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Master's Thesis of Public Administration

**Factors Affecting Youth
Participation in the
NAADS Program:**

**A Case Study of Katenga sub-county,
Mitooma District, Uganda**

**NAADS 농업 프로그램의 청년층 참여에
영향을 미치는 요인에 관한 연구
: 우간다 미투마지방과 카텐가지역을 중심으로**

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Graduate School of Public Administration

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**Factors Affecting Youth
Participation in the
NAADS Program:
A Case Study of Katenga sub-county,
Mitooma District, Uganda**

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Abstract

Agriculture sector remains the lifeline for most African developing countries, not only as a source of livelihood to citizens but also as a back bone of the respective economies. This is so true in light of the principle of economics: one should engage in production of goods and services in which they have a comparative advantage. However, recent decades have witnessed dwindling production in the agricultural sector, main reason being an ageing farmer population engaged in subsistence farming. Research shows that the youth, many and unemployed as they are, shun this sector despite deliberate government interventions to have them on board. A number of authors argue that this behavior is attributed to material factors, that is, land and farm inputs. This conventional view seems logical but is it good enough?

The central objective of this thesis is to identify and examine other factors, specifically, perceptual factors which have not received much attention in spite of their importance in explaining why youth shun agricultural programs. For this purpose, a survey was conducted from 105 respondents from Katenga sub-county, Mitooma district, Uganda, focusing on the NAADS program. Data was collected using administered questionnaires, coded in MS excel and analyzed using logistic regression to determine whether both material and perceptual factors are significant in explaining the low participation of the youth in the NAADS programs.

The findings confirm that perceptual factors are equally significant as the material factors in explaining the likelihood of the youth to participate

or not in the agricultural programs. In particular, it was discovered that negative attitudes reinforced by community influence and lack of knowledge in basic farming techniques are major inhabitants, in addition to the lack of land and limited access to farm inputs.

It is of utmost importance therefore that policy-makers direct their attention towards alleviating these hurdles if the potent force of the youth is to be tapped into agriculture sector. The appropriate strategies include establishing agriculture institutions targeting the rural out-of-school youth to enhance their knowledge in good farming practices, mass sensitization to change the attitudes towards agriculture, assisting the youth to access agro-credit and focusing on farming enterprises that do not require large land. This will provide an all-round solution not only by increasing agricultural production but also by providing the youth with a sustainable and meaningful source of livelihood.

Key words: *NAADS program, Material factors, Perceptual factors, Participation of the youth, Agriculture*

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List of abbreviations

CIA	Central Intelligence Agency
FAO	Food and Agriculture Organization
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MDGs	Millennium Development Goals
NAADS	National Agricultural Advisory Services
PEAP	Poverty Eradication Action Plan
PMA	Plan for Modernization of Agriculture
UBOS	Uganda Bureau of Statistics
UN	United Nations
UNDP	United Nations Development Programme
USA	United States of America

CHAPTER ONE

1.0 Introduction

The developing world today faces a challenge of having a young and dependent population. According to World Bank (2009), there are 1.2 billion youth (aged 15 - 24) world wide and 87% (1 billion) of these are in developing countries. 80% live in Africa and Asia where they make up 50% of the total population. More strikingly, 50% of these youth survive on less than US\$ 2 a day and 90% of them in the developing world are unemployed. Uganda in particular, happens to have the youngest population in the World with a heavy dependent burden (The New Vision, 14th Dec, 2012). According to the State of Uganda Population Report (UBOS, 2012), 78% of Ugandans are below the age of 30. The same report indicates that of the estimated 34 million people, 6.5million are in the age group of 18 – 30 years, making up 21.3%. This age group is projected to grow to 7.7million young people by 2015.

The UN, for statistical consistency across regions, defines ‘youth’, as those persons between the ages of 15 and 24 years, without prejudice to other definitions by Member States. Therefore the definition varies according to context and region. For purposes of this study, I will adopt the Ugandan definition of youth as embedded in the 1995 Constitution and the National Youth Policy of 2001 which defines the youth as those persons between the ages of 18 and 30.

The population explosion mentioned above means a rising demand in food. On the other hand, as countries struggle to achieve MDG No. 1 which is

eradicating extreme poverty and hunger, research shows that agriculture is faced with the challenge of an ageing population (Hosenally, 2011), putting the average farmer age at 55 (UNDP, 2010). This means that in Uganda where according to Uganda National Household Survey (UBOS, 2009), the youth make up 86% of the national labor force and 82% of these are in rural areas, ensuring that the young participate in agriculture is a necessary condition not just for sustainable development but for human survival.

The development of agriculture and its contribution to farmer's income depends to a large extent on youth and adult farmer's adoption of improved farming technologies (Umeh&Odom, 2011). In developing countries like Uganda, the only sector that has the potential to tap into this huge labor force and bring about meaningful and sustainable rural development is agriculture (Akinboye, 2007; Fadayomi, 1998). Indeed as literature review shows, various studies have concluded that rural youth have a vital role in agricultural and rural development (Gameren& Hinojosa 2006; Malatest, 2002; Odhiambo, 2001;Ommani&Chizari, 2006). The studies also consent to the fact that the youth, if well nurtured, have characteristics of making a potent force in agricultural development because of their proneness to innovations, having minimal risk aversion, less fear of failure, less conservative, greater physical strength, faster rate of learning and a high social propensity (Umeh *et al*, 2011).

In face of all this, the Government of Uganda has attempted to attract the youth to participate in agriculture through various programs but most notably the National Agricultural Advisory Services (**NAADS**), a program

targeting all the youth in farming in rural areas. The program which started in 2002 intends to offer trainings in modern farming practices, however, 10 years down the road, very few youth have shown interest despite the enormous financial investment of over US\$ 665 million (NAADS Secretariat, 2012). As of 2012, only 25% of the target population had joined the program (The New Vision, 5th June, 2012).

Much as this set back could be attributed to a number of reasons, a review of various studies carried out in Nigeria, Iran, Malaysia, the Caribbean and South Africa which is expounded in the chapter on Literature review has indicated that the major factors that influence youth's participation in such programs are material in nature, that is, land ownership and access to farm inputs such as tractors, improved seed varieties, animal hybrids and so forth (Akinboye, 2007; Daudi, 2009; Hall, 2009; Mark McCracken, 2011).

There is however another group of factors that some authors like Abdullah (2013), Bertrand (1926), D'Silva *et al* (2010) allude to as having an impact on the youth decision-making process. This is in terms of what and why they may choose to participate or not in a certain program. These are categorized as perceptual factors and they are; knowledge, attitude and awareness. Although they have not had much attention in regard to how they impact on youth's participation in agriculture, they are believed to influence youth's behavior.

The research is concerned that a lot of emphasis has been placed in material factors (land and farm inputs) over shadowing the importance of perceptual factors (knowledge, attitude and awareness). It is the researcher's

view that material factors alone do not explain wholly the youth's behavior in rural areas and one can only be able to have a full understanding of why they shun agricultural programs like the NAADS by examining the perceptual factors as well. This study set out principally to test the assumption that the low participation of the youth in the NAADS program can effectively be explained by not just material factors but a combination of both material and perceptual variables. Secondly, there is also a number of youth who joined but later dropped out of the program, the study will examine why this has been the case. Last but not least, the study will explore strategies to address the dilemma.

1.1 Statement of the Problem

Millennium Development Goal No. 1 is to eradicate poverty and hunger by 2015; this explicitly shows the importance of agriculture in sustainable development. We also note the fact that it employs 36.4% of the World's total Labor force (CIA World facts, 2012) and over 75% in Sub-Saharan Africa. In Uganda alone, agriculture employs 73% of the total labor force (The Newvision, May 11, 2013). Considering Uganda's vision for 2040 which is "*A transformed Ugandan society from a peasant to a modern and prosperous country within 30 years*" (Uganda National Planning Authority, 2013) and its strategy of transforming farmers from subsistence to commercial farmers, the participation of the youth in this sector is of utmost importance. Unfortunately, Uganda too faces the challenge of an ageing farmer population with the youth's participation now standing at a paltry 25% (The New Vision,

5th June, 2012). It is therefore clear that to realize the above target, the youth have to be attracted to agricultural production because they have the potential and the propensity to sustain the sector. Henceforth, identifying factors that inhibit their participation and developing strategies of attracting them is of utmost importance.

1.2 Research Objectives, Questions and Hypotheses

Having realized that agriculture is the most suited sector to salvage the economies of developing countries like Uganda and noting that youth's participation is paramount in this initiative, it goes without a doubt that problem-identification is rooted in the question – why do the youth shun agriculture programs. Therefore, the central theme of this study is to examine the constraints to youth's participation in the NAADS program in Mitooma district, Uganda. The specific objectives are;

- a) To compare and contrast the socio-economic attributes of the youth who participate and those who do not in the NAADS program.
- b) To explore the significance of material and perceptual factors to the youth's participation in the NAADS program.
- c) To identify strategies of increasing youth's participation in agricultural programs in general and the NAADS in particular.

