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FACULTY OF BUSINESS AND DEVELOPMENT STUDIES

DEPARTMENT OF RURAL DEVELOPMENT

CASH CROP TECHNOLOGIES AND YOUTH EMPLOYMENT IN NYAMASHEKE DISTRICT

Case study of Mahembe Coffee Washing Station

Period: 2018-2021

Undergraduate thesis presented in partial fulfillment of the requirements for the award of Bachelor degree with honor in Rural Development

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DECLARATION

Declaration by the Candidate

We, NDIZEYE Francois and HAMENYIMANA Pierre Denys, 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.

Names..... Names.....

Signed..... Signed.....

Date..... Date.....

Declaration by the Supervisor

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

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ABSTRACT

This study entitled “Cash Crop Technologies and Youth Employment in Nyamasheke District”, with a case study of Mahembe washing coffee station, had to identify the various technological practices implemented by the youth in coffee production value chain, to determine the contribution of coffee production in employment of the youth and to find out the challenges faced by the youth in coffee production technologies, in Nyamasheke district.

Literature review developed theoretical, conceptual and empirical frameworks related to cash crop technologies and youth employment.

This study was conducted on 372 young people aged between 15-35years working for Mahembe coffee washing station, among whom a sample size of 58 respondents was selected to answer to questionnaire for quantitative and qualitative analysis, with the help of computer package such as SPSS.

The study revealed that Mahembe coffee washing provided that 65.5% respondents agreed the distribution of fertilizers to coffee farmers; 71.2% agreed at both coffee harvest and ploughing; 82.7% agreed at harvest collection and 84.5% agreed at coffee drying, what consequently resulted in employment for youth as long as 74.1% agreed at employment expansion; 79.3% agreed having signed contracts, and 72.4% agreed at employment availability. However, challenges were identified where 37.9% protested over low amount of salary and 1.7% criticized over delay of salary payment for what 55.2% suggested for increasing salary, and 29.3% recommended paying the salary on time as mitigating solutions. Therefore, it was concluded that cash crop technologies have a significant role in accessing youth with employment in Nyamasheke district.

The study recommended that coffee washing stations should come up with convened guidance lines to ensure the employees’ training and do whatever it takes to get the employees motivated by providing them with reasonable salary on time. The effect of coffee production on saving culture among youth, in Nyamasheke district, was suggested for further research.

DEDICATION

This entire work is dedicated to:

The Almighty God;

Our beloved wives;

Our beloved children;

Our beloved parents;

All our brothers and sisters

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LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|-------------|---|
| GDP | : Gross Domestic Products |
| GenU | : Generation Unlimited |
| SPSS | : Statistical Package for Social Sciences |
| US\$ | : United States Dollars |

CHAPTER ONE: GENERAL INTRODUCTION

1.0. INTRODUCTION

The general introduction chapter describes the background of the study; statement of the problem, objectives of the study, research questions, significance of the study, limitation of the study, scope of the study and thesis organisation.

1.1. BACKGROUND OF THE STUDY

Technology and cash crop are probably the first things that come to mind when you think about the future of employment for young people. This makes historic sense, as cash crop agriculture sheds labor when countries develop. And the traditional ways of producing cash crop do not look particularly smart. Yet, technology and cash crop are also opening up opportunities for agriculture employment for youth. ((Kidodo et al., 2016).

Globally, the average age of farmers is 60 years old, and young people are increasingly pursuing nonagricultural careers rather than following in the footsteps of their parents and grandparents. Worldwide, populations are becoming younger, particularly in Sub-Saharan Africa, where 10 of the youngest countries in the world are located Youthful populations offer a great opportunity for many countries as the entrepreneurial and innovative energy of young people can help revitalize and enhance local economies. This is particularly true in the agricultural sector, where new technologies and innovative farming practices have the potential to enhance the employment for youth. (Hutt, 2016).

In the early independence period most African states attempted to diversify their agricultural base away from staple export production for European markets, by establishing large-scale mechanized estates, agri-industrial sectors, and promoting cash crop production, all supported by government subsidies. The imposition of structural adjustment policies resulted in the divestment of state agricultural enterprises, the opening up of African domestic markets to international cash crop imports, the promotion of export-oriented agriculture and the removal of subsidies. These initiatives resulted in the investment in national cash crop technology and extending employment for young people. (World Bank, 2008)

Rwanda's agricultural cash crop growth over the last decade has been remarkable. With a government that is committed to achieving sustainable cash crop growth coupled with growth in

employment opportunities for young people, Rwanda has made impressive progress in technology to stabilize its economy to pre-1994 levels. The overall cash crop technology is growing at a significant rate. The average annual growth rate in GDP was 8.8 per cent between 2015 and 2019. Rwanda's GDP per capita has increased from less than 200US\$ in 1994 to 740 US\$ in 2021. Rwanda has also emphasized the need to improve the investment climate through improved regulations in doing business in order to attract cash crop investment and create employment, (Mukwereza, L. 2016). Therefore, taking into account Mahembe Coffee Washing Station (CWS), the role of cash crop technologies in youth employment had to be assessed.

1.2. STATEMENT OF THE PROBLEM

Around the world about 50 billion young people aged between 15 and 29 years who have shown determination to ensure their rights and occupy a prominent place in the development process of the world. Today, despite the progress that has been conquering youth, in many countries, we know that many of the more than one billion young people of the planet remain without access to basic rights such as health, education, work and culture not to mention specific rights for that they are unemployment and have been struggling for in an increasingly significant way in cash crop productivity (BRASIL, 2013).

On the other side, the challenge of youth employment in Africa may appear daunting, yet Africa's vibrant youth represent an enormous opportunity, particularly now, when populations in much of the world are aging rapidly. Youth not only need jobs, but also create them. Africa's cash crop growing labor force can be an asset in the global marketplace. Realizing this brighter vision for Africa's future, however, will require a clearer understanding of how to benefit from this asset. (S. Ouma, 2015)

Young people in Rwanda constitute more than 40 percent of the entire population (Fourth Population and Housing Census, 2018). However, the rate of unemployment is among youth. The agricultural sector constituting 90 percent employment opportunities in the economy, dominated by small-scale, subsistence, and rain-fed farming. Yet, heading to the country Vision 2050, Rwanda envisions inclusiveness of young generation in agriculture systems and transformation to a productive high-value, market-oriented farming. (ILO, 2020). This is the issue for which this study had to assess the role cash crop technologies in employment of youth in Nyamasheke district, particularly in Mahembe coffee washing station.

