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IMPLICATIONS OF FARMING APPROACHES FOR FARMERS' WELLBEING: A COMPARATIVE STUDY OF GROUP AND INDIVIDUAL FARMING PRACTICES IN NAKASEKE DISTRICT, UGANDA.

SEPTEMBER, 2009

IMPLICATIONS OF FARMING APPROACHES FOR FARMERS' WELLBEING: A COMPARATIVE STUDY OF GROUP AND INDIVIDUAL FARMING PRACTICES IN NAKASEKE DISTRICT, UGANDA.

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DECLARATION

I, Kyebuzibwa Joseph, declare that this dissertation is my original work and has not been submitted for a degree in any other university. The views expressed herein are mine and not any other person nor institution. I assume responsibility of any mistakes.

Signed…….. Date ……..

This dissertation has been submitted for examination with knowledge of my supervisor.

Signed …… Date ……

Dr. Peter Atekyereza (Supervisor)

DEDICATION

To Phyllis Freeman and Anthony Robbins for giving me the opportunity to study

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ABBREVIATIONS AND ACRONYMS

AAE: Agricultural Advisory Extensionists

AAS: Agricultural Advisory Services

AES: Agricultural Extension Services

AHI: Africa Highland Initiative

AIDS: Acquired Immune Deficiency Syndrome

CIAT: International Center for Tropical Agriculture

CODESRIA: Council for the Development of Social Science Research in Africa

DENIVA: Development Network of Indigenous Voluntary Associations

FaaB: Farming as a Business

FG: Farmer Group

FGA: Farmer Group Approach

FGD: Focus Group Discussion

FF: Farmer Forum

GF: Group Farming

HIV: Human Immune Virus

IF: Individual Farmers

IFA: Individual Farming Approach

IFPRI: International Food Policy Research Institute

MAAIF: Ministry of Agriculture Animal Industry and Fisheries

NAADS: National Agricultural Advisory Services

PMA: Plan for Modernization of Agriculture

RD: Rural Development

SPSS: Statistical Package for Social Scientists

SSA: Sub Saharan Africa

UBOS: Uganda Bureau of Statistics

VEDCO: Voluntary Efforts and Development Concerns

ABSTRACT

The emphasis on Farmer Groups (FGs) is to develop a demand driven and farmer led Agricultural Advisory Services (AAS) delivery mechanism that is responsive to the challenges of 'poor' farmers who cannot absorb the costs of individual participation. In Uganda, the National Agricultural Advisory Services (NAADS) was started and as such, is meant to transform and empower farmers through their groups to gain access to and have control over Agricultural Extension Services (AES). However, the disincentives inherent in group approaches have continued to render the approach ineffective. There are farmers who have continuously avoided farmer groups in spite of the fact that the approach is believed to lower the delivery and purchasing costs of AES. The study assessed formation dynamics of FGs, perceptions of farmers about the two approaches as well as the motivations and constraints inherent in each approach and lastly the benefits that accrue to farmers from participating as groups or individuals. The study was conducted in Nakaseke district and used a case study of FGs under the NAADS programme; in addition, it used the descriptive survey methods (semi-structured questionnaire and interview guides) in collecting data. There were some initial misunderstandings by farmers about NAADS. Farmers expected to get free farm inputs which led to formation of false groups. Group formation largely depended on friendship and family ties, gender and level of farming resources and men controlled group activities. The very poor and the rich were absent in group activities. Notably from the research findings, NAADS is not addressing the pride of the resource poor farmers with no farm resources and are excluded from participating in farmer groups. The implementation of NAADS has concentrated more on theoretical training than producing tangible commercial farm outputs that would empower farmers financially and encourage their participation and ownership of the programme. It is therefore necessary for NAADS and other development partners harmonize the programme to include the resource poor farmers and bring them into programme activities. NAADS should empower farmer groups either by strengthening farmer grass root farmer institutions so that government and donor funding flows directly to these groups and should as much as possible encourage farmers to raise own funds to supplement government or donor funds.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In order to improve agriculture and raise the incomes of smaller holder communities, there have been remarkable changes in delivering Agricultural Advisory Services (AAS). World over, there are continued demands for extension services to increasingly include participatory oriented approaches in the organization, working modalities and partnership building with a principle goal of raising the incomes of smallholder communities (Murray, 2000; World Bank, 2000; Anderson and Feder, 2003 and Opondo et al, 2006). In order to achieve this, the importance of local institutions is being recognized. Informal local traditional groups have played a key role across the African continent in survival, social learning and support, resource sharing and are more recently been harnessed to plan the delivery of AAS. The recognized value of local groups and institutions for development has been coupled with the upsurge in promotion and use of participatory approaches which emerged given the analysis of past failures and limited sustainability of top down approaches (Africa Highland Institute, 2006). However, there is a considerable debate of how best to organize people particularly farmers into effective farmer groups and there are many issues emerging about the effectiveness and efficiency of local groups.

