



**FARM OWNERS' PERSONAL CHARACTERISTICS AND PERFORMANCE OF
HOUSEHOLD FARM ENTERPRISES: THE CASE OF HOMESTEADS IN
KIKAMULO SUB COUNTY, NAKASEKE DISTRICT, UGANDA**

MUSA SEMUWEMBA

15/MIML/00/KLA/WKD/0010

**A DISSERTATION SUBMITTED TO THE SCHOOL OF MANAGEMENT SCIENCES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
THE MASTERS DEGREE IN INSTITUTIONAL MANAGEMENT AND
LEADERSHIP OF UGANDA MANAGEMENT INSTITUTE**

JANUARY2018

DECLARATION

I, Musa Semuwemba declare that I am the rightful author of this study and any assistance I received in its preparation is fully acknowledged and disclosed. I confirm that this study has never been submitted to any university or any other educational institution for any award. I have also cited and acknowledged the sources from which I used data, ideas of words, either quoted directly or paraphrased. I also hereby certify that this dissertation was prepared by me specifically for the partial fulfilment for the award of a master's degree in institutional management and leadership of Uganda Management Institute.

Signed

.....

Musa Semuwemba

15/MIML/00/KLA/WKD/0010

APPROVAL

This is to certify that this research report entitled “Farm owner’s personal characteristics and performance of households farm enterprises: The case of homesteads in Kikamulo Sub County, Nakaseke District, Uganda” has been written under my supervision and is now ready for submission for examination.

Signature.....

Date:

Dr. Karim Ssesanga

Supervisor

Signature.....

Date:

Dr. Stella Kyohairwe

Supervisor

DEDICATION

To my dear grandfather Hassan Kibirige, my lovely Uncle Abbasi Kawaase Mukasa, my jjajja Ambassador Swaib Musoke my Mum Rehema Kibirige Semuwemba, and my wife Rosette Kahirwa.

ACKNOWLEDGEMENT

First and foremost, I thank the Almighty Creator for the gift of life, divine guidance, protection and eternal blessings that enabled me to reach this far as regards this study. I wish to extend my appreciation to my supervisors Dr. Karim Ssesanga and Dr. Stella Kyohairwe who guided me in the compilation of this study with total commitment. Their inspiration has taken me to another level of my academic development. I further extend my sincere appreciation to all the staff of Uganda Management Institute for their time, input and support.

I also greatly appreciate the Chairman and staff of Kikamulo Sub-county, Nakaseke who provided information that was necessary for the success of this study, in addition for their facilitation in reaching the target population of the study. I thank them very much for their peculiar interest in this study, generosity and support that enabled this work to become a success.

Special thanks go to my fellow participants in the same intake, and my good friends especially so Dr. Chesro Moses; Eng. Richard Sebamala; Mr. Nasser Munyagwa, Mr. Enock Wekia, Ms Sylvia Nambalirwa, Mr. Nicholas Agaba and Mr. Umar Serubiri. Last but not least, I am profoundly grateful to my wife Rosette Kuhirwa for all her support in encouraging me to pursue my further studies. I deeply thank my family members for the vital support and endurance of my absence whenever I would leave for studies. I take blame for all mistakes and inconsistencies that might occur in this book.

TABLE OF CONTENT

DECLARATION	i
APPROVAL	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT	v
LIST OF TABLES	xii
LIST OF FIGURES	xii
ABSTRACT.....	xiv
CHAPTER ONE: INTRODUCTION	1
1.1 Introduction.....	1
1.2 Background	1
1.2.1Historical Background	1
1.2.2Theoretical Background.....	5
1.2.3Conceptual Background.....	6
1.2.4Contextual Background	7
1.3 Statement of the Problem.....	8
1.4 Purpose of the Study	9
1.5 Objectives	10
1.6 Research Questions	10
1.7 Research Questions	10

1.8	Research Hypotheses	11
1.9	Conceptual Framework	12
1.10	Justification of the Study	13
1.11	Significance of the Study	13
1.12	Scope of the Study	14
1.12.1	Geographical Scope	14
1.12.2	Content Scope	15
1.12.3	Time Scope	15
1.13	Operational Definition of Terms and Concepts	15
CHAPTER TWO: LITERATURE REVIEW		17
2.1	Introduction	17
2.2	Theoretical Review	17
2.2.1	Upper Echelons Theory	19
2.3	Review of Related Literature	21
2.3.1	Performance of Household Farm Enterprises	21
2.3.2	Entrepreneurial Characteristics and Performance of Household Farm Enterprises	22
2.3.2.1	The Need for Achievement and Performance of Household Farm Enterprises	22
2.3.2.2	Risk Taking and Performance of Household Farm Enterprises	23
2.3.2.3	Innovativeness and Performance of Household Farm Enterprises	24
2.3.3	Demographic Characteristics and Performance of Household Farm Enterprises	25
2.3.3.1	Gender and Performance of Household Farm Enterprises	25
2.3.3.2	Age and Performance of Household Farm Enterprises	26

2.3.3.2	Marital Status and Performance of Household Farm Enterprises	27
2.3.3.3	Education and Performance of Household Farm Enterprises	28
2.3.4	Attitudinal Characteristics and Performance of Household Farm Enterprises	28
2.3.4.1	Locus of Control and Performance of Household Farm Enterprises	29
2.3.4.2	Pro-activity and Performance of Household Farm Enterprises.....	29
2.3.4.3	Self Efficacy and Performance of Household Farm Enterprises.....	30
2.4	Summary of Literature Review	31
 CHAPTER THREE:METHODOLOGY		32
3.1	Introduction.....	32
3.2	Research Design.....	32
3.3	Study Population	33
3.4	Sample Size and Selection	33
3.5	Sampling Techniques	34
3.5.1	Simple Random Sampling	34
3.5.2	Purposive Sampling	34
3.6	Data Collection Methods	35
3.6.1	Research Questionnaire Survey	35
3.6.2	Interview	35
3.7	Data Collection Instruments	36
3.7.1	Research Questionnaire	36
3.7.2	Interview Guide	36
3.8	Research Procedure.....	36

3.9	Data Quality Control.....	37
3.9.1	Validity	37
3.9.2	Reliability.....	38
3.10	Data Analysis	39
3.10.1	Quantitative Data Analysis	39
3.10.2	Qualitative Data Analysis	39
3.11	Measurement of Variables	39
3.12	Ethical Considerations	40

CHAPTER FOUR: PRESENTATION, ANALYSIS AND INTERPRETATION OF

RESULTS	42
4.1	Introduction..... 42
4.2	Response Rate..... 42
4.3	Background Information..... 43
4.4	Description of the Dependent Variable: Performance of Household Farm Enterprises 45
4.5	Farm Owner's Personal Characteristics and Performance of Households Farm Enterprises..... 53
4.5.1	Research Question One: What is the Relationship between Entrepreneurial Characteristics of Farm Owners and Performance of Household Farm Enterprises in Kikamulo Sub County Nakaseke District? 53
4.5.1.1	Descriptive results on Entrepreneurial Personal Characteristics 53
4.5.1.2	Regression Analysis of Entrepreneurial Personal Characteristics and Performance of Household Farm Enterprises 60

4.5.2Research Question Two: What is the Relationship between Demographic Characteristics a Farm Owner and Performance of Household Farm Enterprises In Kikamulo Sub County Nakaseke district?.....	61
4.5.2.1Descriptive Statistics for Demographic Characteristics	61
4.5.2.2 Correlation Analysis between performance of household farm enterprises and Demographic Characteristics	62
4.5.2.2 Regression Model for Performance of Household Farm Enterprises by Demographic Characteristics	64
4.5.3Research Question Three: What is the Relationship between Attitudinal Characteristics of Farm Owners and Performance of Household Farm Enterprises in Kikamulo Sub County Nakaseke District?	68
4.5.3.1Descriptive Statistics for Attitudinal Characteristics	68
4.5.3.2Regression Analysis of Attitudinal Characteristics of a Farm Owner and Performance of Household Farm Enterprises	74

CHAPTER FIVE: SUMMARY, DISCUSSION, CONCLUSIONS AND

RECOMMENDATIONS.....	75
5.1 Introduction.....	75
5.2 Summary of the Findings.....	75
5.2.1Performance of Households Farm Enterprises	75
5.2.2Entrepreneurial Personal Characteristics and Performance of Household Farm Enterprises	75
5.2.3Demographic Characteristics of the Farm Owner and Performance of Household	

Farm Enterprises	76
5.2.4 Attitudinal Characteristics and Performance of Households' Farm Enterprises	76
5.3 Discussion	77
5.3.1 Performance of Households Farm Enterprises	77
5.3.2 Entrepreneurial Personal Characteristics and Performance of Household Farm Enterprises.....	77
5.3.2 Demographic Characteristics of the Farm Owner and Performance of Household Farm Enterprises	78
5.3.3 Attitudinal Characteristics and Performance of Household Farm Enterprises	81
5.4 Conclusions.....	81
5.4.1 Objective One: To establish the relationship between entrepreneurial personal characteristics and performance of household farm enterprises in Kikamulo Sub county Nakaseke district.....	82
5.4.2 Objective Two: To find out the relationship between demographic characteristics of the farm owner and performance of household farm enterprises in Kikamulo Sub county Nakaseke district.....	82
5.4.3 Objective Three: To determine the relationship between attitudinal characteristics of a farm owner and performance of household farm enterprises Kikamulo Sub county Nakaseke district.....	82
5.5 Recommendations.....	83
5.5.1 Objective One: To establish the performance of household farm enterprises in Kikamulo Sub county Nakaseke district.....	83

5.5.2Objective Two: To establish the relationship between entrepreneurial personal characteristics and performance of household farm enterprises in Kikamulo Sub county Nakaseke district.....	83
5.5.3Objective Three: To find out the relationship between demographic characteristics of the farm owner and performance of household farm enterprises in Kikamulo Sub county Nakaseke district.....	84
5.5.4Objective Four: To determine the relationship between attitudinal characteristics of a farm owner and performance of household farm enterprises Kikamulo Sub County Nakaseke District.....	84
5.6Limitations of the Study.....	84
5.7Areas for Further Research	85

REFERENCES.....	86
------------------------	-----------

APPENDICES	i
Appendix A: Table for determining sample size forA population of a given size	i
Appendix B: Questionnaire for Household Heads.....	ii
Appendix C: Interview Guide.....	ix
Appendix D: Introduction Letter from UMI.....	xi
Appendix E: Authorisation Letter for Field Research	xiii
Appendix F: Validity Test Results.....	xv
Appendix G: Reliability Test Results	xvii

LIST OF TABLES

Table 3.1: Population, Sample Size and Selection Technique.....	34
Table 3.2: Content Validity Index	38
Table 3.3: Reliability Indices	38
Table 4.1: Response Rate for the Study.....	42
Table 4.2: Background Characteristics	43
Table 4.3: Frequencies, Percentages and Means on Performance of Household Farm Enterprises	46
Table 4.4: Summary Statistics on Performance of Households' Farm Enterprises.....	50
Table 4.5: Frequencies, Percentages and Means on Entrepreneurial Personal Characteristics	54
Table 4.6: Summary Statistics on Entrepreneurial Personal Characteristics	57
Table 4.7: Regression Model for Entrepreneurial Personal Characteristics and Performance of Household Farm Enterprises	60
Table 4.8: Demographic Characteristics	61
Table 4.9: Correlation Matrix for Performance of Household Farm Enterprises and Demographic Characteristics (dummies).....	64
Table 4.10: Regression of Performance of Household Farm Enterprises on Demographic Characteristics	65
Table 4.11: Frequencies, Percentages and Means on Attitudinal Characteristics	68
Table 4.12: Summary Statistics on Attitudinal Characteristics	71
Table 4.13: Regression Model for Attitudinal Characteristics of a Farm Owner and Performance of Household Farm Enterprises	74

LIST OF FIGURES

Figure 1.1: Conceptual Framework Relating Personal Characteristics with Performance of Household Farm Enterprises	12
Figure 4.1: Histogram for Household Farm Performance.....	51
Figure 4.2: Histogram for Entrepreneurial Personal Characteristics.....	58

ABSTRACT

This study sought to establish the relationship between the farm owner personal characteristics and farm enterprise performance in Kikamulo Sub-County, Nakaseke District. The objectives of the study were to establish the relationship between entrepreneurial personal characteristics and performance of household farm enterprises; to find out the relationship between demographic characteristics of the farm owner and performance of household farm enterprises; and to determine the relationship between attitudinal characteristics of a farm owner and performance of household farm enterprises. The study adopted a correlational and cross-sectional research designs on a sample of 235 respondents comprising household heads, the sub county chief, community development officer and agriculture extension officer. Data was collected using a self-administered questionnaire and interviews and analysed quantitatively and qualitatively. Quantitative data analysis involved the use of descriptive and inferential analyses. Descriptive analysis involved determining frequencies, percentages and means while inferential analysis involved correlation and regression analyses. Descriptive statistics revealed that performance of households' farm enterprises was moderate, entrepreneurial personal characteristics were good, the mode for demographic characteristics was of males, those that were aged between 30 and 40 years, the married and those with primary education, and attitudinal characteristics were moderate. Inferential analysis revealed that: There was a positive significant relationship between entrepreneurial personal characteristics and performance of household farm enterprises. Gender and education level were positive significant demographic characteristics predicting performance of household farm enterprises while age and marital status did not. There was a positive significant relationship between attitudinal characteristics and performance of household farm enterprises. Thus, it was concluded that good entrepreneurial personal characteristics are imperative for the performance of household farm enterprises, probable demographic characteristics necessary for performance of household farm enterprises are gender and education level, and attitudinal characteristics are a prerequisite for the performance of household farm enterprises. Therefore, it was recommended that through training, sensitisation and empowerment, farmer entrepreneurial personal characteristics can be developed. In offering of training, sensitisation and empowering of farmers, gender focussed approaches should be used and understandable information provided. Lastly, effort should be made to develop appropriate attitudinal characteristics of the farmers.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The world of farming globally is currently undergoing many changes including the number, size and characteristics of farms. A growing number of farmers, especially small-scale farmers, are moving away from the traditional methods and scale of crop and livestock production as this has become unprofitable (Barbieri&Mshenga, 2008). In this study, it is a perception that to move away from traditional unprofitable methods to ensure improved performance of Household Farm Enterprises, personal characteristics of the farmer may have a great influence. Therefore this study will investigate the relationship between personal characteristics namely; entrepreneurial personal characteristics (Singh &Rahman, 2013), demographic characteristics and attitudinal characteristic (Franek&Vecera, 2008) and performance of household farm enterprises. This first chapter presents the background to the study, statement of the problem, study purpose, objectives, research questions, hypotheses, conceptual framework, significance, justification, scope and operational definition of terms.

1.2 Background

1.2.1 Historical Background

Since 1960, the population growth of the world has increased more than two fold rising from approximately 2.9 billion in 1960 to more than 6.7 billion today. This has placed high demand on farm crop and livestock production. Farm production growth contributes directly to food security.

It also supports poverty reduction (Wik, Pingali, & Broca, 2008). However, globally, the share of agriculture in total GDP has fallen from 9 percent in the early 1970s to 4 percent in recent years. This share is considerably higher in developing countries (Chete, Adeoti, Adeyinka & Ogundele, 2014). In Europe, America and Australia, farmers cultivate large farms and cultivation is highly mechanized with large expenditures of energy from fossil fuels (Flynn, 2015). Reidsma, Ewert and Lansink (2007) reveal that in Europe, concerns in agriculture are mainly related to farmer livelihood and the land available for farming and less to food production. A European vulnerability assessment showed that farmer livelihood is especially vulnerable in the Mediterranean region.

Cultivation by household in South Asia, Southeast Asia and East Asia is generally small varying from less than one hectare to few hectares. With the exception of Japan and Korea Republic, cultivation in South Asia, Southeast Asia and East Asia still uses enormous amounts of human labour, in spite of the effort made in mechanization of agricultural production (Flynn, 2015). However, to attain the desired level of agricultural growth, Asian countries such as Bangladesh, Pakistan, India and Nepal have devoted their effort to the importance of Total Factor Productivity (TFP) improvements. A case in point is the Twelfth Five Year Plan (2012–2017) of India that puts emphasis on three major agricultural inputs of land, labour and capital (Anik, Rahman & Sarker, 2017). Anik et al. (2017) also indicate that similarly, the 11th Five Year Plan of Pakistan (2013–2018) set a target of 4.0% to 5.0% agricultural growth to be achieved by improving TFP growth through technology-based interventions and minimizing yield gap.

In many African countries, Agriculture is one of the most important economic sectors and provides livelihoods for large parts of the population. As there are many smallholder farmers and

fields are heterogeneous and scattered with a large variety of crops grown and dynamic interactions between crops and livestock. Many characteristics of African households in rural areas are not well known or uncertain (Waha, Zipf, Kurukulasuriya & Hassan, 2016). Waha et al. (2016) reported that in African countries such as Burkina Faso, Cameroon and Egypt the majority of households receive more than 20% of their total household net income from farm activities. With the exception of Kenya in countries such as Senegal and South Africa more than 80% of the farms are small or medium-scale farms. In Ghana, Zambia and Zimbabwe more than 80% of the households are smallholders.

In Uganda, Over 85% of Uganda's population lives in rural areas where agriculture is the major contributor to their livelihoods. Despite the fact that agriculture supports most livelihoods and is the main source of exports, contributing as much as 85% of export earnings, the overall share of agriculture in GDP has declined in recent years, from 50% in the early 1990s to 23% currently as a result of a slowdown in the growth of agricultural production (Ekou, 2013). In Nakaseke District, majority of the farmers in Nakaseke District are still dependant on rainfall for farming hence variations in food security between seasons (Mayanja, Rubaire-Akiiki, Greiner & Morton, 2015). Mukasa, Kabonesa and Martin (2014) report that in Nakaseke District, farm production is low per acreage, farm products of low quality hence farmers suffer insufficient food, lack of something to sell, no money in the pocket and poor feeding.

The link between personal characteristics and enterprise performance can be traced to the 1960s. McClelland's (1961) indicated that there were personal characteristics that led to successful performance of enterprises. McClelland indicated that need for achievement; that is the innate

desire to succeed, accomplish, thrive and achieve was a personal characteristic related to enterprise performance (Suter&Bwisa, 2013).Accordingly, individuals with the need for achievement had a high degree of individual responsibility to achieve a goal, required individual skill and effort and had a moderate degree of risk taking (Ismail et al., 2015). Rotter (1966) identified the personal characteristic of locus of control that he defined as an individual's perception about the underlying main causes of events in his/her life. More simply he defines locus of control as, the individual belief that his/her behaviour is guided by his/ her personal decisions and efforts (internal); or by fate, luck, or other external circumstances (external) (Okhomina, 2010).

Carland, Hoy, Boulton andCarland (1984) included the elements of risk taking, innovation, growth, a need to control, a need for achievement and desire to be independent as the entrepreneurial need to success (Ismail et al., 2015). Overtime, other different scholars have identified different personal characteristics for entrepreneurial performance. For instance, Timmons (1994) identified commitment and determination, opportunity obsession, tolerance of risk, creativity and adaptability. Carl (1996) expounded that entrepreneurs are not homogenous but were characterised by need for achievement, preference for innovation and risk taking propensity. Blackman (2003) identified two personal characteristics that influenced enterprise performance, namely attribute characteristics that include age, gender, marital status and influence of the family; and attained characteristics that include educationand business experience.

Barbieri and Mshenga (2008) pointed out entrepreneur characteristics that were gender, age, highest education level, principal occupation and number of association memberships. Prabhu, McGuire, Drost and Kwong (2012) identified proactive and self-efficacy personal characteristics.