1.3. RESEARCH OBJECTIVES

1.3.1. General objective

The purpose of this study is about assessing the role of cash crop technologies in youth employment in Nyamasheke district, with the case study of Mahembe coffee washing station operating in Mahembe sector.

1.3.2. Specific objectives

The study was guided by the following objectives:

1. To identify the various technological practices implemented by the youth in coffee production value chain in Nyamasheke district.
2. To determine the contribution of coffee production in employment of the youth in Nyamasheke district.
3. To find out the challenges faced by the youth in coffee production technologies as well as the applied mitigation strategies.

1.4. RESEARCH QUESTIONS

The study sought to answer the following research questions:

1. What are the various technological practices implemented by the youth in coffee production value chain in Nyamasheke district?
2. To what extent is coffee production contributing in employment of the youth in Nyamasheke district?
3. What are the challenges faced by the youth in coffee production technologies and their mitigation strategies?

1.5 SIGNIFICANCE OF THE STUDY

This study may help in various domains. The researchers divided this sub section into three main categories: Individual interest, scientific interest and socio-economic interest.

1.5.1. Individual Interest

This research is good opportunity for the researchers to increase knowledge and practice that they have studied in the classroom especially in the course of research methodology. And once this study work is validated, the researchers will be awarded the Bachelor's degree with honor in Rural Development.

1.5.2. Scientific interest

The result of this study will be also an open document for the next generations' researches. It will be also useful in future academic research areas that will be high listed after this research in Kibogora Polytechnic (KP) and other institutions around the world.

1.5.3. Socio-economic interest

The study aims to address the extent to which cash crop technologies including coffee production contribute to youth's employment opportunities. Findings from this research will contribute in capturing the missing services and improvement of the existing policies that will help in creating employment for the youth.

1.6. LIMITATION OF THE STUDY

The researchers encountered various limitations that hindered the access to information sought by the study. Some respondents were reluctant in providing the required data which made the researchers to use much effort in explaining the ethical issues to finally convince the respondents.

1.7. SCOPE OF THE STUDY

1.7.1. Content scope

The content scope is about agriculture and economy with focus to cash crop technologies and youth' employment opportunity.

1.7.2. Time scope

This study specifically covered the period of four years ranging from 2018 up to 2021.

1.7.3. Geographical scope

The present study was carried out in Mahembe coffee washing station operating in Mahembe sector, Nyamasheke district of Western province in Rwanda.

1.8. THESIS ORGANISATION

This thesis is organized into five chapters. Chapter One consists of the background of the study, statement of the problem, objectives of the study, research questions and significance of the study, limitations, scope of the study and thesis organisation. Chapter Two covers the literature review which is also divided into various sub topics namely theoretical framework, conceptual framework and empirical frameworks. Chapter Three constitutes the research methodology,

which is divided into research design, target population, sample and sampling procedure, research instrument, data collection procedure and data analyses techniques. Chapter Four constitutes of data presentation, interpretation and analysis. And finally chapter five constitutes of conclusion, recommendations and suggestions for further research.

SUMMARY

Throughout this chapter, identifying the technological practices implemented by farmers in coffee production value chain, identifying the contribution of cash crop technologies in employment opportunities of the youth and finding out the challenges faced by the youth in cash crop production and mitigation solution, in Nyamasheke district, are provided as specific objectives to identify the role of cash crop technologies in employment of the youth in Nyamasheke district. as the young still facing the problem of unemployment. Hence, this study details how it will be significantly beneficial for researchers, future academic generation and socio-economically. However, the limitation of the study is presented. The relevant information for this study is ranging from 2018 up to 2021. Finally, it ends up with the thesis organisation.

CHAPTER TWO: LITERATURE REVIEW

2.0 INTRODUCTION

This chapter focuses on the key concepts and theoretical, conceptual and empirical framework related to the topic of the study, referring to different authors, journals and reports to finally provide research gaps.

2.1. DEFINITION OF KEY TERMS

This subsection comes up with the definitions of key terms namely, cash crop, technologies and youth employment.

2.1.1. Cash crop

It is any crop that is considered easily marketable, as wheat or cotton. The crop for direct sale in a market, as distinguished from a crop for use as livestock feed or for other purposes. (Oxford, 2010),

A cash crop or profit crop is an agricultural crop which is grown to sell for profit. It is typically purchased by parties separate from a farm. The term is used to differentiate marketed crops from subsistence crops, which are those fed to the producer's own livestock or grown as food for the producer's family. (Belton et al.2014)

A cash crop is exactly what its name suggests; it's a crop of plants that is only grown to make money. A farmer might grow grains, legumes, and vegetables to feed his family and his livestock, but anything beyond that would be a cash crop. Cash crops might be additional grains, legumes, or vegetables, but they could also be plants used for drugs or making clothing. (Belton et al.2014)

2.1.2. Technologies

It is the application of scientific knowledge to the practical aims of human life or, as it is sometimes phrased, to the change and manipulation of the human environment. (Bates and Parkinson,1963)

Technology is the continually developing result of accumulated knowledge and application in all techniques, skills, methods, and processes used in industrial production and scientific research.

Technology is embedded in the operation of all machines, with or without detailed knowledge of their function, for the intended purpose of an organization, (J. R. Hicks, 1939)

It is the system by which a society provides its members with those things needed or desired or the sum of the ways in which social groups provide themselves with the material objects of their civilization, (Hirschl, 2003),

2.1.3. Youth employment

It is the opportunities for young people to find a job, which are bound to the general state of the economy and overall employment situation in a country. (McGurK, S. 2014)

Youth employment is a successful engagement of young people in the labour market and society, which is crucial not only for their own personal economic prospects and well-being, but also for overall economic growth and social cohesion. (Belton et al.2014)

Youth unemployment is the situation of young people who are looking for a job, but cannot find a job, with the age range being that defined by the United Nations as 15–30 years old. (Islam, R.,2006)

2.2. THEORETICAL FRAMEWORK

Theoretical framework highlights theories related to Food versus Cash. Development Theory and Reality, Generation unlimited theory of change, Theory of agricultural technology and Employment theory of value and theory of surplus value.

2.2.1. Food versus Cash. Development Theory and Reality

According to Boserup, (1965), The population density is the independent or the dependent variable in the relationship between population pressure and agricultural development. The competition or food first school of thought considers the introduction of cash crop to be the main cause of food crises, as this export crop competes with traditional food crops. The complementarity school of thought contends that food production will benefit from the promotion of export crops through trickle down effects of improved packages, agricultural mechanization and institutional arrangements developed in favour of export crops.