In light of the above objectives, the study is structured to answer the following research questions;

a) Are there any differences in the socio-economic attributes of youth who participate and those who do not participate in the NAADS program?

The essence of this question is to internalize the characteristics of the youth who are participating in the program and compare them with those who are not to ascertain if there are differences or similarities and how they impact on the choices these two groups make. These attributes include age, gender, education, income level, occupation, land ownership and their perception towards agriculture.

b) Do material and perceptual factors effectively explain the likelihood of a youth to participate or not in the NAADS program?

As earlier noted, this is the core of my research. It is my opinion that studying materials factors alone cannot provide a full picture because as literature shows, human behavior is also explained by the knowledge and attitude one possesses towards a particular event. It is therefore crucial that we analyze our targets' decision-making process by putting into consideration both the economic and perceptual factors.

c) In what ways can the youth's participation in agricultural programs be increased?

This study can only be meaningful and useful to development practitioners if it provides solutions based on evidence assessed. Therefore, at the tail end of this study, I provide recommendations based on my field findings.

The hypotheses to test the above questions are:

H0: Only material factors influence youth's participation in the NAADS program.

Ha: Participation in the NAADS program is influenced by a combination of material and perceptual factors.

As the literature review shows, many authors have concentrated on material factors as the only factors with significant impact on the youth's participation in agriculture programs, as a result perceptual have received minimal attention. It is therefore my intention to find out whether the existing knowledge fully explains why the youth do not participate in agriculture programs as the null hypothesis shows or if it is a combination of both material and perceptual factors.

1.3 Significance of the Study

Much as the world is now concerned with what seem to be the most challenging issues of the 21st century such as terrorism/extremism, nuclear war/Weapons of mass destruction, the Israel question; sustainable development can never be achieved if people are hungry and poor. And as long as agriculture is relegated to the aged group of people, poverty and hunger plus youth's unemployment will remain a monster amongst us. Therefore, any effort towards resolving this challenge is invaluable.

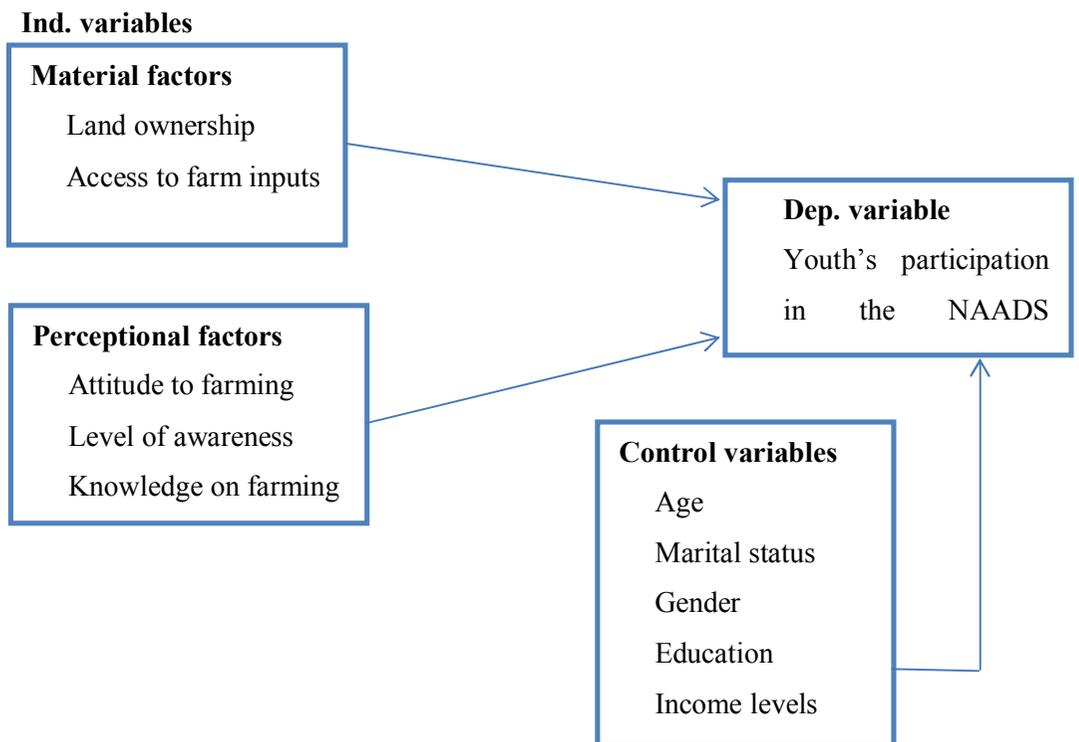
This study is intended to contribute to further understanding of the reason why the youth's participation in agricultural production has remained low. In particular, it focused on measuring the extent to which material and perceptual factors highlighted above have on the youth's participation in

agricultural production. It is the expectation of the researcher that the results will be helpful in designing the appropriate strategies that can help to solve the hurdles inhibiting the youth's involvement in agricultural programs.

1.4 Conceptual Framework

The foregoing conceptual frame work is meant to provide a visual presentation of the main issues to be studied, that is, the key factors, concepts or variables and the presumed relationship among them. It basically shows the main independent variables to be studied and highlights how they are linked to the participation of the youth in the NAADS program. Its design has been guided by the ideas in the existing literature on the topic under study.

Figure 1: Diagram showing the Conceptual framework



As the diagram shows, the socio-economic environment from where the youth grow has a large bearing on what they become and ultimately the choices they make in life. The existing literature shows that the choice of a person to participate or not participate in a program is an outcome of a decision-making process that is guided by a combination of the means available to that person and the outcome they expect. The means in this case is the economic capacity (access to factors of production), that is, land and farm inputs; on the other hand, the projection of outcomes is a function knowledge, attitude and level of awareness available to the individual. I will label these two groups of variables as material – for land and farm inputs and perceptual for knowledge, attitudes and awareness.

As the available literature indicates, the importance of land and farm inputs in influencing the youth's decision to participate in agricultural programs is paramount (Hall, 2009; Ommani, 2010; UNDP & FAO, 2010). Although the literature on perceptual factors is scanty, a number of authors have highlighted the influence of attitude on decision making (Abdullah, 2013; D'Silva *et al.*, 2010) in matters of action or inaction. Brinkley (2006) acknowledges that knowledge is as important as other resources such as physical capital when one is considering to engage in a productive activity. The level of awareness on the other hand has been advanced by authors like Daudi (2009) as a prerequisite to people's participation in any development program. It is therefore my contention that to understand why the youth have shunned participation in the NAADS program, we should first carefully internalize these variables and how they relate to the target group. This

certainly involves examining their demographic characteristics and the socio-economic environment that shapes them.

CHAPTER TWO

LITERATURE REVIEW

2.1 The Relevance of Agriculture to Developing Economies

In international trade, the rule of the thumb is that a country engages in production of goods and services in which it has a comparative advantage. By all standards, Uganda has a comparative advantage in agriculture measuring by the available factors of production. No wonder, the sector employs 73% of the total labor force and contributes 23.9% to GDP (CIA Facts, 2012). The role of agriculture in the rural economy is of tremendous importance that a synonymy between agricultural and rural development has been put across by many scholars (Umeh& Odom, 2011). Akinboye (2007) &Fadayomi (1998)observed that sustainable rural development can only be achieved if there is sustainable growth in rural income and standards of living which could be brought about primarily by agriculture. This is especially true of developing tropical countries like Uganda where in addition to the favorable natural environment, there is a big and youthful labor force waiting to be tapped into. Various studies have concluded that rural youth have a vital role in agricultural and rural development (Gameren& Hinojosa, 2006; Malatest, 2002; Odhiambo, 2001;Ommani&Chizari, 2006).

Agriculture is known to be the primary source of income and survival in the area of study although other economic activities such as trading, building and construction, arts and crafts, transport industry are available. But

by virtue of its location, its tropical climate and economic environment, growing of cash crops such as coffee, bananas, pineapples and rearing of animals such as cattle, goats and enterprises such as poultry are very strategic. On realization of this fact, Government of Uganda started the NAADS program to tap into this resource potential.

2.2 What is the NAADS?

The acronym NAADS stands for the National Agricultural Advisory Services which is a national program aimed at providing farmers with practical knowledge and skills in modern farming practices. The NAADS is being implemented in pursuit of the national development framework of Poverty Eradication Agenda, which is guided by the Poverty Eradication Action Plan (PEAP). The NAADS overall supervision is vested in the Ministry of Agriculture Animal Industry and Fisheries (MAAIF). The program was officially launched in March 2002.

The NAADS is one of the seven components under the Plan for Modernization of Agriculture (PMA), the planning framework of the government for the transformation of subsistence agriculture to market oriented farming for commercial production. The NAADS program aims to redress past shortcomings in the provision of agricultural extension services through far reaching reforms and innovative approaches in service delivery (The NAADS Act, 2001; <http://www.agriculture.go.ug> as of Oct 2013). As provided for under the National Agricultural Advisory Services (NAADS) Act of 2001, the mandate of the NAADS is to contribute to the

modernization of the agricultural sector in order to increase total factor productivity of both the land and labor for the benefit of the farmers. Its objectives and functions are to:

- a) Enhance and promote meaningful participation of farmers especially the youth and women in agricultural sector.
- b) Promote food security, nutrition and household incomes through increased productivity and market oriented farming;
- c) Empower farmers to access and utilize contracted agricultural advisory services;
- d) Develop a private sector-led agricultural advisory delivery services.