Singh and Rahman (2013) pointed out five personal characteristics, namely innovativeness, futuristic mindset, risk-taking ability, adaptability, and commitment. Sarwoko et al. (2013) define personal characteristics relating to enterprise performance to include education, personal values, age, work experience, moral support network, and professional support network. Overall, the personal characteristics identified above can be grouped into three, namely entrepreneurial personal characteristics, demographic characteristics and attitudinal characteristic. Entrepreneurial personal characteristics include need for achievement, risk taking, innovative, growth, a need to control, and desire to be independent. Demographic characteristics are gender, age, marital status, education, influence of the family work experience, moral support network, and professional support network. Attitudinal personal characteristic include locus of control, proactive and self-efficacy personal characteristics.

1.2.2 Theoretical Background

Personal characteristics theories that explain performance of enterprises which informed and guided this study are; the Need for Achievement theory (McClelland, 1961) and Upper Echelons Theory (Hambrick& Mason, 1984). Need for Achievement theory expounds that the need for achievement (symbolically written as n Ach) relates to economic success. The need for achievement (n Ach) is the extent to which an individual desires to perform difficult and challenging tasks successfully (Chell, 2008). People with a high need for achievement desire success and seek to excel (Ogbo, Orga&Ukpere, 2012). Achievement-motivated individuals avoid low-risk situations because they find easily attained success not to be genuine achievement (Chell, 2008). The Needs for Achievement theory reveals that the personal characteristic of need for achievement relates to performance of enterprises. However, the Needs for Achievement theory

covers only entrepreneurial characteristics and does not cover the other personal characteristics and thus it helped in relating the entrepreneurial characteristics to performance of household farm enterprises.

The Upper Echelons Theory propounded by Hambrick and Mason (1984) asserts that organisational outcomes, strategic choices and performance levels are partially predicted by managerial background characteristics. The Upper Echelons Theory expounds that organisational outcomes; both strategies and effectiveness, are reflections of the values and cognitive bases of the powerful actors in the organisation. Therefore, owners/ managers of any enterprise matter in ensuring the performance of the enterprise. However, because the cognitions, values, and perceptions of owners/ managers are difficult to measure, demographic characteristics are reasonable proxies for underlying differences in cognitions, values, and perceptions. Thus, variables such as age, number of years and specific focus of work experience, and educational background can be applied to predict the actions of owners when faced with strategic decisions in organizations (Juravich, 2012). The Upper Echelons Theory suggests that personal characteristics such as demographic characteristics relate to performance of enterprises. This theory was basis for relating the demographic characteristics and performance of household farm enterprises.

1.2.3 Conceptual Background

Personal characteristics are the independent variable and performance of household farm enterprises, the dependant variable. Personal characteristics refer to the demographic and dispositional variables of individuals (Akinbode, 2011). In this study, personal characteristics referred to entrepreneurial characteristics, demographic characteristics and attitudinal

characteristics. Entrepreneurial personal characteristics refer to a unique cocktail of traits, skills and characteristics that enable individuals to beat the odds and go after their dreams full throttle (Patricio&Neyland, 2013). Operationally, entrepreneurial personal characteristics referred to need for achievement, risk taking and innovativeness.

Demographic characteristics refer to individual characteristics such as age, sex, education, income, marital status, job, religion, birth rate, death rate, family size, and marriage age(Bove, Vala-Haynes &Valeggia, 2012). In this study, they referred to gender, age, marital status and education. Attitudinal characteristics refer to manners, disposition, feeling or position with regard to a person's tendency or orientation, especially of the mind (Ojugo et al., 2013). In this study, operationally, attitudinal characteristics referred to locus of control, proactive and self-efficacy personal characteristics. On the other hand, performance is a measure of how well a mechanism/ process achieves its purpose (Curristine, 2005). In this study, performance of the household farm enterprise was defined as referring to the quality of products, production efficiency, production effectiveness, innovation in products (Chenhall & Langfield-Smith, 2007), innovation in products and sales growth (Iselin, Sands & Mia, 2009).

1.2.4 Contextual Background

In Nakaseke district, household farms are the main economic activity. Farm enterprises included the cultivation of coffee, maize, beans, bananas, cassava, sweet potatoes, vegetables such as tomatoes, cabbage and fruits including pineapples and mangoes. Livestock farm activities included raising of cattle (for meat and milk), goats and chicken. There were agriculture investment activities in the area aimed at boosting household farm enterprises that included agro-processing

factories for such crops as cotton, coffee and fruits which provided market to farmers. Foreign agriculture investors bought local meat, milk, cotton, coffee and fruits (Mugalu, 2014). Several farmers in the district adopted methods aimed at improving their household farm enterprises such as growing improved crop varieties especially beans, bananas, cassava, and coffee (Mugwanya, 2014).

Despite farm improvement in the district, performance of household farm enterprises largely remained poor. As already noted above (1.1.1), majority of the farmers in Nakaseke District was still dependant on rainfall for farming hence variations in food security between seasons (Mayanja, Rubaire-Akiiki, Greiner & Morton, 2015). Farm production was low per acreage, farm products of low quality hence farmers suffer insufficient food, lack of something to sell, no money in the pocket and poor feeding (Mukasa, Kabonesa & Martin, 2014). The above contextual evidence showed that in Nakaseke District performance of household farm enterprises was largely poor despite government interventions to provide technology, capital and markets. This led to the unanswered empirical question as to whether personal characteristics of the farmers had any relationship with the performance of household farm enterprises.

1.3 Statement of the Problem

Performance of household farm enterprises leads to increased food production, raises farmers' income and improves the standard of living of people (Adofu, Shaibu & Yakubu, 2013). This is because performing household farm enterprises experience high net income, profit margin, return on assets, return on equity, capital turnover and working capital of a farm enterprise (Dunaway, 2013). Cognisant of the importance of the performance of household farm enterprises, the

government of Uganda through its Ministry of Agriculture and programs like the National Agricultural Advisory services (NAADS) made effort to improve household farm enterprises in Nakaseke District. The government supported farmers to improve their farming practices through accessing them improved crop varieties especially beans, bananas, cassava, and coffee (Mugwanya, 2014). The government also attracted foreign agriculture investors in the area who provided farmers with market by buying local meat, milk, cotton, coffee and fruits (Mugalu, 2014).

Despite this effort, performance of household farm enterprises largely remained poor. Farm production was still low per acreage, farm products of low quality hence farmers suffered insufficient food, lack of something to sell, no money in the pocket and poor feeding (Mukasa, Kabonesa & Martin, 2014). Majority of the farmers were still dependant on rainfall for farming hence variations in food security between seasons (Mayanja, Rubaire-Akiiki, Greiner & Morton, 2015). If the problem of poor performance of household farm enterprises was not addressed, poverty in the area would remain high despite government interventions to provide technology, capital and markets (Mukasa, Kabonesa & Martin, 2014). It was against this background that this study sought to explore the relationship between the personal characteristics of the owners of the farm enterprise and its performance.

1.4 Purpose of the Study

The purpose of this study was to establish the relationship between farm owners' personal characteristics and household farm enterprises performance in Kikamulo Sub-County, Nakaseke District.

1.5 Objectives

This study sought to;

- i. To establish the relationship between entrepreneurial personal characteristics and performance of household farm enterprises in Kikamulo Sub county Nakaseke district.
- ii. To find out the relationship between demographic characteristics of the farm owners and performance of household farm enterprises in Kikamulo Sub county Nakaseke district.
- iii. To determine the relationship between attitudinal characteristics of a farm owner and performance of household farm enterprises Kikamulo Sub county Nakaseke district.

1.6 Research Questions

- i. What is the relationship between entrepreneurial characteristics of a farm owner and performance of household farm enterprises in Kikamulo Sub county Nakaseke district?
- ii. What is the relationship between demographic characteristics a farm owner and performance of household farm enterprises in Kikamulo Sub county Nakaseke district?
- iii. What is the relationship between attitudinal characteristics of a farm owner and performance of household farm enterprises in Kikamulo Sub county Nakaseke district?

1.7 Research Questions

- i. What is the relationship between entrepreneurial characteristics of farm owners and performance of household farm enterprises in Kikamulo Sub county Nakaseke district?
- ii. What is the relationship between demographic characteristics of farm owners and performance of household farm enterprises in Kikamulo Sub county Nakaseke district?

- iii. What is the relationship between attitudinal characteristics of farm owners and performance of household farm enterprises in Kikamulo Sub county Nakaseke district?

1.8 Research Hypotheses

- i. There is a positive significant relationship between entrepreneurial personal characteristics and performance of household farm enterprises.
- ii. There is a positive significant relationship between demographic characteristics and performance of household farm enterprises.
- iii. There is a positive significant relationship between attitudinal characteristics and performance of household farm enterprises.

1.9 Conceptual Framework

Independent Variable

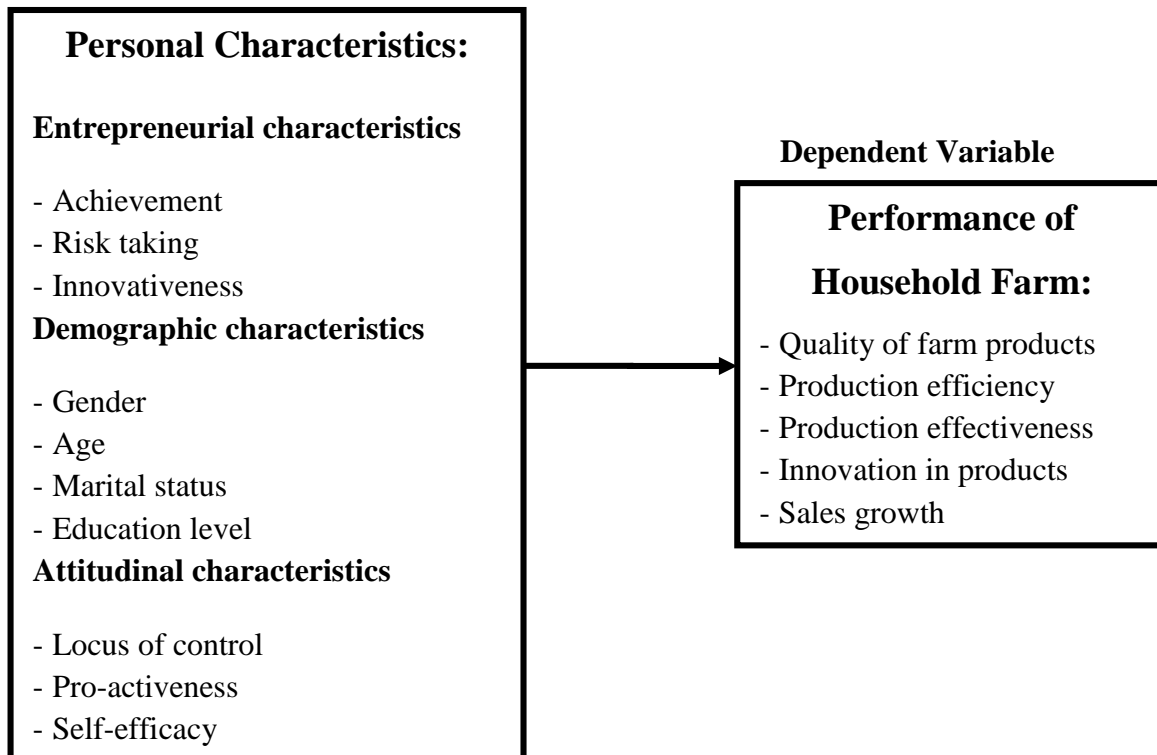


Figure 1.1: Conceptual Framework Relating Personal Characteristics with Performance of Household Farm Enterprises

Source: Adopted from Bove et al. (2012); Chenhall and Langfield-Smith (2007); Curristine (2005); Iselin et al. (2009); Ojugo et al. (2013); and Patricio and Neyland (2013), and moderated by the researcher.

The conceptual framework (Figure 1.1) suggests that there is a relationship between personal characteristics and performance of household farm enterprises. The framework shows that personal characteristics include entrepreneurial personal characteristics, demographic

characteristics and attitudinal characteristics. Entrepreneurial characteristics include achievement, risk taking and innovativeness. Demographic characteristics are gender, age, marital status and education. Attitudinal characteristics are locus of control, proactive and self-efficacy personal characteristics. The dependent variable of performance of household farm enterprises is indicated to include quality of farm products, production efficiency, production effectiveness, innovation in products and sales growth.

1.10 Justification of the Study

In rural Uganda like in other sub-Saharan countries, the majority of the population were poor. About 67% of Ugandans were either poor or highly vulnerable to poverty (Anguyo, 2013). To reduce the poverty levels, the government of Uganda launched the wealth creation programme to help to improve the agricultural sector. However, even with government interventions, the ultimate success of the enterprise depended largely upon the psychological makeup and determination of the farmer. Such personal characteristics of the farmer relied on in any engagement range from intuition to analytical ability. Therefore, the relationship between personal characteristics of the farmer and the performance of the household farm enterprise are of significant interest to both policy makers and implementers. Therefore, this study aimed at isolating and identifying those personal characteristics of the farmer that could be basis for enhancing performance of household farm enterprises.

1.11 Significance of the Study

It is anticipated that the proposed study might be significant in the following areas; One; it might help the government of Uganda and other stakeholders to identify mechanisms through which to

enhance performance of household farm enterprises. Secondly; it might provide a bench mark for policy makers to formulate fresh guidelines and policies on how to assist farmers improve performance of household farm enterprises. This proposed study will inform operation wealth creation implementers, Local governments and non-government organisations doing agricultural related work on how to best assist farmers by putting into consideration their personal characteristics. The study might also help farmers understand themselves and learn the personal characteristics they need to attain in order to improve performance of their household farm enterprises. In addition, this proposed study contributes to the existing body of knowledge about microfinance services and wealth creation. This will provide scholars with new knowledge about microfinance services and wealth creation. This might be the basis for scholars to expand knowledge about the same.

1.12 Scope of the Study

1.12.1 Geographical Scope

The geography of the study was Kikamulo Sub County, Nakaseke District. Nakaseke District is in the central part of Uganda, approximately 100 kilometres from Kampala City via Luweero District off Gulu road. Nakaseke District shares its borders with Wakiso and Mityana district in the south, Luweero district in the east, Masindi and Nakasongola district in the North and Kiboga and Kyankwanzi in the west. The people of Nakaseke District were majorly farmers involved in both crop farming and animal rearing. Nakaseke District was made of seven sub-counties, namely Kapeeka, Kasangombe, Kikamulo, Nakaseke, Ngoma, Semuto and Wakyato. Kikamulo Sub-County was selected because of the wealth creation programmes being promoted and implemented there by the Government of Uganda and its various development partners.

1.12.2 Content Scope

The content scope of the study was on personal characteristics and performance of household farm enterprises. Personal characteristics were studied in terms of entrepreneurial personal characteristics, demographic characteristics and attitudinal characteristics. Entrepreneurial characteristics were studied in terms of achievement orientation, risk taking and innovativeness. Demographic characteristics that considered were gender, age, marital status and education. Attitudinal characteristics were looked at in terms of locus of control, proactive and self-efficacy personal characteristics. Performance of household farm enterprises considered included quality of farm products, production efficiency, production effectiveness, innovation in products and sales growth.

1.12.3 Time Scope

The period scope of the study was 2012-2016. This is the time when there was increased effort in the area as with other parts of Uganda by the government through the Wealth Creation Programme to improve performance of household farms. This period was sufficient enough to enable the researcher to track changes in farm production and explore the effect of farm owner personal characteristics on the changes in performance of the household farms.

1.13 Operational Definition of Terms and Concepts

In this study the following terms and concepts were used and carried the following meanings:

Attitudinal characteristics: Attitudinal characteristics refer to manners, disposition, feeling or position with regard to a person's tendency or orientation, especially of the mind (Ojugo et al.,

2013). In this study, attitudinal characteristics operationally referred locus of control, proactive and self-efficacy personal characteristics.

Demographic characteristics: Demographic characteristics refer to individual characteristics such as age, sex, education, income, marital status, job, religion, birth rate, death rate, family size, and marriage age (Bove, Vala-Haynes & Vallengia, 2012). In this study, demographic characteristics were defined as gender, age, marital status, education and work experience.

Entrepreneurial personal characteristics: Entrepreneurial characteristics refer to a unique cocktail of traits, skills and characteristics that enable individuals to beat the odds and go after their dreams full throttle (Patricio & Neyland, 2013). Operationally, entrepreneurial personal characteristics referred to need for achievement, risk taking and innovativeness.

Performance of household farm enterprises: Performance is a measure of how well a mechanism/ process achieves its purpose (Curristine, 2005). In this study performance of household farm enterprises referred to quality of farm products, growth of farm output, efficiency in production, effectiveness of production, reliability of production, profit making, innovation in products and sales growth

Personal characteristics: Personal characteristics refer to the demographic and dispositional variables of individuals (Akinbode, 2011). Personal characteristics in this study referred to entrepreneurial personal characteristics, demographic characteristics and attitudinal characteristics.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature review that includes the theoretical review and the review of related literature. The review of related literature follows the study themes developed from the study objectives. The literature review involves conceptualisation, theorisation and reporting of empirical results of leading to identification of the gaps that were filled by this study.

2.2 Theoretical Review

This study was based on two theories, namely the Need for Achievement Theory (McClelland, 1961) and Upper Echelons Theory (Hambrick& Mason, 1984).

The Need for Achievement Theory

The Needs for Achievement theory was conjectured by McClelland's (1961). McClelland indicated that need for achievement (symbolically written as n Ach) related to economic development via entrepreneurial activities. The need for achievement (n Ach) is the extent to which an individual desires to perform difficult and challenging tasks successfully (Chell, 2008). People with a high need for achievement desire success and positive feedback that is related to their performance of tasks, seek to excel and thus tend to avoid both low-risk and high-risk situations, and like to work alone or with other high achievers (Ogbo, Orga&Ukpere, 2012).

Predominantly, achievement-motivated individuals avoid low-risk situations because they find easily attained success is not genuine achievement; rather they attribute it to the ease of the task not their own effort. Similarly, they avoid high-risk projects, regarding success as the result of chance not their competence. Thus, individuals with high need for achievement are not gamblers, nor are they afraid to take risks. Rather, they calculate the degree of risk and select moderate risk options. According to McClelland, people with high achievement need make good leaders, although they tend to expect those that they work with also to be result driven and may expect too much from them. Their aggressive realism makes them successful entrepreneurs (Chell, 2008).

The presumed mechanism by which an achievement level translates itself into economic growth is the entrepreneurial class. If the n Achievement level is high, there will presumably be more people who behave like entrepreneurs and one would expect a relatively greater amount of entrepreneurship in a society if the average level of need achievement in a society is relatively high. This is because having a high n Ach encourages an individual to seek challenging goals, work hard to achieve the goals and uses the skills and abilities needed to accomplish them. The inner drive of individuals propels them to work more and to achieve something for their own interest by taking personal risk (Agbinou, Nwekpa& Gerald, 2015).

Need for achievement then, reflects a strong goal orientation, an obsession with job or task to be done. Entrepreneurship thus becomes the link or intervening variable between need achievement and economic growth. The theory advocates for increasing the level of need-achievement in a society in order to stimulate entrepreneurship and economic growth. This is because entrepreneurs are activated by the high extent of achievement motivation. In addition, the desire to do well, not

so much for the sake of social recognition or prestige, but for an inner feeling of personal accomplishment, induce people to be an entrepreneur (Alam&Hossan, 2003). The Needs for Achievement theory reveals that entrepreneurial characteristics relate to performance of enterprises. However, the Needs for Achievement theory covers only entrepreneurial characteristics and does not cover the other personal characteristics and thus was used to relate the needs entrepreneurial characteristics to performance of household farm enterprises.