According to Bassett (1988b), both schools of thought exaggerate (to opposite extremes) the impact of export crop production on food crops. He argues that complementarity between food

crops and cash crops is weak due to a number of institutional and technical constraints which give rise to food and export crop competition rather than complementarity. He further contends that the question can only be answered in the context of (i) governments' agricultural policies and interventions in the export crop and food crop sectors, (ii) how rural households respond to these policies and interventions, and (iii) a host of agro-ecological and socio-economic variables which can facilitate or constrain increased agricultural output.

2.2.2. Generation unlimited theory of change

In addition to a desire to overcome the challenges facing young people today, Generation Unlimited is motivated by and designed to address gaps and flaws in the systems, operating environment, and supporting architecture responsible for supporting young people. While many actors have made significant efforts towards these priorities, these efforts have not been sufficiently effective or systemic to make a significant impact for the 1.8 billion young people in need of resources and opportunities to better their lives and communities. This is due to several gaps in the global ecosystem that Generation unlimited (GenU) has been uniquely designed, in its identity as a multi-sector partnership and in its strategy, to fill. (Kirui, Chepkemai Fancy C, 2013)

First, there is insufficient political, social and financial commitment and urgency around the youth agenda. As young people leave the direct oversight of government school systems, their challenges become less visible on the national and international stages. Furthermore, economic struggles are often seen as less visceral and urgent than humanitarian ones, even though for young people in the most vulnerable and fragile contexts, economic empowerment is tightly interlinked with and facilitative of progress in many other areas of life. As a result, as of January 2013, 22% of countries did not have a youth policy, and those that do have youth policies or youth ministries generally do not dedicate significant resources to the youth agenda. Additionally, efforts that do not have support from senior levels of government are unable to reach systems-level scale, let alone transform existing systems to better support young people. GenU is designed to work directly with governments to build political and financial commitment to the youth agenda, as well as with a wide range of partners to coalesce a political and social movement around the cause of supporting young people's education, training, employment, entrepreneurship and civic engagement. (Kirui, Chepkemai Fancy C, 2013)

Second, most efforts to date have been driven prescriptively by the perspective of the public and development sectors; private sector engagement has traditionally been lacking in supply-side interventions, and the voice of young people has not been seriously and meaningfully factored into decisions. This lack of holistic thinking has frequently hampered efforts and led to point solutions that are unable to fulfill young people's values and priorities, as well as keep pace with fast changing economies. Therefore, GenU is designed to leverage the capabilities and assets of the private sector, as well as the perspectives and innovative talents of young people. In particular, GenU will make a concerted effort to engage the most marginalized young people, recognizing their diverse needs. (Kirui, Chepkemai Fancy C, 2013)

Additionally, existing efforts are often conducted in silos and approached from the perspective of one actor. As a result, there is often a disconnect between globally and locally led efforts, and between global actors and local needs, such that resources and expertise are fragmented and inaccessible to local actors, who are crucial to ensuring effective in-country efforts. This has contributed to a proliferation of sub-scale innovations in the youth development space. As a multi-sector partnership, GenU will provide channels of communication and coordination among actors across geographies and sectors to unlock synergies and increase effectiveness of collective efforts, with an aim to develop and identify evidence-based innovations, and drive implementation at scale. (Kirui, Chepkemai Fancy C, 2013)

2.2.3. Theory of agricultural technology

According to Ondari (2010), socio-economic factors like household size, household structure and household control decision making, sex and occupation, and household head are expected to influence agricultural technology on both food and non-food consumption. He stated that general and specific characteristics of the technical farming and their operators shape overall levels of production and productivity, generating differential returns to farming endeavours.

Such characteristics as farm size, use of conservation practices, land tenure as well as household demographics and technological assets have been shown to exert some influence over enterprise and technology choice, input use and market participation. Besides farm characteristics, the socio-demographic traits of farmers such as education level, knowledge of farming practices, experience in farming, access to agricultural technology, level of poverty, age and gender structure of the household can greatly affect technological farming performance. Most of the

studies and literature related to measurement of poverty among the farm households have been based on income poverty and economic-poverty with some researchers preferring one of the measures while others sticking to either of the methods. This means empirical literature to measure poverty has proceeded along a few general approaches only. (Harry, G., 1975).

According to Intriligator (1979), the household is any group of individuals sharing income so as to purchase consumer goods and services, and is one of the basic institutions of economic theory. The economizing problem of the household is that of deciding how much of each of the available goods and services it should purchase, given the prices of all goods and services and its income. The economizing activities of the household are treated mathematically as the choice of a particular point in "agricultural technology".

2.2.4. Employment theory of value and theory of surplus value

At the heart of all theories of accounting lies a theory of value and the origin of profit. Throughout the history of economic thought two conflicting theories of value have competed for intellectual dominance, the marginalist theory of economics, and the employment theory of value of political economy, particularly its development by Marx. The application of marginalism to accounting produces economic income theory within which profit is defined as the change in the present value of expected future cash flows. For economic income theorists, "capital" is the origin of profit. From the perspective of Marx's political economy, the source of profit is surplus value. As Engels said, this is " ...the crucial question in political economy, the theory of surplus value" (Marx, 1976)

Most accounting academics uncritically accept economic income as an "ideal" framework for conceptualizing financial reporting. Only a few have drawn on political economy, particularly Sraffa's work (1960), to highlight the logical inconsistencies in the marginalist theory and its weakness as the foundation of a viable theory of accounting, and have begun to articulate a theory of accounting based on the employment theory of value. From the perspective of political economy the central weakness of marginalism as a theory of accounting is its failure to recognize accounting as a social reality, as a reflection and reinforcement of the dominant social relations within capitalism (Tinker, 1980)

Sraffa (1960) showed that given the technical conditions of production and the real-wage rate, there is a logically necessary unique set of commodity prices and a uniform rate of profit which

will allow the economic system to reproduce itself. He concluded that prices and profits could therefore be explained solely by the technical conditions of production and the real-wage rate without reference to subjective utility functions. With the logical necessity of marginalism removed, the onus is placed on the marginalists to provide other arguments or evidence to support their theory.

