agreed that poor access to information also affects tea production.

## **CHAPTER FIVE**

### **DISCUSSION OF THE RESEARCH FINDINGS.**

#### **5.1 Factors favouring tea production in Kayonza sub county, Kanungu District.**

The study findings from table 5 indicated that 92% of the respondents agreed that farm labour favours tea production which satisfied (UBOS,2010) which stated that the agricultural systems in Uganda over the years are characterised by depending on human power with simple tools for production, 5% were not sure and 3% disagreed. This implies that 92% the majority of the respondents agreed that farm labour encourages tea production since it depends mainly on human power with simple tools.

The study results from table 5 indicated that 93% of the respondents agreed that land availability favours tea production and this is in agreement with (Kgutha et al. 2010) who stated that the size of land owned by a family or a household becomes an important asset as it determines the amount that can be produced for a family in terms of crops at any given time, 5% of the respondents were not sure and only 21 % disagreed. This implies that 93% the majority of the production in Kayonza Sub County, Kanungu District.

From the study findings shown in table 5 indicated that 67% of the respondents agreed with the issue of relief which is in line with (Githinji B.K 2003) who stated that commercial tea plantations are favourably located in highlands and on hilly slopes whose natural drainage is favourable for tea as it cannot survive in stagnant water as well as water logged areas in low lands, 10% were not sure and 23% disagreed. This implied that the majority of the respondents were in agreement that relief influences tea production.

The study findings indicated that 70% of the respondents agreed with the issue of agro-input use which is in line with (Jayne, Mather and Mghenyi 2010) who believes that over the last 40 years, income has risen through the rest of the world, yet has remained low in Africa and explanations for this are many although they usually centre on low input use, 8% were not sure and 22% disagreed. This implied that 70% the majority of respondents also agreed that agro-input use influences tea production.

Research findings according to table 5 also indicated that 50% of the respondents agreed with the issue of tea growing promotion as a strategic agricultural enterprise which is in agreement with (Krybil and Kidoido, 2009) who indicated that the government of Uganda under the Ministry of agriculture 2001/2002 initiated a strategy to support priority agricultural enterprises at zone level to increase volumes and quality for both national and export market, the argument put forward by the ministry is not for large scale agricultural production for the selected enterprises per say, but rather for both agro-industrial development and sustainable trade, 13% were not sure and 37% disagreed. This implies that many respondents disagreed with this issue as almost a half of them were not in agreement with it hence making it weak although a half of the respondents agreed with it.

## **5.2 Contributions of tea production to the economic development of Kayanza sub county, Kanungu District.**

From table 6, the study results shown revealed that 90% of the respondents agreed with employment opportunities which is in line with (IF AD 2013) which showed that the estates which own the tea plantations, employ their own staff and provide other benefits to the staff like medical care and it also shown that close to 80,000 farming households are involved in tea growing and approximately 1,000,000 people directly derive their livelihood from tea growing in Uganda, 10% were not sure and none of the respondents disagreed. This implies that 90% the majority of the respondents agreed that tea production provide employment opportunities to people.

The study findings presented in table 6 indicated that 77% the respondents agreed with foreign exchange earner which is in agreement with (UBOS, 2010) which states that tea is Uganda's second largest foreign export earner (after coffee) with over 21,000 hectares dedicated to its growth and harvest and the tea sector produces over 10,000 metric tonnes of tea per annum of which 90% is exported to earn foreign exchange, 20% were not sure and 3% disagreed. This implies that majority of the respondents believed that tea production provides foreign exchange to Uganda.

The study results in table 6, revealed that 70% of the respondents agreed that tea production contributes to food security which is in line with (FAO 2013) which stated that tea growing may contribute to food security as it generates foreign currency through exports which money is used to import food or invest in domestic production by local investors, 10% were not sure and 20% disagreed, this implies that 70% the majority of the respondents were in agreement that tea production contributes to food security.

According to the study findings, it was shown that 83% of the respondents agreed with infrastructural development which is in agreement with (Ogot and Ochieng 1995) history study which observed that post independence Africa kept increasing its cash crop production to earn foreign exchange which has helped to improve infrastructures that ease transportation of inputs, harvests and processed goods as well, 7% were not sure and 10% disagreed. This implies that it is true that tea production promotes infrastructural development since the results also indicated that 83% the majority of the respondents agreed with the point of infrastructural development.

