KIBOGORA POLYTECHNIC

FACULTY OF BUSINESS AND DEVELOPMENT STUDIES

DEPARTMENT OF RURAL DEVELOPMENT

ASSESSMENT OF THE CROP PRODUCTIVITY AND INVESTMENT RETURNIN RUSIZI

Case study: Shagasha Tea Factory

Undergraduate thesis presented in partial fulfillment of the requirements for the Bachelor's degree with honor in Rural development

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DECLARATION

Declaration by the candidates

We, ISHIMWE Ange hereby declare that this is our own original work and not a duplication of any similar academic work. It has therefore not been previously or concurrently submitted for any other degree, diploma or other qualification to Kibogora Polytechnic or any other institution. All materials cited in this paper which are not our own have been duly acknowledged.

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Declaration by the Supervisor

I declare that this work has been submitted for examination with my approval as KP Supervisor

SIBOMANA Providence Signed: _____ Date:_____

ABSTRACT

 This study was focused on the assess the contribution of the crop productivity to investment return within farmers from Shagasha Tea Company Ltd,it have three specific objectives that are mentioned below To assess the tea productivity for farmers within Shagasha Tea Company Ltd,To investigate the extent of investment return for farmers within Shagasha Tea Company Ltd and To ascertain the challenges and mitigation strategies to adopt for return enhancement,Qualitative and Quantitative research approaches, Descriptive research Design,Target Population were 4116 population and sample size was 67 the findings The tea productivity for farmers within Shagasha Tea Company Ltd,the agree was 47% and strong agree was 53%,Tea productivity for farmers the agree 44% and strong agree was 56%,Degree of commercialization the agree was 34% and strong agree 45(66%),Organizational structure the agree was 44% and strong agree was 56%,Tea in cash crops the agree was 34% and strong agree 66% and Tea increase Effort the agree 34% and strong agree was 66%,The return level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea , the Idle Asset Identification the agree was 29% and strong agree71%,Divestment the agree was 47% and strong agree 53%,Asset Sale the agree was 44% and strong agree was 56% and Redeployment the agree was 34% and strong agree was 66% and The challenges to adopt for return enhancement,The Use Of Outdated Technology, the agree was47% and strong agree was 53%,Diseases And Pests the agree was 44% and strong agree was 56%,climate change agree was 34% and strong agree was 66%,Infrastructure the agree was 29% and Strong agree was 71% and Soil Nutrients the agree was 47% and strong agree was 53% As conclusion Tea demand is increasing rapidly both in domestic as well as in international markets. The growing demand of tea requires an increase in its production in a sustainable way. Therefore, enhancing tea productivity of present tea farms is the most feasible solution due to land scarcity and unavailability of required climate conditions and It recommendAdministrative staff Should facilitates workers in the process of productivity in Shagasha tea Company Ltd

DEDICATION

To the families of our own this study is dedicated. You have been an inspiration for us through your hard work, your commitment, your love, and wisdom. Our families, without you, we would not be what we are.

Thank you, may God reward you for your generosity and kindness.

AKNOWLEDGEMENT

TABLE OF CONTENT

LIST OF T ABLES

LIST OF APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

A: Agree

A:Agree

D: Disagree

S A: Strong Agree

SA: Strong Agree

1.0 INTRODUCTION

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

1.1 BACKGROUND OF THE STUDY

Globally,This confirms the existence of a pass-through from international tea prices to farm-gate prices as anticipated by the policy, though there remains a wedge of 25% between what the factories pay co-operatives, on average, and what farmers actually receive. The pricing reform led 20% of farmers to expand tea cultivation. On average, female and older headed households were found to be less likely to expand cultivation, as were households headed by those with no reading or writing skills. A lack of land holdings, rather than land quality, is the primary constraint to expansion. There is suggestive evidence that the reform positively impacted productivity, but increases are not statistically significant,(Ofoyuru, 2016).

In Africa,inked farmers directly to the international tea market through a 30% price share of the international tea price, as determined at the Mombasa tea auction. The impact evaluation finds that the average nominal price for green leaf tea in Rwanda rose sharply (by about 40%) as a result of the pricing reform. In contrast, annual tea farmer revenues did significantly increase post-reform and the empirical analysis also detects a significant increase in farm related investments, which suggests the possibility of future productivity enhancements. To date, price reforms have not resulted in statistically observable impacts on household food expenditure patterns, livestock asset profiles of tea farmers, or subjective household welfare((Bandyopadhyay).

Sub Sahara,Knowledge of the tea reforms is poor among non-tea farmers, and most remain reluctant to engage in tea production. The survey responses suggest non-tea farmers view the tea prices as significantly below the reservation prices that would stimulate their entry In general, non-tea farmers have less land, own fewer assets, and have lower levels of household welfare. In particular, the positive effects observed from the COOPTHE are certainly correlated with the introduction of the

reform, but may not be causally linked. Furthermore, the cooperative is viewed within the tea sector as well managed and high-performing, so results may not be generalizable for the sector as a whole. Therefore, the evidence from this case study portion is best interpreted as suggestive, rather than compelling(Reza, 2014).

In Rwanda,Rwandan population is involved in the development process, were prevented and disadvantaged in various aspects of development. Throughout the history of the development process, the development specialists have tried to identify strategies and mechanisms that could promote the level of the Rwandan participation in their development. Thus various interventions such as Rwanda's Strategic Plan for Agriculture Transformation phase 4 (PSTA 4) outlines priority investments in agriculture and estimates required resources for the agriculture sector for the period 2018-2024.(Nuwategeka,2017)

The decisive objective of Rwanda's long term development plan is to transform the country into a middle-income country and an economic trade, communication and financial hub by the year 2020 and 2050. Towards the achievement of this, the Government of Rwanda has recently adopted an Economic Development and Poverty Reduction Strategy (EDPRS), with Agricultural Sector Development as one of its key constituents Indeed Rwanda's economic development plan can't be achieved without an Agricultural sector that is effective, in particular that is capable to expand access to the high yield and agricultural services, and to enhance crop productivity and to mobilize long-term capital for investment recovery. If there is no agricultural development, it will be possible as long as the current situation will persist with domestic subsistence consistently negative and more than 70% of the population totally excluded from agricultural services, even from subsistence agriculture ones (MINECOFIN,2008).

1.2 STATEMENT OF THE PROBLEM

Low tea productivity in Rwanda is mainly due to mismanagement and unsuitable plantation in developing countries including Rwanda (Verdoodt & Ranst, 2003). The tea sector among export commodities increase the internal revenue and this led the government of Rwanda to expend the area of tea plantation by 20% through land consolidation and population expropriation (NAEB, 2012). Despite the increasing of the new tea plantations, there is very little land suitability

assessment undertaken on these new agriculture lands and the lack of this prior identification of suitable land, land is being replanted at high cost, but a good crop establishment is not achieve ((Bandyopadhyay & Reza, 2014). Consequently, overexploitation, mismanagement and land degradation are linked to ignorance of basic soil quality factors governing productivity (Nuwategeka, Ayine, & Ofoyuru, 2016). Moreover, limited and lack of information on land suitability and crop requirement hinders farmer's decision on the best land use type. Several studies have suggested land suitability characterization for tea plantation before planting to achieve the target of producing high quantity with low cost of investment (Uwingabire et al., 2016).