The narrow and passive individually-tailored approach is being challenged in view of an approach that delivers AAS to organized groups of farmers. Individually tailored approach has been criticized for yielding benefits to mainly the wealthy and educated

farmers (Masako et al, 2005). Consequently a number of countries including Australia, Philippines, New Zealand, Israel, Indonesia, Nigeria, Kenya, and Uganda among other countries have introduced Farmer Group Approach (FGA) in delivering AAS (Marsh and Pannell, 2000; Anderson and Crowder, 2004, Tanui, 2006 and Opondo et al, 2006). The FGA is a production unit which is voluntarily formed by farmers in order to get more benefits than individual farming. Although there have been change improvements in the 1990's and 2000 for example poverty reduced from 56% in 1993 to 35% in 2000 but has risen to 38% (DENIVA, 2006). This presents a challenge to policy makers and implementers. As a result programmes that have been implemented have remained below their potential (World Bank, 2000). In countries where collective initiatives have informed development projects, local populations have not been able to take advantage of collective efforts for their development (World Bank, 2004).

Farming experiences in Sub Saharan Africa (SSA) indicate that on the ground, attempts to address farming problems identified as limited access to relevant farming information, credit and market, the FGA has increasingly been incorporated into government and non-government farming principles. Case studies from Mozambique, Kenya and Zambia indicate that the emphasis on Group Farming (GF) has created the potential for farmers' empowerment. Farmers mobilize local resources, set priorities and demand for the services they require for survival (Tanui, 2006 and Opondo et al, 2006). This has had a substantial effect in improving farmer's living standards. What is not clear however, is whether the improvement in living standards of farmers is realistic and whether this improvement is attributed to working in local farmer groups. There are many issues

emerging at this point in time about the FGA. A comparative analysis with Individual Farming (IF) can yield reliable findings.

Uganda is rapidly reforming the delivery of extension services in line with global trends. This led to the development of a new government program-the National Agricultural Advisory Services (NAADS), an initiative designed to increase farmers' access to information and technologies in a demand driven approach. The approach has spread widely and in 2005 it covered a total population of four million people with a total of 20,194 Farmer Groups (NAADS, 2003, MAAIF, 2005; Friis-Hansen, 2005 and Opondo et al, 2006). The country has traditionally had self-help groups for meeting their socio-economic needs. The whole ideas of farmers forming groups did not start with NAADS. Farmers took the opportunity to form groups especially in meeting their social needs such as wedding, funeral and family needs. For continuity and sustainability of the venture, the economic aspect was implied, they mobilized own resources to enable them purchase items and services that would support the smooth running of their group activities. Over time, these groups have diversified their activities to include registration with community development programmes like NAADS. NAADS has support even such groups that existed before but only after registering as new groups in the NAADS programme (Opondo et al, 2006, Development Network of Indigenous Voluntary Association (DENIVA), 2005). GF is increasingly becoming a vehicle through which farmers pursue wider concerns, initiate new activities, learn new skills, new knowledge, gain easy access to markets, technologies and gain confidence and self esteem. However, if all these were operating optimally, it is believed that FGs would be a means and an end to many

farming problems. More often than not, farmers are still faced with many farming constraints, and despite the elaborated benefits of GF, there are still a considerable number of individual farmers who shun GF. It is in light of this that a study was proposed to assess the implications of group and individual farming approaches to farmers' well-being.