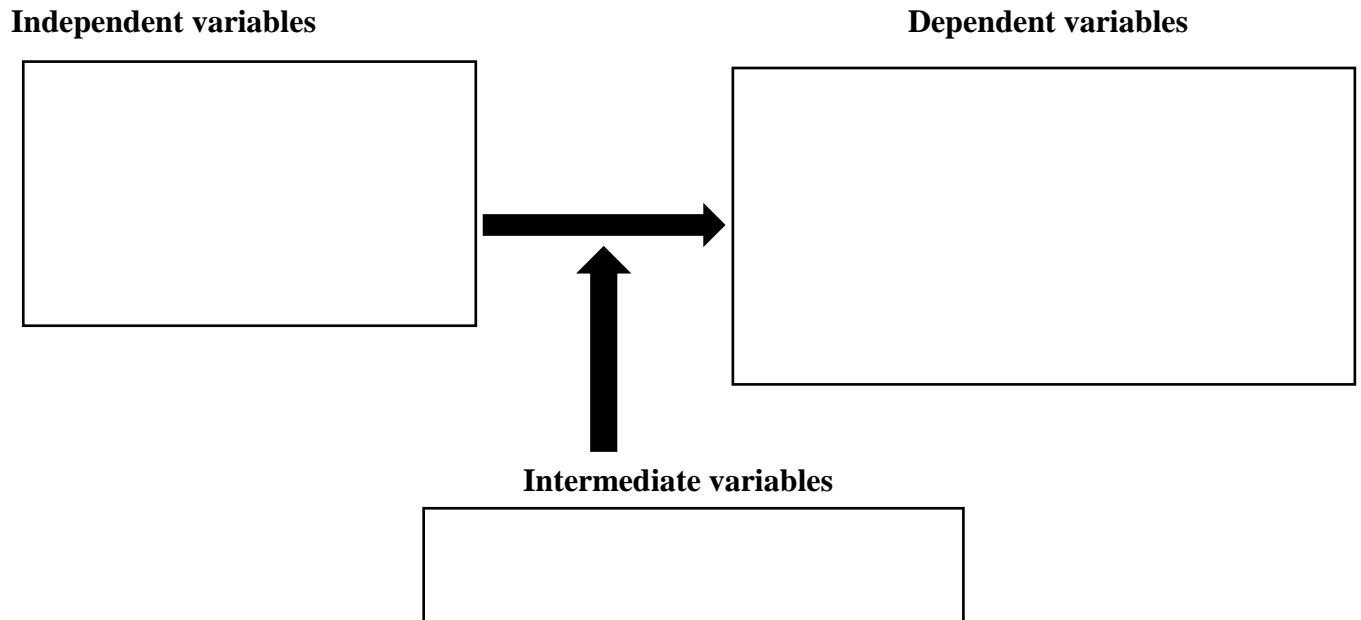
None have been forthcoming and, for Marxists at least, Sraffa has delivered a "staggering blow" to marginalism. However, by the same stroke, Sraffa's work also challenged the employment theory of value. Sraffa did not merely show that the marginalist's theory of value was irrelevant. He showed there was no logical necessity for any theory of value; that we do not need a theory of value to provide a logical explanation of economic reproduction. On the basis of Sraffa's work; some economists have also concluded that Marx's employment theory of value is logically inconsistent, and irrelevant as an explanation of the functioning of modern capitalism (Steedman, 1977).

Given the impossibility of choosing between marginalism and the employment theory of value solely on logical grounds, a primary task for accounting theorists must be to test their adequacy as descriptions and explanations of the current and historical functioning of accounting in its political, social and economic contexts. A prominent feature of modern capitalism is financial reporting to capital markets. Thus, from this perspective, the marginalist and employment theories of value should only be accepted or rejected by accounting theorists according to their ability to describe and explain this aspect of capitalism. The accounting theories and practices that are now socially acceptable. In other words, conventional cost-based accrual accounting which lies at the heart of modern financial reporting (Tinker, 1980).

2.3. CONCEPTUAL FRAMEWORK

The conceptual framework as concerned, is an assemblage set of research concepts like cash crop technologies, in terms of independent variables and youth employment indicators, in terms of dependent variable together with their logical relationships often represented in the form of: diagrams as presented below:

Figure 1: Conceptual framework



Source: Researchers compilation, 2022

The figure 1 shows that cash crop technologies through cash crop fallowing, cash crop harvesting, cash crop drying and cash crop packaging should contribute in youth employment opportunities by offering employment share, employment expansion, low rate of unemployment, employment contraction and employment change. However, it should be feasible due to youth mindset, and geographical conditions in position of intermediate factors.

2.4. EMPIRICAL FRAMEWORK

Empirical framework will look at other related works as developed by different authors. For example, Buyisile Magagula & Chiedza Z. Tsvakirai (2020) investigated the nature of youth perceptions and their influence on youth's intentions of engaging in agripreneurship. The study findings reveal that the youth held positive economic perceptions of the agricultural sector. Along with the provision of secondary school agricultural education and a significant amount of financial support, these perceptions positively influenced their intentions to participate in agripreneurship. The findings affirm the need for improving awareness of the economic opportunities available in the agricultural sector. The study recommends that programmes that

aim to encourage agripreneurship target both the socio-economic and cognitive limitations of youths.

Thomas Kehinde Adesina (2012), The study examined the determinants of participation in Youth-In-Agriculture Programme (YIAP) in Ondo state, Nigeria. Multistage sampling procedure was used to draw 128 youths as study sample. Questionnaire was used to elicit information from the respondents. Data were analyzed with descriptive and inferential statistical tools: Chi-square, Pearson Product Moment Correlation and Multiple Linear Regression. Respondents' mean age was 32.0 ± 5.1 years; 59.4% were males, 99.2% had formal education and 62.2% were married. Mean households' size was 4 ± 1.0 persons. Over 50.8% had between 1- and 5-years farming experience. Most (68.0%) had favourable attitude towards YIAP. Inadequate training facilities was the most severe constraint to participation (0.98) and participation in YIAP was above average (57.0%). Predictors significantly related to YIAP participation were household size ($\beta=0.133$, $p=0.032$), farm size ($\beta=0.373$, $p=0.001$), years of farming experience ($\beta=0.354$, $p=0.002$), attitude ($\beta=0.228$, $p=0.006$) and constraints ($\beta=-0.074$, $p=0.032$). However, farm size ($\beta=0.40$) and years of participation ($\beta=0.36$) mostly contributed to participation in YIAP. Effort by relevant agencies to providing extension education, encourage female youth participation and harnessing youth involvement in agriculture programme will ultimately reduce rural-urban drift.