2.2.1 Upper Echelons Theory

Hambrick and Mason (1984) advanced the Upper Echelons Theory. The Upper Echelons Theory (UET) asserts that organisational outcomes, strategic choices and performance levels are partially predicted by managerial background characteristics. UET expounds that organisational outcomes; both strategies and effectiveness, are reflections of the values and cognitive bases of the powerful actors in the organisation. The theory indicates that the owners/ managers of any enterprise matter. The choices they formally and informally make reflect the idiosyncrasies of these decision makers. In decision making, owners/ managers bring their own sets of givens to an administrative situation and these givens reflect their cognitive base: knowledge or assumptions about future events; knowledge of alternatives and knowledge of consequences attached to alternatives (Hambrick, 2007).

Therefore, outcomes in an enterprise are directly impacted by the knowledge, experiences and expertise of those individuals occupying prominent managerial roles in the enterprise. Outcomes can be predicted to some degree based upon the characteristics of owners/ managers. However, the field of vision; that is the areas owners or managers direct their attention to and for that matter

the perceptions of the environment that result are restricted by their cognitive base and values. This is because the process of attention is constrained by the limited capacity of humans for information processing at any given time and as a result, our decision to attend to certain elements in the environment is determined by our dispositions and personal tendencies. In other words, personal characteristics determine the aspects of the environment that they can see and what they see informs the decisions they make regarding strategic choices which ultimately affects the bottom-line of the organisation (Oppong, 2014).

Simply put, because the cognitions, values, and perceptions of owners/ managers are difficult to measure, demographic characteristics are reasonable proxies for underlying differences in cognitions, values, and perceptions. Thus, variables such as age, number of years and specific focus of work experience, and educational background can be applied to predict the actions of owners/ managers when faced with strategic decisions in organizations (Juravich, 2012). Therefore, the human side of managers or owners such as their backgrounds and psychological characteristics influence the decisions they make. Personal characteristics such as age, tenure in the organization, education, social-economic extraction and financial position of the firm owners/ managers have a strong influence on the direction and performance of a business. The owner/ manager's experience, values and personalities greatly influence their interpretations of situations they face and in turn the choices they made (Ng'ang'a, Ngugi&Odhiambo, 2014). The Upper Echelons Theory suggests that personal characteristics such as demographic characteristics relate to performance of enterprises. This theory was the basis for relating demographic characteristics to performance of household farm enterprises.

2.3 Review of Related Literature

2.3.1 Performance of Household Farm Enterprises

Farm performance is about output per unit of input in a production process. Farm performance is the measure of how efficient and effective resources (inputs) are brought together and utilised for the production of goods and services (outputs) of the quality needed by the society in the long term (Agbinou, Nwekpa & Gerald, 2015). An enterprise is deemed to be performing if it is able to evolve with the same rhythm of the market, create the differential and make its way into the environment in order to achieve its objectives effectively, efficiently and relevant (Belgacem, 2015). Osunsan, Kinyatta, Baliruno and Kibirige (2015) indicate that studies on performance employ measure performance in terms of financial and nonfinancial performance. Financial performance includes cash flow, return on assets, and return on equity as a means of assessing firm performance. While the nonfinancial performance includes aspects such as customer service, marketing effectiveness, human capital, strategy achievement, innovation, employee satisfaction, financial practice, processes, and corporate culture. There are different scholars (Adofu, Shaibu & Yakubu, 2013; Herath & Rosli, 2014; Waha, Zipf, Kurukulasuriya & Hassan, 2016) that have study performance of enterprises. Adofu et al. (2013) carried out a study on economic impact of improved agricultural technologies on cassava productivity in Kogi State. Their descriptive results revealed that farmers experienced high cassava productivity as well as the socio-economic emancipation of cassava farmers from the shade of poverty.

Herath and Rosli (2014) in the effect of entrepreneurial self-efficacy on the performance of SME in Sri Lanka revealed that SMEs had the ability to discover new ways to improve existing products, ability to identify new areas for potential growth, to design products that solve current problems

and created products that fulfilled customers' unmet needs. Waha et al. (2016) carried out a survey on farm performance in eleven African countries: Burkina Faso, Cameroon, Ghana, Niger and Senegal in western Africa; Egypt in northern Africa; Ethiopia and Kenya in eastern Africa; South Africa, Zambia and Zimbabwe in southern Africa. The results showed that households grew up to six crops simultaneously on a plot. The ten most frequently grown crops across were maize, millet, groundnut, sorghum, beans, cowpea, cassava, wheat and cotton. The results above show that farm performance was good and farmers grew a variety of crops. However, none of the studies was carried out in Uganda. Therefore, this made imperative of the study to be carried out in Uganda to establish the level of farm performance.

2.3.2 Entrepreneurial Characteristics and Performance of Household Farm Enterprises

Entrepreneurship is a major factor in the national economy; thus, it is important to understand the motivational characteristics spurring people to become entrepreneurs and why some are more successful than others. Successful farmers are perceived as having certain entrepreneurial personal characteristics that enhance performance of household farm enterprises (Collins, Hanges & Locke, 2004). Such entrepreneurial personal characteristics of successful farmers are perceived to include need for achievement, risk taking and innovativeness. Empirical literature on entrepreneurial personal characteristics and household farm enterprises follows:

2.3.2.1 The Need for Achievement and Performance of Household Farm Enterprises

The need for achievement refers to an individual's characteristics associated with desire for significant accomplishment, mastering of skills, control, or high standards (Oladipo & Ajufu, (2013). The individuals high with the need for achievement set goals which they can influence

with their effort and ability, and as such the goal is considered to be achievable. Achievement-motivated people are generally the ones who make things happen and get results. This characteristic of determined results-driven approach is almost invariably present in the character make-up of all successful entrepreneurs (Barr & Dowding, 2015). Abdulwahab and Al-Damen (2015) investigated the impact of the entrepreneurs' characteristics on small business success at in Jordan using owners and managers working as units of analysis. Multiple regression results showed that the entrepreneurs' characteristic of need for achievement had a positive impact on small business success. Al Mamun, Nawi and Zainol (2016) examined the role of entrepreneurial competencies in informal micro-enterprise performance in Kelantan, Malaysia. Using variance-based structural equation modelling, they established that the need for achievement had a positive effect on informal micro-enterprise performance. Moruku (2012) evaluated the performance of SMEs in three states of the South-South geopolitical zone of Nigeria. Canonical correlation analysis found that achievement motivation had no positive significant impact on performance.

2.3.2.2 Risk Taking and Performance of Household Farm Enterprises

Risk taking is the perceived possibility of receiving the rewards associated with success of a proposed situation, which is required by an individual before he will subject himself to the consequences associated with failure, the alternative situation providing less reward as well as less severe consequence than the proposed situation (Salleh& Ibrahim, 2011). Taking risks and dealing with uncertainty are part and parcel of doing business. Risk-taking activities are a prerequisite for dealing effectively with uncertainty (Andersen, Garvey & Roggi, 2014). Al Mamun, Nawi and Zainol (2016) examining the role of entrepreneurial competencies in informal micro-enterprise performance used variance-based structural equation modelling. The results showed that the risk

taking had a positive effect on informal micro-enterprise performance. Fairoz, Hirobumi and Tanaka (2010) investigated the degree of entrepreneurial orientation (EO) of manufacturing small and medium scale enterprises (SMEs) in Hambantota District, Sri Lanka (HDSL). Qualitative and quantitative techniques were applied for data analysis. Correlation analysis revealed that risk taking significantly correlated with market share growth. Wambugu, Gichira, Wanjau and Mung'atu (2015) sought to establish the influence of entrepreneurial risk taking and firm performance of agro processing small and medium enterprises in Kenya. Using structural equation modelling, they established that risk taking had positive impact on firm performance of agro processing.

2.3.2.3 Innovativeness and Performance of Household Farm Enterprises

Innovativeness is the means by which members of companies diversify, adapt and even reinvent their firms to contest evolving market and technical conditions (Günday, Ulusoy, Kılıç&Alpkan, 2008). It is through innovativeness that managers devise solutions to business problems and challenges, which provide the basis for the survival and success of the firm well into the future (Hoq&Norban, 2009).Fairoz et al. (2010) investigating the degree of entrepreneurial orientation (EO) of manufacturing SMEs using correlation analysis established that innovativeness significantly correlated with market share growth. Ngugi, McOrege and Muiru (2013) sought to establish the influence of innovativeness on the growth of SMEs in Kenya. Using regression, the results revealed that innovativeness influenced the growth of SMEs. Rosli and Sidek (2013) evaluated the impact of innovation on the performance of SMEs in the food and beverage, textiles and clothing and wood enterprises throughout Malaysia. Regression results indicated that innovation and process innovation influenced firm performance significantly.

2.3.3 Demographic Characteristics and Performance of Household Farm Enterprises

The demographic characteristics of people also shape their behaviours towards entrepreneurship. Such demographic characteristics include age, religion, gender, experience, background and education of entrepreneurs towards their entrepreneurial behaviours and firm's performance (Sajilan, UIHadi&Tehseen, 2015). The owners' characteristics are appropriate predictors of the size and performance of a small enterprise. The founder's management experience and role significantly influences performance (Barbieri&Mshenga, 2008). Gender, age, marital status, and education have been related to enterprise performance.

2.3.3.1 Gender and Performance of Household Farm Enterprises

Gender takes the cultural and role perspectives. From the cultural perspective, gender refers to the social classification of an individual as either masculine or feminine (Snowdon, 2009). In terms of roles, gender is a variable distinguishing women and men as individuals or as defining relationships located within the context of the family (Ferree, 2010). The number of female entrepreneurs across the world has been gradually growing in the recent years (Sarfaraz, Faghih&Majd, 2014). However, gender inequalities are still widely prevalent and women are deprived of having equal rights with men" (Sarfaraz&Faghih, 2011). Treating women as the second gender means ignoring and underestimating huge potential human resources. Women entrepreneurs can play crucial roles in the process of economic development if they have equal opportunity and access to resources (Sarfaraz et al., 2014). Chirwa (2004) assesses the performance of enterprises owned by females relative to those owned by males using national survey data in Malawi. The results revealed that no significant differences in profit margins.

However, female owned enterprises revealed decreases or no change in the growth of sales than male-owned enterprises. Malaya (2006) carried out a comparative analysis of the performance of men-owned and women-owned businesses using printing firms based in Metro Manila in the Philippines. Student t-Test results revealed no variations attributed to gender in firm performance. Osunsan (2015) sought to identify the effect of the gender of owner on the small scale enterprise performance in Kampala, Uganda. Simple regression and Student t- Test results, indicated that gender significantly affected the performance the small business and that there was a significant difference in the levels of performance between male owned businesses and females owned businesses with the male owned businesses tending to perform better those of their female counterpart.

2.3.3.2 Age and Performance of Household Farm Enterprises

Age refers to the number of years an individual has lived on planet earth. Age for purpose of study can be categorised as the process of classifying people as belonging to a certain age group, and the boundaries that people set for age categories which inform age-category stereotypes (for example, about being 'old'). On average, people generally stop being described as young at approximately 40 years of age (Abrams, Vauclair& Swift, 2011). Older adults are more likely to analyse the problem, seek information, and talk with family members than younger adults hence enterprise success (Losby, 2008). Barbieri and Mshenga (2008) investigated the role of firm and owner characteristics on the gross income of farms in North America. Their correlation findings revealed that the farmers' age was inversely related to business performance. Farms whose owners were younger earned more than those whose owners were old. Osunsan, Kinyatta, Baliruno and Kibirige (2015) sought to identify the effect of the age of owner on the small scale enterprise performance

in Kampala, Uganda. ANOVA results revealed a significant difference between the performance of older and younger small business owners. However, correlation results indicated no significant relationship between age of owner and performance of small business. Woldie, Leighton and Adesua (2008) analysed the influence of owner/managers and firm characteristics on the growth of the firm. Their chi-square results revealed that age of the owner/ managers and firm characteristics on the growth of the firm.

2.3.3.2 Marital Status and Performance of Household Farm Enterprises

Marital status is the condition of being married or unmarried by males and females (Khan, Khan, Khan, Nawaz and Yar, 2013). Marital status can be categorised as married/ cohabitating, never married/ living alone, divorced/ living alone, and widow/widower/living alone (Lindström & Rosvall, 2012). Adegbite, Ilori, Ireferin, Abereijo and Aderemi (2007) evaluated the impact of entrepreneurial characteristics on the performance of small-scale manufacturing industries in Nigeria. Regression results revealed that marital status had a negative contribution on the sales revenue. Bula (2012) discussed family characteristics and marital status of women entrepreneurs and performance of women operated small-scale enterprises in Kenya. Regression results showed that marital status had no significant influence on the small-scale enterprises. Fielden, Davidson and Makin (2000) carried out a study on barriers encountered during micro and small business start-up in North-West England. Their results showed a positive relationship between marital status and business performance. Married men and women worked harder and performed better in managing a business because of the social, financial and psychological support than single, divorced or widowed individuals because of family responsibility and commitments.

2.3.3.3 Education and Performance of Household Farm Enterprises

Education level refers to the academic credentials or degrees an individual has obtained. Because most organisations use education as an indicator of a person's skill levels or productivity, they frequently employ it as a prerequisite in hiring decisions (Ng & Feldman, 2009). Trusty and Niles (2004) indicate that intelligence and education level are positively and significantly correlated. Therefore, individuals who have high fluid intelligence are more likely to get into college and stay in school, whereas those with less fluid intelligence are more likely to be weeded out along the way. Kuncel, Hezlett and Ones (2004) indicate that education stimulates the development of the minds and promotes the growth of crystallised intelligence. Adegbite et al. (2007) in an evaluation of the impact of entrepreneurial characteristics on the performance of small-scale manufacturing industries using regression reported that education level had a negative contribution on the sales revenue. Bula (2012) in a study on family characteristics and marital status using regression found out that education level had no significant influence on the small-scale enterprises. Woldie et al. (2008) analysing the influence of owner/ managers and firm characteristics on the growth of the firm using chi-square results revealed that the education level of the owner/ managers and firm characteristics had an influence on the growth of the firm.

2.3.4 Attitudinal Characteristics and Performance of Household Farm Enterprises

Attitude refers to the probability that a person will show a specified behaviour in a specified situation (Schwarz & Böhner, 2001). Entrepreneurs show certain behaviours which relate to performance of enterprises. Such behaviour according to Akanbi (2013) include locus of control, proactive and self-efficacy.

2.3.4.1 Locus of Control and Performance of Household Farm Enterprises

Locus of control is the extent to which individuals perceive control over their lives, and environment (April, Dharani& Peters, 2012).Locus of control shows a person's tendency to believe that the outcome of events is within his or her ability to influence, resulting in the acceptance of personal responsibility for the outcomes of his or her abilities and expertise, rather than attributing the cause of events to serendipity, luck, or chance (Širec, &Močnik, 2010).Locus of control is considered an important factor in boosting business performance and enhancing business survival (Rum, 2012). Elena et al. (2015) studied the differences between owners and managers locus of control and the success of a company in Mexican context. Correlation results revealed a significant relationship between locus of control and success of the SMEs. Rum (2012) analysed the influence of Locus of control, innovation and ability on the performance of small medium industry in south Sulawesi. Structural equation modelling results revealed that locus of control stimulated innovation increasing the performance of Small and Medium Enterprises.Thapa (2015) investigated the determinants of microenterprise performance in Nepal. Regression results showed that internal locus of control and managerial foresight positively and significantly determined the performance of microenterprises.

2.3.4.2 Pro-activity and Performance of Household Farm Enterprises

Pro-activity is a state of mind and the will, largely driven by ones consciousness, to sustain a vision, to fulfil a mission, to attain a challenging goal and to achieve a define objective. It is a determination to pursue and attain one's own goal largely defined by one. Entrepreneurial pro-activeness can also be seen as alertness of the company (Oni, 2012).A strong proactive behaviour gives SMEs the ability to anticipate needs in the market place and the capability to anticipate

competitor's needs (Wambugu, Gichira, Wanjau&Mung'atu, 2015). Belgacem (2015) studied the relationship between entrepreneurial orientation and the performance of Tunisian companies. Regression results revealed that pro-activeness was positively and significantly associated with firm performance. Oni (2012) investigated the existing relationship between entrepreneurial pro-activeness characteristics and performance of companies in Nigeria. Correlation results indicated a significant correlation between entrepreneurial pro-activeness and performance. Wambugu, Gichira et al. (2015) sought to establish the influence of pro-activeness on the firm performance of agro processing small and medium enterprises in Kenya. Regression findings revealed that pro-activeness was a significant predictor of firm performance.

2.3.4.3 Self Efficacy and Performance of Household Farm Enterprises

Entrepreneur self-efficacy is the individual's belief in their ability to successfully launch an entrepreneurial venture (Lajin&Zainol, 2015). People with enhanced perceived self-efficacy successfully execute tasks therefore higher the degree of self-efficacy the higher the individual performance, and it predicts future behaviour better than past performance (Herath&Rosli, 2014). Al Mamun, Nawi and Zainol (2016) examined the role of entrepreneurial competencies in informal micro-enterprise performance in Kelantan, Malaysia. Using structural equation modelling, they revealed that informal micro-entrepreneurs' self-efficacy had a significant positive effect on micro-enterprise performance. Herath and Rosli (2014) investigated the effect of the dimensions of entrepreneurial self-efficacy on the performance of SME entrepreneurs in small-scale hotel and restaurants in Sri Lankan SME. Structural equation model results showed that efficacious entrepreneurs performed highly and bounced back in constrained environments. Lajin and Zainol (2015) investigated the effect of entrepreneurial leadership, self-efficacy on

organizational performance done at Universiti Teknologi MARA in Malaysia. Their findings revealed that entrepreneurial self-efficacy influences organizational performance.

2.4 Summary of Literature Review

The literature above revealed a number of personal characteristics that related to house hold farm performance, these were namely; entrepreneurial personal characteristics, demographic characteristics and attitudinal characteristics. Entrepreneurial characteristics were achievement, risk taking and innovativeness. Demographic characteristics were gender, age, marital status and education. Attitudinal characteristics were locus of control, proactive and self-efficacy personal characteristics. However, a number of gaps emerged at contextual and empirical levels. At contextual level, all the studies were done outside Uganda with only two studies Osunsan et al. (2015) and Osunsan (2015) carried out in Uganda. At empirical level, whereas scholars such as Abdulwahab and Al-Damen (2015) and Al Mamun et al. (2016) indicated that the need for achievement had a positive significant effect on enterprise performance Moruku (2012) did not. On the other hand whereas Chirwa (2004) and Malaya (2006) found no variations attributed to gender in firm performance, Osunsan (2015) did. In addition, while Barbieri and Mshenga (2008) found out that farms whose owners were younger earned more, Osunsan et al, (2015) found no significant relationship. Further, while Adegbite et al. (2007) and Bula (2012) found out that marital status had no significant influence on enterprise performance, Fielden et al. (2000) did. Still, while Kuncel et al. (2004) and Bula (2012) found out that education had no influence, Woldie et al. (2008) did. The above gaps made it necessary for this study in the Ugandan context to seek to establish the relationship between personal characteristics and performance of household farm enterprises.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the methods that were used in conducting this study. The chapter covers the research design, study population, sample size and selection, sampling techniques, data collection methods, data collection instruments, procedure of data collection, reliability and validity of instruments, data analysis and measurement of variables.

3.2 Research Design

This study adopted the correlational and cross-sectional designs. A correlational design is a research design that helps to determine the presence and degree of a relationship between two factors basing on quantitative data (Ingham-Broomfield, 2014). The correlational design helped in relating farm owner's personal characteristics and performance. Using cross-sectional design data was collected on what was going on at the particular point in time because the cross-sectional design takes a snapshot. This helped to obtain useful data in a relatively short period saving time and costs of data collection (Labaree, 2009). The study used both quantitative and qualitative methods of data collection. Quantitative data were the basis for drawing statistical inferences by relating the independent and dependent variables. Qualitative data supplemented the quantitative data by providing detailed information in form of statements from interviews for in-depth analysis.