To achieve its objectives, the NAADS has teams of technical staff at National, District and sub county level. The team at sub county level is composed of agricultural extension workers whose mandate is to provide technical knowledge in modern farming practices and the other is a team of development workers whose role is to ensure that the target population is organized in farmers' groups which share similar objectives and can easily seek and access agricultural technical services.

2.3 Who Are the Youth?

The concept of the youth has been interpreted in various ways from society to society (Umehet *al*,2011). Some societies, organizations and scholars define the youth either on the basis of age while others use characteristics associated with stages in human growth to categorize the youth. D'Souza (1970) asserts that the youth, the state of being young, is a

transitional period in personality development that bridges the years between child hood and adulthood. And as such the age varies among authorities - for some societies it is between the years of 10 – 20 (Shingi, 1980), to others it is between 10 – 30 (Anonymous, 2000), the Malysian Youth Council defines the youth as people between the ages of 15 – 40 (Norhlilmatur *et al*, 2013) while to others, as long as one remains a bachelor or spinster, they are a youth.

Nevertheless, there is a general agreement that the youth possess unique capabilities, dynamism, strengths, adventure, ambition, hilarity and so forth (Akwiwu *et al*, 2005; Udah, 2001; Waldie, 2004). In other words, the youth comprise a potent force that once tapped into appropriately can transform the economy. Although the definition varies depending on subject of interest, for purposes of this study, I adopt the definition by the Uganda National Youth Policy (2001) which puts the ages of the youth between 18 – 30 years. As earlier noted, this age group forms the bulk of the Ugandan population.

2.4 Rationale for Participation of the Youth in Development Programs

In a general terms, many argue that participation is a means of empowerment of the people (Ghai,1988; Gran, 1983; Oakley, 1987; Oakley & Marsden, 1984) that involves, among other things, transformation of attitude and values (Uddin, 1990), a possibility that people can more actively control their own lives (Barimah& Nelson, 1994; Rappaport, 1981), help themselves

to make decisions that are right for them (Merzel, 1991) and speak up their perspectives and voices (Stuart and Bery, 1996).

Youth's Participation according to Checkoway&Gutiérrez (2006) is defined as a process of involving young people in institutions and decisions affecting their lives. Participation in this case is active, voluntary and informed (Common Wealth Secretariat, 2005). In the 1990s, the term youth participation came to be applied to a set of principles of youth development emphasizing active support for the growing capacity of young people (Hamilton & Hamilton, 2004). Checkoway&Gutiérrez (2006) argued that participation can strengthen human development, build organizational capacity and facilitate change in society. Kim & Sherman (2006) also asserted rightly that the conditions are now ripening for young people to move from the margins – to the very center of productive life. In response to this trend, organizations are shifting the focus of their research and practice from viewing the youth as problems to viewing them as resources.

Agboola (1998) maintains that participation is a process by which the person in question takes part in the initiation, implementation and evaluation of a decision, policy, program, project or in general terms any undertaking. Ogbuozobe (1997) concluded that the totality of community development process and movement is embedded in the principle of citizen participation which enjoys whatever is done to improve the welfare of the people. By implication, since the youth form the bulk of the citizenry, their participation in development programs is not debatable. Similarly, Shrimpton (1989) referring to the experience of rural development programs, stated that

youth's participation in the design and management of a program greatly enhances the likelihood of program success due to improved goodness of fit and increased sustainability.

Akinboye (2007) raised a very important point that in recent African history, in many communities, there was a vibrant community development process through participation of both youth and community elders. It is remarkable to note that during these periods, community infrastructures were constructed out of community efforts, with immersed youth's participation. It is therefore true that youth's participation is a pre-requisite for overall sustainable community development (UN, 2000). Indeed in many homesteads, more children meant more sources of labor and increased capacity to generate food to sustain livelihoods.

The main idea behind the youth' participation in programs is that real development must be people-centred (Finsterbusch&Wicklin, 1989). Earlier, Korten&Carner (1984) had argued forcefully that the development process should not ignore the creative initiatives of people as they are the primary development resource. Finsterbusch&Wicklin (1989) add that participation can lead to initiatives on the people's part and allow them to assume ownership of the development process.Both Aibel (1991) and Stone (1989) stress that people's participation helps individuals resolve their problems by themselves.

For a country like Uganda therefore to attain meaningful economic stability, the agricultural sector must be vibrant and this is only possible if the youth are encouraged to imbibe farming as a noble occupation (Ojediran,

1997). Unfortunately available statistics indicate that most developing countries in Africa and Uganda in particular have failed to incorporate the youth fully in agricultural development programs (Ijere, 2002). As a result, there is a general trend of declining agricultural production, increase in cases of hunger, rising youth unemployment and general poor standards of living (Okwocheetal, 2009). It is therefore of great concern to find out what is responsible for this trend and design strategies to reverse it.

2.5 Why Do the Youth Shun Agriculture Programs

A number of authors have attempted to identify factors that influence the youth's behavior in the field of agriculture. Most have dueled on examining factors that are directly linked to agriculture as sector since they are requirements that must be possessed for someone to participate. These factors are land ownership and access to farm inputs, hereafter termed as material factors which I explain on below;

2.5.1 Land ownership

Ownership of land relates to land tenure. Land tenure can simply be defined as a mode of holding or occupying land (Burke, 1976). The importance of land ownership throughout history has been documented. In Uganda, like many other agricultural economies, the fundamentals of land ownership focus on possession and control of arable land for productive agriculture. In Uganda the predominant ways of owning land are Freehold (private), Mailo (Squatters), Lease and Customary (family land/inheritance) (Land Act, 1998). Majority of youth in my area of study own land by

customary means and this dictates the decision-making powers they have over that land. Normally, a parent passes on land to the child either temporarily or permanently and as a result some own land as family and others as private property. The intention of this research is to ascertain how the mode of ownership or lack of ownership affects one's participation in agriculture.

2.5.2 Access to farm inputs

The term Farm inputs as it applies to the area of agriculture refers to the resources that are used in agricultural production such as; chemicals, equipment, feeds, improved seed varieties, animals breeds and energy (McCracken, 2011). Most farm inputs are purchased and over time, prices of farm inputs have increased making it a vital factor to one's capacity to participate in farming meaningfully. In this research, we are assessing the significance of one's capacity to acquire farm inputs and its impact on their likely participation in the NAADS program.

That said, there is recognition that although these factors enhance one's economic capacity and potential to participate in agriculture sector, they are not sufficient in the decision making process that determines action or inaction. Whereas there is not a lot of literature pointing out these other factors, psychologists agree that one's perception has a large bearing in explaining their behavior. It is on this note that I want to introduce in perceptual factors shown below and investigate if they relate to the youth' behavior and their low participation in agriculture.

2.5.3 Attitude

According to D'Silva *et al.* (2010), attitude can be defined as an evaluative disposition based upon cognitions, affective reactions, behavioral intentions, and past behaviors and it describes general individual feelings of favor or disfavor towards a specific behavior. In other words, attitudes refer to an individual's degree of like or dislike for an item. Therefore, attitudes depict positive or negative views, actions or inactions towards a person, place, thing or event and in this case, participation in the NAADS program. This idea is reinforced by the findings of Abdullah (2013) who argues that negative attitude is a major factor in explaining the youth's behavior. Therefore, if attitude plays a big role in motivating the behavior of the youth, then it is valid to expect that it has an impact on their participation in agriculture.

2.5.4 Knowledge

There is no universal definition of knowledge but for purposes of this study, we shall adopt the concept by Bertrand (1926) that knowledge might be defined as a belief which is in agreement with the facts. Also, according to Wikipedia, Knowledge is a familiarity with someone or something, which can include facts, information, descriptions, or skills acquired through experience or education. It can refer to the theoretical or practical understanding of a subject. It can be implicit (as with practical skills or expertise) or explicit (as with the theoretical understanding of a subject); it can be more or less formal or systematic.

Knowledge can also be termed as the confident understanding of a subject, potentially with the ability to use it for a specific purpose (<http://en.wikipedia.org/wiki/Knowledge>). The role of knowledge as compared with natural resources, physical capital and low skill labor has taken on greater importance (Brinkley, 2006). Considering the nature of my study population, I take knowledge to refer to the formal or informal understanding of basic technical practices in farming gained mainly through experience. It is my expectation that the level of knowledge one has in the sector is crucial in their decision-making process to participate or not in a particular program.