In fact, there have been more research study which appraise the land ecological suitability for tea plantation and the focus was made on the geographical information system (GIS) by developing models for identification of suitable tea growing areas like the climate suitability for tea growth and climate suitability approaches for measuring the land use potential (Bo et al., 2012; Jayasinghe et al., 2019). However, there was few research on land suitability analysis for tea plantation focusing on the soil parameters as the soil have the major capacity to provide the required nutrients for tea. In order to obtain maximum returns from tea plantation, it is necessary to provide optimum conditions such as environmental and soil factors and could be used as a decisive tool in identifying suitable lands for tea cultivation and help to advice on improving unsuitable land in Rwanda.

1.2 OBJECTIVES OF THE STUDY

This study was guided by both general and specific objectives

1.3.1 General objective

The general objective of this study is to assess the contribution of the crop productivity to investment return within farmers from Shagasha Tea Company Ltd.

1.3.2 Specific objectives

Specific objectives strong-minded by this research are the following:

1. To anqlyise the tea productivity for farmers within Shagasha Tea Company Ltd.
2. To investigate the extent of investment return for farmers within Shagasha Tea Company Ltd.
3. To ascertain the challenges and mitigation strategies to adopt for return enhancement.

1.4. RESEARCH QUESTIONS

1. What are the services received by farmers of Shagasha Tea Company Ltd?
2. To What extent is the investment return for farmers within Shagasha Tea Company Ltd?
3. What are the the challenges and mitigation strategies to adopt for return enhancement?

1.5. SIGNIFICANCE OF THE STUDY

The study is of high significance to farmers within Shagasha Tea Company Ltd, Kibogora Polytechnic community and the researchers as well.

1.5.1. To researchers

The study enabled the researchers to gain knowledge and skills of analyzing and interpreting data about the contribution of crop productivity to investment recovery. It's also a fulfillment of one of the requirements for the award of the Bachelor's degree with Honor of Rural Development once the research is validated.

1.5.2. To tea farmers

This research will be help farmers in being more informed about the tea productivity and the investment return so as the enhancement of tea farming as productive and remunerative business.

1.5.3. To Kibogora polytechnic community

The study findings are of great significant to Kibogora Polytechnic community for both students and staff who have interest in the business and development studies, by adding on the volume of materials in the library for reference and guidance for further researches.

1.6. LIMITATIONS OF THE STUDY

The study was limited to the study area of Shagasha Tea Company Ltd farmers sampled of the entire all members. This also reduced the costs of pre visits to the study area. The researchers also in a bid to cut costs will not use any research assistant.

The researchers also limited the respondents to identify with only one tea factory institution. The researchers requested for the cooperation of the the villageois officers and the beneficiaries to identify themselves with only Shagasha Tea Company Ltd operating in Shagasha Sector.

1.7. SCOPE OF THE STUDY

The scope of this study is in three dimensions namely geographical, contents and time scopes.

1.7.1. Content scope.

The research focused on assessment of the contribution of tea productivity and investment return. Thus make this work to be in agriculture and economic.

1.7.2. Time Scope

To consider the contribution of crop productivity and investment recovery to farmers within Shagasha Tea Company Ltd, the study took into consideration three years period ranging from 2019 up to 2021. This work was done in three months from June up to August 2022.

1.7.3. Space Scope

The data of this research were gathered within Shagasha Tea Company Ltd boundaries in Giheke sector of Rusizi District, Western Province of Rwanda.

1.8. ORGANIZATION OF THE STUDY

This study is organized in five chapters: the first chapter of study is the general introduction, background to the study, problem statement, research questions, significance to the study and scope of the study which show in details the ground upon which the researcher based to carry this research. The second chapter is literature review that examines the studies already conducted in the same areas. The third chapter entails methods, techniques and procedures used. It deals with techniques and procedures used in investigation and data collection and analysis. It includes area of the study, population and sample selection of the study. Chapter four deals with the results presentation,

discussion and interpretation and the fifth chapter which is the last is all about the conclusion derived from the study, recommendations and suggestions for further studies.

SUMMARY

This study is the general introduction, background to the study, problem statement,Research Objectives, Research questions, significance to the study,scope of the study,Organization of the study

CHAPTER TWO: LITERATURE REVIEW

2.0. INTRODUCTION

This chapter covers the literature review which is about the theoretical framework, conceptual framework and the empirical review.

2.1. DEFINITION OF KEY TERMS

2.1.1. Crop

Crop is a plant or plant product that is grown and harvested(Gupta, D. K,2012).

2.1.2. Productivity

Productivity is a measure of economic performance that compares the amount of goods and services produced (output) with the amount of inputs used to produce those goods and services(Pedosphere,2014).

2.1.3. Crop productivity

Crop productivity is the quantitative measure of crop yield in given measured area of field(Bockheim, J,2014)..

2.1.5. Tea plant (Camelliasinensis)

Tea is a species of evergreen shrubs or small trees in the flowering plant family Theaceae. Its leaves and leaf buds are used to produce tea(Gennadiyev, A,2015).

2.1.7. Investment

Investment is an asset acquired or invested in to build wealth and save money from the hard earned income or appreciation. Investment meaning is primarily to obtain an additional source of income or gain profit from the investment over a specific period of time(Hartemink, A. E,2014).

2.1.8. Investment Return

Return on Investment (ROI) is a popular profitability metric used to evaluate how well an investment has performed. ROI is expressed as a percentage and is calculated by dividing an investment's net profit (or loss) by its initial cost or outlay.Return on Investment (ROI) is a popular profitability metric used to evaluate how well an investment has performed. ROI is expressed as a percentage and is

calculated by dividing an investment's net profit (or loss) by its initial cost or outlay(Brevik, E. C,2014).

2.2. THEORETICAL FRAMEWORK

A theory is a guiding light for the researcher. Theorizing is the process of providing explanations and predictions of social phenomena. Rather empirical than speculative, the theory is a testable attempt to explain a particular phenomenon (Bailey, 1987). This study applies the theory of diffusion of innovation of Rogers.