3.3 Study Population

The target population of the study were 3,741 comprising 3,739 heads of the households in Kikamulo Sub County, from the seven parishes of the sub county that were namely; Kamuli 530, Kapeeke 612, Kasana 819, Kibose 624, Luteete 409, Magoma 575 and Wakayamba 350 (UBOS report, 2014). The other people were three that were the Sub County Chief, Community Development Officer and the Agriculture Extension Officer of the sub county. The heads of households were selected because they were the owners of household farm enterprises while the Sub County Chief, Community Development Officer and the Agriculture Extension Officer managed agriculture activities in the Sub County hence understood the activities of the farmers and could give expert knowledge on the study problem. Due to time and cost constraints, the researcher found it convenient to carry out the study on part of the target population, which was more accessible and hence the sampled population. Therefore, the study considered only households in Kasana Parish which had the highest number of household farms.

3.4 Sample Size and Selection

The sample size included a minimum of 262 out of 819 of heads of households in Kasana Parish for the questionnaire survey determined basing on the table for determining sample sizes from a given population (Krejcie & Morgan, 1970-Appendix A). The Sub County Chief, Community Development Officer and the Agriculture Extension Officer were studied using interviews. The sample size is presented in Table 3.1.

Table 3.1: Population, Sample Size and Selection Technique

Population Category	Target Population	Sample Size	Sampling Technique
Household heads	3,739	262	Simple random sampling
Sub County Chief	1	1	Purposive
Community Development Officer	1	1	Purposive
Agriculture Extension Officer	1	1	Purposive
Total	3,741	265	

3.5 Sampling Techniques

The study used two sampling methods, namely simple random and purposive sampling techniques.

3.5.1 Simple Random Sampling

Simple random sampling is a sampling technique by which each individual is chosen randomly and entirely by chance, such that each individual has the same probability of being chosen to participate in the study (Roy & Zeng, 2014). By simple random sampling, each individual was chosen by chance basing on the sampling frame containing names of the heads in the households in the parish (Oso & Onen, 2009). Simple random sampling was selected because it enabled the generalisability of the findings. It also helped in avoiding personal biases (Amin, 2005).

3.5.2 Purposive Sampling

Purposive sampling is a purposeful sampling technique that involves selecting certain units or cases based on a specific purpose (Teddlie & Yu, 2007). With purposive sampling, the Sub County

Chief, Community Development Officer and the Agriculture Extension Officer were selected to provide in-depth responses by interviews for qualitative analysis (Edwards & Holland, 2013). Purposive sampling helped in obtaining detailed data for in-depth analysis

3.6 Data Collection Methods

The study used two data collection methods that were questionnaire survey and interviewing.

3.6.1 Research Questionnaire Survey

The study was largely a quantitative survey involving many household heads. Therefore, the data collection method adopted the survey, which involved the use of self-administered questionnaires (SAQs). This method enabled the researcher to cover the respondents quickly and at reasonable cost (Bordens & Abbott, 2011). The questionnaire was chosen because it had the ability to collect data from a large pool of participants relatively easily compared to other methods such as observation or content analysis (Cheung & Hew, 2009). For those respondents who could not answer the questions in English, the question items were interpreted for them.

2.6.2 Interview

An interview is qualitative research method used to collect oral responses by directly asking individual respondents questions about the study problem. Interviewing targets a particular population with specific information. With interviewing, the participants get involved and talk about their views. In addition, the interviewees are able to discuss their perception and interpretation in regards to a given situation. It is their expression from their point of view

(Koskei&Simiyu, 2015). Interviews were therefore used because they helped in obtaining detailed data that provided explanation to the quantitative data of the questionnaire survey.

3.7 Data Collection Instruments

3.7.1 Research Questionnaire

The data collection instrument was a self-administered questionnaire (SAQ) made up of three sections, namely; A through C. Section A was on demographic characteristics of the respondents and sections B and C was on the independent and dependent variables respectively based on instruments. The method enabled the researcher to cover the respondents quickly and at reasonable cost (Kelley, Clark, Brown & Sitzia, 2003). At the end section of the SAQ, there was an open-ended questionnaire. This was because open questions allowed time and space for free-form responses that invite participants to share their understandings, experiences, opinions and interpretations (Bird, 2009). The combination of closed and open questions provide numerical and in-depth results.

3.7.2 Interview Guide

The qualitative method of data collection was an interview guide. Through in-depth face to face interviews, the respondents were asked their opinions and experiences about the study problem. Interviews sought information of much detail and the researcher talked to each participant directly (Oltmann, 2016). Interview data was collected from the Sub County Chief, Community Development Officer and the Agriculture Extension Officer.

3.8 Research Procedure

The researcher sought an introductory letter from the head of Higher Degrees Department at Uganda Management Institute (UMI) to allow him to proceed to the field to collect data. The

researcher personally administered both the self-administer questionnaire and the interview guide. A letter explaining the purpose of this study accompanied each questionnaire. The researcher recorded all the interviews to ensure an accurate record of data.

3.9 Data Quality Control

3.9.1 Validity

Validity measures accuracy and quality of the instruments used in collecting data. Content validity that is the extent to which a measure represents all aspects of a given social concept was established (Kimberlin&Winterstein, 2008). Content validity of the instruments was attained by making sure that the items on the main variables (independent and dependent variables) in it matched with the study's conceptual framework (see Figure 2.1). The opinions of supervisors on the question items were sought. To obtain content validity index, inter judge was used with the help of two research consultants. Each of the judges provided his/ her opinion on a two point rating scale of Relevant (R) and Irrelevant (IR) to calculate the average index (CVI). The items considered irrelevant were deleted or substituted with relevant ones. The formula used to calculate CVI was;

$$CVI = n/N$$

Where: n = number of items rated as relevant

N= Total number of items in the instrument

The CVI for the questionnaire was obtained at above 0.70(see Appendix C) which is the standard for CVI of a study instrument (Natalio, Faria, Teixeira-Salmela&Michaelsen, 2014). CIV results were as presented in Table 3.2.

Table 3.2: Content Validity Index

Items	Number of Items	Content Validity Index
Entrepreneurial characteristics	8	0.875
Demographic characteristics	Not applicable	
Attitudinal characteristics	8	0.813
Performance of Household Farms	10	0.792

3.9.2 Reliability

Reliability is the extent to which results are repeatable on different occasions, under different conditions. It is the consistency of measurement or stability of measurement over a variety of conditions obtaining same results (Drost, 2011). Reliability for the qualitative instrument was attained through consultation with the supervisor, prolonged engagement and audit trails. Data collected was systematically checked, focus maintained and errors identified and corrected (Morse, Barrett, Mayan, Olson & Spiers, 2002). Reliability for quantitative data was determined by calculating Cronbach Alpha using SPSS 22.0 (Statistical Package for Social Scientists). The instrument was found reliable at above 0.70 (see Appendix D) after a pilot study. Tavakol and Dennick (2011) indicate that a reliability index of 0.70 suggests consistency in the scores produced by the instrument. The results are presented in Table 3.3.

Table 3.3: Reliability Indices

Items	Number of Items	Cronbach alpha (α)
Entrepreneurial characteristics	8	0.803

Demographic characteristics	Not applicable	
Attitudinal characteristics	8	0.722
Performance of Household Farm	10	0.768

3.10 Data Analysis

3.10.1 Quantitative Data Analysis

Analysis of quantitative data involved descriptive and inferential analyses. Descriptive analysis involved frequencies, percentages from the frequency tables and means. Inferential analyses involved correlation and regression analyses. The statistical package for social scientists (SPSS 22.0) was used in the analysing of data.

3.10.2 Qualitative Data Analysis

The data collected using open-ended questions in the questionnaire and interviews was coded and grouped basing on emerging themes as per the study objectives. Discursive and thematic methods of data analysis were used. The discursive method considered detail of the text, interpreting the analysed text and attributing meaning. Thematic analysis ensured that clusters of text with similar meaning were presented together (Devetak, Glažar & Vogrinc, 2010). As suggested by Zohrabi (2013), qualitative data supplemented quantitative data and helped in providing explanations.

3.11 Measurement of Variables

Measurement of the variables was based on nominal and ordinal scales. The nominal scale was used to identify demographic characteristics of the respondents. The categories for the variables did not follow any deliberate order with numerical codes to the different categories although the

coding did not mean that one code was superior to the other. The ordinal scale was used on the items of the constructs of the independent and dependent variables for continuous data. These categories possessed the characteristic for ranking with codes assigned superior ranking (Harry et al., 2010). As indicated by Zohrabi (2013), the ranking for the ordinal scale was based on a five-point Likert type Scale (Where 1 = strongly disagree 2 = disagree 3 = undecided 4 = agree 5 = strongly agree).

3.12 Ethical Considerations

During the study, the researcher ensured informed consent, confidentiality, privacy and guarded against plagiarism. With respect to informed consent, before the respondents participated in the study, they were given a chance to provide informed consent. The researcher ensured that the respondents willingly agreed to participate in the research without coercion or duress. The respondents were briefed in a simple language to make them understand the outcome, benefits, and importance of the study before their consent could be sought. The respondents were also be given chance to ask questions pertaining to the research and were given sufficient time to make up their minds of their intention to participate or not.

Regarding confidentiality, the researcher kept data provided anonymous. This by ensuring that during data management results were reported in aggregate form using such measures as percentages, means, correlations and regression coefficients. The privacy of the respondents was also respected. This involved the researcher making appointments with the respondents and asking them where they wanted to meet the research. Plagiarism was avoided by ensuring that all studies

used in the study were acknowledged. This involved citing the work or publication, the author, year of authorship and the publisher.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Introduction

This chapter covers the presentation, analysis and interpretation of the findings on farm owner's personal characteristics and performance of households' farm enterprises in homesteads in Kikamulo Sub County, Nakaseke District. Analysis of the study was based on the objectives of the study. The chapter in particular, presents the response rate, background findings and the empirical findings.

4.2 Response Rate

The researcher planned to collect data from 265 respondents comprising 262 household heads, the Sub County Chief, Community Development Officer and the Agriculture Extension Officer. However, appropriate questionnaire survey data was not obtained from all the distributed questionnaires distributed as presented in Table 4.1

Table 4.1: Response Rate for the Study

Instruments	Targeted	Actual	Response Rate
Interview	03	03	100%
Questionnaires	262	232	88.5%
Total	265	235	88.7%

The data in Table 4.1 shows that interview data were collected from all the 3 (100.0%) planned respondents and questionnaire survey data from 232 (88.5%) respondents out of the initially planned 262. The general response rate for both categories of the respondents was 235 (88.7%). This was considered an appropriate response rate because Sivo, Saunders, Chang and Jiang (2006) suggest that a response rate of 0.60 (60%) and above is good.

4.3 Background Information

This section presents results on background information of the respondents. This included: villages of the respondents in the sub-county, size of their land, their means of production and their main farm activity. The data on background characteristics of the respondents is presented in Table 4.2.

Table 4.2: Background Characteristics

Item	Categories	Frequency	Percent
Location	Kasana	63	27.2
	Kiwoko Town Hill	52	22.4
	Lwabijogo	47	20.3
	Wabitunda	70	30.2
	Total	232	100.0
Land size	Less than 5 acres	87	37.5
	5-10 acres	111	47.8
	10 acres and above	34	14.7
	Total	232	100.0
Means of production	Strictly human labour	187	80.6
	Low level mechanised	40	17.2
	Highly mechanised	5	2.2
	Total	232	100.0
Main farm activity	Largely Crop growing	152	65.5
	Largely Livestock farming	26	11.2
	Both crop growing and livestock farming	54	23.3
	Total	232	100.0

The results on the villages of the respondents showed that the modal percentage (30.2%) was of those farmers from Wabitunda, 27.2% were from Kasana, 22.4% were from Kiwoko Town Hill and 20.3% were from Lwabijogo. This suggested that people from all the four villages in the parish studies were represented. Therefore, data was representative of the views of the people from the whole sub county. In relation to the size of the land owned by the farmers, the modal percentage (47.8%) of the respondents was of those with 5-10 acres, 37.5% who were below 30 years had land that was less than 5 acres. The remaining 14.7% had 10 acres of land and above. The results show that farmers with different sizes of land owned participated in this study. Thus, data was representative of different categories of farmers from small scale subsistence farming to those involved in commercial farming.

The results in Table 4.2 on the means of production of the respondents showed that the modal percentage (80.6%) of the respondents that strictly depended on human labour, 17.2% that had low level mechanisation and 2.2% that were highly mechanised. This data shows that there was low uptake of mechanisations. However, the study was able to capture data reflecting farmers with different means of production. Regarding the main farm activity of the respondents, the modal percentage (65.5%) of the respondents largely grew crops, 23.3% were involved in both crop growing and livestock farming while 11.2% were largely involved in livestock farming. With farmers involved in different farm activities this means that the responses captured were representative of different types of farmers making the data more dependable.

4.4 Description of the Dependent Variable: Performance of Household Farm Enterprises

This section presents data on the dependent variable of the study, namely performance of household farm enterprises. The self-administered questionnaire (see Appendix B) shows that performance of household farm enterprises was studied using 12 quantitative items and one qualitative item. The 12 quantitative items performance of household farm enterprises are shown in Table 4.3. The items were scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree. For each of the items on performance of household farm enterprises, descriptive statistics, namely; frequencies, percentages and means are presented. The results are as presented in Table 4.3.

Table 4.3: Frequencies, Percentages and Means on Performance of Household Farm Enterprises

Performance of Household Farm Enterprises		SD	D	U	A	SA	Mean
I produce enough food to feed my family throughout the year	F	8	86	5	113	20	3.22
	%	3.4	37.1	2.2	48.7	8.6	
My farm production enables my family to afford a balanced diet	F	6	132	13	56	26	2.84
	%	2.6	56.9	5.2	24.1	11.2	
My family rarely buys food that can be produced on the farm locally	F	16	40		146	30	3.58
	%	6.9	17.2		62.9	12.9	
My family rarely skips meals because of lack of food	F	10	42		134	46	3.71
	%	4.3	18.1		57.8	19.8	
The products of my farm are attractive to the buyers because of their high quality	F	14	30	10	136	42	3.70
	%	6.0	12.9	4.3	58.6	18.1	
My land productively meets my household's necessities	F	9	39	22	118	44	3.64
	%	3.9	16.8	9.5	50.9	19.0	
My produce for the market brings enough income to cater for my family needs	F	15	84		87	46	3.28
	%	6.5	36.2		37.5	19.8	
My farm enables me to save money for family contingency problems	F	35	87		78	32	2.94
	%	15.1	37.5		33.6	13.8	
I spare money from sale of farms products to make investments	F	31	82	22	76	21	2.89
	%	13.4	35.3	9.5	32.8	9.1	
My farm is the source of my household's livelihood	F	17	57		124	34	3.44
	%	7.3	24.6		53.4	14.7	
I have improved my production on the farm because of the income I obtain from it	F	24	91	3	87	27	3.01
	%	10.3	39.2	1.3	37.5	11.6	
My farm activities are diversified	F	18	53		117	44	3.50
	%	7.8	22.8		50.4	19.0	

Key:

SD = Strongly Disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly Agree

The data in Table 4.3 on whether the farmers produced enough food to feed their families throughout the year revealed that cumulatively the larger percentage (53.7%) of the respondents agreed while 41.5% disagreed and 2.2% were undecided. The mean = 3.22 was close to three which on the scale used corresponded with undecided. Three being undecided (average/ fair/ moderate), the results suggested that moderately, farmers produced enough food to feed their families throughout the year. As to whether the farm production enabled their families to afford a balanced diet of meals, cumulatively the larger percentage (59.5%) of the respondents disagreed while 35.3% disagreed and 5.3% were undecided. The mean = 2.84 close three suggested that the respondents were undecided. Three being the average, the results thus suggested that farmers indicated that fairly farm production enabled their families to afford a balanced diet of meals.

With respect to whether the families of the farmers rarely bought food that could be produced on the farm locally, cumulatively the majority percentage (73.8%) agreed with 24.1% disagreeing. The mean = 3.58 close to four corresponded with agreed. With a high mean, this suggested that largely the families of the farmers rarely bought food that could be produced on the farm locally. As regards to whether the families of the farmers rarely skipped meals because of lack of food, cumulatively the majority percentage (77.6%) of the respondents agreed with 22.4% disagreeing. The mean = 3.71 meant that the respondents agreed. These results therefore suggested that the respondents indicated that their families rarely skipped meals because of lack of food.

Regarding whether the products of the farmers were attractive to the buyers because of their high quality, cumulatively the majority percentage (76.7%) of the respondents agreed while 18.9% disagreed and 4.3% were undecided. The mean 3.70 implied that the respondents agreed. This

suggested that the products of the farmers were attractive to the buyers because of their high quality.

Concerning whether the farmers lands productively met their households necessities, cumulatively the larger percentage (69.9%) of the respondents agreed while 20.7% disagreed and 9.5% were undecided. The mean = 3.64 was close to four which on the scale used corresponded with agreed. This implied that the farmers indicated that their lands productively met their households' necessities. As to whether the farmers produce for the market brought enough income to cater for their family's needs, cumulatively the larger percentage (57.3%) of the respondents agreed with 42.7% disagreeing. The mean = 3.28 was close three which on the scale used corresponded with undecided. This meant that the respondents indicated that moderately, they produced for the market which brought them some income to cater for their family's needs.

Regarding whether the farms enabled the farmers to save money for families contingency problems, cumulatively the larger percentage (52.6%) disagreed with 47.4% agreeing. The mean = 2.94 close to three which corresponded with undecided meant that the respondents indicated that moderately, the farms enabled the farmers to save money for families contingency problems. As to whether they spared money from sale of their farms' products to make investments, cumulatively the larger percentage (48.7%) of the respondents disagreed while 41.9% agreed with 9.5% being undecided. The mean = 2.89 close to three suggested that the respondents were undecided. This meant that the money spared from sale of farm products to make investments was moderate.

With respect to whether the farmers' farms were the source of their households' livelihoods, cumulatively the larger percentage (51.7%) of the respondents disagreed with 47.3% agreeing. The mean = 3.44 close to three which on the scale used corresponded with undecided suggested that the farmers indicated that the farms were a moderate source of their households' livelihoods. As to whether the farmers improved their production on the farm because of the earnings they obtained from them, the majority percentage (49.5%) of the respondents agreed while 49.1% disagreed and 1.3% were undecided. The mean 3.01 implied that the respondents were undecided. This suggested that fairly, the farmers improved their production on the farm because of the earnings they obtained from them. With regard to whether the farmers' farms activities were diversified, cumulatively the majority percentage (69.4%) of the respondents agreed while 30.6% disagreed. The mean = 3.50 was close to four which on the scale used corresponded with agreed. This implied that the farmers' farms activities were diversified. To find out the overall performance of households farm enterprises, an average index of farm enterprise performance was computed for the 12 items measuring performance of households' farm enterprises. The summary of the statistics for the items are presented in Table 4.4.

Table 4.4: Summary Statistics on Performance of Households' Farm Enterprises

Descriptives			Statistic	Std. Error
Household Farm Performance	Mean		3.31	0.04
	95% Confidence Interval for Mean	Lower Bound	3.21	
		Upper Bound	3.39	
	5% Trimmed Mean		3.31	
	Median		3.33	
	Variance		0.41	
	Std. Deviation		0.64	
	Minimum		1.00	
	Maximum		4.83	
	Range		3.83	
	Interquartile Range		0.83	
	Skewness		-0.45	0.16
	Kurtosis		0.81	0.32

The results in Table 4.4 show that the mean = 3.31 was close to the median = 3.33. Therefore, despite the negative skew (skew -0.45), the results were normally distributed. The mean and median close to three suggested that performance of households' farm enterprises was fair because basing on the scale used, three represented undecided that is moderate. The low standard deviation = 0.64 suggested low dispersion in the responses. The curve in Figure 4.1 supports the suggested normality.