2.6 Findings on Specific Youth Development Initiatives

In his study, Daudi (2009) found out that in countries such as Great Britain, Netherlands, Denmark, Germany, USA, Tanzania, the involvement of the youth in agriculture had contributed significantly to agriculture development and empowering the citizenry and particularly the youth to be self-sufficient in food production. He however, points out that poor land tenure is a major hindrance to the youth involvement in agricultural production. And he goes on to describe poor land tenure as the lack of land to be used on a sustainable basis owing to lack of ability to own it on a permanent basis. He goes ahead to say that low levels of awareness also contribute a great deal in inhibiting youth's participation in agricultural programs. That aside, his research was much more interested in the roles the

youth play in agricultural production and therefore was unable to explore in great detail factors that inhibit their participation.

Nevertheless, unfavorable land tenure system was also identified by Hall (2009) who found out that it made it a risky venture for young women and men to engage in farming because they cannot make decisions regarding how to use the land and sometimes do not have control over the harvests since they do not have full rights over it. He adds on that as a result, they are not able to engage in permanent crop growing which has a better commercial value as compared to growing of annual crops. Hall also cites lack of access to farm inputs such as improved animal breeds and seeds as a major challenge. He therefore advocates for better safety nets for farmers and just land laws as very important to attract youth participation in the sector.

A survey conducted by UNDP & FAO (2010) in the Caribbean region found out that there are very low levels of youth's participation in agriculture and an ageing farming population in the sector with an average farmer in the Caribbean region above 55years. From the study, the major factors inhibiting participation of the youth in agricultural production are lack of land and limited access to farm inputs such as improved seed varieties animal breeds. They therefore proposed creation of agricultural funds, developing farmer to farmer interactive programs and re-education of the youth through the school system on the potential of agriculture as a means of enhancing their participation.

Another study in Nigeria's Ebonyi state by Umeh& Odom (2011) found out that much as the development of agriculture in rural areas depends

to a large extent on the youth and adult farmers' adoption of improved farming technologies, there was a wide disparity between the youth and adult participation in the sector and they attributed this disparity to constraints faced by the youth which are; negative perception towards farming, unfavorable land tenure system and lack of finance. Also according to the findings of Akinboye (2007) in a study of 80 rural youth in Nigeria, there are three major factors that militate against the youth's participation in agricultural production. He found that 25% identified lack of recognition of the youth as a formidable labor-force in community development as a big hindrance. And 23.8% attributed it to negative parental influence which in turn affects their perception towards agriculture. This negative influence contends that agriculture is not a profitable venture and therefore not worth taking for the youth who want to be financially successful. The researcher also found out that there is no significant relationship between age, gender, marital status, membership to a social organization and level of awareness and youth's decision to participate in agricultural production.

Another study conducted in Iran by Ommani (2010) found out that there is a significant relationship between youth's perception and participation. According to the study, negative beliefs accounted for the low levels of youth's participation in development programs. This finding is confirmed by the survey of Antoine (2011) who studied the youth' perception on government programs and concluded that the decisions of an individual to become actively engaged in anything may be predicted by examining their beliefs about it. This view is further advanced by Hosenally (2011) who in

study of Agriculture, ICT and the Youth in Kenya found out that the youth have a negative perception on agriculture and this has resulted in an ageing farmer population.

2.7 Summary

From the above studies, I realize that the researchers have a general agreement on the fact that the involvement of the youth in agriculture is very poor and needs to be revamped. Most authors point to the fact that poor land tenure coupled with limited access to farming inputs are outstanding obstacles to the youth's participation in agriculture production. These researchers agree that the youth do not own land on a private basis, they rather access family land. For this reason they are not able to make independent decisions regarding on how to use this land. As a result they have not been able to get involved in meaningful agriculture production since their parents do not allow them to engage in long term agricultural enterprises which would be more profitable. There is also consensus on the fact that the youth do not have access to farming inputs such as tractors, irrigation equipment, improved animal and seed varieties and so forth. This is because, these require huge capital which they do not have and yet they cannot easily access agricultural credit.

Much as these arguments are logical, some scholars argue that human behavior cannot be explained by only material factors. It is also true that there are some of the youth who do have meaningful access to land and capital but this has not guaranteed their participation in agriculture programs, though it

would a suitable venture for them. It is on this note that I would like to emphasize that, although perceptual factors, that is, knowledge, attitude and level of awareness have not received much attention in the field of agriculture, it is possible that they have a big influence in explaining the youth's behavior. It is therefore my contention that low the youth participation in agriculture can be fully understood by examining both material and perceptual factors unlike other authors and policy-makers who have concentrated on the former.

This would be essential in developing appropriate strategies to address the problem and ensure that many youth are attracted in the agricultural sector. I also wish to add that most of the available studies focused on interviewing the youth who are already engaged in rural agricultural programs and therefore the views of those youth who have not joined or dropped out of such programs are not captured. It is also very vital to compare the socio-economic attributes of youth who participate and those who do not so as to determine whether these attributes account for the different behaviors.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This study mainly by uses quantitative analysis since the researcher collected statistics to be used as evidence in analyzing the problem at hand. The study is also ex post facto (Fortune & Reid, 1999) in nature because the researcher is studying the impact already caused by independent variables on the dependent variable. And in any case, the researcher does not have control over the independent variables but the intention is to study the significance of these factors in inhibiting the participation of the youth in the NAADS program. It is a one-time single case study and employed field survey technics to collect data from a cross section of respondents.

3.2 Area of Study and Target Population

The study was conducted in Katenga sub-county, Mitooma district in western Uganda. This sub county is a typical rural setting with agriculture as the main occupation of the population. The main agriculture activities carried out include coffee and banana planting, a few tea plantations and animal rearing (cattle and goats). Other enterprises conducted on a small scale include pine apple, millet, maize and potato growing and these are basically on subsistence scale.

As earlier noted, the central objective of this research is to examine why the youth have increasingly shunned participation in the

NAADS programs despite the commitment of enormous financial and human resources government of Uganda. Therefore, the study population is the youth in rural communities who qualify to participate in the NAADS program but have not despite the fact that they are not engaged in any other productive activity. As earlier shown, the target is the out-of-school youth in the age group of 18 – 30 years, male and female in the area of study. The lower limit is set as the minimum age for participation in the NAADS program (The NAADS Act, 2001) because; first it is the age of consent in Uganda (Constitution of Uganda, 1995) and secondly, below that age, one is considered to be actively in school.

The sub county has a population of about 30,000 people (Sub county Development plan, 2012) and of these, 2,600 are youth who would be the expected active participants in the program. In light of the fact that it is not feasible for the researcher to study the whole population, sampling is always done so that results can be generalized on the whole population of interest as long as prescribed procedures are followed to the letter (Earl Babbie, 2012). So, the researcher used probability sampling and in particular random sampling to select the respondents in this study. The table below shows the sampling frame and sample size of the study.

Table 1: Sampling frame and sample size of the study.

	Targeted population	Target sample size(%)	Actual sample (N)
Participant youth	2000	5	77
Dropouts	500	5	23
Non-participant youth	100	5	5

Total	2600		105
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A sampling frame was obtained from the sub county records showing the youth who are involved in the NAADS program as well as those not yet involved in the program. In order to capture views of those who dropped out of the program, deliberate attempts using purposive sampling were made to interview them with emphasis on why they did drop out.

3.3 Data Collection and Analysis

As earlier said, the researcher collected quantitative data and to effectively do this, an interview questionnaire was designed and dispatched to the study area since the researcher was far away from the country of study. The researcher then carefully appointed a research assistant who in turn selected 5 interviewers; the interviewers then identified respondents using the random sampling techniques and administered the questionnaires accordingly. The research assistant then cross checked the questionnaires for any missing data or inconsistencies under the guidance of the researcher. Upon satisfaction that the questionnaires had been fully answered and queries sorted out, they were sent back to the researcher who then did coding and analysis.

The researcher used MS excel program for coding and generating descriptive statistics, that is, frequency counts, bar graphs and pie charts. For inferential statistics, the researcher used SAS statistical program to do regression analysis and in particular, logistic regression since the dependent variable was categorical.

3.4 Reliability and Validity

Research results can be meaningful and applicable only if they stand the trial of reliability. According to Joppe (2000), reliability is the extent to which results are consistent over time and an accurate representation of the total population under study. That is to say, if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. In short, it is the consistency and stability of scores over time and across raters. The term embodies replicability and repeatability of results. Kirk & Miller (1986) identify three types of reliability as;

- the degree to which a measurement, given repeatedly, remains the same,
- the stability of a measurement over time and
- the similarity of measurements within a given time period.

Although test re-test method has been advanced as a form of ensuring reliability, many authors agree that it is still hard to measure, but it can be achieved as long as the researcher follows the standard procedures in developing the questionnaire or instrument and administering it (Earl Babbie, 2012) and this I did. I therefore believe that the measure I employed is highly reliable.

Researchers also assert that although the researcher may be able to prove that the research instrument has repeatability and internal consistency, and, therefore reliability, the instrument itself may not be valid (Nahid, 2003). Validity determines whether the instrument measured exactly that which it was intended to measure. In other words, did the research instrument hit in

bull's eye? (Joppe, 2000). To put it into perspective, you cannot use a thermometer to measure blood pressure. To achieve validity, the design of the questionnaire was guided by information available in literature review and consideration of exact information required to fulfill the intentions of the study.