2.2.1. Diffusion of innovation Theory of Rogers

Rogers' diffusion of innovations theory is the most appropriate for investigating the adoption of technology in higher education and educational environments (Medlin, 2001). In fact, much diffusion research involves technological innovations so Rogers (2003) usually used the word "technology" and "innovation" as synonyms. For Rogers, "a technology is a design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome" (p.13). It is composed of two parts: hardware and software. While hardware is "the tool that embodies the technology in the form of a material or physical object," software is "the information base for the tool" (Rogers, 2003, p. 259).Since software (as a technological innovation) has a low level of observability, its rate of adoption is quite slow.

For Rogers (2003), adoption is a decision of "full use of an innovation as the best course of action available" and rejection is a decision "not to adopt an innovation" Rogers defines diffusion as "the process in which an innovation is communicated thorough certain channels over time among the members of a social system" (5). As expressed in this definition, innovation, communication channels, time, and social system are the four key components of the diffusion of innovations.

2.2.3 Diffusion and Adoption

Perhaps the most crucial decision in the entire innovation development process is the decision to begin diffusing the innovation to potential adopters. On the one hand, there is usually pressure to approve an innovation for diffusion as soon as possible, as the social problem/need that it seeks to solve may have been given a high priority. Public funds may have been used to sponsor the research and such financial support is an unrealized public investment until the innovation is adopted by users. On the other hand, the change agency's reputation and credibility in the eyes of its clients rests on

only recommending innovations that will have beneficial consequences for their adopters. Scientists tend to be cautious when it comes time to translate their scientific findings into practice.

2.2.4 Early Adopters

Compared to innovators, early adopters are more limited with the boundaries of the social system. Rogers (2003) argued that since early adopters are more likely to hold leadership roles in the social system, other members come to them to get advice or information about the innovation. In fact, "leaders play a central role at virtually every stage of the innovation process, from initiation to implementation, particularly in deploying the resources that carry innovation forward" ((Light). Thus, as role models, early adopters' attitudes toward innovations are more important. Their subjective evaluations about the innovation reach other members of the social system through the interpersonal networks. Early adopters' leadership in adopting the innovation decreases uncertainty about the innovation in the diffusion process. Finally, "early adopters put their stamp of approval on a new idea by adopting it (Rogers, 2003)

constructed to predict and understand the crop productivity and investment recovery behavior among Tea farmers is based on three groups of independent variables: (1) structural and institutional factors, (2) Socioeconomic characteristics, (3) indigenous knowledge about the nature of Teal and Tea productivity and recovery investment. The model also contains three intervening variables: (1) knowledge of crop productivity and investment recovery challenges, (2) attitudes toward risk to production, (3) goals in Tea farming.

The dependent variable is adoption of crop production practices.

The model is a modified classical diffusion model that incorporates indigenous knowledge systems. The rationale for introducing indigenous knowledge in the adoption/diffusion model is two-fold: theoretical, and practical.

Theoretically, introducing indigenous knowledge in the adoption/diffusion model should enhance its explanatory power. The appropriateness of the adoption/diffusion paradigm for third world countries has been questioned in the literature in the sense that the model does not adequately consider the local culture.

Building upon farmer's knowledge will also generate production and investment techniques familiar to farmers and compatible with their traditional farming systems. Such an approach not only will minimize risk but will also shift in a positive direction the influence of significant others on the

individual decision-process. Thus innovations built upon indigenous knowledge will be better received and more quickly adopted by the local population than new and unfamiliar practices.

The model begins with the independent variables consisting of: 1) structural and institutional factors including farmers' access to the tea factory's facilities, the influence of significant others, 2) farmers' personal characteristics and 3) their indigenous knowledge of Tea production.

These independent variables are expected to affect at the next stage intervening factors, including 1) farmers' knowledge of crop productivity and investment recovery challenges, 2) attitudes toward risk to production and 3) their individual goals in farming. In turn, the intervening factors are expected to have a direct influence on the adoption rates of tea production and investment recovery practices.

Also, the structural and institutional factors are expected to affect farmers' personal characteristics which, in turn, will influence their indigenous knowledge of Tea production. In addition, farmers' knowledge of crop productivity and investment recovery challenges is expected to affect their attitudes toward risk investment can cause in case of recovering their investment.

In the end, farmers' attitudes toward risk will influence their goals in farming.

Structural and institutional factors

Structural and institutional factors will include access to access to the tea factory's facilities and influence of significant others.

Access to the tea factory's facilities is defined as the ability to obtain a loan on fertilizers and trainings by a farmer heeding the production.

Significant others refer to any person or group of people who have influence on the individual adoption behavior. Significant others in this study refers to two main groups ((Bangura and Korsching): (1) the local group, including relatives, spouse(s), neighbors, friends, the village chief and local trader(s), and (2) the nonlocal group, including the CRPA (governmental extension services) and the Six "S" (a non-governmental organization) agents, local authorities such as the Prefect of Department (Mayor) and the High Commissioner of Province (Governor).

Both CRPA and Six "S" work for rural promotion by providing among other services assistance to farmers for implementing soil conservation practices. Balance theory, as developed earlier, is tied to the local group of significant others.

2.2 The tea productivity for farmers

The demand of agricultural commodities is growing rapidly due to increase in global population. Tea is an important agricultural commodity and a large segment of rural population in tea producing countries is engaged in tea enterprise. Therefore, increased agricultural production has the potential to strengthen the economy of rural families and reduce the poverty of rural areas (Koirala et al., 2014). Turkey is the fifth largest tea producing country after China, India, Kenya, and Srilanka (Worldatlas, 2016) but its share in international tea export market is minimal. Turkey has the highest per capita tea consumption (6.96 pounds) in the world (Ferdman, 2014). Even though domestic tea production fully meets national needs but country's share in international tea export mark et is minimal as compared to other major tea producing countries. The export share in international market can be enhanced in two ways i) decreasing domestic tea consumption ii) increasing total tea production. Disturbing domestic tea market for export purpose is not a feasible solution economically. For this reason, increasing tea production is a more viable solution. Tea production can be enhanced either by increasing land under tea cultivation or by increasing productivity of present tea farms. Increasing land area under tea cultivation is very hard due to land scarcity and more importantly tea plants can be grown only under certain climatic and soil conditions.

Therefore, improving tea productivity of present tea enterprises is the most feasible solution both socially and economically. But tea farmers are facing a number of problems which limit the ability of tea farmers to enhance tea productivity. These include both management and production related problems. Özcan and Yazıcıoğlu (2013) listed a set of problems affecting tea productivity such as aging, delay in the renewal of tea plants, land fragmentation, high production costs, illegal entry of tea, and severe fluctuations in tea processing sectors. The small tea growers are facing problems such as low product price, late payment, and lack of solidarity organization (Sakli, 2011). Except these factors farm size, farmers' socioeconomic characteristics, land fragmentation, and resource ownership also affect crop productivity (Chand et al., 2011). Topsoil depth, tea age, fertilizer, and organic matter are other important factors to consider in tea productivity (Anandacoomaraswamy et al. 2001). In addition, the amount of labor hired, land under tea cultivation, the number of bushels, and off-farm income are also vital factors affecting the tea productivity (Kiprono et al., 2011). Beside these socio-economic, organizational, technological and

environmental issues, farm ownership (owned or tenure) is also considered a vital determinant of tea productivity.