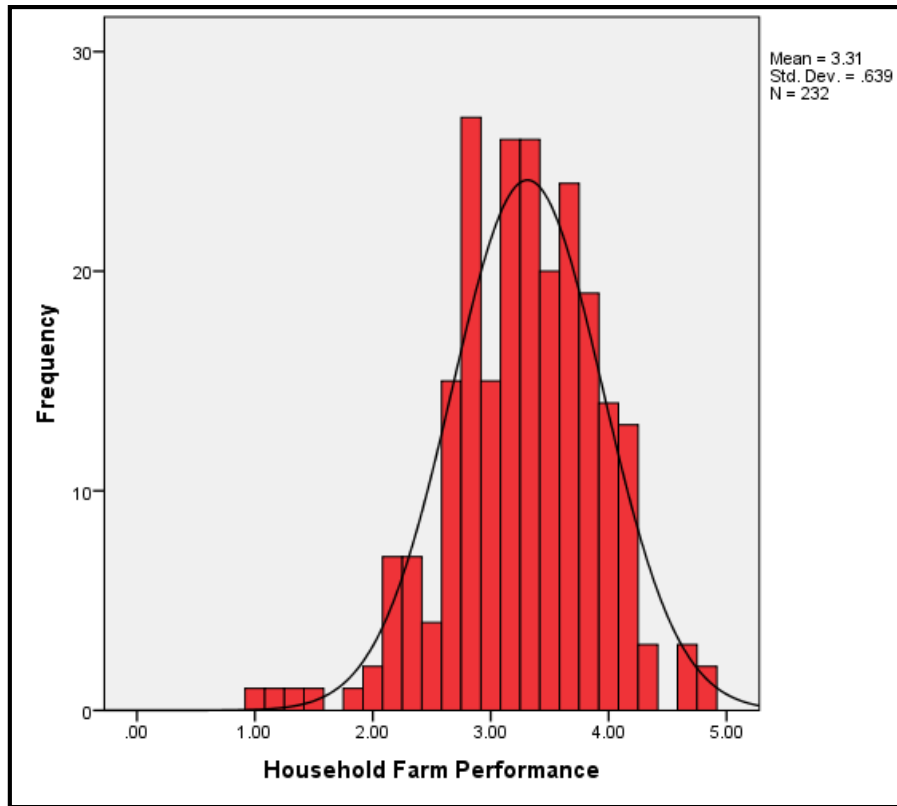


Figure 4.1: Histogram for Household Farm Performance

Figure 4.1 shows normal distribution of the responses obtained from the respondents. This means that the data obtained on performance of households' farm enterprises could be subjected to linear correlation and regression and suitable results got.

In the open responses of the questionnaire, the respondents gave their opinion on how they appreciated the performance of their farms. The respondents revealed that their farms enabled them to have sufficient food for their families, to obtain some income buy selling produce, had diversified production and there was relative improvement. For instance, one respondent stated, "These days with guidance from extension workers and farm groups, my produce has somehow increased. However, if the government can help and access us withcheap farm implements like

watering pumps, generators and tractors, production can even go further.” One respondent remarked, *“my farm production has improved because of I have adopted new production techniques and plant treated seeds. However, lack of production equipments like tractors and irrigation facilities hamper my ability to increase production.”* In relation to the above, another respondent stated, *“My problem is lack of enough land and so I have to depend on renting land. However, now that the market is good I will be able to increase my production because I will be able to acquire more land.”* The views above show that farmers indicated that the performance of their farms was fair but still more could be done if they were able to access production equipments like watering pumps, generators, tractors and more land.

In their responses, the interviewees gave responses related to those of the farmers. The Sub County chief stated; *“There had been effort to support the farmers through accessing them improved seeds through the wealth creation programme. This has seen production go up but the challenge is that farmers still depend on weather. There is need for the government to help farmers’ access water such that they are able to irrigate.”* The agriculture extension worker stated, *“In the recent years, farm production has increased. Through farmers associations and extension programmes, farmers have access to improved planting materials like maize seeds, pineapple suckers and piglets.”*

The community development officer gave a wide range of views indicating that farm production was improving for the progressive farmers although there were many peasants whose production was still very poor. The community officer revealed that through extension services programmes like soil and water conservation approaches, wealth creation and farmers associations through which farmers accessed improved farm requirements and markets, many progressive farmers have

improved their farms performance. The results above suggest that because of different schemes there was improvement in farm performance. These results are consistent with the descriptive statistics which suggested that household farm performance was fair.

4.5 Farm Owner's Personal Characteristics and Performance of Households Farm Enterprises

This section presents data on the independent variable of the study, namely farm owner's personal characteristics and attitudinal characteristics of a farm owner in relation to performance of household farm. The self-administered questionnaire (see Appendix B) shows that the construct of farm owner's personal characteristics comprised entrepreneurial personal characteristics, demographic characteristics and attitudinal characteristics. The results on these constructs follow here under. The results on entrepreneurial personal characteristics, demographic characteristics and attitudinal characteristics include descriptive statistics and inferential analysis.

4.5.1 Research Question One: What is the Relationship between Entrepreneurial Characteristics of Farm Owners and Performance of Household Farm Enterprises in Kikamulo Sub County Nakaseke District?

4.5.1.1 Descriptive results on Entrepreneurial Personal Characteristics

The second objective of the study sought to establish the relationship between entrepreneurial personal characteristics and performance of household farm enterprises in Kikamulo Sub county Nakaseke district. The results obtained on entrepreneurial personal characteristics were first analysed at univariate level of data analysis to first describe the respondents' entrepreneurial

personal characteristics. Descriptive analysis involved calculation of frequencies, percentages and means. The results on the same are presented in Table 4.5.

Table 4.5: Frequencies, Percentages and Means on Entrepreneurial Personal Characteristics

Access to Finance	F/%	SD	D	U	A	SA	Mean
I am always labouring to achieve big things on my farm	F %	7 3.0	47 20.2		128 55.2	50 21.6	3.72
I try to make improvements for each mistake or failure I suffer on the farm	F %	11 4.7	76 32.8	6 2.6	112 48.3	27 11.6	3.29
I have a strong urge to connect with other successful farmers	F %	5 2.2	48 20.7		125 53.9	54 23.3	3.75
I enjoy competing with other farmers in better production methods	F %	5 2.2	17 7.3	13 5.6	135 58.2	62 26.7	4.00
I set challenging tasks for myself on my farm	F %	6 2.6	20 8.6	36 15.5	122 52.6	48 20.7	3.80
I make trials of new crops or livestock on my farm	F %	4 1.7	66 28.4		112 48.3	50 21.6	3.59
Unexpected weather vagaries do not distract me from my farming activities	F %	4 1.7	76 32.8	10 4.3	95 40.9	47 20.3	3.45
When one season fails, that does not discourage my effort	F %	27 11.6	48 20.7	22 9.5	93 40.1	42 18.1	3.32

The data in Table 4.5 on whether the farmers were always struggling to achieve big things on their farms revealed that cumulatively the majority percentage (59.9%) of the respondents agreed with 23.2% disagreeing. The mean = 3.72 was close to four which on the scale used corresponded with agreed. Four being agreed, the results suggested that the farmers were always struggling to achieve big things on their farms. As to whether farmers tried to make improvements for each mistake or failure they suffered on the farm, cumulatively the larger percentage (59.9%) of the respondents disagreed while 37.5% disagreed and 2.6% were undecided. The mean = 3.29 close three suggested that the respondents were undecided. Three being the average, the results thus suggested that

farmers indicated that fairly they tried to make improvements for each mistake or failure they suffered on the farm.

With respect to whether the farmers had a strong urge to connect with other successful farmers, cumulatively the majority percentage (77.1%) agreed with 22.9% disagreeing. The mean = 3.75 close to four corresponded with agreed. With a high mean, this suggested that farmers had a strong urge to connect with other successful farmers. As regards to whether the farmers enjoyed competing with other farmers in better production methods, cumulatively the majority percentage (84.9%) of the respondents agreed while 9.5% disagreed and 5.6% were undecided. The mean = 4.00 meant that the respondents agreed. These results therefore suggested that the respondents indicated they enjoyed competing with other farmers in better production methods.

Regarding whether the farmers set challenging tasks for themselves on their farm, cumulatively the majority percentage (73.3%) of the respondents agreed while 11.2% disagreed and 15.5% were undecided. The mean 3.80 implied that the respondents agreed. This suggested that the farmers set challenging tasks for themselves on their farm. Concerning whether the farmers made trials of new crops or livestock on their farms, cumulatively the larger percentage (69.9%) of the respondents agreed with 30.1% disagreeing. The mean = 3.59 was close to four which on the scale used corresponded with agreed. This implied that the farmers indicated that they made trials of new crops or livestock on their farms.

As to whether unexpected weather vagaries did not distract farmers from their farming activities, cumulatively the larger percentage (61.1%) of the respondents agreed while 34.5% disagreed and 4.3% were undecided. The mean = 3.45 was close three which on the scale used corresponded with

undecided. This meant that the respondents indicated that moderately, unexpected weather vagaries did not distract farmers from their farming activities. Regarding whether when one season failed, that did not discourage the farmers effort, cumulatively the larger percentage (58.2%) agreed while 32.3% disagreed with 9.5% being undecided. The mean = 3.32 close to three which corresponded with undecided meant that the respondents indicated that moderately, when one season failed, that did not discourage the farmers effort. To establish the overall farmers rating of their entrepreneurial personal characteristics, an average index of entrepreneurial personal characteristics was computed for the eight items measuring entrepreneurial personal characteristics. The summary of the statistics for the items are presented in Table 4.6.

Table 4.6: Summary Statistics on Entrepreneurial Personal Characteristics

Descriptives				Statistic	Std. Error
Entrepreneurial characteristics	Mean			3.62	0.05
	95% Confidence Interval for Mean	Lower Bound		3.52	
		Upper Bound		3.71	
	5% Trimmed Mean			3.64	
	Median			3.75	
	Variance			0.53	
	Std. Deviation			0.72	
	Minimum			1.63	
	Maximum			5.00	
	Range			3.38	
	Interquartile Range			0.97	
	Skewness			-.55	0.16
	Kurtosis			-.04	0.32

The results in Table 4.6 show that the mean = 3.62 was close to the median = 3.75. Therefore, despite the negative skew (skew -0.55), the results were normally distributed. The mean and median close to four suggested that entrepreneurial personal characteristics were good because basing on the scale used, four represented agreed. The low standard deviation = 0.72 suggested low dispersion in the responses. The curve in Figure 4.2 supports the suggested normality.

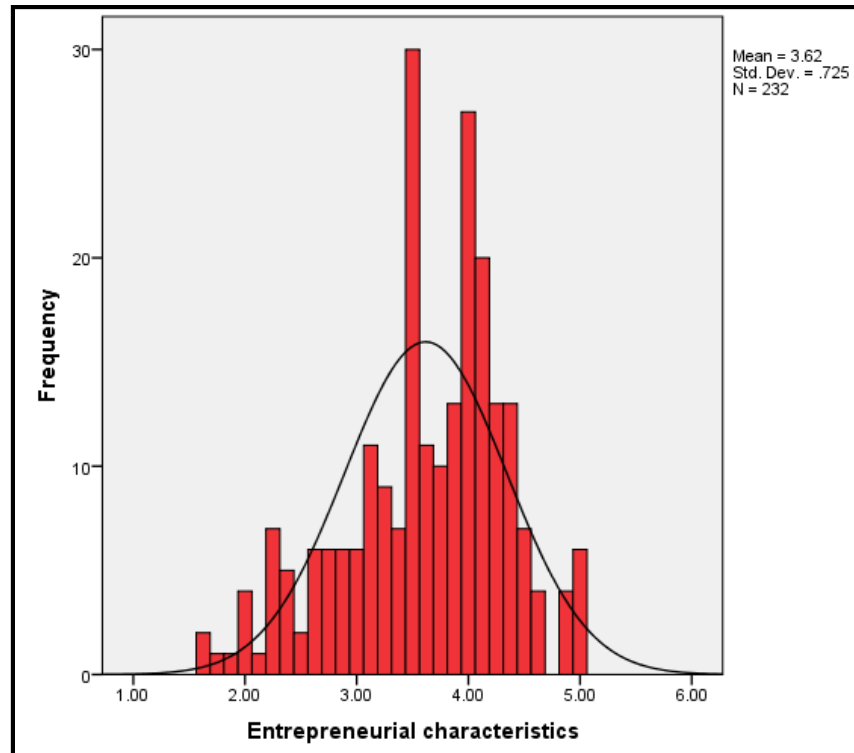


Figure 4.2: Histogram for Entrepreneurial Personal Characteristics

Figure 4.2 shows normal distribution of the responses obtained from the respondents. This means that the data obtained on entrepreneurial personal characteristics could be subjected to linear correlation and regression and appropriate results obtained.

In the open responses of the questionnaire, the respondents commented on their personal effort on the farms. The respondents revealed that they made effort to adopt new farming techniques, improved seeds, technologies and learn from successful farmers. One respondent stated, “I have visited successful farmers in Nakaseke and other areas such as Luwero and Masaka to learn what they are doing. The skills learnt from there have been handy in my effort to improve my farming activities” Another respondent stated;

Due to high demand for agricultural produce especially carrots, pepper, maize, tomatoes and eggs especially by exporters to neighbouring countries such as Sudan and even Europe, I have acquired watering equipments among others to enhance my production. Specifically for exporters to Europe, where organic farm produce are exported I have had to adopt natural methods of farming because when chemicals are used the produce is rejected.

Another respondent stated, *“I am open to change and this has helped me to improve my farm. I have adopted growing of non-traditional crops and technologies such as the soil and water conservation strategies. These have helped to hence my farming activities.”* These views above show that farmers made effort to improve their farms and this suggested that their entrepreneurial personal characteristics were good.

In the interviews, the interviewees gave views which reflected those of the farmers. The interviews revealed that some farmers were making effort to improve their farms and wilfully took on government agriculture improvement programmes. The interviewees also indicated that some farmers had joined farmers groups, had adopted new technologies and a few had mechanised their activities. Accordingly, agricultural activities were becoming advanced in the area. One respondent stated, *“A number of farmers have made effort to improve their farming activities. They are using fertilisers, pesticides, and quality planting materials. However, they are challenged by lack of enough money to purchase the desired inputs.”* Another respondent stated, *“Low capacity for private investment in complimentary assets such as generators to help in irrigation and preservation of harvests have frustrated agriculture improvement and marketing efforts.”* However, overall, the views above show that farmers made effort to improve their performance despite lack of sufficient income. This thus supports the descriptive results which indicated that entrepreneurial personal characteristics were good.

4.5.1.2 Regression Analysis of Entrepreneurial Personal Characteristics and Performance of Household Farm Enterprises

To establish the relationship between entrepreneurial characteristics of a farm owner and performance of household farm enterprises, a regression analysis was done. The results were as in Table 4.7.

Table 4.7: Regression Model for Entrepreneurial Personal Characteristics and Performance of Household Farm Enterprises

	Standardised Coefficients	Significance (p)
	Beta (β)	
Entrepreneurial Personal Characteristics	0.408	0.000
Adjusted $R^2 = 0.163$ F = 45.993, p = 0.000		

a. Dependent Variable: Performance of Household Farm Enterprises

The results in Table 4.7 show that, entrepreneurial personal characteristics explained 16.3% of the joint variation in wealth creation (adjusted $R^2 = 0.163$). This means that 83.7% of the variation was accounted for other factors other than those considered in this model. The results suggest that hypothesis one (H1) which stated that there is a positive significant relationship between personal characteristics and performance of household farm enterprises was accepted ($\beta = 0.408$, $p = 0.000 < 0.05$). Therefore, entrepreneurial personal characteristics have a positive and significant influence on performance of household farm enterprises.

4.5.2 Research Question Two: What is the Relationship between Demographic Characteristics a Farm Owner and Performance of Household Farm Enterprises In Kikamulo Sub County Nakaseke district?

4.5.2.1 Descriptive Statistics for Demographic Characteristics

Objective three of the study sought to find out the relationship between demographic characteristics of the farm owner and performance of household farm enterprises in Kikamulo Sub county Nakaseke district. Items measuring the various demographic characteristics were scaled using the nominal scale with appropriate options provided. The results on the items are as presented in Table 4.8.

Table 4.8: Demographic Characteristics

Item	Categories	Frequency	Percent
Gender	Male	139	59.9
	Female	93	40.1
	Total	232	100.0
Age	Below 30 years	56	24.1
	30-40 years	93	40.1
	40-50 years	59	25.4
	Above 50 years	24	10.3
	Total	232	100.0
Marital Status	Single never married	43	18.5
	Married	178	76.7
	Widowed	9	3.9
	Divorced	2	0.9
	Total	232	100.0
Education Level	Post secondary	29	12.5
	Secondary	48	20.7
	Primary	137	59.1
	Non-formal only	18	7.8
	Total	232	100.0

Source: Primary Data

The results in Table 4.8 on gender of the respondents show that the modal percentage (59.9%) was of males and females were 40.1%. With respect to age of the respondents, the modal percentage (40.1%) of the respondents was of those that were 30 but below 40 years, followed by 25.4% who were 40-50 years, then 24.1% who were below that years and the least percentage 10.3% was of those who were above 50 years. Regarding marital status, the modal percentage (76.7%) comprised the married, 18.5% were single never married, 3.9% were widowed and 0.9% was divorced. This indicates that most the respondents were married. Data on the highest level of education attained by the respondents showed that the modal percentage (59.1%) of the respondents was of those who had primary education, followed by 20.7% with secondary education, 12.5% possessed post secondary education and 7.8% were those with informal education. This suggests that cumulatively the larger percentage of those with highest education levels were those with primary education.

4.5.2.2 Correlation Analysis between performance of household farm enterprises and Demographic Characteristics

To establish whether there was an effect of the above unidimensional variables on wealth creation, the unidimensional variables were converted into dummy variables to make them numerical and hence amenable for correlation analysis. A dummy (SexD) was made from Table 4.8 for gender of the respondents using the males as the comparison group (1 = “Male”) and the females as the reference group (0 = “Female”). The reason behind this was that the gender model in the study of enterprise performance presumes that there was a significant difference in the levels of performance between male owned businesses and females owned businesses with the male owned businesses tending to perform better than those of their female counterpart (Osunsan, 2015). A

dummy (AgeD) was created from Table 4.8 for age groups using the older ones as the comparison group (1 = old ones “40 and above”) and young ones as the reference groups (0 = young ones i.e. “below 30” and “30 but below 40”). This was because age was considered to determine performance of enterprises because older adults are more likely to analyse the problem, seek information, and talk with family members than younger adults hence enterprise success (Losby, 2008).

A dummy (MarD) was also created from Table 4.8 for marital status using the married as comparison groups (1 = married) and the unmarried as the reference group (0 = “single and never married” and “single ever married that is widowed and divorced”). The justification for this was that Married men and women worked harder and performed better in managing a business because of the social, financial and psychological support than single, divorced or widowed individuals because of family responsibility and commitments (Fielden et al., 2000). A dummy was created from Table 4.8 for highest level of education attained (EducD) using the highly educated as the comparison group (1 = “secondary” and “post-secondary”) and the less educated as the reference group (0 = “primary and below”). The basis for this was that education is educational status was related to positive budgeting behaviour among low-income people and that more highly educated people were more likely to engage in cognitive decision making processes hence creating wealth (Losby, 2008). The correlation results are presented in Table 4.9.

Table 4.9: Correlation Matrix for Performance of Household Farm Enterprises and Demographic Characteristics (dummies)

	Performance of Household Farm Enterprises	SexD	AgeD	MarD	EducD
Performance of Household Farm Enterprises	1	0.229*	0.057	0.055	0.611**
SexD		1	0.087	0.157	-0.163
AgeD			1	0.231*	0.019
MarD				1	.159
EducD					1

*. Correlation is significant at the 0.05 level (2-tailed).