3.5 Ethical Consideration

Keeping ethics of research is a virtue that must be held in high regard by all scholars especially in respect to respondents in any research undertaking. As such the researcher did observe these ethics primarily by seeking consent of respondents as required and ensuring confidentiality for all those who participated.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF RESEARCH FINDINGS

4.1 Introduction

After successful collection and cleaning of data, I used Excel and SAS statistical programs to analyze it in order to answer my research questions. These questions are in regard to socio-demographic characteristics of the youth who participate and others who do not participate in the NAADS program; this is meant to draw a comparison between the two categories. Second and most important of all is to examine whether or not material as well as perceptual factors have a significant impact youth's participation in the NAADS program. This is meant to provide us with an all-round understanding of factors that inhibit the youth's involvement in agriculture programs and design strategies to counter the trend. The findings are presented in two forms; descriptive and inferential statistics. The former are represented by frequency counts, pie charts and bar graphs while the latter are analyzed using logistic regression in SAS statistical program.

4.2 Socio-Economic Characteristics of Respondents

As per the statistics, it turns out that majority of the youth are not participating in the program with the rate at 23% plus a 5% dropout figure. This is despite the fact that 62% of the respondents reported being engaged in agriculture. It turned out that majority of the youth (74%) are engaged in food

crop farming at a subsistence level. This dilemma will be a subject of discussion in the latter part of this chapter. Needless to mention, 77% of the respondents agreed that they have access to land although they reported limited decision-making powers regarding utilization of that land. As a matter of fact, only 35% have full ownership of land though small in acreage, while 62% live on family land and the rest pay rent for land usage. From the statistics, it is also worth noting that the literacy levels of the youth are improving as 49% reported to have reached Middle to high school while 26% have a certificate and 17% are at least diploma holders and above.

Last but not least, 54% of respondents in this research were male while 46% were females. Also majority of the respondents (59%) were aged between 25 – 30 while the rest (41%) were between the ages of 18 & 24. As regards marital status, 60% were married while 40% are single. Surprisingly, much as it seems that the youth are marrying at a young age, there were no reports of divorce or separation. This information is summarized in the table below.

Table 2: Socio-economic characteristics of respondents

Variable	Frequency (N)	Percentage (%)
<i>Gender</i>		
Male	57	54
Female	48	46
Total	105	100
<i>Age group</i>		
18 – 24	43	41
25 – 30	62	59
Total	105	100
<i>Marital status</i>		

Single	42	40
Married	63	60
Total	105	100
<i><u>Education</u></i>		
Primary	08	08
O – A’Level	52	49
Certificate	27	26
Diploma+	18	17
Total	105	100
<i><u>Land access</u></i>		
Yes	77	73
No	28	27
Total	105	100
<i><u>Land ownership</u></i>		
Private	27	35
Family	48	62
Rental	02	03
Total	77	100
<i><u>Occupation</u></i>		
Agriculture	62	59
Trade	15	14
Transport	15	14
Building & Construction	03	03
Arts & Craft	04	04
Others	06	06
Total	105	100
<i><u>Participation in the NAADS</u></i>		
Yes	23	22
No	77	73
Dropped out	05	5
Total	105	100

Source: Field survey, 2013

4.3 Comparison of Socio-Economic Characteristics of Participant and Non-Participant Youth

In this section, I want to draw a comparison of respondents in regard to the socio-economic characteristics of two groups, that is, the group that

reported that it participates and the other that reported that it does not participate in the NAADS program. The information summarized in the table below.

Table 3: A summarized comparison of socio-economic characteristics of participants and non-participants

Variables	Participants(%)	Non-participants (%)
<u>Gender</u>		
Male	48	54
Female	52	46
Total	100	100
<u>Age group</u>		
18– 24	39	50
25 – 30	61	50
Total	100	100
<u>Marital status</u>		
Single	13	48
Married	87	52
Total	100	100
<u>Education level</u>		
Primary	4	9
Middle-High Sch	43	51
Certificate	26	26
Diploma+	26	15
Total	100	100
<u>Monthly income</u>		
0 –100,000	26	47
100,001 – 250,000	35	32
250,001 – 500,000	22	12
Above 500,000	17	09
Total	100	100
<u>Access to land</u>		
Yes	100	66
No	0	34
Total	100	100
<u>Type of land ownership</u>		

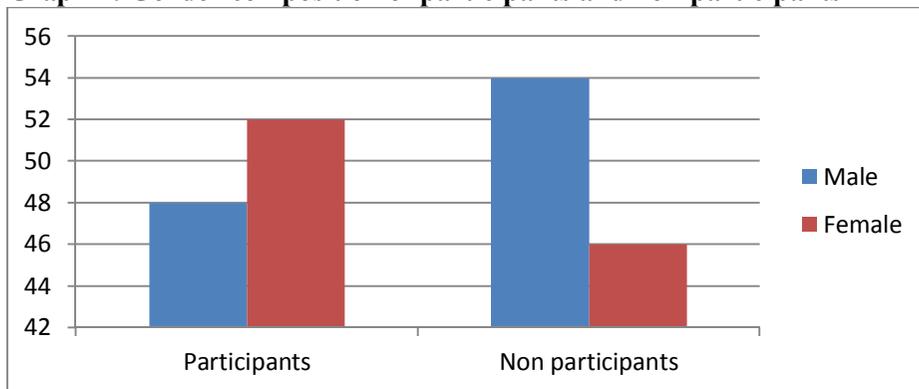
Private	87	21
Family	13	75
Rental	0	4
Total	100	100

Field survey, 2013

From the above statistics, one realizes that whereas there are a number of huge disparities between the youth who participate in the NAADS program and those who do not participate, there are also some similarities. These are expressed in detail in the following paragraphs.

The field statistics show that in both categories, females are in a fair position as compared to males. There are more female participants at 52% as compared to males at 48%. In the non-participant category, on the other hand, males are 54% versus 46% for females. In other words, females are more likely to participate in the program unlike their male counterparts. This can be graphically illustrated below.

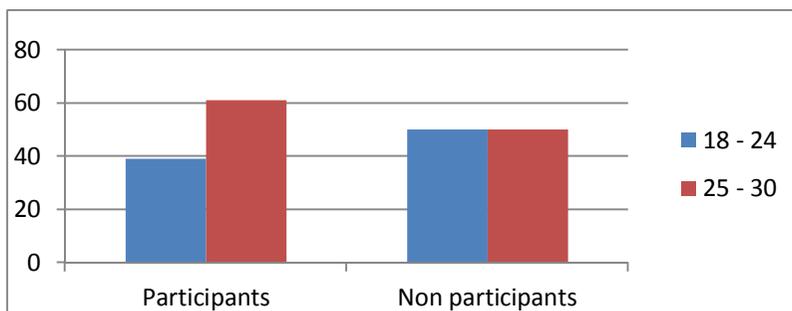
Graph 1: Gender composition of participants and non-participants



Source: Field survey, 2013.

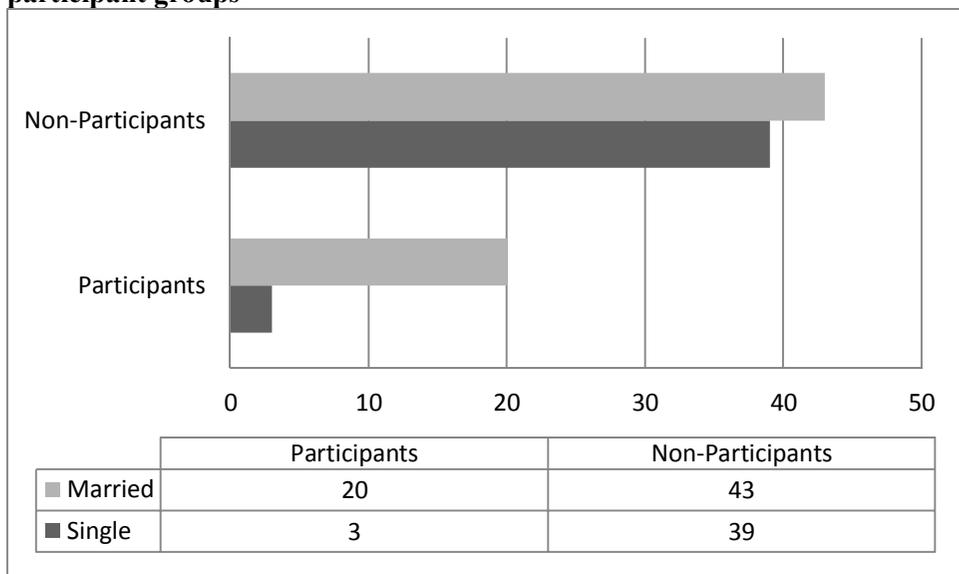
This presents probably one of the biggest disparities between the two groups. The statistical data shows that only 39% of the youth who participate in program are in the age group of 18 – 24 while the remaining 61% falls in the age group of 25 – 30. This might lead one to think that age has a role to play in factors affecting youth participation in the NAADS initiative; however, as we shall see later, it has a lot to do with decision-making powers. On the other hand, the age group for respondents who were non-participants is balanced at 50-50%. The graph below shows the disparity in age groups of participants and non-participants.