Mastewal Yam, (2018), showed that the interventions implemented by governments and development partners across Africa have succeeded in producing favourable outcomes despite some limitations. Interventions that integrate capacity development, financial support for startups, and continuous mentorship on the technical and financial aspects of youth-run agribusiness projects proved successful in enhancing youth engagement in agribusiness. This suggests that the design and implementation of future interventions should be based on an integrated approach that considers diversity of youths' aspirations and shared capabilities, interests, expectations, as well as challenges associated with access to resources and participation in collective action. The design of future interventions should also be built on strong partnerships among rural communities, academia, research, and private sector for increased impact on livelihood improvements

Akilimali Ndatbaye Ephrem, (2021), examined the extent to which perceived social norms and psychological capital affect youths' intentions to pursue agribusiness opportunities in the Eastern DRC. Data was collected on a sample of 600 youths. We applied Partial Least Squares Structural Equation Modelling (PLS-SEM) in order to examine the relationship between the variables. The

findings indicated that most of the youths did not select agribusiness as their top career choice. The intention to engage in agribusiness activities was significantly higher among the youths who perceived that agribusiness was socially valued and supported. Psychological capital significantly and positively affects youths' agripreneurial intention. The findings contribute to the underlying Theory of Planned Behavior by supporting a positive mediation role of psychological capital and the moderating roles of educational level, gender, access to land, and location—on the relationship between perceived social norms and agripreneurial intention. The paper concludes that the provision of funds is not enough to promote youth agripreneurship in an environment in which agricultural-related social norms, youths' psychological capital, gender, access to land, educational level, and location (rural versus urban) are not thoroughly considered.

From the above empirical framework discussions, it should be realized that core issues remain how to make agricultural activities contribute in youth employment and ensure that the benefits are positive. For the purpose of this study, the above theoretical debates form the bedrock to explore the role of cash crop agricultural technology in youth employment opportunity in Nyamasheke district, with the case study of Mahembe coffee washing station, in Mahembe sector.

RESEARCH GAP

Impical review shows main researchers was talk about this topic around the world but in Rwanda there is a few researchers talked about it.

SUMMARY

Having defined developed theoretical framework, conceptual framework and empirical framework of literature related to youth employment and cash crop technology, it should be deduced that the availability of cash crop agricultural technology could greatly result in youth employment opportunities.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0. INTRODUCTION

The purpose of this chapter is to describe 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 further describes how data are collected, processed and finally analyzed to give the implication of findings.

3.1. RESEARCH APPROACHES AND DESIGN

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

This study is descriptive in nature. According to Gay et al, (2006), 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. The research design fits the present study, for it helped to describe the role of cash crop agricultural technology in youth employment opportunity, in Nyamasheke district.

3.2. TARGET POPULATION

Peter ODERA (2006) defines 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 is young people employed in Mahembe coffee washing station owning, in Mahembe sector. This means that those young people aging between 18-35 years old were selected from all the employees of Mahembe coffee washing station and those are 372 employees (Mahembe sector report, 2021).

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 decided to use random simple sampling procedure to select the population for this study, to minimize cost and for relevant information about the research study, basing on Cochran's formula:
$$N = \frac{no}{1 + \frac{(no-1)}{N}}$$

Where:

Ne is the sample size

n_o is the sample size for big populations (N>30)

N: is the size of the population

To calculate n_o, the following formula was used:

$$n_0 = \frac{(Z_{\frac{\alpha}{2}})^2 p(1-p)}{d^2}$$

Where: $Z_{\alpha/2}$ = confidence level a 90% (type value of 1.65)

d= precision error is 10%

P= is proportion of presence where p is 0.5

$$n_0 = \frac{(Z_{\frac{\alpha}{2}})^2 p^2}{d^2} = \frac{(1.65)^2 \cdot 0.5^2}{0.1^2} = 68.06 \cong 68.1$$

3.4. SAMPLE SIZE

A sample is a population which is examined with a view of gaining information about the population under the study. The sample size is calculated by using the formula of COCHRAN, (1977), as follows:

$$Ne = \frac{no}{1 + \frac{(no-1)}{N}} = \frac{no \times N}{N + no - 1} = \frac{68 \times 372}{372 + 67} = 57.62186788154897 = 58$$

In this study, the researchers selected 58 participants including, from whom the targeted respondents were selected basing on their ages, it means between 18-35 years old.

3.5. DATA COLLECTION PROCESS

The research instruments were used as a practical means of attaining or achieving special relevant information related to the cash crop technology and youth employment.

3.5.1. Questionnaire

Data were collected from participants through questionnaires administered by the researchers using a standardized questionnaire with both close and open ended questions which were given to respondents to provide information about the study. The questions were structured in way that the respondents have to select an answer from a list provided through a closed ended questions.

3.6. ETHICAL ISSUES

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

3.7. VALIDITY AND RELIABILITY MEASURES

To minimize bias and errors, the researchers used specified questionnaires. Therefore, the questionnaires were administered to different respondents at different intervals of period. However, to ensure accuracy and consistency of data, the researchers make sure that the questionnaires are clear and in the same way understandable by the researchers and respondents. Introductory letter was submitted to local authority introducing the researchers. The researchers respected rules about conducting a research and collect current information from 2018 to 2021 This testifies the validity of data as it is the recent period where the researchers got data. The research principles were respected and applied.

3.8. DATA ANALYSIS

The study used descriptive data analysis which combined both quantitative and qualitative data methods of analysis. Computer package like SPSS was used to generate tables and figures. After collecting data, the researchers proceeded with data editing, coding and tabulation. As the research is quantitative and qualitative type, quantities were used to facilitate the action of data presentation and analysis. The collected data were analyzed and organized according to each objective and according to research questions. The data collected were transformed into meaningful information and synthesized to provide descriptive statistics such as percentages, frequency and tables and have a worthwhile conclusion to satisfy the requirements of accuracy and completeness.

3.8.1. Editing

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

3.8.2. Coding

Coding means assigning numerals or other symbols to the categories or responses. Through coding data collected from respondents were categorized into themes, similar responses from different respondents and this is useful to the researchers in making conclusion and recommendations about the study.

3.8.3. Tabulation

Tabulation is putting together of data into some kind of tables. These data may then undergo certain statistical manipulation. 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.

SUMMARY

This study will be conducted on 58 employees of Mahembe coffee washing station, selected from 372 young people aged between 18-35 years old, basing on Cochran's formula, to answer to questionnaire for qualitative and quantitative analysis, with the help of computer packages such as SPSS.

CHAPTER FOUR: PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

4.0. INTRODUCTION

Throughout this chapter, based on the objectives of the study, presentation of the findings, discussion of findings and summary of the findings were developed.

4.1. PRESENTATION AND INTERPRETATION OF FINDINGS

Respondents' identification was analyzed based on their age, sex, marital status and education. Other findings are presented basing of specific objectives as set by this study.

4.1.1 Identification of respondents by age

The researchers had to analyze how youth is involved in coffee agricultural technologies basing on their age. This gives the information on the relevance of the information providers.