The study findings indicated that 97% of the respondents agreed with the issue of source of income which is in agreement with (NAADS annual report 2012) as it stated that farmers' realisation that tea has ready market and it gives steady income to households compared to other food crops have preferred tea growing as the most important source of their household income, None of the respondents were not sure and only 3% disagreed. This implies that income generation is the major contribution of tea production as the majority of respondents agreed with it as compared to the contributions.

### **5.3 Challenges affecting tea production in Kayonza sub-county, Kanungu district.**

The study findings from table 7 above indicated that 87% of the respondents agreed with the issue of cost of production which is in line with (Tanzania Tea competitiveness study 2017) which revealed that the cost of production of Uganda tea is considered to be high when compared to other tea producing countries which is causing uncertainty in the future of tea fanning in Uganda and the cost of production in Uganda is about 1.2 USD per kg of made tea, 5% were not sure and 8% disagreed. This implied that majority of the respondents were in agreement that the cost of production affects tea production affects tea production.

The study findings indicated that 83% of the respondent agreed with poor road networks and infrastructures in remote areas where tea is grown which is in agreement with (MAAIF 2010) which stated that most of areas are remote with poor roads that limit tea transportation. On the other hand poor transportation methods used lead to losses of green tea leaf while in transit due to limited green leaf collecting trucks and this inevitably leads to withering losses of green leaf in transit to factory, 10% were not sure and 7% disagreed. This implies that 83% the majority of the respondents were in agreement that poor road networks and infrastructures limit tea production activities.



The study findings from table 7 indicated that 70% of the respondents agreed with lack of comprehensive policies to address the tea value chain development which is in the agreement with (MAAIF, 2010) which stated that farmers do not practice modern agribusiness techniques in tea farming due to inadequate delivery of tea extension /advisory services, little support and limited supply of high yielding tea clones and quality plantlets . 17% were not sure and 13% disagreed. This showed that majority of the respondent were in agreement with the challenge of lack of comprehensive policies.

The study findings also indicated that 90% of the respondents agreed with pests and diseases which is in line with (Njogu, W, E 2002) who stated that there is loss of about 10 percent in tea production due to pests and diseases as most of farmers do not follow the practices of integrated pest management in the plantations and due to poor monitoring and limited use of pesticides has generally led to low output and poor quality tea by some of the farmers. 7% were not sure and only 3% disagreed. This implies that majority of the respondents were in agreement that pests and diseases limit tea production.

The study results in table 7 above indicated that 77% of the respondents agreed with poor agricultural technology which is in line with (SID 2012) which stated that Uganda's agriculture is characterized by low yields and this is partly a function of low application of modern technology for instance fertilizer use. 10% were not sure and 13%, disagreed and this implied that majority of the respondents were in agreement that poor agricultural technology limits tea production.

From table 7, the study findings indicated that 58% of the respondents agreed with marketing and value- addition constraints that is in line with (NAADS, 2012) which stated that low and fluctuating prices resulting from seasonal fluctuations in the supply and demand for agricultural produce coupled by forced sale due to demand for cash to meet basic needs do not allow them to sell produces when prices are high and even ready markets are not available for sale of the produce and purchase of inputs. 22% were not sure and 20% disagreed. This implied that though majority agreed but it seemed to be the weak challenge since almost a half of the respondents did not respond positively to it as many were not sure while others disagreed.

The study findings indicated that 71 % of the respondents agreed with climatic changes and seasonal effects which is in line with (Talbot 1.0,2002) who stated that tea is very sensitive to climate changes, tea cultivation has its specific temperature and precipitation requirements therefore change in climate is a great threat to the tea production where untimely rainfall,

low or no rainfall, prolonged dry spell, sometimes flood like situations, increasing temperature are major challenges in almost all tea gardens. 17% were not sure and 12% disagreed. This implied that 71 % the majority of the respondents were in agreement with the statement that climatic changes and seasonal effects limit tea production. According to the study findings in table 7, it was revealed that 67% of the respondents agreed with poor access to information which is in line with (CPDA 2008) which stated that small holder farmers have lacked information on better tea fanning methods since the tea sector was liberalised in 1990s, during the days of government control of the sector, farmers used to get extensions services which most of them are not capable to pay for or are ignorant about their usefulness. 20% were not sure and 13% disagreed. This implied that majority of the respondents were in agreement that poor access to information has also limited tea production.

## **CHAPTER SIX**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **6.1 INTRODUCTION:**

This chapter contains summary, conclusions and recommendations based on the analysis of the results that were obtained from the field and on the order according to the objectives of the research study.