Graph 2: Comparing the age groups of participants and non-participants



Marital status presents yet another wide disparity between the two groups. As observed from the data, the number of married youth in the NAADS program is quite high at 87% and yet the number of married youth and singles in the non-participant category is fairly balanced at 52% for the married and 48% for the singles. Yet again, although marital status was not found to have a profound impact on the youth’s participation in the NAADS program, it has an indirect correlation rooted in the socio-economic setting of our rural societies but much of that will be discussed later after regression analysis. To visually portray the idea, the bar graph below shows the marital representation for participants and non-participants.

Graph 3: Comparing marital status of the youth in participant and non-participant groups

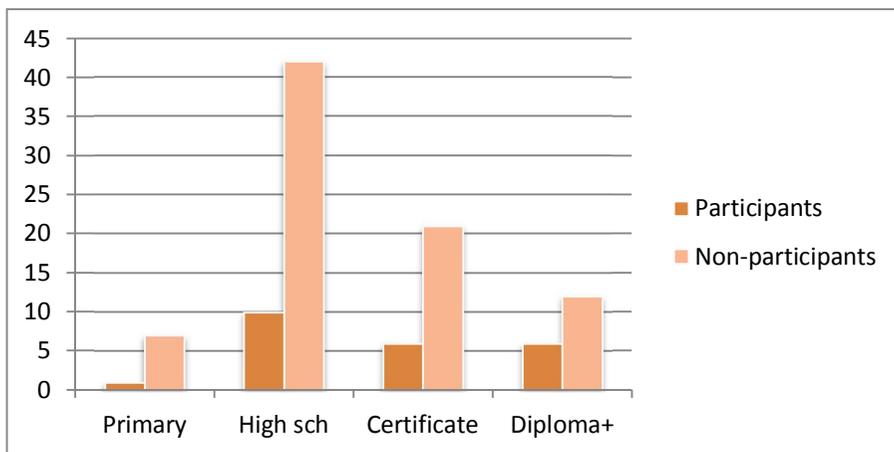


Source: Field survey, 2013

In relative terms, all education levels are fairly represented in both groups. From the statistics, it is clear that literacy levels in Katenga sub-

county are above national average but that aside, the youth of all education levels fall in both groups. Primary school level youth form 4% in the participants' category and 9% in the non-participants category. Middle-High school level respondents make up majority in both groups standing at 43% for participants and 51% for non-participants. Certificate holders on the other hand are well balanced in both groups at 26% on each side. Last but not least the youth that have attained a Diploma and upwards make up 26% and 15% for participants and non-participants respectively as highlighted in the foregoing bar graph.

Graph 4: Comparison of education levels between participants and non-participants.

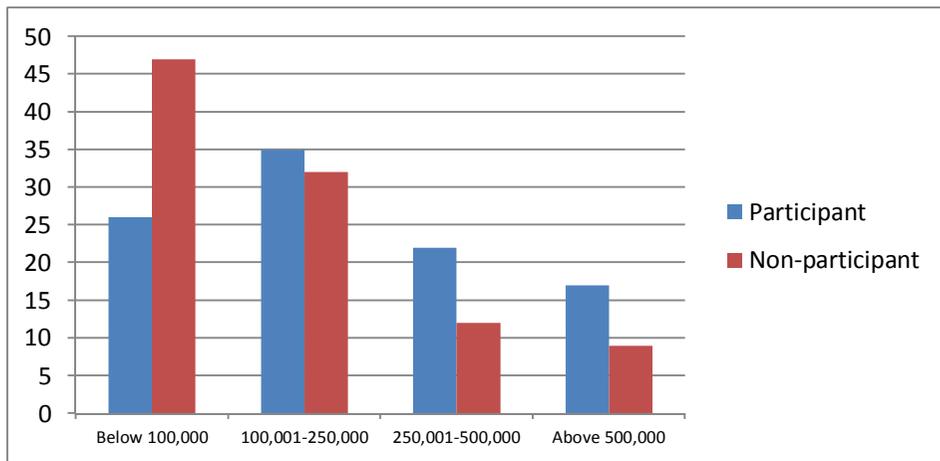


Source: Field survey, 2013

In respect to income levels, statistics suggest that almost half (47%) of the youth in Katenga sub-county who earn the lowest income fall in the group of non-participants as compared to 26% in the participants group. As to whether participation in the NAADS is responsible for differences in income levels or vice versa is an issue I will expound later but small as it is, the

participant group has an upper hand when it comes to income levels in this sub county. This trend is even clearer in the upper tier of income levels. The graph below shows it all.

Graph 5: Comparison of income levels between participants and non-participants



Source: Field survey, 2013

Much as access to land does not guarantee participation in the NAADS program, land is a major ingredient for one to participate in the program. The relationship between participation in the program and access to land is presented in detail in my inferential statistics that follow; however, I want to just highlight the accessibility to land as it pertains in both groups. As expected, 100% of all participants have access to land although the size and ownership rights differ. In the non-participant group on the other hand, up to 34% of the youth do not have access to land at all. The table below gives us the whole picture.

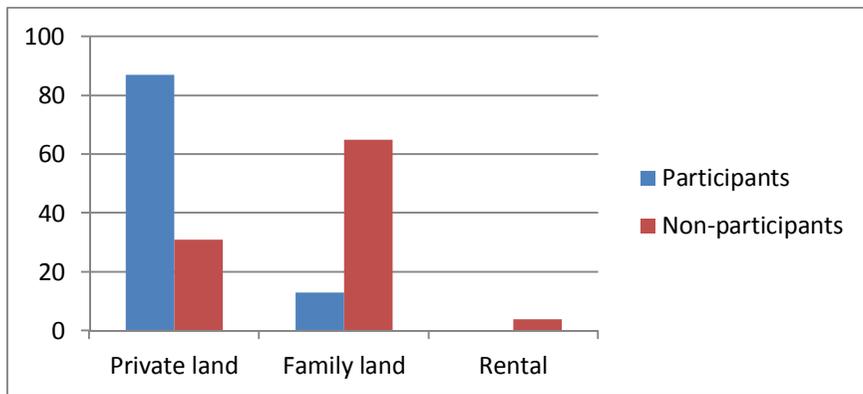
Table 4: Comparison of access to land for participants and non-participants

Access to land	Participants	Non-participants
Have access	100%	66%
No access	<u>0%</u>	<u>34%</u>
Total	100.0	100.0

Source: Field survey, 2013

From the above table, it is clear that access to land is a vital condition for participation in the NAADS program, however, it does not directly justify why majority of the youth do not since a significant number (66%) of non-participants do have access to land. This led me into ascertaining the ownership rights and decision making powers that the youth have over land in our communities. Land ownership is a vital determinant factor that defines the extent to which the youth have powers to make decisions regarding the land that they access. To that end, the youth who own land on a private basis are guaranteed of full powers in decision-making; however, the other group that accesses family land has minimal decision-making powers. From my research findings, majority (87%) of participants own the land privately and hence have full decision-making powers while only 13% are using family land. On the other hand, among the non-participants who have access to land, only 21% own it privately while 75% use family land and the remaining 4% use rented land. As we shall see later, this is a deciding factor in participation of the youth in the NAADS program. The graph below shows us the comparison between the two groups.

Graph 6: Comparison of land ownership for participants and non-participants



To sum it up, this section was responding to my first research question in which I wanted to compare the socio-economic characteristics of the youth who participate in the NAADS program versus those who do not. It is a fact that youth's participation in the NAADS is very low at 23% plus a dropout rate of 5%. That aside, where as there are similarities in the socio-economic characteristics such as gender and education levels save for marital status, the economic characteristics of the two groups are different, that is, income levels, access and ownership of land with the differences in favor of participants.