Therefore, the formal and informal methods of accessing the land for farming have a crucial role in enhancing the income of rural households and agricultural productivity (Carter & Olinto, 1998; Yao, 2007). Although productivity is a prime concern, analyzing the factors that affect the crop productivity can facilitate benefitting from the high economic profit without disturbing the environment. Therefore, the primary objective of this study was to analyze the effect of different farm variables specially farm size and land ownership on tea productivity with socioeconomic and environmental factors. The practices associated with cost savings were also explored in this study with different farm sizes.

2.3 The recovery level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea

2.3.1 Introduction

There are several important components to effective investment recovery. These include idle asset identification, asset redeployment, and divestment. There are a large number of other processes that fall under each of these areas. The sections below will outline the main areas of investment recovery and will provide a brief introduction to these areas. We will also discuss some of the benefits that can accrue to the organization for having effective processes in place to manage these important functions.

2.3.2 Idle Asset Identification

One of the most important parts of the investment recovery process is the identification idle assets. There are many hidden costs that are associated with carrying idle assets. First, if a piece of equipment works, it could be put to better use somewhere else. Second, unused equipment depreciates in value and results in an actual expense on the books. Third, there are very real storage costs for holding and storing equipment and materials. These include rent, storage costs, and loss of space that could be used for other more productive activities. Fourth, idle equipment represents capital that is tied up and is not earning a return on investment. This is a very real loss, but is often a loss that managers fail to account for. Finally, if an idle asset is sold, it could provide an immediate cash benefit to the business (Savastano and Scandizzo, 2017).

12

For some organizations, identifying an idle asset may be quite difficult. Especially if idle assets are located in another geographic area and are under control of another person, group, or operating entity. In some cases, the entity controlling these assets may not have an incentive to have them labeled as idle. When identifying an asset, it is important to obtain as many details about the asset as possible. This may include model number, serial number, manufacturer, or other information. It also includes assessing the condition of the asset and determining if it can still be used productively. It can also involve taking pictures of the asset or following another standard asset cataloging procedures (Deininger & Jin, 2005).

2.3.3 Redeployment

Redeploying an idle asset to another part of an organization is one of the best and most cost effective things an investment recovery professional can do with an idle asset. Redeploying an asset to another part of an organization removes an asset from the idle category and also saves the organization money by eliminating the need to purchase a new asset at current market rates. In order for an asset to be reused internally, another part of the company needs to have a need for an asset of that type. It must also be practical for the asset to be transferred and deployed at the new location. Finally, reusing an asset at the new location should also produce a benefit that exceeds the cost of purchasing a new item(Chattopadhyay and Sengupta, 1998).

2.3.4 Divestment

In the event that an idle asset can not be redeployed, it should be quickly sold, scrapped, recycled, donated, or disposed. Correctly using these divestment processes maximizes the value of the asset for the organization. By effectively divesting the asset, the organization can quickly obtain cash that can then be used to invest back into the business. In addition, a successful divestment provides a significant (and often unexpected boost) to the organization's bottom line. This is because asset sales and scrapped equipment are usually booked as revenue to the organization. Donations can also provide goodwill and a tax benefit (Shahbaz et al., 2017)

There are many ways to divest an asset. The method of divestment will depend on several factors: the condition of the asset, the fair market value, the number of prospective buyers, the complexity of the asset, the book value of the item, and whether the asset has hazardous materials or components.

The best method is the method that provides the highest value / benefit for the organization, has the lowest divestment costs, and still complies with the organization's divestment policies. The optimal method often can be difficult to determine but understanding the options available will usually make the decision easier. The sections below will elaborate on divestment options like asset sales, scrapping / recycling an asset, donating an asset, and asset disposals(Rahmana and Rahman, 2009).

2.3.5 Asset Sale

Once the decision has been made to sell an asset, an investment recovery professional next needs to decide how to sell the asset. This is not as simple as it might first appear. There are many ways to sell an asset that range from a fixed price sale, private sale, negotiated sale, auction, sealed bid, consignment, or outsourced sale(Heltberg, 1998).

2.4 The challenges and mitigation strategies to adopt for recovery enhancement.

The Use Of Outdated Technology

Although it is one of the KARI´s most important bets into the future, it has been a major challenge to have users adopt the newer technology made available for them.The misdirection of efforts due to poor research done with obsolete technology reduces the potential productivity-boost that could take place(Tauer,1995)

Climate Change

The climate change occurring nowadays on planet Earth is no news for any of us. What it is big news is what that climate change is doing to the soil.Those zones that were considered to be semi-arid are in danger of becoming arid and the arid zones have become so dry that no agricultural project can be thought for them. There is currently a project underway and is one of KARI´s strategic goals to achieve artificial irrigation to compensate the lack of rainfall in certain areas.According to recent studies, the production could be multiplied ten times with that investment (Weir,1999).

Diseases And Pests

There is a huge problem with pests and diseases that not only applies to the pre-harvest moment. There have been some major issues with the storage facilities not being adequate for the goods to stay there for some period of time.For example, afflatoxins affecting maize in the southern provinces after it was harvested and once it was stored caused severe losses. This is considered to another drawback from farmer´s lack of information or misinformation on how to properly go about controlling pests and diseases.

Infrastructure

There are some peripheral needs that have to be tackled at a large scale to aid the farmers all around Kenya. One of the main issues in this regard is the lack of and the poor conditions of rural roads linking the farmer´s facilities and the commercialization spots in the country.This affects the loss of perishable goods and also increases largely the costs associated with the production. If production costs are higher, they are translated into the final price of the product that reaches commercialization spots in good shape, impacting the production wheel negatively on both ends.

Soil Nutrients

Another major issue is the increasing population of the country forcing the terrain subdivision to be done in smaller parcels. Smaller parcels produce less amount of product and therefore have to be exploited with less downtime between crops.Soil nutrients are, then, not given the chance to be restored naturally damaging the outcome. Poor yields, weak plants and more fertilizer expenses are all a result from this lack of information farmers have. KARI has already acknowledged this situation and information about product rotation and harvest cycle is being given to all farmers in the country to preserve the potential of Kenyan soil.

2.3. CONCEPTUAL FRAMEWORK

To address the objectives and the research issues identified in the preceding section, we developed a conceptual framework,That served as a guide for developing hypotheses tested during the various research activities reported in this study. The conceptual framework for this research on farmers adoption towards soil conservation methods draws from Risk and balanced theories of farmers

adoption in crop production and investment recovery that explain adoption challenges facing farmers as a result of investment recovery challenges (Heibert, 1974; Heider, 1946; Vender Zanden, 1977).