Table 1: Identification of respondents by age

| | Frequency | Percent | Cumulative Percent |
|-----|---------------|-----------|--------------------|
| Age | Between 15-20 | 24 | 41.4 |
| | Between 21-25 | 19 | 74.1 |
| | Between 26-30 | 13 | 96.6 |
| | Between 31-35 | 2 | 100.0 |
| | Total | 58 | 100.0 |

Source: Primary data, August, 2022

The table one shows that, out of 58 respondents, 41.4% were in the age bracket of 15-20, 32.8% were in the age bracket of 21-25, and 22.4% were in the age bracket of 26-30 whereas those who were in the age bracket of 31-35 were 3.2% of the respondents. This means that all respondents were young people. This means that from the study area, youth were interested in working in coffee production and its value chain.

4.1.2. Identification of respondents by gender

The intention is to know whether both men and women are involved in coffee production as a way of finding for themselves an employment, their gender was analysed.

Table 2: Identification of respondents by gender

| | Frequency | Percent | Cumulative Percent |
|---------------|--------------|-----------|--------------------|
| Gender | Male | 41 | 70.7 |
| | Female | 17 | 29.3 |
| | Total | 58 | 100.0 |

Source: Primary data, August, 2022

From the table two, 41 respondents equal to 70.7% were male whereas 17 respondents equivalent to 29.3% were female. This is to say that, in Mahembe sector, a good number of men had got employment in coffee production as a source income. This also implies the relevance of the collected information since both sexes were represented.

4.1.3. Identification of respondents by marital status

Since any family's makes one the factors determining responsibility of someone, the respondents' marital status had to be analysed.

Table 3: Identification of respondents by marital status

| | Frequency | Percent | Cumulative Percent |
|---------------|--------------|-----------|--------------------|
| Status | Single | 47 | 81.0 |
| | Married | 11 | 19.0 |
| | Total | 58 | 100.0 |

Source: Primary data, August, 2022

As shown in the table three, 47(81%) respondents were married, 11(19%) respondents were single and none was widow (er) nor divorced. This implies that the majority of the respondents were still under the responsibilities of their parents but preferred looking for the employment in coffee production, because it is one among available opportunities in the study area.

4.1.4. Identification of respondents by education

Education as one of the factors proving any one's reasoning capacity, the one of respondents had to be analysed for pertinence of the information.

Table 4: Identification of respondents by education

| | | Frequency | Percent | Cumulative Percent |
|------------------|-----------------|------------------|----------------|-------------------------------|
| Education | None | 7 | 12.1 | 12.1 |
| | Primary level | 38 | 65.5 | 77.6 |
| | Secondary Level | 12 | 20.7 | 98.3 |
| | Academic Level | 1 | 1.7 | 100.0 |
| | Total | 58 | 100.0 | |

Source: Primary data, August, 2022

As indicated in the table four, 38 respondents corresponding to 65.5% completed primary level, 12 respondents equal to 20.7% completed secondary level, then 7 respondents associating to 12.1% while 1 respondent equating to 1.7% had academic level. This implies that most of the respondents had basic numeracy and literacy competence to provide relevant information about youth employment situation due to cash crop technology in the study area.

4.1.5 Experience and coffee production employment

To reassure the relevance of information to be provided, the researchers had analysed the time for which the respondents have actively been working in Mahembe coffee washing station.

Table 5: Duration of membership

| | | Frequency | Percent | Cumulative Percent |
|-----------------|-------------------|------------------|----------------|-------------------------------|
| Duration | Less than 1 year | 19 | 32.8 | 32.8 |
| | Between 1-3 years | 16 | 27.6 | 60.3 |
| | More than 3 years | 23 | 39.7 | 100.0 |
| | Total | 58 | 100.0 | |

Source: Primary data, August, 2022

The table five indicates that 19 (32.8%) respondents have been working for Mahembe coffee washing station for less than 1 year, and 16 (27.6%) respondents for between 1-3 years then 23(39.7%) for more than 3 years. This proves that the information as provided by the respondents was relevant based on their experience, working in Mahembe coffee washing station.

4.2. COFFEE PRODUCTION TECHNOLOGICAL PRACTICES

The researchers had to identify the various technological practices implemented by the youth in coffee production value chain. It was up to the researchers to analyse technological practices realised by youth in their routine activities at Mahembe coffee washing station.

Table 6: Coffee production technological practices

| | Strongly agree | | Agree | | Somehow agree | | Neutral | | Somehow Disagree | | Disagree | | Strongly disagree | | Total | |
|---------------------------|----------------|------|-------|------|---------------|------|---------|-----|------------------|------|----------|-----|-------------------|-----|-------|------|
| | Fr. | % | Fr. | % | Fr. | % | Fr. | % | Fr. | % | Fr. | % | Fr. | % | Fr. | Mean |
| Coffee fallowing | 14 | 24.1 | 19 | 32.8 | 15 | 25.9 | 2 | 3.4 | 3 | 5.2 | 4 | 6.9 | 1 | 1.7 | 58 | 2.60 |
| Fertilizers provision | 32 | 55.2 | 6 | 10.3 | 6 | 10.3 | 1 | 1.7 | 6 | 10.3 | 4 | 6.9 | 3 | 5.2 | 58 | 2.43 |
| Ploughing and harvesting | 40 | 69.0 | 6 | 10.3 | 4 | 6.9 | 2 | 3.4 | 1 | 1.7 | 3 | 5.2 | 2 | 3.4 | 58 | 1.88 |
| Collection of the harvest | 30 | 51.7 | 18 | 31.0 | 2 | 3.4 | 2 | 3.4 | 2 | 3.4 | 2 | 3.4 | 2 | 3.4 | 58 | 2.00 |
| Machinery and drying | 32 | 55.2 | 17 | 29.3 | 3 | 5.2 | 1 | 1.7 | 2 | 3.4 | 2 | 3.4 | 1 | 1.7 | 58 | 1.86 |
| Loading the dried coffee | 19 | 32.8 | 15 | 25.9 | 10 | 17.2 | 4 | 6.9 | 5 | 8.6 | 2 | 3.4 | 3 | 5.2 | 58 | 2.64 |

(Fr.: Frequency), %: Percentage

Source: Primary data, August, 2022

As indicated in table six, out of 58 respondents on the statement about acceptance of making people aware about fallowing coffee for better harvest, the summation of strongly agreed and agreed, and somehow agreed is 82.8% while 3.4% is at neutral side. Later on the side of disagreeing is totalling 13.8%. The mean value for this statement is 2.60.