The results in Table 4.9 indicate that only two demographic characteristics namely gender of the respondent (SexD) and education level (EducD) were significant correlates of performance of household farm enterprises with their critical values significant ($p < 0.05$). However, education level correlated more significantly than gender. On the other hand, the other demographic characteristics that were namely, age (AgeD) and marital status (MarD) not significant correlates ($p > 0.05$). Therefore, gender of the respondent and education level related to performance of household farm enterprises while age and marital status did not.

4.5.2.2 Regression Model for Performance of Household Farm Enterprises by Demographic Characteristics

To establish whether demographic characteristics predicted performance of household farm enterprises, the dependent variable namely, performance of household farm enterprises was

regressed on independent variable, namely demographic characteristics. The demographic characteristics considered were gender (SexD), age (AgeD), marital status (MarD) and education level (EducD). The results were as in Table 4.10.

Table 4.10: Regression of Performance of Household Farm Enterprises on Demographic Characteristics

	Standardized Coefficients	Significance
	Beta (β)	(p)
SexD	0.166	0.033
AgED	0.053	0.612
MarD	0.079	0.469
EducD	0.295	0.000
Adjusted $R^2 = 0.480$		
$F = 112.173, p = 0.000$		

a. Dependent Variable: Performance of Household Farm Enterprises

The results in Table 4.10 show that, the four demographic characteristics explained 48.0% of the variation in performance of household farm enterprises (adjusted $R^2 = 0.480$). This means that 52.0% of the variation was accounted for by other than these variables. The regression model was significant ($F = 198.173, p = 0.000 < 0.5$). While all four demographic characteristics significantly affected performance of household farm enterprises, only two of them, gender of the respondent (SexD) ($\beta = 0.166, p = 0.033 < 0.05$) and education level (EducD) ($\beta = 0.295, p = 0.000 < 0.05$) proved to be statistically positive significant demographic characteristics predicting performance of household farm enterprises while age (AgeD) ($\beta = 0.053, p = 0.612 > 0.05$) and marital status

(MarD) ($\beta = 0.079$, $p = 0.469 > 0.05$) did not. However, education level (EducD) was the most significant predictor followed by gender (SexD) respectively. This means that only two aspects of hypothesis Two (H2) stating that there is a positive significant relationship between entrepreneurial personal characteristics and performance of household farm enterprises were accepted and two aspects were rejected. The aspects of H2 that were accepted as relating to performance of household farm enterprises were gender of the respondent and education level but age and marital status were rejected.

In the open ended section of the questionnaire, the farmers were asked indicate how they assessed their personal demographic characteristics in relation to the performance of their farms. The respondents gave a number of items which pointed to the effect that because of their gender, they were able to inherit and acquire production means such as land more easily. Due to education, they easily accessed knowledge about modern farming. For instance one respondent stated, *“I have sufficient land because as a man, I inherited from my parent which was not possible for my sisters because for them their inheritance is with their husbands.”* Another respondent stated, *“My education has helped me to be able to manage knowledge which has been instrumental to the improvement of my farm. The internet has helped a lot in getting information about different practices I have introduced on my farm.”* Another respondent revealed, *“It is the men who have the means of production and can easily access credit from lending institutions to improve farms. As a woman I have found it hard to access sizeable loans because the land on which farm which belongs to my husband I do not have rights over it to pledge it as security.”* The views presented above point to the factor that two demographic characteristics, namely sex and education level of the respondents related to performance of farm enterprises.

In the interviews, the respondents gave views related to those given by the farmers above. For instance the sub county chief stated, *“In this area, its men who have easy access to land because they inherit it from their fathers. Therefore, commercial farming favours men and mean head families are more likely to engage in commercial farming than single mother headed families.”*

The agriculture extension officer also reiterated the views of the sub county chief. He indicated that, “Here men have more land and thus are able to establish commercial agricultural enterprises and even when they are established by the women, their husbands still have control over them. On the other hand, the community development officer said; those who have some level of education are at an advantage. They are the ones, who visit community libraries which have been established by NGOs, access the internet and easily adopt the newest agricultural practices because they have access to information. Their production has been better than that of the less educated or uneducated.

Overall, the views presented above show that gender and education played a significant role in influencing performance of farm enterprises. These views resonate with the views presented by the farmers which indicated that two demographic characteristics, namely sex and education level of the respondents related to performance of farm enterprises. Therefore, the qualitative data obtained concurs with inferential analysis which indicated that gender of the respondents and education levels were positive significant demographic characteristics predicting performance of household farm enterprises.

4.5.3 Research Question Three: What is the Relationship between Attitudinal Characteristics of Farm Owners and Performance of Household Farm Enterprises in Kikamulo Sub County Nakaseke District?

4.5.3.1 Descriptive Statistics for Attitudinal Characteristics

Objective four of the study sought to determine the relationship between attitudinal characteristics of a farm owner and performance of household farm enterprises Kikamulo Sub county Nakaseke district. Data analysis was first done at univariate level to first describe the respondents' attitudinal characteristics. Descriptive analysis involved calculation of frequencies, percentages and means. The results on the same are presented in Table 4.11.

Table 4.11: Frequencies, Percentages and Means on Attitudinal Characteristics

Attitudinal Characteristics	F/%	SD	D	U	A	SA	Mean
I keep working on difficult tasks on my farm without needing encouragement from others	F %	7 3.0	69 29.7	4 1.7	116 50.0	36 15.5	3.45
I rarely depend on others for decisions in managing my farm	F %	9 3.9	61 26.3	15 6.5	120 51.7	27 11.6	3.41
When I am involved in something on my farm I try to find out all I can about what is going on elsewhere about it	F %	7 3.0	42 18.1	4 1.7	125 53.9	54 23.3	3.76
I trust in my own farm skills	F %	5 2.2	81 34.9	14 6.0	93 40.1	39 16.8	3.34
On the whole, I am satisfied with myself in handling my farm issues	F %	6 2.6	67 28.9	28 12.1	96 41.4	35 15.1	3.38
I can always manage to solve difficult problems on my farm	F %	5 2.2	73 31.5	12 5.2	101 43.5	41 17.7	3.43
I am confident that I can deal efficiently with unexpected events on my farm	F %	6 2.6	113 48.7	5 2.2	74 31.9	34 14.7	3.07
My farm activities satisfy my expectations	F %	29 12.5	97 41.8	- -	69 29.7	37 15.9	2.95

The data in Table 4.11 on whether the farmers kept working on difficult tasks on their farms without needing encouragement from others revealed that cumulatively the larger percentage (65.5%) of the respondents agreed while 32.7% disagreed and 1.7% were undecided. The mean = 3.45 was close to three which on the scale used corresponded with undecided. Three being undecided/ average, the results suggested moderately, the farmers kept working on difficult tasks on their farms without needing encouragement. As to whether farmers rarely depended on others for decisions in managing their farms, cumulatively the larger percentage (63.3%) of the respondents disagreed while 30.2% disagreed and 6.5% were undecided. The mean = 3.41 close three suggested that the respondents were undecided. Three being the average, the results thus suggested that farmers indicated that fairly they rarely depended on others for decisions in managing their farms.

With respect to whether the farmers were involved in something on their farms they tried to find out all they could about what was going on elsewhere about it, cumulatively the majority percentage (76.9%) agreed while 21.1% disagreed and 1.7% were undecided. The mean = 3.76 close to four corresponded with agreed. With a high mean, this suggested that farmers indicated that when involved in something on their farms they tried to find out all they could about what was going on elsewhere about it. As regards to whether the farmers trusted in their own farm skills, cumulatively the larger percentage (56.9%) of the respondents agreed while 37.1% disagreed and 6.0% were undecided. The mean = 3.34 meant that the respondents were undecided. These results therefore suggested that the respondents indicated moderately, they trusted in their own farm skills.

Regarding whether the farmers on the whole, were satisfied with their own handling of their farm issues, cumulatively the larger percentage (56.5%) of the respondents agreed while 31.6% disagreed and 12.1% were undecided. The mean 3.38 implied that the respondents were undecided. This suggested that the farmers were moderately satisfied with their own handling of their farm issues. Concerning whether the farmers could always manage to solve difficult problems their farms, cumulatively the larger percentage (61.2%) of the respondents agreed while 33.7% disagreed and 5.2% were undecided. The mean = 3.43 was close to three which on the scale used corresponded with undecided. This implied that the farmers indicated that fairly, they could always manage to solve difficult problems their farms.

As to whether unexpected the farmers were confident that they deal efficiently with unexpected events on their farms, cumulatively the larger percentage (51.3%) of the respondents agreed while 46.6% agreed and 2.2% were undecided. The mean = 3.07 was close three which on the scale used corresponded with undecided. This meant that the farmers indicated that moderately, they were confident that they deal efficiently with unexpected events on their farms. Regarding whether the farm activities satisfied the expectations, cumulatively the larger percentage (54.3%) agreed with 45.6% being undecided. The mean = 2.95 close to three which corresponded with undecided meant that the respondents indicated that moderately, farm activities satisfied the expectations. To ascertain how overall farmers rated of their attitudinal characteristics, an average index of attitudinal characteristics was computed for the eight items measuring entrepreneurial personal characteristics. The summary of the statistics for the items are presented in Table 4.12.

Table 4.12: Summary Statistics on Attitudinal Characteristics

Descriptives			Statistic	Std. Error
Attitudinal characteristics	Mean		3.35	0.05
	95% Confidence	Lower Bound	3.26	
	Interval for Mean	Upper Bound	3.44	
	5% Trimmed Mean		3.36	
	Median		3.50	
	Variance		0.47	
	Std. Deviation		0.69	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		1.00	
	Skewness		-0.39	0.16
	Kurtosis		-0.07	0.32

The results in Table 4.12 show that the mean = 3.35 was close to the median = 3.50. Therefore, despite the negative skew (skew -0.39), the results were normally distributed. The mean and median close to three suggested that attitudinal characteristics were moderate because basing on the scale used, three represented undecided or moderate. The low standard deviation = 0.69 suggested low dispersion in the responses. The curve in Figure 4.3 confirms the suggested normality.

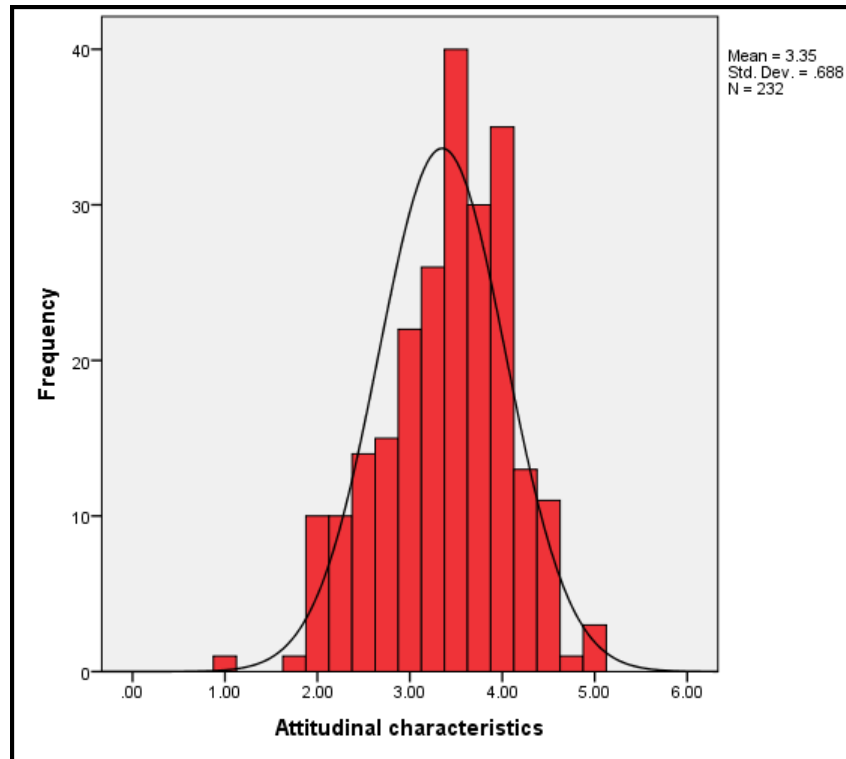


Figure 4.3: Histogram for Attitudinal Characteristics

Figure 4.3 shows normal distribution of the responses obtained from the respondents. This means that the data obtained on attitudinal characteristics could be subjected to linear correlation and regression and appropriate results obtained.

In the open responses of the questionnaire, the respondents were asked to comment on their ability to handle challenges on their farms. The respondents revealed that on the farms they faced a number of challenges some of which they could handle and others they could not. For instance one respondent stated, *“I am able to handle problems such as weeds, most pests and some diseases. However, some epidemics like the recent army worm I could not handle it and it damaged my crops very badly.”* Another respondent noted, *“I easily handle challenges with in my control such*

as weeds, rodents, crop diseases and fertilising. However, problems such as drought are much of time out of my control because sometimes even irrigation efforts fail to maintain the crops.”

Another farmer stated, *“I have been able to control weeds and diseases on my farm, mulch and irrigate short term crops specifically tomatoes and cabbages. This has helped me to get increased yields.”* The views presented above show that farmers made effort to solve challenges on their farms although they still had a number of challenges they could not handle.

In the interviews with the government officials, several responses were given in respect to attitudinal characteristics. The Sub County chief stated, *“Farmers facemany challenges but through sensitisation from responsible government officials, farmer groups and own initiatives, the farmers make effort to overcome challenges they experienceon their farms.”* Similarly, an extension officer stated, *“Interventions help to improve attitudinal characteristics of farmers. Such interventions include those of farmer groups by the farmers are plan together how to meet market demands hence tackling aspects of sustainable production like adopting better pest or disease control, soil fertility maintenance and water conservation practices.”* Another extension officer revealed that farmers improved the challenge of quality of their out puts with help of different stakeholders by obtaining quality seeds such as those of maize seeds, good pineapple suckers, coffee seedlings, cassava stems, chicken and good quality animal seeds-piglets through a proper supply chain management managed by government officials, farmer groups and by farmers themselves. The views above show that farmers made effort to solve challenges they faced on the farms. This finding concurs with the descriptive statistics results which revealed farmers had some moderate attitudinal characteristics.

4.5.3.2 Regression Analysis of Attitudinal Characteristics of a Farm Owner and Performance of Household Farm Enterprises

To establish whether attitudinal characteristics of a farm owner had an effect on performance of household farm enterprises, a regression analysis was done. The results were as in Table 4.13.

Table 4.13: Regression Model for Attitudinal Characteristics of a Farm Owner and Performance of Household Farm Enterprises

	Standardised Coefficients Beta (β)	Significance (p)
Attitudinal characteristics of a farm owner	0.486	0.000

Adjusted $R^2 = 0.223$
 $F = 71.108, p = 0.000$

a. Dependent Variable: attitudinal characteristics of a farm owner

The results in Table 4.13 show that, attitudinal characteristics of a farm owner explained 23.3% of the joint variation in wealth creation (adjusted $R^2 = 0.223$). This means that 76.7% of the variation was accounted for other factors other than those considered in this model. The results suggest that the Hypothesis Three (H3) stating that there is a positive significant relationship between attitudinal characteristics of a farm owner and performance of household farm enterprises was accepted ($\beta = 0.486, p = 0.000 < 0.05$). Therefore, attitudinal characteristics of a farm owner have a positive and significant influence on performance of household farm enterprises.

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Chapter five presents the summaries, discussions, conclusions and recommendations based on the objectives of the study. The chapter also presents limitations of the study and areas for further study.

5.2 Summary of the Findings

5.2.1 Performance of Households Farm Enterprises

Descriptive results revealed that performance of households' farm enterprises was moderate (mean = 3.31). The performance of farms was moderate largely because of limited access to production equipments like watering pumps, generators, tractors and more land. However, schemes such as support from the wealth creation programme, farmers associations and extension programmes helped farmers to achieve some limited level of performance of households' farm enterprises.

5.2.2 Entrepreneurial Personal Characteristics and Performance of Household Farm Enterprises

Descriptive results revealed that entrepreneurial personal characteristics (mean = 3.62) were good. Farmers made effort to improve their performance despite lack of sufficient income. Inferential results revealed that there is a positive significant relationship between entrepreneurial personal characteristics and performance of household farm enterprises ($\beta = 0.408$, $p = 0.000 < 0.05$).

Therefore, the hypothesis which stated that there is a positive significant relationship between personal characteristics and performance of household farm enterprises was accepted.

5.2.3 Demographic Characteristics of the Farm Owner and Performance of Household Farm Enterprises

Descriptive results revealed that the modal percentages were: (59.9%) males, of those that were 30 but below 40 years (40.1%), of the married (76.7%) and of those with primary education (59.1%). Inferential results revealed that gender of the respondent ($\beta = 0.166$, $p = 0.033 < 0.05$) and education level ($\beta = 0.295$, $p = 0.000 < 0.05$) were positive significant demographic characteristics predicting performance of household farm enterprises while age ($\beta = 0.053$, $p = 0.612 > 0.05$) and marital status ($\beta = 0.079$, $p = 0.469 > 0.05$) did not. Therefore, demographic characteristics that included sex and education level predicted performance of farm enterprises but age and marital status did not. In other words, only two aspects of H2 namely gender and education level were accepted as relating to performance of household farm enterprises but age and marital status were rejected.

5.2.4 Attitudinal Characteristics and Performance of Households' Farm Enterprises

Descriptive results revealed that attitudinal characteristics (mean = 3.35) were moderate. Farmers made effort to solve challenges they faced on the farms though they were not able to overcome all of them. Inferential results revealed that there is a positive significant relationship between attitudinal characteristics and performance of household farm enterprises ($\beta = 0.486$, $p = 0.000 < 0.05$). Therefore, the hypothesis to the effect that there is a positive significant relationship between attitudinal characteristics and performance of household farm enterprises was accepted.

5.3 Discussion

5.3.1 Performance of Households Farm Enterprises

The descriptive results on the dependent variable, namely; performance of households' farm enterprises showed that it was moderate. This finding is consistent with the context on which this study was premised that farm production as still low per acreage, farm products of low quality hence farmers suffered insufficient food, lack of something to sell, no money in the pocket and poor feeding (Mukasa, Kabonesa & Martin, 2014). The majority of the farmers were still dependant on rainfall for farming hence variations in food security between seasons (Mayanja et al., 2015). However, the finding was inconsistent with the findings by Adofu et al. (2013) that farmers experienced high cassava productivity as well as the socio-economic emancipation of cassava farmers from the shade of poverty. Similarly, the findings were inconsistent with Herath and Rosli (2014) who revealed that SMEs had the ability to discover new ways to improve existing products, ability to identify new areas for potential growth, to design products that solve current problems and created products that fulfilled customers' unmet needs. However, with the finding of the study consistent with the context in which the study was carried out, performance of households' farms remained unimpressive.

5.3.2 Entrepreneurial Personal Characteristics and Performance of Household Farm Enterprises

The results on the first hypothesis (H2) which stated that there is a positive significant relationship between personal characteristics and performance of household farm enterprises was accepted. This finding is consistent with the propositions of the theory that informed this study that is the

Needs for Achievement theory. According to Alam and Hossan (2003) the theory suggests that personal characteristics such as achievement motivation that is inner feelings of personal accomplishment induce people to be an entrepreneur leading to performance. The finding also is consistent with the findings made by previous scholars. For instance, Abdulwahab and Al-Damen (2015) found out that the entrepreneurs' characteristics had a positive impact on small business success. Al Mamun, Nawawi and Zainol (2016) established that entrepreneurial competencies had a positive effect on informal micro-enterprise performance.