#### **6.2 SUMMARY.**

The study results on the factors favouring tea production in Kayonza sub county Kanungu District indicated different responses which included farm labour, land availability, relief, agro-input use and the tea growing promotion as a strategic agricultural enterprise.

The study went ahead to find out the contributions of tea production to the economic development of Kayonza sub-county, Kanungu district and the responses were, employment opportunities, an important foreign exchange earner to Uganda, contribute to food security, infrastructural development and source of income to farmers.

The study concluded with investigating the challenges affecting tea production in Kayonza sub county, Kanungu District and the responses.were, cost of production, lack of comprehensive policies that address the tea value chain development, pests and diseases, poor road networks and infrastructures in remote areas where tea is grown, poor agricultural technology, marketing and value- addition constraints, climatic changes and seasonal effects and poor access to information.

#### **6.3 CONCLUSION:**

The study results on the factors affecting tea production in Kayonza sub county, Kanungu District indicated that the highest number of respondents (56) which accounted for 93% agreed with land availability and the lowest number (30) which accounted for 50% agreed with tea growing promotion as a strategic agricultural enterprise.

The study results on the contributions of tea production to the economic development of Kayonza sub county, Kanungu District indicated that highest number of the respondents

which accounted for 97% agreed that tea production is the source of income to people and 70% the lowest percentage mentioned that tea production contributes to food security. The study findings on the challenges affecting tea production in Kayonza sub county, Kanungu District indicated the highest number (54) of the respondents mentioned pests and diseases and the lowest number (35) of the respondents mentioned marketing and value- addition constants.

#### **6.4 RECOMMENDATIONS.**

The government should intervene to improve infrastructures such as roads to ease transportation of given leaf tea from the farms to the factory as well as transportation of processed tea to the market in order to reduce on the loss of green tea through withering as a result of poor means of transport.

The government should establish new markets to enable farmers get where to sell their tea as well as setting up stable prices to avoid price fluctuations and this will enable farmers to earn more income as well as improving the quality of tea produced.

There should be provision of free pesticides to enable farmers to spray their tea plantations and provision of extension services and workers to help them on improving the farming methods through mass sensitization in order to achieve high yields of tea.

The government should put in place the comprehensive policies such as adoption of large scale production in order to address the tea value chain development, practicing modern agribusiness techniques in farming such as irrigation to avoid dependence in nature in order to increase on the yields obtained.

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## APPENDIX I:

### QUESTIONNAIRE FOR KEY RESPONDENTS.

Dear Sir Madam...

I am Tukwasibwe Joab, a student of Kabale University pursuing a Bachelor of Science with Education. I am carrying out a research on the topic "To assess the impact of tea production to the economic development of the local community of Kayonza sub-county in Kanungu district" and I kindly request you to provide me with the information. Your participation is voluntary and you will encounter no personal risk from participating in this study. The information you provide will be anonymous and kept strictly confidential and it will be used for academic purposes only.

Section A: Basic information (Tick the right option or fill the right answer in the spaces provided)

1. Age; 20-30 ( ), 31-40 ( ), 41-50 ( ), above 50
2. Sex: Male ( ) Female ( )
3. Position in the factory  
Stakeholder ( ), Administrator ( ), factory worker ( ), farmer ( ).
4. Education level.

Primary ( ), Secondary ( ), Tertiary ( ), Graduate ( ), Non-Formal education ( ).

SECTION B: the factors, contributions and challenges.

5. What are the factors that have favoured tea growing in Kayonza sub-county Kanungu district?
- i) .....
  - ii) .....
  - iii) .....
  - iv) .....



6. What are the contributions of tea production to economic development in kayonza sub county kanungu district?

- i) .....
- ii) .....
- iii) .....
- iv) ..... ●●●●●●●

7. What are the challenges that are facing tea production in kayonza subcounty kanungu district?

- i) .....
- ii) .....
- iii).....
- iv).....

**THANK YOU**

## **APPENDIX HI:**

### **SIMPLE INTERVIEW GUIDE**

1. Do you think there are factors favouring tea growing in your sub-county?
2. Give five factors favouring tea growing in your sub-county?
3. In which ways the factors you have mentioned above favoured tea growing in your area?
4. Is there any contribution of tea growing to your sub-county?
5. If yes, what are the contributions of tea growing in your sub-county?
6. Is there any challenges facing tea growing in your area?
7. What are some of the challenges faced?