Based on the findings of the previous researchers, this study sought to construct an explicit conceptual diagram illustrating the factors influencing Tea farmers' adoption towards crop production and investment recovery methods. Our starting point is a model developed by, (Mah2)which showed Knowledge and information, farmer attributes and Farm enterprises as the determinants of agricultural conservation practices. Our diagram (Figure 2.3) maintains this basic distinction, but, by making scale (especially the down-scaling process) and the temporal progression of the adoption process more explicit, we emphasize the need for both researchers and policy-makers to tackle with their implications.

Characteristics of farms (farm size, land tenure, type of production, and soils), along with farmer experience, are important determinants of expected farm income with the SCMs, and any financial incentives provided. Based on these factors, a farmer's adoption, and their perceptions of uncertainty and risk, determines the initial adoption or enrollment decision, which may be done on a trial basis. Evaluation of the trial can lead to decisions regarding continuation or expansion on the part of the farmer and may further impact the farmer's neighbors. Accordingly, our framework shows the farmer decision process as subject to constant updating, as experience is gained and trial adoption is either expanded or abandoned. Findings show that knowledge and information is critical in soil conservation adoption. However, building the trust of farmers to use the various information sources can be important as well. In the study of USDA, it is seen that different types of farmers are motivated by different strategies at different stages of adoption ((USDA)).

2.4. EMPIRICAL FRAMEWORK

Empirical framework involves citing researchers and recent books and journals or recent time observations and experiments. This section discusses different studies related to the farmers' adoption towards crop productivity and investment recovery methods in tea crop production.

(Ndabasanze)In his study on the suitability analysis of Tea growing, in the Context of crop production and investment recovery, Nyaruguru District, Rwanda. The researcher revealed that all farmers recognized the negative impact of not investing on tea planting where the study indicated

that 68% of farmers adopted SWC techniques and the majority of them (97%) implemented the techniques under the support of government and Tea Cooperatives. The common SWC techniques used were plunking as good as possible (45%), using adequate fertilizers (29%), and bench terracing (11%). In addition 26% of farmers adopted the combination of mechanical and biological measures for their crop production toward a good recovery for their investment. The study revealed also that farmers did not implement full use of organic fertilizers control due to poverty, lack of materials and limited knowledge. The researcher recommended the combination of mechanical (bench terraces) and biological measures (compositing) for improving Tea productivity

2.5 RESEARCH GAP

Research gap as a topic or area for which missing or inadequate information limits the ability of reviewers to reach a conclusion for a given question. A research gap may be further developed, such as through stakeholder engagement in prioritization, into research needs. Previous studies have been conducted on impact of crop productivity and investment Return. Other studies have undertaken the Challenges of crop productivity and investment Return as well as difference between crop productivity and investment Return but few studies assessment of crop productivity and investment Return which really inspired present researchers to conduct research entitled "assessment of crop productivity and investment Return."

SUMMARY

This chapter has reviewed the literatures pertaining to the concept of crop production and investment recovery methods adopted by farmers with a view to study the current stage of research. As evident from it, the term crop production and investment recovery have been explained in multiple ways and in wide variety of contexts. It also highlighted existing farmers' adoption towards Tea plantation productivity methods, models and challenges faced by farmers to adopt modern plantation toward the recovery of their investments. The present study is an effort in the direction to fill above mentioned research gaps and propose relevant solutions.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0. INTRODUCTION

The intention of this chapter is to portray the methodological approach and techniques that are used in the study. It includes the area of study and the study population. It also describes the methods and techniques that are used in choosing sample and data collection. It supplementary describes how data is collected, processed and finally analyzed to give the connotation of findings.

3.1. RESEARCH APPROACHES AND DESIGN

This study used both quantitative and qualitative approaches. Therefore, quantitative and qualitative data collection methods was been used. This research work is qualified to be of quantitative study because during the study, numerical data is used, collected and analyzed. But also qualitative data collection technique was also be used in non-numerical study than number.

This study was descriptive in nature. According to Gay et al, (2006), a descriptive research determines and reports the way things are; it involves collecting numerical data to answer questions about the current status of the subject of the study..

3.2. TARGET POPULATION

Peter ODERA (2006) defined population as all members or elements, be it human beings, animals, trees, objects, events, etc of a well-defined group. That is, Population means all the elements in a well-defined set of values.

The population of this study was Tea farmers living in Giheke sector, who are working with Shagasha Tea Company Ltd operating in Rusizi district. This means the farmers should be chosen from the population living in Giheke sector equal to 4116 people, (Shagasha Tea Company Ltd report, 2020).

3.3. SAMPLING PROCEDURES

Grinnell and William (1990) defined a sample size as the number or objects in the sample. A sample can further be defined as all people or classes selected to take a part in research study due to the nature of the research. Therefore, researchers was decide to use simple random sampling to minimize cost and for relevant information about the research study. The total sample will be determined using, Cochran's formula: $\mathbf{Ne} = \dfrac{\mathbf{no}}{\mathbf{1+\frac{(no-1)}{N}}}$

Where:

n_O: is the sample size for big populations

N: is the size of the population

To calculate n_o, the following formula was used:

$n_0 = \dfrac{z^2 pq}{e^2}$

Where:

Z= confidence level at 90% (type value of 1.65)

e = precision error is 0.10%

P= is proportion of presence where p is 0.5

q = is 1-p

then,

$$n_o = (Z_{\frac{\alpha}{2}})^2 \, p^2 = (\tfrac{1.65}{0.1})^2 . 0.5^2 = 68.06 \simeq 68$$

3.4. SAMPLE SIZE

A sample is a segment of statistical population which is examined with a vision of gaining information about the population under the study. The researchers was used simple random sampling in order to get the sample representing all the population and each element of the population has an equal chance of being selected. Therefore, the sample size was been calculated as follows:

$Ne = \dfrac{no}{1+\frac{no-i}{N}} = \dfrac{no \times N}{N+no-1} = \dfrac{68 \times 4116}{4116+67} = 68.910829548 = 68$

In this study, the researchers was pick 68 participants for detailed study. This sample size will be implicit by the researchers to be representative of the total population.

3.5. RESEARCH INSTRUMENTS

The research instruments will be used as a practical means of attaining or achieving special relevant information related to the Tea Factories institutions and crop productivity and investment recovery.

3.5.1. Questionnaire

Data will be collected from participants through questionnaires administered by the researchers using an identical questionnaire with close ended questions which were distributed to respondents to give their views about the study. The questions were structured in a way that the respondents have close ended questions, in which the respondents were asked to select an answer from a directory provided.

3.6 DATA COLLECTION INSTRUMENTS

In conducting this research study, the required data gathered from both primary and secondary data sources. The information required helped the researcher to achieve the set objectives.