In agreement with the finding of the study, Fairoz et al. (2010) revealed that entrepreneurial orientation significantly correlated with market share growth. Ngugi et al. (2013) revealed that personal characteristic of innovativeness influenced the growth of SMEs. Rosli and Sidek (2013) indicated that the personal characteristic of innovation and process innovation influenced firm performance significantly. Wambugu et al (2015) established that the personal characteristic of risk taking had a positive impact on firm performance. With the finding of the study in agreement with the findings of previous scholars, this means that personal characteristics had an effect on performance of household farm enterprises.

5.3.2 Demographic Characteristics of the Farm Owner and Performance of Household Farm Enterprises

The second hypothesis (H2) that stated that there is a positive significant relationship between demographic characteristics and performance of household farm enterprises tested four demographic characteristics, namely gender, age, education and marital status. With respect to gender, the findings revealed that it was a positive significant demographic characteristic

predicting performance of household farm enterprises. This finding is consistent with the propositions of Upper Echelons Theory which indicates that demographic characteristics are reasonable proxies for underlying differences in cognitions, values, and perceptions. Thus, variables such as gender can be applied to predict the actions of owners/ managers when faced with strategic decisions in organizations (Juravich, 2012). The finding is also consistent with the findings of previous scholars. For instance, Brush et al. (2002) reported that women lacked access to venture capital thus leading to poor performance of their enterprises. Chirwa (2004) who reported that female owned enterprises revealed decreases or no change in the growth of sales than male-owned enterprises. Similarly, Osunsan (2015) found that there was a significant difference in the levels of performance between male owned businesses and females owned businesses with the male owned businesses tending to perform better than those of their female counterpart. However, on the contrary, Malaya (2006) revealed no variations attributed to gender in firm performance. Nevertheless, with the finding of the study in agreement with findings of previous scholars, this means that gender affects performance of farm enterprises.

With regard to age, the findings indicated that it had a positive but insignificant effect on performance of farm enterprises. This finding is in agreement with the findings of previous scholars. For example, Barbieri and Mshenga (2008) revealed that the farmers' age was inversely related to business performance. Farms whose owners were younger earned more than those whose owners were old. Osunsan et al. (2015) revealed no significant relationship between age of owner and performance of small business. Nonetheless, Woldie et al. (2008) revealed that age of the owner/ managers and firm characteristics impacted on the growth of the firm. However, with more

studies indicating supporting the variable, this means that age had insignificant effect on performance of farm enterprises.

Concerning marital status, the findings indicated that it had a positive but insignificant effect on performance of farm enterprises. This finding is consistent with the findings of previous scholars. For instance, Adegbite et al. (2007) revealed that marital status had a negative contribution on the sales revenue. Relatedly, Bula (2012) showed that marital status had no significant influence on the small-scale enterprises. However, Fielden et al. (2000) reported a positive relationship between marital status and business performance. Married men and women worked harder and performed better in managing a business because of the social, financial and psychological support than single, divorced or widowed individuals because of family responsibility and commitments. However, since more previous studies are in agreement with the current study, this means that marital status does not affect performance of farm enterprises.

With respect to education level, the results revealed that it was a positive significant demographic characteristic predicting performance of household farm enterprises. This finding confirms the underpinnings of Upper Echelons Theory which informed this study. The theory according Ng'ang'a et al. (2014) indicates that personal characteristics such as education have a strong influence on the direction and performance of a business. This finding also concurs with Adegbite et al. (2007) who reported that education level had a negative contribution on the sales revenue. Kuncel et al. (2004) indicate that education stimulates the development of the minds and promotes the growth of crystallised intelligence. Woldie et al. (2008) revealed that the education level of the owner/ managers and firm characteristics had an influence on the growth of the firm. However,

Bula (2012) found out that education level had no significant influence on the small-scale enterprises. Nevertheless with the finding of the study in agreement with previous scholars, this means that education level predicted performance of household farm enterprises.

5.3.3 Attitudinal Characteristics and Performance of Household Farm Enterprises

The results on the third hypothesis (H3) stating that there is a positive significant relationship between attitudinal characteristics and performance of household farm enterprises was accepted. This was consistent with the findings made by previous scholars. For instance, Elena et al. (2015) revealed a significant relationship between the attitudinal characteristics of locus of control and success of the SMEs. Similarly, Rum (2012) revealed that locus of control stimulated innovation increasing the performance of small and medium enterprises. Belgacem (2015) revealed that the attitudinal characteristic of pro-activeness was positively and significantly associated with firm performance. Likewise Oni (2012) indicated a significant correlation between entrepreneurial pro-activeness and performance. Al Mamun et al. (2016) revealed that the attitudinal characteristics of self-efficacy had a significant positive effect on micro-enterprise performance. Consistently, Herath and Rosli (2014) showed that efficacious entrepreneurs performed highly and bounced back in constrained environments. Lajin and Zainol (2015) revealed that entrepreneurial self-efficacy influenced organisational performance. With the finding of the study supported by previous scholars, this means that attitudinal characteristics and performance of household farm enterprises

5.4 Conclusions

Based on the study on the findings the following conclusions were drawn;

5.4.1 Objective One: To establish the relationship between entrepreneurial personal characteristics and performance of household farm enterprises in Kikamulo Sub county Nakaseke district.

Good entrepreneurial personal characteristics are imperative for the performance of household farm enterprises. Such characteristics include having the zeal to achieve big things, a strong urge, enjoying competing, capacity to set challenging tasks and make trials. Such entrepreneurial characteristics enable farmers to adopt new farming techniques, improved seeds, technologies and learn from successful farmers.

5.4.2 Objective Two: To find out the relationship between demographic characteristics of the farm owner and performance of household farm enterprises in Kikamulo Sub county Nakaseke district.

Probable demographic characteristics that have a bearing on the performance of household farm enterprises are gender and education level. However, other demographic characteristics such as age and marital status play an insignificant role. Therefore, gender of the respondents and education levels are the demographic characteristics that predict performance of household farm enterprises.

5.4.3 Objective Three: To determine the relationship between attitudinal characteristics of a farm owner and performance of household farm enterprises Kikamulo Sub county Nakaseke district.

Attitudinal characteristics determine the performance of household farm enterprises. Such characteristics include resilience in face of difficult tasks, ability to depend on oneself in decision

making, creativity and ability to solve difficult problems. Therefore, attitudinal characteristics determine the performance of household farm enterprises

5.5 Recommendations

In the view of the study conclusions, the following recommendations were made;

5.5.1 Objective One: To establish the performance of household farm enterprises in Kikamulo Sub county Nakaseke district.

Government agencies, farmers associations and all stakeholders should access farmers with watering pumps, generators, tractors and more land to enhance performance of households' farm enterprises. This will help farmers to achieve a higher level of performance of households' farm enterprises.

5.5.2 Objective Two: To establish the relationship between entrepreneurial personal characteristics and performance of household farm enterprises in Kikamulo Sub county Nakaseke district.

Government agencies, farmers associations and all stakeholders involved in promotion of performance of household farm enterprises should make effort through training, sensitisation and empowerment to develop good entrepreneurial personal characteristics of farmers. Such characteristics that need to be developed include arousing the zeal in the farmers to achieve big things, creating in them a strong urge, competition through farmer competition activities and motivating farmers to set challenging tasks and always make trials.

5.5.3 Objective Three: To find out the relationship between demographic characteristics of the farm owner and performance of household farm enterprises in Kikamulo Sub county Nakaseke district.

Government agencies, farmers associations and all stakeholders in training, sensitisation and empowering of farmers, should emphasise gender focussed approaches. Gender focus is important women lack of control to land while on the other hand training enables farmers to adopt modern approaches that increase performance of the farm.

5.5.4 Objective Four: To determine the relationship between attitudinal characteristics of a farm owner and performance of household farm enterprises Kikamulo Sub County Nakaseke District.

Government agencies, farmers associations and all stakeholders involved in promotion of performance of household farm enterprises should make effort through training, sensitisation and empowerment to develop appropriate attitudinal characteristics. Such characteristics include making farmers develop resilience in face of difficult tasks, ability to depend on oneself in decision making, creativity and ability to solve difficult problems.

5.6 Limitations of the Study

This study makes significant contributions as far as identifying the relationship between farm owner's personal characteristics and performance of households' farm enterprises are concerned. However, a number of gaps emerged that cannot be ignored. For instance, the study considered farmers in one rural sub county in central Uganda, this might limit generalisation of the findings in different areas and regions of the country because of differences in orientations of the people

because of their location. Still, this study predominantly used a quantitative approach and this inhibited in-depth analysis.

5.7 Areas for Further Research

This research has explored the relationship between farm owners' personal characteristics and performance of household farm enterprises. Further research should focus on the following areas;

1. Future research intending out to carry out studies on farm owner's personal characteristics and performance of households' farm enterprises should consider a survey in different regions of the country. This will be significant for the generalisation of the findings to different parts of the country.
2. Researchers intending to carry out studies on farm owner's personal characteristics and performance of households' farm enterprises should also adopt the qualitative approach. This will enable in-depth analysis of the study problem.
3. This study considered only three farmer characteristics that relate to performance of household farm enterprises yet evidently there are other many such as business experience (Blackman, 2003), principal occupation, number of association memberships (Barbieri & Mshenga, 2008), futuristic mindset, adaptability and commitment (Singh & Rahman, 2013), personal values, moral support network and professional support network (Sarwoko et al., 2013) among others. Future research should consider relating these variables to performance of household farm enterprises in the context of Uganda.

REFERENCES

- Abdulwahab, M. H., & Al-Damen, R. A. (2015). The impact of entrepreneurs' characteristics on small business success at medical instruments supplies organizations in Jordan. *International Journal of Business and Social Science*, 6(8), 164-175.
- Abrams, D., Vauclair, M., & Swift, H. S. (2011). *Predictors of attitudes to age across Europe*. Department for Work and Pensions Research Report No 735. Retrieved from: <http://research.dwp.gov.uk/asd/asd5/rrs-index.asp>
- Adegbite, S. A., Ilori, M. O., Irefin, I. A., Abereijo, I. O., & Aderemi, H. O. S. (2007). Evaluation of the impact of entrepreneurial characteristics on the performance of small scale manufacturing industries in Nigeria. *Journal of Asia Entrepreneurship and Sustainability*, 3(1), 1-22.
- Adofu, I., Shaibu, S. O., & Yakubu, S. (2013). The economic impact of improved agricultural technology on cassava productivity in Kogi State of Nigeria. *International Journal of Food and Agricultural Economics*, 1(1), 63-74.
- Adofu, I., Shaibu, S. O., & Yakubu, S. (2013). The economic impact of improved agricultural technology on cassava productivity in Kogi State of Nigeria. *International Journal of Food and Agricultural Economics*, 1(1), 63-74.
- Agbinou, C. U., Nwekpa, K. C., & Gerald, E. (2015). Certificate acquisition and entrepreneurial productivity for Sub Saharan Africa competitiveness: Evidence from entrepreneurs in Nigeria. *American Journal of Social Issues and Humanities*, 5(2), 462-472.

- Akanbi, S. T. (2013, December). Familial factors, personality traits and self-efficacy as determinants of entrepreneurial intention among vocational based College of Education Students in Oyo State, Nigeria. *The African Symposium*, 13(2), 66-76.
- Al Mamun, A., Nawi, N. B. C., & Zainol, N. R. B. (2016). Entrepreneurial competencies and performance of informal micro-enterprises in Malaysia. *Mediterranean Journal of Social Sciences*, 7(3), 273-281.
- Al Mamun, A., Nawi, N. B. C., & Zainol, N. R. B. (2016). Entrepreneurial Competencies and performance of informal micro-enterprises in Malaysia. *Mediterranean Journal of Social Sciences*, 7(3), 273-281.
- Andersen, T. J., Garvey, M., & Roggi, O. (2014). Managing risk and opportunity: The governance of strategic risk-taking. Oxford, UK: Oxford University Press.
- Anik, A. R., Rahman, S., & Sarker, J. R. (2017). Agricultural productivity growth and the role of capital in South Asia (1980–2013). *Sustainability*, 9(3), 470-494.
- April, K. A., Dharani, B., & Peters, K. (2012). Impact of locus of control expectancy on level of well-being. *Review of European Studies*, 4(2), 124-137.
- Barbieri, C., & Mshenga, P. M. (2008). The role of the firm and owner characteristics on the performance of agritourism farms. *Sociologia ruralis*, 48(2), 166-183.
- Barr, J., & Dowding, L. (2015). *Leadership in health care*. Los Angeles, USA: Sage.
- Belgacem, B. (2015). Entrepreneurial orientation and firms' performance: The case of Tunisian companies. *International Journal of Economics, Commerce and Management*, 3(3), 1-5.
- Bird, D. K. (2009). The use of questionnaires for acquiring information on public perception of natural hazards and risk mitigation—a review of current knowledge and practice. *Natural Hazards and Earth System Sciences*, 9(4), 1307-1325.

- Blackman, A. J. (2003). *Entrepreneurs: Interrelationships between their characteristics, values, expectations, management practices and SME performance*. Unpublished PhD Thesis Griffith University, Gold Coast Campus, Ghana.
- Boone, H. N., & Boone, D. A. (2012). Analyzing likert data. *Journal of extension*, 50(2), 1-5.
- Bordens, K. S., & Abbott, B. B. (2011). *Research design and methods: A process approach* (8th ed.). New York, USA: The McGraw-Hill Companies, Inc.
- Bove, R. M., Vala-Haynes, E., & Vallengia, C. R. (2012). Women's health in urban Mali: Social predictors and health itineraries. *Social science & medicine*, 75(8), 1392-1399.
- Brush, C.G., Carter, N.M.; Greene, P.G.; Hart, M.H. and Gatewood, E. 2002. The role of social capital and gender in linking financial suppliers and entrepreneurial firms: A framework for future research. *Venture Capital*, 4(4): 305-23.
- Bula, H. O. (2012). Performance of women in small-scale enterprises (SSEs): Marital status and family characteristics. *European Journal of Business and Management*, 4(7), 85-99.
- Chell, E. (2008). *The entrepreneurial personality: A social construction* (2nd Ed). London, UK: Psychology Press.
- Chenhall, R. H., & Langfield-Smith, K. (2007). Multiple perspectives of performance measures. *European Management Journal*, 25(4), 266–282.
- Chete, L. N., Adeoti, J. O., Adeyinka, F. M., & Ogundele, O. (2014). *Industrial development and growth in Nigeria: Lessons and challenges* (No. 2014/019). WIDER Working Paper.
- Cheung, W. S., & Hew, K. F. (2009). A review of research methodologies used in studies on mobile handheld devices in K-12 and higher education settings. *Australasian Journal of Educational Technology*, 25(2), 153-183.

- Chirwa, E. W. (2004). *Gender and performance of micro and small enterprises in Malawi*. Wadonda Consult Working Paper WC.
- Clayton, S. (2014).
- Collins, C. J., Hanges, P. J., & Locke, E. A. (2004). The relationship of achievement motivation to entrepreneurial behaviour: A meta-analysis. *Human Performance*, 17(1), 95-117.
- Devetak, I. Glažar, S. S., & Vogrinc, J. (2010). The role of qualitative research in science education. *Eurasia Journal of Mathematics, Science & Technology Education* 6(1), 77-84.
- Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives*, 38(1), 105-123.
- Dunaway, T. M. (2013). *Farm financial performance of Kentucky Farms*. Master's dissertation, University of Kentucky, Lexington, USA.
- Edwards, R., & Holland, J. (2013). *What is qualitative interviewing?* London, UK: Bloomsbury Publishing Plc.
- Ekou, J. (2013). Eradicating extreme poverty among the rural poor in Uganda through poultry and cattle improvement programmes: A review. *Journal of Development and Agricultural Economics*, 5(11), 444-449.
- Elena, M., Chavez, E., Carlos, R., Córdova-Rangel, A., Moreno-García, E., & Garcia-Santillan, A. (2015). Empirical Evidence on Locus of Control among Owner and Manager and Its Relation to Success Firms. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, 6(3), 177-184.
- Fairoz, F. M., Hirobumi, T., & Tanaka, Y. (2010). Entrepreneurial orientation and business performance of small and medium scale enterprises of Hambantota District Sri Lanka. *Asian Social Science*, 6(3), 34-46.

- Ferree, M.M. 2010. Filling the glass: Gender perspectives on families. *Journal of Marriage and Family*, 72, 420-439.
- Fielden, S. L., Davidson, M. J., & Makin, P. J. (2000). Barriers encountered during micro and small business start-up in North-West England. *Journal of Small Business and Enterprise Development*, 7(4), 295-304.
- Flynn, D. (2015). Sustainable rice culture in Asia. *World Journal of Social Science*, 2(2), 14-26.
- Franek, M., & Vecera, J. (2008). Personal characteristics and job satisfaction. *Ekonomie a Management*, (4), 63-76.
- Günday, G., Ulusoy, G., Kılıç, K., & Alpan, L. (2008). *An integrated innovation model: how innovations are born and what are their impacts on firm performance?* Proceedings of 15th European Operations Management Association (EUROMA) Conference, pp.92-101, Gröningen, The Netherlands.
- Hambrick D (2007). Upper echelons theory: An update. *Academic Management Review*, 32(2): 334–343.
- Harry, M., Mann, P. S., De Hodgins, O. C., Hulbert, R. L., & Lacke, C. J. (2010). *The practitioner's guide to statistics and lean six sigma for process improvements*. John New Jersey, USA: Wiley & Sons.
- Herath H. M. A., & Rosli, M. (2014). Dimensions of entrepreneurial self-efficacy and firm performance. *Global Journal of Management and Business Research*, 14(4), 23-20.
- Hoq, M. Z. (2009). *Innovativeness: Its antecedents and impact on SME business performance*. Retrieved from: <https://ssrn.com/abstract=1851423> or <http://dx.doi.org/10.2139/ssrn.1851423>.

- Ingham-Broomfield, R. (2014). A nurses' guide to Quantitative research. *Australian Journal of Advanced Nursing*, 32(2), 32-37.
- Iselin, E., Sands, J., & Mia, L. (2009). Multi-perspective performance reporting, continuous improvement and organisational performance. *Accounting and Finance Association of Australia and New Zealand (AFAANZ) conference*, Adelaide, Australia.
- Ismail, I., Rahim, N. A., Kamal, M. H. M., Mat, R. C., & Husin, N. (2015). Investigating the needs for achievement, risk taking and tolerance for ambiguity toward entrepreneurial passion among single mother entrepreneur in Malaysia. *Procedia Economics and Finance*, 31, 110-116.
- Juravich, M. F. (2012). *Examining general managers in the North American professional sport context: Upper echelons and logics of action as determinants of performance*. Unpublished Doctoral dissertation, The University of Michigan, Michigan, USA.
- Kelley, K., Clark, B., Brown, V., & Sitzia, J. (2003). Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, 15(3), 261-266.
- Khalid, K., Abdullah, H. H., & Kumar M, D. (2012). Get along with quantitative research process. *International Journal of Research in Management*, 2(2), 15-29.
- Khan, I., Khan, F., Khan, H., Nawaz, A., & Yar, N. B. (2013). Determining the demographic impacts on the organizational commitment of academicians in the HEIs of DCs like Pakistan. *European Journal of Sustainable Development*, 2(2), 117-130.
- Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *Am J Health Syst Pharm*, 65(23), 2276-84.