4.4 Analysis of the Factors That Affect Participation of the Youth in the NAADS Program

In this section, I turn to the pillar of my research, which is, analyzing factors that affect the youth’s participation in development programs with specific attention to the NAADS program in Katenga sub-county, Mitooma district, Uganda. Before going any further, let me note that, in the process of this exercise, I was guided by literature review on the subject. Majority of authors contended that participation of the youth in agriculture programs is primarily influenced by material factors, as a result, little is known about the impact of perceptual factors. Logistic regression was used to predict the likelihood of a youth with certain attributes to participate or not in the program. The independent variables used in the model were land ownership, access to farm inputs, knowledge, level of awareness and attitude towards while participation in the NAADS was treated as a dependent variable. The analysis also included control variables, that is, gender, income, age, education and marital status. The analysis was based on the following model;

$$Y = \text{Ln}(p/1 - P)$$

$$\text{Ln}(p/1 - P) = b_0 + b_1x_1 + b_2x_2 + \dots + b_{10}x_{10} + e$$

Where:

Y = *Dependent binary variable (Participate or do not participate)*

P = *Probability of participating in the NAADS program*

Ln = *Natural Logarithm function*

b_0 = *Constant*

b_1 - b_{10} = *Regression coefficients*

x_1 - x_{10} = *Explanatory variables (Landownership, Farm inputs, Awareness, Attitude, Knowledge, Gender, Income, Education, Age and Marital status)*

e = Stochastic error term
 $p/1-p$ = Odd ratio (odds in favor of participation)

Table 5: Logistic regression results

Parameter/Variable	Coefficient	p-value
Intercept	0.3268	0.7865
Landownership	2.7763	0.0120**
Farminputs	3.3478	0.0016**
Knowledge	1.8685	0.0215**
Awareness	1.4344	0.1645
Attitude	2.4475	0.0432**
Gender	-0.2825	0.8096
Age	1.1792	0.2422
Maritalstatus	1.3883	0.3546
Income	1.5697	0.0789*
Education	0.6146	0.5166

***significant at .01, **significant at .05, *significant at .1

No. of observations: 100.

As the results above indicate, farm inputs, land ownership, knowledge and attitudes are statistically significant at in explaining why majority of the youth are not participating in the NAADS program. This is at a level of significance of 95%. It is also apparent that income has an impact on the involvement of the youth in the program with a p-value of 0.07 at 90% level of significance. On the other, the evidence indicates that the high level of awareness about the NAADS program has not significantly translated into increased participation as one would expect. Also, gender, age, marital status

and level of education proved insignificant in explaining why the youth have been hesitant to involve themselves in the program.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study was conducted with the main intention of examining whether material and perceptual factors have any significant impact on participation of the youth in the NAADS program in Katengasub-county, Mitooma district, Uganda. Both qualitative and quantitative data was collected through a survey using a questionnaire on a sample of 105 youth respondents. Data was then coded and analyzed using excel and SAS statistical programs to answer the two fundamental questions:

- a) Do the youth who participate in the NAADS program have the same socio-economic attributes as those who do not?
- b) Do both material and perceptual factors have any significant impact on participation of the youth in the NAADS program?

5.1 Major Findings

From the statistics, it is clear that the youth who are participating in the program have an edge over non-participants in terms of land ownership, for instance, 87% of participants own land on a private basis as compared to 21% of non-participants. Also, participant youth earn higher incomes than non-participants; up to 74% of participants earn more than US\$2 per day as compared to only 47% in the non-participants category. I also found out that, material as well as perceptual factors have a significant impact on

participation of the youth in the NAADS program. The results indicate that the lack of land, limited access to farm inputs, the low level of basic knowledge in farming and negative attitudes towards agriculture are serious impediments which must be alleviated if the involvement of the youth in agriculture is to be increased substantially.

5.2 Discussion of Findings

On the basis of evidence collected, I found out that positive attitude increases the likelihood of a youth to participate in the NAADS program. This lends credence to the arguments of Jeffrey *etal* (2010) that most times, human behavior is driven by attitude. This includes choices of favor or disfavor, action or inaction, like or dislike and in this case, participate or not to. Umeh & Odom (2011) alluded to this point when they asserted that farming in its current form is considered without prestige, and associated with the stigma of poverty, illiteracy, and backwardness. This, by all standards is a big disincentive to youth's participation in agricultural programs. Ayanwuyi (2007), raises the impact of parental and societal influence on attitudes towards agriculture. He contends that most parents discourage their children from taking up agriculture related work, arguing that it is not profitable and meant for the poor. This build-up of negative attitudes has significantly inhibited the participation of the youth in agriculture programs.

Also, among the perceptual factors, knowledge proved to be significant in influencing the youth's participation. The results indicate that an increase in the level of knowledge in modern farming practices increases the

likelihood of a youth to participate in an agriculture related program. Knowledge in this study was based on two considerations: experience and education. The importance of knowledge is emphasized by Abdullah(2013), and he argues that it plays a vital role in helping people to make informed choices, the lack of which, they will be guided by feelings and emotions. Although this finding disagrees with the findings of Mathews-Njoku (2005), it agrees with Brinkley (2006), that the role of knowledge as compared with natural resources, physical capital and skilled labor has taken on greater importance. Unfortunately, majority of my respondents were found to lack basic knowledge in farming practices, the reason why participation is still low.

The findings also proved that increased access to farm inputs (improved seedlings, hybrid animals, fertilizers, chemicals, equipment such as tractors, energy, irrigation schemes) increases the likelihood of the youth to participate in the NAADS program. This finding concurs with the report of UNDP & FAO (2010) which pointed out that limited access to farming inputs is a major hindrance for the youth to engage in commercial farming programs. Also Adekunle(2009) had found out that the youth had a challenge of accessing agricultural loans because they could not meet the rigorous conditions set by financial firms such as credit history, permanent place of abode and so forth. Indeed, most financial institutions are hesitant to support the youth because as Nnadi(2008) stresses, they are viewed as dependents, stubborn and less productive.

The importance of land ownership to agriculture has been raised by a number of authors. My findings also concur that an increase in private land

ownership increases the likelihood of the youth to participate in an agricultural program. This finding is in agreement with Daudi *et al.* (2009) who found out that lack of land was a major constraint to youth's involvement in farming. The structure and focus of the NAADS program has been on traditional cash crops such as coffee and banana growing, certainly these require large land which the youth do not have. As earlier shows, only 37% of the youth were found to have land, therefore, unless the issue of land ownership is handled, participation of the youth in agriculture will remain low.

Nevertheless, I note that based on the findings, the level of awareness proved insignificant in influencing youth's involvement in the NAADS program. Simply put, the high levels of awareness about the NAADS program among the youth has not translated into increase in their participation. This concurs with the findings of Ayanwuyi *et al.* (2007). However, it is in disagreement with the findings of Daudi (2009) who argued that low levels of awareness negatively impacted on youth's participation. But considering the particular case of Katengasub-county, the NAADS program has invested a lot in publicity and indeed majority of the youth know about the program although this has not increased on their participation.

Among the control variables, income proved to be significant in predicting the likelihood of a youth to participate in the NAADS program. This implies that the higher the income, the higher the probability of participation. The importance of income was also emphasized by Karki & Bauer (2004) who stressed that higher income enhances increased adoption of new farming technologies and increased participation in agriculture related

programs. Hyttia & Kola (2006) stressed that increase in income changes people's attitude towards agriculture activities from subsistence to commercial oriented farming. However, this should not be interpreted to mean that higher income earners participate in agriculture more than lower income earners. On the contrary, as Jefferey (2010) asserts, lower income people tend to choose agriculture activity as their main money generating activity or as a side income, albeit on subsistence basis. On the other hand, gender, age, marital status and education were found not to have a significant impact on the involvement of the youth in the NAADS program.

5.3 Conclusion

For a long time, many researchers and policy makers in the agriculture sector have devoted their efforts on examining the impact of material factors on youth's participation, which is logical anyway, because these are important considerations in the farming business. However, basing on the evidence I have collected, they do not stand alone. The impact of attitude and knowledge on one's mental decision-making process cannot be underestimated because they drive behavior. As we have seen, lack of knowledge in basic farming techniques and stigmatization of farming as an occupation of the poor and vulnerable groups of people is significant in explaining the low participation of the youth in the NAADS agriculture program.

5.4 Recommendations

The necessity of attracting more youth in agriculture programs as a precursor to sustainable growth in developing countries is paramount (Adekunle, 2009).

Unfortunately the trend has suffered serious set-backs in recent decades (Russel, 2001). It is therefore a matter of urgency for governments to revisit their policies if the trend is to be reversed, and in light of the challenges above, I recommend the follow measures;

Enhancement of the youth's knowledge in basic farming techniques should be enhanced by establishing Agricultural training centres and strengthening existing ones specific designed demands of the rural out-of-school youth. To this end, the medium of instruction should be in languages best understood by the local community so as to encourage participation of even the illiterate. At the same time, considering that Uganda is an agricultural economy, agricultural science subject should be made compulsory in secondary schools to equip all the youth with knowledge in modern farming practices.

There should be a concerted effort to change the attitude of the youth towards farming. This effort should target all categories of people including parents and community leaders since it is apparent that parents have a negative influence on their children's engagement in agricultural activities. This strategy should involve massive sensitization of communities and enhancing modern farming techniques to make the sector more appealing, profitable and respectable. In the same vein, the rural youth should be involved in program planning and design so as to incorporate their views as early as possible in order to have informed policies that reflect their unique characteristics.

The NAADS program should be restructured to incorporate farming enterprises that do not require large land and expensive farming inputs.

Deliberate efforts should be made to increase the capacity of the youth to access credit facilities by linking them to agro-credit financiers especially by revising the requirements for accessing credit. This will go a long way in enhancing their capacity to access farm inputs.

5.5 Limitation of the Study

The study was not without a few hurdles and most important of all was the fact that it was small in scope, that is, geographical and population coverage. Considering that Uganda is an agricultural economy, low youth participation in the sector is a national concern that requires a bigger and wider reaching research.