Furthermore, the mean value of 2.43 is for the statement about the provision of fertilizers to coffee farmers. On the agreeing side is 75.8% while 22.4% were on disagreeing side. With this statement 1.7% of respondent said nothing means that that they were at neutral side.

Therefore, the majority corresponding to 86.2% are on the side of agreeing with the statement about the technology of ploughing and coffee harvesting. In this regard 3.4% were neither side and 10.3% were disagreeing side. This statement has the mean value of 1.88.

And also, about that they dealt in collecting the harvest when it was the time of harvesting, 86.1% of respondents are on agreeing side 3.4% said nothing, then 10.2% of respondents are on disagreeing side. This statement is with the mean value of 2.00.

Moreover, about whether their jobs were about following up the machinery and the drying process of the coffee before packaging 89.7% are on agreeing side while 1.7% of respondent said nothing, but 8.5% were on disagreeing side. This statement has the mean value of 1.86.

Then, about whether the technology is about loading the dried coffee into the sacks to get it ready for transportation, 75.9% were on the agreeing side and 6.9% said nothing, but 17.2% were on disagreeing side. This statement has the mean value of 2.64.

4. 3 COFFEE PRODUCTION AND YOUTH EMPLOYMENT

It was also up to the researchers to analyse how youth got access to employment activities due to coffee production.

Table 7: Coffee production in employment of the youth

| | Strongly agree | | Agree | | Somehow agree | | Neutral | | Somehow Disagree | | Disagree | | Strongly disagree | | Total | |
|--------------------------|----------------|------|-------|------|---------------|-----|---------|-----|------------------|-----|----------|-----|-------------------|-----|-------|------|
| | Fr. | % | Fr. | % | Fr. | % | Fr. | % | Fr. | % | Fr. | % | Fr. | % | Fr. | Mean |
| Employment share | 44 | 75.9 | 5 | 8.6 | 0 | 0.0 | 2 | 3.4 | 3 | 5.2 | 3 | 5.2 | 1 | 1.7 | 58 | 1.76 |
| Employment expansion | 30 | 51.7 | 13 | 22.4 | 3 | 5.2 | 3 | 5.2 | 4 | 6.9 | 2 | 3.4 | 3 | 5.2 | 58 | 2.24 |
| Low rate of unemployment | 33 | 56.9 | 8 | 13.8 | 4 | 6.9 | 5 | 8.6 | 3 | 5.2 | 1 | 1.7 | 4 | 6.9 | 58 | 2.24 |
| Employment contract | 30 | 51.7 | 16 | 27.6 | 4 | 6.9 | 2 | 3.4 | 2 | 3.4 | 3 | 5.2 | 1 | 1.7 | 58 | 2.02 |
| Employment change | 30 | 51.7 | 12 | 20.7 | 3 | 5.2 | 4 | 6.9 | 4 | 6.9 | 3 | 5.2 | 2 | 3.4 | 58 | 2.26 |

Source: Primary data, August, 2022

As indicated in the table seven, 84.5% of respondents are on agreeing side about employment share while 3.4% said nothing, about the disagreeing side 12.1%. for this statement the mean value is 1.76.

Therefore, about having got their employment expanded since they started working with in coffee washing station 79.3% are on the agreeing side while 5.2% of respondents said nothing, but 15.5% are on disagreeing side with this statement. The mean value of this statement is 2.24.

Furthermore, 77.1% are on agreeing side by confirming that unemployment rate was reduced due to the employment opportunities offered by Mahembe coffee washing station, while 8.6% said nothing, then 13.8% were on disagreeing side. This statement has mean value of 2.24.

Moreover, with the mean value of 2.02, the agreeing side is represented by 86.2%, then 3.4% said nothing while 10.3% are disagreeing about that getting contract with the coffee washing station they are working for.

Besides, with the mean value of 2.26, only 77.6% of respondents are on agreeing side, while 6.9% of respondents said nothing, but 15.5% of respondents were disagreeing with the statement that getting employed by Mahembe washing coffee station was due to the availability of employment as they had to change their previous jobs.

4.4. CHALLENGES AND YOUTH EMPLOYMENT

The researchers had to find out the challenges faced by the youth in coffee production technologies in Mahembe coffee washing station.

4.4.1. Challenges

By this, the researchers should come up with challenges faced by youth in coffee production technologies.

Table 8: Challenges

| | Frequency | Percent | Cumulative Percent |
|--|------------------|----------------|---------------------------|
| Challenges Absence for training | 35 | 60.3 | 60.3 |
| Low amount of salary | 22 | 37.9 | 98.3 |
| Delay of salary payment | 1 | 1.7 | 100.0 |
| Total | 58 | 100.0 | |

Source: Primary data, August, 2022

The table eight shows that, out of 58 respondents, 60.3% complained about absence for trainings or meeting, and 37.9% protested over low amount of salary, while 1.7% criticized over delay of salary payment and no one stated for other challenges. As provided by the respondents this could contribute to the challenges that could hinders the youth from either looking for employment or keeping the employment they already have.

4.4.2. Mitigating solutions

Having found out the challenges faced by youth, mitigating solutions had been suggested.

Table 9: Mitigating solutions

| | Mitigation solutions | Frequency | Percent | Cumulative Percent |
|------------------|-----------------------------|------------------|----------------|-------------------------------|
| Solutions | Training provision | 9 | 15.5 | 15.5 |
| | Increase of salary | 32 | 55.2 | 70.7 |
| | Payment of salary on time | 17 | 29.3 | 100.0 |
| | Total | 58 | 100.0 | |

Source: Primary data, August, 2022

The table nine indicates that 32 respondents equating to 55.2% suggested that the salary should be increased, and 17 respondents equal to 29.3% recommended paying the salary on time whereas 9 respondents corresponding to 15.5% proposed about providing training. This means that Mahembe coffee washing station still has a lot to do to keep the youth as it manpower and the employment opportunities to youth sustainable.

4.5. DISCUSSION OF FINDINGS

Referring to analysed data as collected from the youth working in Mahembe coffee washing station, operating in Mahembe sector, to assessing the role of cash crop technologies in youth employment in Nyamasheke district throughout a period of 3 years, it was revealed as follows:

According to researcher respondents shows that 89.7% are agreeing side, the machinery and the drying process of the coffee before packaging can provide youth employment.

Therefore, about having got their employment expanded since they started working with in coffee washing station 79.3% are on the agreeing side.

The 60.3% respondents complained about absence for trainings or meeting are big challenges to get youth employment while 15.5% proposed about providing training are solution of youth employment.