- Koskei, B., & Simiyu, C. (2015). Role of Interviews, observation, pitfalls and ethical issues in qualitative research methods. *Journal of Educational Policy and Entrepreneurial Research*, 2(3), 108-117.
- Kuncel N. R., Hezlett S. A., & Ones, D. (2004). Academic performance, career potential, creativity, and job performance: Can one construct predict them all? *Journal of Personality and Social Psychology*, 86, 148–161.
- Labaree, R. V. (2009). *Organising your social sciences research paper: Types of research designs*. Retrieved from: <http://libguides.usc.edu/writingguide>
- Lajin, N. F. M., Zainol, F. A. (2015). The effect of entrepreneurial leadership, self efficacy and organizational performance: A Conceptual Paper. *International Academic Research Journal of Social Science* 1(1), 16-24.
- Lindström, M., & Rosvall, M. (2012). Marital status, social capital, economic stress, and mental health: A population-based study. *The Social Science Journal*, 49(3), 339-342.
- Losby, J. L. (2008). *Saving strategies: Decisions and sacrifices low-income parents make to secure a better future for their families*. Unpublished PhD thesis of University of Iowa, Iowa, USA.
- Malaya, M. F. (2006). A Gender-based Analysis of Performance of Small and Medium Printing Firms in Metro Manila. *Journal of International Women's Studies*, 8(1), 83-95.
- Mayanja, M. N., Rubaire-Akiiki, C., Greiner, T., & Morton, J. F. (2015). Characterising food insecurity in pastoral and agro-pastoral communities in Uganda using a consumption coping strategy index. *Research, Policy and Practice*, 5(11), 1-14.
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International journal of qualitative methods*, 1(2), 13-22.

- Moruku, R. K. (2012). Entrepreneurship and performance: An antithetical view of McClelland's ideological need for achievement. *DBA Africa Management Review*, 2(3), 1-24.
- Mugalu, M. (2014, February 26). Nakaseke special economic zone to lift agriculture. *The Observer*. Retrieved from: www.observer.ug/business/.../
- Mugwanya, N. (2014, May 14). Nakaseke farmer reaps big benefits of improved crops. *Daily Monitor*. www.monitor.co.ug
- Mukasa, B., Kabonesa, C., & Martin, A. (2014). *Gender and diversity situational analysis for C: AVA and GLCI projects Uganda country report*. Africa Innovations Institute, Uganda.
- Natalio, M. A., Faria, C. D., Teixeira-Salmela, L. F., & Michaelsen, S. M. (2014). Content validation of a clinical assessment instrument for stair ascent and descent in individuals with hemiparesis. *Brazilian Journal of Physical Therapy*, 18(4), 353-363.
- Ng, T. W., & Feldman, D.C. (2009). How broadly does education contribute to job performance? *Personnel psychology*, 62(1), 89-134.
- Ng'ang'a, P. K., Ngugi, P. K., & Odhiambo, R. (2014). Influence of owner/manager personal characteristics on the demand for business development services by micro and small enterprises: Perspectives from the upper echelons theory. *International Journal of Business and Social Science*, 5(6), 108-114.
- Ngugi, J. K., McOrege, M. O., & Muiru, J. M. (2013). The influence of innovativeness on the growth of SMEs in Kenya. *International Journal of Business and Social Research*, 3(1), 25-31.
- Ogbo, A. I., Orga, C. C., & Ukpere, W. I. (2012). Motivation strategies for technical staff in Nigeria. *African Journal of Business Management*, 6(39), 10463-10471.

- Ojugo, A. A., Ugboh, E., Onochie, C. C., Eboka, A. O., Yerokun, M. O., &Iyawa, I. J. B. (2013). Effects of formative test and attitudinal types on students' achievement in mathematics in Nigeria.*African Educational Research Journal*, 1(2), 113-117.
- Okhomina, D. A. (2010). Entrepreneurial postures and psychological traits: The sociological influences of education and environment. *Research in Higher Education Journal*, 8, 1-20.
- Oladipo, S. E., &Ajufo, B. I. (2013). What factors predict need achievement among undergraduates in Nigeria? *Journal of Sociological Research*, 4(1), 61-67.
- Oltmann, S. (2016, May). Qualitative Interviews: A Methodological Discussion of the Interviewer and Respondent Contexts. *In Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 17(2). Retrieved from: www.qualitative-research.net ›
- Oni, E. O. (2012). Relevance of Entrepreneurial proactiveness on business performance: Nigerian companies experience. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 1(6), 92-108.
- Oppong, S. (2014). Upper echelons theory revisited: The need for a change from causal description to casual explanation. *Management: Journal of Contemporary Management Issues*, 19(2), 169-183.
- Oso, W. Y., &Onen, D. (2009). *Writing Research Proposal and Report: A handbook for Beginning Researchers*. Nairobi, Kenya: Sitima Printers and Stationers Ltd.
- Osunsan, O. K. (2015). Gender and Performance of Small Scale Enterprises in Kampala, Uganda.*Asian Journal of Social Sciences & Humanities*, 4(1), 55-65.
- Osunsan, O. K., Kinyatta, S., Baliruno, J. B., &Kibirige, A. R. (2015). Age and performance of small business enterprises in Kampala, Uganda.*International Journal of Social Science and Humanities Research*, 3(1), 189-196.

- Patricio, A., & Neyland, S. (2013). *Ten important personal characteristics of entrepreneurs*. Hiscox Inc. Retrieved from: www.hiscox.com/small.../
- Prabhu, V. P., McGuire, S. J., Drost, E. A., & Kwong, K. K. (2012). Proactive personality and entrepreneurial intent: Is entrepreneurial self-efficacy a mediator or moderator? *International Journal of Entrepreneurial Behavior & Research*, 18(5), 559-586.
- Reidsma, P., Ewert, F., & Lansink, A. O. (2007). Analysis of farm performance in Europe under different climatic and management conditions to improve understanding of adaptive capacity. *Climatic Change*, 84(3-4), 403-422.
- Rosli, M. M., & Sidek, S. (2013). The Impact of Innovation on the Performance of Small and Medium Manufacturing Enterprises: Evidence from Malaysia. *Journal of Innovation Management in Small & Medium Enterprises*, 1 -16. doi: 10.5171/2013.885666
- Roy, S. D., & Zeng, W. (2014). *Social multimedia signals: A signal processing approach to social network phenomena*. New York, USA: Springer.
- Rum, M. (2012). Locus of control, innovation, performance of the business people in the small business and medium industries in south Sulawesi. *Journal of Business, Economic and Accountancy*, 15(3). Retrieved from: <https://journal.perbanas.ac.id/index.php/jebav/article/view/108>.
- Sajilan, S., M., UIHadi, N., & Tehseen, S. (2015). Impact of entrepreneur's demographic characteristics and personal characteristics on firm's performance under the mediating role of entrepreneur orientation. *Review of Integrative Business and Economics Research*, 4(2), 36-52.

- Salleh, F., & Ibrahim, M. D. (2011). Demographic characteristics differences of risk taking propensity among micro and small business owners in Malaysia. *International Journal of Business and Social Science*, 2(9), 149-153.
- Sarfaraz, L., & Faghih, N. (2011). Women's entrepreneurship in Iran: a GEM based-data evidence. *Journal of Global Entrepreneurship Research*, 1(1), 45-57.
- Sarfaraz, L., Faghih, N., & Majd, A. A. (2014). The relationship between women entrepreneurship and gender equality. *Journal of Global Entrepreneurship Research*, 4(1), 1-11.
- Sarwoko, E., Surachman, S., Armanu, A., & Hadiwidjojo, D. (2013). Entrepreneurial characteristics and competency as determinants of business performance in SMEs. *IOSR Journal of Business and Management (IOSR-JBM)*, 7(3), 31-38.
- Singh, H. R. & Rahman, H. (2013). Traits of successful entrepreneurs. *IJSR - International Journal of Scientific Research*, 2(11), 292-294.
- Širec, K., & Močnik, D. (2010). How entrepreneurs' personal characteristics affect SMEs' growth. *Vpliv podjetnikovih osebnih lastnosti na rast MSP. Naše gospodarstvo*, 56(1), 2-12.
- Sivo, S. A., Saunders, C., Chang, Q., & Jiang, J. J. (2006). How low should you go? Low response rates and the validity of inference in questionnaire research. *Journal of the Association for Information Systems*, 7(6), 351-414.
- Snowdon, R. (2009). Gender trouble: Coming to terms with postmodern feminist approaches. *The School of Historical Studies Postgraduate Forum E-Journal*, Edition 7. Retrieved from: Dostupné z: http://www.societies.ncl.ac.uk/shspgfe/ed_6.htm
- Suter, P. N., & Bwisa, H. M. (2013). Entrepreneurial characteristics that influence success among Second Hand Motor Vehicle Dealers in Kenya: A Case Study of Ngong Road Area.

- International Journal of Academic Research in Economics and Management Sciences*, 2(5), 105-120.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55.
- Teddlie, C., & Yu, F. (2007). Mixed methods sampling a typology with examples. *Journal of mixed methods research*, 1(1), 77-100.
- Thapa, A. (2015). Determinants of microenterprise performance in Nepal. *Small Business Economics*, 45(3), 581-594.
- Uganda Bureau of Statistics – UBS (2014). Sub county development programme implementation of the community information system (CIS): Nakaseke local government report based on CIS summary results. Retrieved from: www.ubos.org/onlinefiles/uploads/ubos/
- Waha, K., Zipf, B., Kurukulasuriya, P., & Hassan, R. M. (2016). An agricultural survey for more than 9,500 African households. *Scientific Data*, 3. Available at: doi: 10.1038/sdata.2016.20
- Waha, K., Zipf, B., Kurukulasuriya, P., & Hassan, R. M. (2016). An agricultural survey for more than 9,500 African households. *Scientific data*, 3, 1-8.
- Wambugu, A. W., Gichira, R., Wanjau, K. N., & Mung'atu, J. (2015). The relationship between risk taking and performance of small and medium agro processing enterprises in Kenya. *International Journal of Economics, Commerce and Management United Kingdom*, 3(12), 441-445.
- Wambugu, A. W., Gichira, R., Wanjau, K. N., & Mung'atu, J. (2015). The relationship between pro-activeness and performance of small and medium agro processing enterprises in Kenya. *International Journal of Economics, Commerce and Management*, 3(12), 58-72.

- Wik, M., Pingali, P., & Broca, S. (2008). Global agricultural performance: past trends and future prospects. *Background Paper for the World Development Report*. Available at: citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.697.2420
- Woldie, A., Leighton, P., & Adesua, A. (2008). Factors influencing small and medium enterprises (SMEs): An exploratory study of owner/manager and firm characteristics. *Banks and Bank Systems*, 3(3), 5-13.
- Zohrabi, M. (2013). Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and Practice in Language Studies*, 3(2), 254-62.

APPENDICES

APPENDIX A: TABLE FOR DETERMINING SAMPLE SIZE FOR A POPULATION OF A GIVEN SIZE

<i>N</i>	<i>S</i>	<i>N</i>	<i>s</i>	<i>N</i>	<i>s</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	168	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	198	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note: *N* = population size

S = sample size

Source: Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities.

Educational and Psychological Measurement, 30, 607-610.

APPENDIX B: QUESTIONNAIRE FOR HOUSEHOLD HEADS

Uganda Management Institute

P. O. Box 20131

Kampala

Dear Respondent

I Musa Semuwemba I am a student of Uganda Management Institute currently undertaking research on the topic “Farm owner’s personal characteristics and performance of household farm enterprises: The case of Kikamulo Sub County, Nakaseke District, Uganda.” The information sought is required only for academic purposes. Your participation in this study is voluntary but necessary for the success of this work. I request you to accept to participate in this study for the success of the research. Confidentiality will be ensured for information provided by ensuring anonymity.

Sincerely

.....

MUSA SEMUWEMBA

SECTION A: Background Information

Please tick the option you consider is the most appropriate to you;

A1. My village

.....

A2. Size of my land

1	2	3
Less than 5 acres	5-10 acres	10 acres and above

A3. My means of production

1	2	3
Strictly human labour	Low level mechanised	Highly mechanised

A4. My main farm activity

1	2	3
Largely Crop growing	Largely Livestock farming	Both

Section B: Household Farm Performance (DV)

This section presents items on household farm performance. You are kindly requested to indicate the extent to which you agree or disagree with the statements here under using the scale where, 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree.

B	Household Farm Performance	SD	D	U	A	SA
		1	2	3	4	5
B1.1	I produce enough food to feed my family throughout the year					
B1.2	My farm production enables my family to afford a balanced diet					
B1.3	My family rarely buys food that can be produced on the farm locally					
B1.4	My family rarely skips meals because of lack of food					

B1.5	The products of my farm are attractive to the buyers because of their high quality					
B1.6	My land productively meets my household's necessities					
B1.7	My produce for the market brings enough income to cater for my family needs					
B1.8	My farm enables me to save money for family contingency problems					
B1.9	I spare money from sale of farms products to make investments					
B1.10	My farm is the source of my household's livelihood					
B1.11	I have improved my production on the farm because of the earns I obtain from it					
B1.12	My farm activities are diversified					

B1.13 In a few words, give your opinion on how you appreciate the performance of your farm.

.....

.....

.....

.....

Section C: Personal Characteristics (IV)

This section presents items on personal characteristics and is divided into three sections, namely: entrepreneurial characteristics, demographic characteristics and attitudinal characteristics. You are kindly requested to indicate the extent to which you agree or disagree with the statements here under using the scale where, 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree.

C1	Entrepreneurial characteristics	SD	D	U	A	SA
		1	2	3	4	5

C1.1	I am always labouring to achieve big things on my farm					
C1.2	I try to make improvements for each mistake or failure I suffer on the farm					
C1.3	I have a strong urge to connect with other successful farmers					
C1.4	I enjoy competing with other farmers in better production methods					
C1.5	I set challenging tasks for myself on my farm					
C1.6	I make trials of new crops or livestock on my farm					
C1.7	Unaccepted weather vagaries do not distract me from my farming activities					
C1.8	When one season fails, that does not discourage my effort					

C1.9. In summary, what is your comment on your personal effort on the farm?

.....

.....

.....

.....

C2. Demographic characteristics

This subsection presents items on Demographic characteristics of which six are un-dimensional in nature and seventh question which is a summary assessment. On the following items, please supply the following facts about yourself.

C2.1 your gender

Male	Female

C2.2 Your age

Below 30 years	30-40 years	40-50 years	Above 50 years

C2.3 Your marital status

Single never married	Married	Widowed	Divorced

C2.4 Your education level

Post secondary	Secondary	Primary	Non-formal only

C2.5 What is your assessment of how your personal demographic characteristics affect the performance of your farm?

C1	Attitudinal characteristics	SD	D	U	A	SA
		1	2	3	4	5
C3.1	I keep working on difficult tasks on my farm without needing encouragement from others					
C3.2	I rarely depend on others for decisions in managing my farm					
C3.3	When I am involved in something on my farm I try to find out all I can about what is going on elsewhere about it					
C3.4	I trust in my own farm skills					
C3.5	On the whole, I am satisfied with myself in handling my farm issues					
C3.6	I can always manage to solve difficult problems on my farm					
C3.7	I am confident that I can deal efficiently with unexpected events on my farm					
C3.8	My farm activities satisfy my expectations					

C1.9. In summary, what is your comment on your ability to handle challenges on your farm?

.....

.....

.....

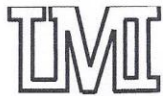
.....

APPENDIX C: INTERVIEW GUIDE

1. What is your observation on the quality of produce by the farmers?
2. What is your opinion on the performance of household farming in this area?
3. What factors affect performance of household farms in your opinion?
4. What personal characteristics in your opinion do affect performance of household farms?
5. How do the following entrepreneurial personal characteristics affect farmers' productivity in this area?
 - i. Achievement
 - ii. Risk taking
 - iii. Innovativeness
6. How do the following demographic characteristics relate to household farm production in this area?
 - i. Gender
 - ii. Age
 - iii. Marital status
 - iv. Education level
 - v. Years one is involved in household farming
 - vi. One's monthly from the farm
7. What is your assessment of the effect of people's attitudinal characteristics on the performance of their household farms?
8. Are there farmers in the area with performing profitable household farms?
9. And if yes, what common personal characteristics do they share?

10. Are there potentially profitable struggling household farms? And if yes, what common personal characteristics are you observing amongst their farm owners?
11. And what common characteristics are shared by the owners of poorly performing household farms in this area.

APPENDIX D: INTRODUCTION LETTER FROM UMI



UGANDA MANAGEMENT INSTITUTE

Telephones: 256-41-4259722 /4223748 /4346620
256-31-2265138 /39 /40
256-75-2259722
Telefax: 256-41-4259581 /314
E-mail: admin@umi.ac.ug

Plot 44-52, Jinja Road
P.O. Box 20131
Kampala, Uganda
Website: <http://www.umi.ac.ug>

Your Ref:

Our Ref: G/35

17 October, 2017

TO WHOM IT MAY CONCERN

MASTERS IN MANAGEMENT STUDIES DEGREE RESEARCH

Mr. Musa Semuwemba is a student of the Masters in Institutional Management and Leadership of Uganda Management Institute 6th Intake 2015/2016, **Reg. Number 15/MIML/WKD/0010**.

The purpose of this letter is to formally request you to allow this participant to access any information in your custody/organization, which is relevant to his research.

Her research Topic is: *"Farm Owners' Personal Characteristics and Performance of Household Farm Enterprises: The case of Homesteads in Kikamulo Sub County, Nakaseke District, Uganda"*.

Yours Sincerely,

Stella Kyohairwe (PhD)
AG. HEAD, POLITICAL AND ADMINISTRATIVE SCIENCE

APPENDIX E: AUTHORISATION LETTER FOR FIELD RESEARCH



UGANDA MANAGEMENT INSTITUTE

Telephones: 256-41-4259722 /4223748 /4346620

256-31-2265138 /39 /40

256-75-2259722

Telefax: 256-41-4259581 /314

E-mail: admin@umi.ac.ug

Plot 44-52, Jinja Road

P.O. Box 20131

Kampala, Uganda

Website: <http://www.umi.ac.ug>

Your Ref:

Our Ref: G/35

11th October, 2017

Mr. Musa Semuwemba
15/MIML/KLA/WDK/0010

Dear Mr. Semuwemba,

FIELD RESEARCH

Following a successful defense of your proposal before a panel of Masters Defense Committee and the inclusion of suggested comments, I wish to recommend you to proceed for fieldwork.

Please note that the previous chapters 1, 2 and 3 will need to be continuously improved and updated as you progress in your research work.

Wishing you the best in the field.

Yours Sincerely

Stella Kyohairwe (PhD)

AG. HEAD, POLITICAL AND ADMINISTRATIVE SCIENCE

APPENDIX F: VALIDITY TEST RESULTS

Validity Results for Entrepreneurial characteristics

Judges	Relevant	Irrelevant
Judge 1	7	1
Judge 2	7	1

8

$$CVI = 7 + 7 = 14 \div 2 = 7$$

$$7 \div 8 = 0.875$$

Validity Results for Attitudinal characteristics

Judges	Relevant	Irrelevant
Judge 1	6	2
Judge 2	7	1

8

$$CVI = 6 + 7 = 13 \div 2 = 6.5$$

$$6.5 \div 8 = 0.813$$

Validity Results for Performance of Household Farm

Judges	Relevant	Irrelevant	
Judge 1	9	3	
Judge 2	10	2	
			12

$$\text{CVI} = \frac{9 + 10}{2} = 9.5$$

$$9.5 \div 12 = 0.792$$

APPENDIX G: RELIABILITY TEST RESULTS

Reliability Statistics for Entrepreneurial characteristics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.803	0.807	8

Summary Item Statistics for Entrepreneurial characteristics			
	Mean	Variance	N of Items
Item Means	3.617	0.061	8
Item Variances	1.249	0.082	8
Inter-Item Covariances	0.422	0.018	8

Reliability Statistics for Attitudinal characteristics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.722	0.726	8

Summary Item Statistics for Attitudinal characteristics			
	Mean	Variance	N of Items
Item Means	3.350	0.061	8
Item Variances	1.395	0.044	8
Inter-Item Covariances	0.341	0.033	8

Reliability Statistics for Performance of Household Farm		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.768	0.773	12

Summary Item Statistics for Performance of Household Farm			
	Mean	Variance	N of Items
Item Means	3.311	0.107	12
Item Variances	1.447	0.052	12
Inter-Item Covariances	0.313	0.064	12