3.6.1. Primary data

Primary data is a type of data that is collected by researchers directly from main sources through interviews, surveys, experiments, etc. Primary data are usually collected from the source where the data originally originates from and are regarded as the best kind of data in research. The sources of primary data are usually chosen and tailored specifically to meet the demands or requirements of a particular research. Also, before choosing a data collection source, things like the aim of the research and target population need to be identified. During the research, primary data will be used to obtain from the sample elements relevant information concerning the whole people under the study. The materials which will be used are questionnaire and interview. The questionnaire will be addressed to the selected school teachers and learners under the study and contained both close-ended and open-ended questions. School staff also will be interviewed.

3.6.2. Secondary data

Secondary data refers to data that is collected by someone other than the primary user. Common sources of secondary data for social science include censuses, information collected by government departments, organizational records and data that was originally collected for other research

purposes. Primary data, by contrast, are collected by the investigator conducting the research, Secondary data analysis can save time that would otherwise be spent collecting data and, particularly in the case of quantitative data, can provide larger and higher quality databases that would be unfeasible for any individual researcher to collect on their own. In addition, analysts of social and economic change consider secondary data essential, since it is impossible to conduct a new survey that can adequately capture past change and/or developments. However, secondary data analysis can be less useful in marketing research, as data may be outdated or inaccurate.

3.7. DATA ANALYSIS

The study used descriptive data analysis which combines both quantitative and qualitative data methods of analysis. Computer package like Microsoft Excel was used to produce tables and figures. After collecting data, the researchers will proceed with data editing, coding and tabulation. As the research is quantitative and qualitative type, quantities were used to facilitate the exploit of data presentation and analysis. The collected data were analyzed and organized according to each objective and according to research questions. The data collected will be transformed into significant information and synthesized to provide descriptive statistics such as percentages, frequency and tables and have a valuable conclusion to suit the requirements of accuracy and comprehensiveness.

3.7.1. Editing

Editing was done to ensure that answers were accurate and consistent. Again through editing the researchers were able to deduce from answers given to see whether all questions were uniformly interpreted according to the instructions. Editing was done to check completeness of the questionnaires and to see that all applicable questions had been answered. The researcher tried to look for inconsistencies among answers given.

3.7.2. Coding

Coding means transmitting numerals or other symbols to the categories or responses. Through coding data collected from respondents were categorized into themes, related responses from different respondents and this were functional to the researchers in making conclusion and recommendations concerning the study.

3.7.3. Tabulation

Tabulation is putting together of data into some kind of tables. These data may then undergo certain statistical manipulation (Reference). Under this study, tabulation was done after editing. Tabulation is essentially important in establishing frequency to distribution and then calculating the number and the percentages of the figures presented.

3.7. ETHICAL ISSUES

The major ethical issues of concern are informed consent privacy and confidentiality, anonymity and researchers' responsibility. The researchers kept confidentially the data provided by responses of respondents. Data are to be used for academic purposes only. The researchers discussed with the respondents about how the data would be kept.

3.8. VALIDITY AND RELIABILITY MEASURES

Reliability refers to how consistently a method measures something. If the same result can be consistently achieved by using the same methods under the same circumstances, the measurement is considered reliable. You measure the temperature of a liquid sample several times under identical conditions. The thermometer displays the same temperature every time, so the results are reliable.

Validity refers to how accurately a method measures what it is intended to measure. If research has high validity that means it produces results that correspond to real properties, characteristics, and variations in the physical or social world. High reliability is one indicator that a measurement is valid. If a method is not reliable, it probably isn't valid. If the thermometer shows different temperatures each time, even though you have carefully controlled conditions to ensure the sample's temperature stays the same, the thermometer is probably malfunctioning, and therefore its measurements are not valid.

CHAPTER FOUR: DATA PRESENTATION ,ANALSIS,INTERPRENTATION AND SUMMARY

4.0 INTRODUCTION

This chapter presents the Demographic data of respondents,Findings related to the specific objectives,Discussion of Findings and Summary of Findings.

4.1 PRESENTATION OF FINDINGS

This analysed interpreted data collected about the identification of the respondents and the three objectives of the study.

4.1.1. Identification of respondents

The respondents were identified according to the gender, age, education, profession and marital status of the respondents.

Table 1: Identification of respondents

		Frequency	Percent
Sex	Male	44	64.7%
	Female	24	35.3%
	Total	68	100.0
Age	Under 20	6	8.8%
	21-30 years	14	20.6%
	31-40 years	29	42.6%
	41 and above	19	27.9%
	Total	68	100.0
Education	No level	5	7.4%
	Primary	11	16.2%
	Secondary	42	61.8%
	University	10	14.7%
	Total	68	100.0
Profession	Farmers	3	4.4%
	Traders	52	76.5%
	Public employees	10	14.7%
	Private employees	3	4.4%
	Total	68	100.0
Marital status	Single	5	7.4%
	Married	53	77.9%
	Divorced	6	8.8%
	Widows (ers)	4	5.9%
	Total	68	100

Source: Primary data,July,2022

The table 1 indicates that, out of 68 respondents, 64.7% represented males while 35.3% represented females. This implies that most of the were male. This means that the collected data were of were free of gender bias. More significantly, it shows that data obtained is free of gender bias.

The table above also shows that the majority of respondents associating to 42.6% were between 31-40 years old and 41 year and above corresponded to 27.9% of respondents and 20.6% corresponded to the age bracket of 21-30 years while those one with under 20 years were 8.8% of respondents. This implies that all categories of age, in study area, were using internet banking, what was making a good banking environment. This also proves the relevance of the collected since the respondents were mature enough to provide pertinent answers.

As indicated in this table, 61.8% of respondents completed secondary schools, 16.2% completed primary schools, and 14.7% completed university whereas 7.4% of respondents had no qualification.

From the table 4, 76.5% of respondents were traders and 14.7% of respondents were employed in public sector while 4.4% of respondents represented the private employees and farmers for each.

The table also indicates that, out of 68 respondents, 77.9% were married, and 8.8% were divorced, then 7.4% were single while 5.9% were widows(ers).

4.2 Findings Related to Specific Objectives

This present the finding related to the assess the tea productivity for farmers within Shagasha Tea Company Ltd, the recovery level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea. And the challenges and mitigation strategies to adopt for recovery enhancement.

4.2.1 The tea productivity for farmers within Shagasha Tea Company Ltd

The tea productivity for farmers within Shagasha Tea Company Ltd are the , Socio-economic factors facilitates tea productivity for farmers,tea productivity for farmers is the Mechanization,Degree of commercialization is facilitates tea productivity for farmers,Organizational structure facilitates tea productivity for farmers in Shagasha,Tea is cash Crops and Tea increase Effort.