4.6 SUMMARY OF FINDINGS

This chapter had to analyse and interpret the collected from 58 youth work of Mahembe washing coffee station operating in Mahembe sector in order to assess the role of cash crop technologies in youth employment in Nyamasheke district, basing on the respective specific objectives.

Therefore, about various practices implemented by the youth in coffee production value chain, 56.9% agreed and strongly agreed at coffee fallowing for better a harvest; 65.5% agreed and strongly agreed at distribution of fertilizers to coffee farmers; 71.2% agreed and strongly agreed at both coffee harvest and ploughing; 82.7% agreed and strongly agreed at harvest collection; 84.5% agreed and strongly agreed at coffee drying and 58.7% agreed and strongly agreed at coffee packaging.

Subsequently, about coffee production in employment of the youth, 84.5% agreed and strongly agreed at employment share; 74.1% agreed and strongly agreed at employment expansion; 70.7% agreed and strongly agreed at employment opportunities; 79.3% agreed and strongly agreed at having signed contracts, and 72.4% agreed and strongly agreed at employment availability.

On the other hand, about the challenges, 60.3% complained for trainings or meeting absence, and 37.9% protested over low amount of salary, while 1.7% criticized over delay of salary payment for what 55.2% suggested for increasing salary, and 29.3% recommended paying the salary on time whereas 15.5% proposed about providing training as mitigating solutions.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.0. INTROCDUCTION

Throughout this chapter, conclusion and recommendations are involved to finally give suggestion for further researches.

5.1. CONCLUSION

This research study dealt with Cash crop technology and youth employment compilation. Through qualitatively and quantitatively analyzing the findings, using SPSS computer package, the researchers assessed the role of cash crop technologies in youth employment in Nyamasheke district, with Mahembe coffee washing station as a case study.

After analysis and discussion of the findings, in verification of the first objective, it should be concluded that youth were benefiting from coffee production chain value practices through respectively following the reasons: the 86.2% respondents are agreeing the providing fertilizers, drying process, harvesting and collecting the harvest before coffee is packed for transportation from the station in the study area.

In verification of the second objective, it should be concluded that the youth, in the study area, due to coffee production chain value practices, 79.3% of respondents agreeing were accessed with the opportunity from which some of them changed employment; expanded their employment and managed to get contract with coffee washing station what, in end, resulted in lowering unemployment in the area.

However, in verification of the third objective, 100% respondents should concluded that the youth were still facing the challenges like lack of training, insufficient salary and irregular payment of the salary even though the study came up with pertinent mitigating solutions like increase of salary, salary payment on time and trainings provision.

By conclusion, it should be concluded that cash crop technology has a significant role in cash crop technologies and youth employment in Nyamasheke district.

5.2. RECOMMENDATIONS

To increase the effect of coffee production technological practices for youth employment opportunities, the following recommendations were made.

5.2.1. Recommendation to coffee washing station

The coffee washing stations should come up with convened guidance lines to ensure the employees are getting training on their daily activities to enhance their performance and get them productive and stable.

Coffee washing station manager should do whatever it takes to get the employees motivated by providing them with enough amount of salary, and on time since could be the causes which make youth show the instability in their job resulting in employment change.

5.3. SUGGESTION FOR FURTHER RESEARCH

The current study was based on small sample size taken from only one coffee washing station operating in Mahembe sector, Nyamasheke district.

Further research done on a bigger scale with a large sample size could shed light on how coffee washing station's activities play a good role in accessing the youth with employment in rural areas in Rwanda.

Further research could also be conducted to determine how to solve the gap between demand and supply in terms of youth employment in Nyamasheke district.

Further research could also be done to examine the effect of coffee production on saving culture among youth in Nyamasheke district.

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APPENDICES

Appendix 1: Questionnaire

We are pursuing the program of Undergraduate of Rural Development at Kibogora Polytechnics (KP). And we are conducting a survey on Cash Crop Technologies and Youth Employment in Nyamasheke District, with a case study of Mahembe Coffee Washing Station , in Mahembe sector . This is why we are inviting all of you to take part in this survey by answering the following questions as much as you can and the information gathered will be only used for academic purpose. Furthermore, all information will be kept and treated confidentially. All respondents are kept anonymous.

Thank you for your cooperation and commitment!

Instructions:

Please, put the sign X in the box before the response of your choice.

A. Identification

1. Age:
- (a) 15-20 years
- (b) 21-25 years
- (c) 26-30 years
- (d) 31-35 years
2. Gender:
 - (a) Female
 - (b) Male
3. Marital status:
 - (a) Single
 - (b) Married
 - (c) Widows (ers)
 - (d) Divorced
4. Education:
 - (a) None
 - (b) Primary
 - (c) Secondary

(d) University

[]

B. Cash Crop Technologies and youth employment

5. How long have you been working for Mahembe Coffee Washing Station?(2018-2021)

(a) Less than 1 year []

(b) Between 1-3 years []

(c) More than 3 years []

6. Rate your response on a scale of 1 to 7; about the technological practices implemented by farmers in coffee production value chain (1= Strongly agree; 2= Agree; 3= somehow agree; 4= Neutral; 5= Somehow disagree, 6= Disagree; 7= Strongly disagree)

| Statement | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| I work to make people aware about following coffee for better harvest | | | | | | | |
| I got employment in department in charge of providing coffee farmers with fertilizers. | | | | | | | |
| When it is the time of harvesting, I deal in collecting the harvest | | | | | | | |
| My job is about following up the drying process of the coffee before packaging | | | | | | | |
| My job is about loading the dried coffee into the sacks to get it ready for transportation. | | | | | | | |

7. Rate your response on a scale of 1 to 4; about the contribution of cash crop agricultural activities in youth employment (1= Strongly agree; 2= Agree; 3= somehow agree; 4= Neutral; 5= Somehow disagree, 6= Disagree; 7= Strongly disagree)

| Statement | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------|---|---|---|---|---|---|---|
| Employment share | | | | | | | |
| Employment expansion | | | | | | | |

| | | | | | | | |
|--------------------------|--|--|--|--|--|--|--|
| Low rate of unemployment | | | | | | | |
| Employment contraction | | | | | | | |
| Employment change | | | | | | | |

8. What are some of challenges do you face in Mahembe Coffee Washing Station?

- (a) Absence for training []
- (b) Low amount of salary []
- (c) Delay of salary payment []
- (d) Others, specify..... []

9. What do you think should be done as solutions?

- (a) Training provision []
- (b) Increase of salary []
- (c) Payment of salary on time []
- (d) Others, specify []

Thanks!

Appendix 2: Introductory letter