5.6 Areas for Further Research

There is need for extensive studies to examine the complexities associated with youth's participation in farming. In this case, special attention should be directed on the educational institutions to design agricultural courses that would enable the youth to acquire more appropriate knowledge and better attitude towards farming.

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Appendix 1

Questionnaire

SEOUL NATIONAL UNIVERSITY GRADUATE SCHOOL OF PUBLIC ADMINISTRATION SURVEY QUESTIONNAIRE

Dear Respondent,

I am a student of a Global Masters of Public Administration (GMPA) at the above-mentioned University conducting a research on the topic: Participation of the youth in the NAADS program. The responses to this questionnaire are meant for academic purposes only. Please be assured that confidentiality of your responses is highly guaranteed. You are requested to be as honest and sincere as possible. If you have any questions or require access to findings of this research, feel free to contact the researcher at; byompairefrancis@yahoo.com or +8210 4992 9883.

Thank you for giving me your valuable time to complete this questionnaire.

Section A

1. Name (optional)
2. Sex: a) Male b) Female
3. Age group: a) 18 – 24 b) 25 – 30
4. Marital status: a) Never married b) Married
c) Separated
d) Divorced
5. Highest level of education attained
a) No education b) P.1 – P.4
c) P.5 – P.7
d) O'Level
e) A'Level f) Certificate
g) Diploma
h) Undergraduate i) Graduate

Section B(Circle appropriate answer)

7. What major economic activities are you engaged in? (Multiple choices)
a) Agriculture b) Trading c) Fishing
d) Boda-Boda Transport e) Building & Construction f) Arts & Crafts
g) Other (specify)
8. What is your major source of income? (Choose one major)
a) Agriculture b) Trading c) Fishing
d) Boda-Boda Transport e) Building & Construction

- f) Arts & Crafts
- g) Other (specify)

9. How many years have you been engaged in this major income generating activity?

10. What is your monthly income bracket in Uganda shillings?

- a) Below 100,000
- b) 100,001 – 250,000
- c) 250,001 – 500,000
- d) 500,001 – 750,000
- e) 750,001 – 1,000,000
- f) 1,000,001 & above

Section C

11. Do you have access to land? (If No, go to question 16)

- a) Yes
- b) No

12. The land is;

- a) Fully Mine
- b) Family land
- c) Rental
- d) Communal
- e) Public
- f) Others (Specify)

12. How much of that land (acres) do you access?

- a) 1 acre & below
- b) Between 2 – 5 acres
- c) Between 6 – 10
- d) Above 11

13. What percentage of that land do you use for farming?

- a) 25% & below
- b) 26 – 50%
- c) 51 – 75%
- d) 76 – 100%

14. What type of farming activity are you involved in?

- a) Cash crop farming (coffee, banana, rice)
- b) Animal rearing (goats, sheep, pig, cow)
- c) Poultry
- d) Others (specify)

15. Why did you choose this particular farming activity? (Rank in order from 1 as highest)

- a) More profitable compared to others

- b) Source of food
- c) Requires small capital (land and equipment)
- d) It is what I know most
- e) Others (specify)

16 - 1. Do you think farming is:

- a) Very profitable b) profitable c) Don't know
- d) unprofitable e) Very unprofitable

16 – 2. Please justify your answer.

17 - 1. What challenges do youth face in farming?

17 - 2. In your opinion, how best can these challenges be solved?

Section D

18. Are you aware of the NAADS programme? (If No, stop here)

- a) Yes b) No

19. How did you know about it?

- a) From leaders b) From the media (radio, newspapers)
- c) From friends
- d) Others (specify)

20. Are you participating in the NAADS program? (If No, go to 24)

- a) Yes b) No c) Dropped out

21. What motivated you to join the NAADS program? (Rank in order from 1 as highest)

- a) To access farming inputs (money, seedlings, manure etc)
- b) To acquire knowledge and skills
- c) Because others joined
- d) Others (specify)

22. What benefits have you got from the NAADS program? (Rank in order from 1 as highest)

- a) Access to farming inputs (money, seedlings, manure etc)
- b) Acquisition of knowledge and skills
- c) Sharing labor with group members
- d) Others (specify)

22-1 How would rate yourself in terms of ability to buy farm inputs that you want?

- a) Very able b) Able c) Unable

23. To what extent has the NAADS helped you achieve your objectives?

- a) Very small b) Small c) Average d) Large
 e) Very Large

24 - 1. To what extent has the NAADS program helped the youth in your community to overcome the challenges they face in farming?

- a) Very large b) Large c) Small d) Very small
 e) Not at all
 f) Don't know (skip to Qn 25)

24 – 2 . If a – e justify your answer

Section E

	Reasons why the youth do not participate in the NAADS program.	Strongly agree	Agree	Don't know	Disagree	Strongly Disagree
25.	The lack of access to land is an important reason why some the youth do not participate in the NAADS program.					
26	The lack of access to farming inputs is an important reason why some the youth do not participate in the NAADS program.					
27	Poor attitudes towards farming is an important reason why some the youth do not participate in the NAADS program.					
29	The low level of awareness is an important reason why some the youth do not participate in the NAADS program.					
29	The lack of adequate knowledge in farming methods is an important reason why some the youth do					

	not participate in the NAADS program.					
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30. In your opinion, how can the NAADS program be improved to attract more the youth participants?

Thank you for your cooperation

국문초록

NAADS 농업 프로그램의 청년층 참여에 영향을 미치는 요인에 관한 연구

: 우간다 미투마 지방과 카텐가 지역을 중심으로

Byompaire Francis

행정대학원행정학전공

서울대학교

아프리카 개발도상국들에게 농업 분야는 중요한 구원수와 같다. 시민들의 생활의 근원이 된다는 점에서뿐만 아니라 각 나라 경제의 중추와도 같은 역할을 하기 때문이다. 이는 한 나라가 상품과 서비스 생산을 해야만 상대적 우위를 가질 수 있다는 경제학의 원칙에 비취볼 때도 마찬가지이다.

그러나 최근 수 십 년 간 농업 분야의 생산이 줄어들고 있는데 그 주된 이유는 자경농업에 종사하는 농업인구가 고령화되고 있다는 것에 있다. 비록 정부가 청년들을 농업 분야로 유인하기 위해 많은 정책을 실시하고 있지만 젊은이들은 농업 분야를 기피하고 있다. 선행연구들은 그 이유로 물질적인 요인들이 부족하기 때문이라는 점을 들고 있는데, 예를 들어 농토와 생산요소의 부족들을 제시하고 있다. 이러한 설명이 논리적인 추론이긴 하지만 과연 그것만이 원인인가?

따라서 본 연구의 주요한 목적은 물질적 요인 이외의 다른 요인들을 규명하여 그 영향을 살펴보고자 하는 데 있다. 특히 선행연구들은 청년층이 왜 농업 분야를 기피하는지를 설명하는 데 있어서 그 중요성에도 불구하고 인식요인을 충분히 주목하지 못했는데 본 연구는 바로 이 점을 분석하고자 했다. 이러한 목적에서 본 연구는 우간다 미투마 지방, 카텐카 지역의 NAADS 프로그램에 참여하고 있는 105 명에 대한 설문조사를 실시하였다. 설문조사를 통해 확보한 자료를 이용해 로지스틱 회귀분석을 실시하여 분석하였다. 물질적인 요인뿐만 아니라 인식요인들이 청년층의 농업분야 기피를 설명하는 데 중요한 요인인지를 검증하였다.

연구결과, 선행연구와 마찬가지로 농토부족과 농업요소에 대한 제한적 접근과 같은 물질적인 요인이 통계적으로 유의한 설명변수라는 점을 확인하였다. 그러나 인식요인 역시 마찬가지로 청년들이 농업에 참여할 것인지 아닌지를 설명하는 데 중요한 요인이라는 점을 밝혀냈다. 특히 지역사회에 의해 강화된 부정적인 태도와 기초적인 농업기술 부족이 중요한 요인이었다.

따라서 정책결정자들이 더 많은 청년들을 농업에 참여하게 하기 위해서는 이러한 장애요인들을 해결하는 데 노력을 기울이는 것이 중요하다. 학교를 다니지 않는 농촌지역의 젊은이들이 좋은 농업기술을 배울 수 있도록 농업교육기관을 설치하는 것, 농업에 대한 대중의 인식을 제고하는 것, 또 청년들이 소액금융(agro-credit)제도를 활용할 수 있도록 하고 많은 땅을 필요로 하지 않는 농업 기업에 집중할 수 있도록 도와주는 것 등의 정책대안이 필요하다. 이러한 정책은 단지 농업생산성을 향상시킬 뿐만 아니라 청년층으로 하여금 지속가능한 소득원천을 창출할 수 있게 한다는 점에서 좋은 대안이 될 수 있다.

주요어: NAADS 프로그램, 물질적요인, 인식요인, 농업인구고령화, 청년층참여

학번: 2012-24079

Dedication

To my Mum and Dad, my wife Aine Carol, my son Keith and daughter
Precious.