Table 2:The tea productivity for farmers within Shagasha Tea Company Ltd

I terms	SD		D		N		A		SA		Total	
Frequency/Percentages	F	P%	F	P%	F	P%	F	P%	F	P%	F	P%
Socio-economic factors facilitates tea productivity for farmers	0	0%	0	0%	0	0%	32	47%	36	53%	68	100%
Tea productivity for farmers is the Mechanization	0	0%	0	0%	0	0%	30	44%	38	56%	68	100%
Degree of commercialization is facilitates tea productivity for farmers	0	0%	0	0%	0	0%	23	34%	45	66%	68	100%
Organizational structure facilitates tea productivity for farmers in Shagasha	0	0%	0	0%	0	0%	30	44%	38	56%	68	100%
Tea is cash Crops	0	0%	0	0%	0	0%	23	34%	45	66%	68	100%
Tea increase Effort	0	0%	0	0%	0	0%	23	34%	45	66%	68	100%

Source:Primary Data,2022

The table above show The tea productivity for farmers within Shagasha Tea Company Ltd,the agree was 32(47%) and strong agree was 36(53%),Tea productivity for farmers the agree 30(44%) and strong agree was 38(56%),Degree of commercialization the agree was 23(34%) and strong agree 45(66%),Organizational structure the agree was 30(44%) and strong agree was 38(56%),Tea in cash crops the agree was 23(34%) and strong agree 45(66%) and Tea increase Effort the agree 23(34%) and strong agree was 45(66%), the majority was agree and strong agree The tea productivity for farmers within Shagasha Tea Company Ltd are the , Socio-economic factors facilitates tea productivity for farmers,tea productivity for farmers is the Mechanization,Degree of commercialization is facilitates tea productivity for farmers,Organizational structure facilitates tea productivity for farmers in Shagasha,Tea is cash Crops and Tea increase Effort.

4.2.2 The investment return for farmers within Shagasha Tea Company Ltd

The recovery level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were Idle Asset Identification,Divestment,Asset Sale and Redeployment.

Table 3:The investment return for farmers within Shagasha Tea Company Ltd

I terms	SD		D		N		A		SA		Total	
Frequency/Percentages	F	P%	F	P%	F	P%	F	P%	F	P%	F	P%
Idle Asset Identification is level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were	0	0%	0	0%	0	0%	20	29%	40	71%	68	100%
Divestment is level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were	0	0%	0	0%	0	0%	32	47%	36	53%	68	100%
Asset Sale is level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were	0	0%	0	0%	0	0%	30	44%	38	56%	68	100%
Redeployment is level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were	0	0%	0	0%	0	0%	23	34%	45	66%	68	100%

Source:Primary data

The table above show The return level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea , the Idle Asset Identification the agree was 20(29%) and strong agree 40(71%),Divestment the agree was 32(47%) and strong agree 36(53%),Asset Sale the agree was 30(44%) and strong agree was 38(56,the m%) and Redeployment the agree was 23(34%) and strong agree was 45(66%),the majority respondents was agree and strong agree wasThe recovery level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were Idle Asset Identification,Divestment,Asset Sale and Redeployment.

4.2.3 The challenges and mitigation strategies to adopt for return enhancement

The challenges and mitigation strategies to adopt for return enhancement were The Use Of Outdated Technology, Diseases And Pests,Climate Change and Infrastructure.

Table 4:The challenges to adopt for return enhancement

I terms	SD		D		N		A		SA		Total	
Frequency/Percentages	F	P%	F	P%	F	P%	F	P%	F	P%	F	P%
The Use Of Outdated Technology is the challenges and return enhancement	0	0%	0	0%	0	0%	32	47%	36	53%	68	100%
Diseases And Pests is the challenges and return enhancement	0	0%	0	0%	0	0%	30	44%	38	56%	68	100%
Climate Change is the challenges and return enhancement	0	0%	0	0%	0	0%	23	34%	45	66%	68	100%
Infrastructure is the challenges and return enhancement	0	0%	0	0%	0	0%	20	29%	40	71%	68	100%
Soil Nutrients is the challenges and return enhancement	0	0%	0	0%	0	0%	32	47%	36	53%	68	100%

Source:Primary Data

The table above show The challenges to adopt for recovery enhancement,The Use Of Outdated Technology, the agree was 32(47%) and strong agree was 36(53%),Diseases And Pests the agree was 30(44%) and strong agree was 38(56%),climate change agree was 23(34%) and strong agree was 45(66%),Infrastructure the agree was 20(29%) and 40(71%) and Soil Nutrients the agree was 32(47%) and strong agree was 36(53%),the majority respondents was agree and strong agree that the challenges and mitigation strategies to adopt for return enhancement were the use of outdated Technology, Diseases And Pests,Climate Change and Infrastructure.

4.3 Discussion of Finding

4.3.1 The tea productivity for farmers within Shagasha Tea Company Ltd

The tea productivity for farmers within Shagasha Tea Company Ltd,the agree was 47% and strong agree was 53%,Tea productivity for farmers the agree 44% and strong agree was 56%,Degree of commercialization the agree was 34% and strong agree 45(66%),Organizational structure the agree was 44% and strong agree was 56%,Tea in cash crops the agree was 34% and strong agree 66% and Tea increase Effort the agree 34% and strong agree was 66%, the majority was agree and strong agree The tea productivity for farmers within Shagasha Tea Company Ltd are the , Socio-economic factors   facilitates tea productivity for farmers,tea productivity for farmers is the Mechanization,Degree of commercialization is   facilitates tea productivity for farmers,Organizational structure facilitates tea productivity for farmers in Shagasha,Tea is cash Crops and Tea increase Effort.

4.3.2 The investment return for farmers within Shagasha Tea Company Ltd

The return level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea , the Idle Asset Identification the agree was 29% and strong agree 4071%,Divestment the agree was 47% and strong agree 53%,Asset Sale the agree was 44% and strong agree was 56% and Redeployment the agree was 34% and strong agree was 4566%,the majority respondents was agree and strong agree wasThe recovery level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were Idle Asset Identification,Divestment,Asset Sale and Redeployment.

4.3.3 The challenges to adopt for return enhancement

The challenges to adopt for return enhancement,The Use Of Outdated Technology, the agree was47% and strong agree was 53%,Diseases And Pests the agree was 44% and strong agree was 56%,climate change agree was 34% and strong agree was 66%,Infrastructure the agree was 29% and Strong agree was 71% and Soil Nutrients the agree was 47% and strong agree was 53% ,the majority respondents was agree and strong agree that the challenges and mitigation strategies to adopt for return enhancement were the use of outdated Technology, Diseases And Pests,Climate Change and Infrastructure.

4.4 SUMMARY OF FINDINGS

The tea productivity for farmers within Shagasha Tea Company Ltd are the The investment return for farmers within Shagasha Tea Company Ltd,tea productivity for farmers is the Mechanization,Degree of commercialization is facilitates tea productivity for farmers,Organizational structure facilitates tea productivity for farmers in Shagasha,Tea is cash Crops and Tea increase Effort,The return level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were Idle Asset Identification,Divestment,Asset Sale and Redeployment and challenges and mitigation strategies to adopt for return enhancement were the use of outdated Technology, Diseases And Pests,Climate Change and Infrastructure.

CHAPTER FIVE CONCLUSION AND RECOMMENDATIONS

5.0 INTRODUCTION

This chapter presents the Conclusion, Recommendations and Suggestions For Further researchers

5.1 CONCLUSION

The tea productivity for farmers within Shagasha Tea Company Ltd are the ,The investment return for farmers within Shagasha Tea Company Ltd,tea productivity for farmers is the Mechanization,Degree of commercialization is facilitates tea productivity for farmers,Organizational structure facilitates tea productivity for farmers in Shagasha,Tea is cash Crops and Tea increase Effort,The return level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were Idle Asset Identification,Divestment,Asset Sale and Redeployment and challenges and mitigation strategies to adopt for recovery enhancement were the use of outdated Technology, Diseases And Pests,Climate Change and Infrastructure. as conclusion Tea demand is increasing rapidly both in domestic as well as in international markets. The growing demand of tea requires an increase in its production in a sustainable way. Therefore, enhancing tea productivity of present tea farms is the most feasible solution due to land scarcity and unavailability of required climate conditions.

5.2 RECOMMENDATIONS

The following was the recommendations that used to support our study

5.2.1 To the Administrative staff of Shagasha tea Company Ltd

Administrative staff Should facilitates workers in the process of productivity in Shagasha tea Company Ltd

5.3 Suggestions for Further Researchers
The following was the suggestions for Further Researchers

- Effect of the crop productivity to investment recovery within farmers from Shagasha Tea Company Ltd.

- Examine the mitigation strategies to adopt for recovery enhancement.

- Evaluate the Problem of the crop productivity to investment recovery within farmers from Shagasha Tea Company Ltd.

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APPENDICES

APPENDICES 1:INTRODUCTORY LETTER

KIBOGORA POLYTECHNIC

FACULTY OF BUSINESS DEVELOPMENT STUDY

DEPARTMENT OF RURAL DEVELOPMENT

Dear sir, madam,

I am called ISHIMWE Ange my registration number 1900029 a student of Kibogora Polytechnic, Faculty of Business development study, and Department of Rural Development you write this letter to humbly request you to allow our carry out our research in your institution.

I am currently carrying a research entitled study about **ASSESSMENT OF THE CROP PRODUCTIVITY AND INVESTMENT RETURN IN RUSIZI Case study: Shagasha Tea Factory** for the sake of completing our Bachelor's Degree in Business Development Study at Kibogora Polytechnic I hereby request you to fill this questionnaire in order to get relevant information for this research. Your responses was be kept confidential and will be used for only the purpose stated above.

Your cooperation is our promotion

APPENDICES 2:DEMOGRAPHIC DATA OF RESPONDENTS

DEMOGRAPHIC DATA OF RESPONDENTS	
Sex	Male
	Female
	Total
Age	Under 20
	21-30 years
	31-40 years
	41 and above
	Total
Education	No level
	Primary
	Secondary
	University
	Total
Profession	Farmers
	Traders
	Public employees
	Private employees
	Total
Marital status	Single
	Married
	Divorced
	Widows (ers)
	Total

APPENDICES 3:QUESTIONNARE OF RESPONDENTS

SECTION A: **The tea productivity for farmers within Shagasha Tea Company Ltd**

I terms	SD	D	N	A	SA
Socio-economic factors facilitates tea productivity for farmers					
Tea productivity for farmers is the Mechanization					
Degree of commercialization is facilitates tea productivity for farmers					
Organizational structure facilitates tea productivity for farmers in Shagasha					
Tea is cash Crops					
Tea increase Effort					

The return level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea

I terms	SD	D	N	A	SA
Idle Asset Identification is level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were					
Divestment is level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were					
Asset Sale is level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were					
Redeployment is level for farmers within farmers in Shagasha Tea Company Ltd farmers before and after cropping tea were					

The challenges to adopt for recovery enhancement

I terms	SD	D	N	A	SA
The Use Of Outdated Technology is the challenges and recovery enhancement					
Diseases And Pests is the challenges and recovery enhancement					
Climate Change is the challenges and recovery enhancement					
Infrastructure is the challenges and recovery enhancement					
Soil Nutrients is the challenges and recovery enhancement					

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APPENDICES 4:RESEARCH LETTER

KIBOGORA POLYTECHNIC

Dear Sir/ Madam,

<u>RE:</u> Research for Dissertation Paper

In view to accomplish the academic requirements, Kibogora Polytechnic (KP) has students in the last year ending the Bachelor studies in Rural Development, that's why we recommend the named......I.S.H.I.MWE Ange & NDIKUMANA Jerome to conduct a research for dissertation paper in the institution under your responsibility.

This exercise will be carried out in three months, from May to July 2022; and the student will accomplish the data collection relating to the research topic from different stakeholders and partners of your institution such as administration staff, Managers, Unit Support, Cross cutting staff, Local Leaders, Farmers, Communities and other relevant key informants. Then after, student will compile findings reports which will be shared with all stakeholders and researchers from academic and surrounding communities.

We, therefore, request your usual collaboration and facilitation towards completion of this research. Any assistance rendered to the student in data collection to accomplish the dissertation paper will be highly appreciated by Kibogora Polytechnic.

Dr. MUNYENGABE Sylvestre, PhD
Ag. Deputy Vice Chancellor, KP

SHAGASHA TEA COMPANY Ltd
P.O.BOX 77 RUSIZI
Sign.....................................
Date:....................................

Granted Accreditation and Legal Personality by The Ministerial Order Nº 7/2015Official Gazette Nº 03 of 19/01/2015
P.O.Box: 31 Rusizi-Rwanda Tel:(+250)280100759,788730582,783751294 E-mail:info@kp.ac.rw Website : www.kp.ac.rw

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APPENDICES 5:CODE AND SIGNATURE OF RESPONDENTS

LIST OF RESPONDENTS

FARMERS OF SHAGASHA	
R1	
R2	
R3	
R4	
R5	
R6	
R7	
R8	
R9	
R10	
R11	
R12	
R13	
R14	
R15	
R16	
R17	
R18	
R19	
R20	
R21	
R22	
R23	
R24	

R25	
R26	
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R45	
R46	
R47	
R48	
R49	
R50	
R51	
R52	
R53	

R54	
R55	
R56	
R57	
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R59	
R60	
R61	
R62	
R63	
R64	
R65	
R66	
R67	
R68	