1.2 Statement of the Problem

Provision of Advisory Extension Services (AES) has come under enormous pressure to speed up service and impact delivery to many farmers in a participatory, cost effective and efficient approach. Consequently the demand for forming and working with farmer groups has intensified. The group approach sees organized groups of farmers as a conduit for provision of AES and a critique to Individual Farming Approach (IFA). Vanclay and Lawrence (1995) and Marsh and Pannell (2000) argued that, not all farmers would certainly subscribe to the idea of forming and subsequently farming in groups. The disincentives inherent in group approaches have continued to render the approach ineffective. There are farmers who have continuously avoided farmer groups in spite the fact that groups lower the delivery and purchase costs of AES. Concerns have risen about the nature of circumstances in which FGs are formed, and circumstances in which farming decisions are made. This study sought to assess the formation dynamics and perceptions about farmer groups and assessed the motivating and constraining factors for participation as group or individual farmers as well as the benefits from group farming to improve people's wellbeing.

1.3 Objectives of the study

To assess the implications of using group and individual farming approaches for delivering AAS in improving the incomes of farmers. The specific study objectives were;

1) To understand the formation dynamics of farmer groups.

2) To examine perceptions of farmers about group and individual farming approaches.

3) To examine motivating and constraining factors for participation in group and individual farming approaches and lastly,

4) Assess benefits from group and individual farming practices for improving the wellbeing of farmers.

1.4 Research Questions

In assessing the formation dynamics of farmer groups, the study addressed questions regarding how farmer groups were formed; the factors farmers considered while forming groups, challenges of forming farmer groups, membership and size of farmer groups, participation in activities initiated by the groups, as well as guidance to forming farmer groups. In examining perceptions of farmers about group and individual farming approaches, questions concerning their perceived farming problems, their perceptions about the prevailing strategies to solving the farming problems, their knowledge, awareness, acceptance and ownership of these strategies, sources of information about these strategies as well as their expectations.

In as far as examining the motivating and constraining factors for participation in group and individual farming approaches, study questions included why farmers formed or

joined farming groups, how membership to groups was sustained challenges and suggested concerns of group farming. Also asked why some farmers avoided group farming and lastly challenges and concerns of individual farmers. An assessment of benefits from group and individual farming approaches, the study address issues to do with farmers identifying benefits in form of acreage of farm land under cultivation and crop production, average monthly incomes as well as their perceived knowledge of modern farming practices.

1.5 Scope of the Study

The study was carried out at community levels in Nakaseke district and covered the Sub Counties of Kapeka and Kasangombe. The study involved 60 farmers from 20 farmer groups registered under the NAADS Programme and also involved 60 single/individual farmers who did not belong to any farmer groups in the area. The study assessed the implications of using the farmer group and individual approach in improving the wellbeing of farmers. An assessment of the group formation dynamics, farmer perceptions, motivating, constraining factors and benefits of using group and individual farming was made. Data collection took place from April 3rd to 26th, 2008.

1.6 Significance of the Study

It is my conviction that the study provided the basis for effective delivery of extension services. This is made possible by the fact that it provided for the basis under which the farmer group approach could be effectively used to deliver AES. It also highlighted the circumstances under which individual farmers could be helped to access AES. NAADS

and those other initiatives which intend to use the group approach need to understand these circumstances in order to strengthen and support farmer groups and build upon them to create viable and cohesive groups that can advance the interests of resource poor farmers. From the study findings, farmers need to realize how best they should organize themselves for effective and efficient delivery of AES. Academicians will benefit from the study because of it has contributed to the pool of existing knowledge and contributed to identifying a pool of other areas that need further investigation.

1.7 Conceptual Framework of Group and Individual Farming Strategies

Figure 1: Conceptual Framework

Farming problems are identified as limited access to farming resources such as land, capital, limited skills, low incomes, pests and diseases. In the communities in which these problems exist, there are opportunities (advisory services) that farmers can exploit to address such farming problems. In order to take advantage of the available farming opportunities, farmers strategize either by taking group actions in a collective approach or take individual actions. However, the decision taken is influenced by aspects of gender, level of trust, level of resources and location among the rest. The outcome of any action is to improve farmers' production levels, improved incomes and finally raise standards of living. So the study assessed the formation dynamics and perceptions about farmer groups and assessed the motivating and constraining factors for participation as group or individual farmers as well as the benefits from group farming to improve people's wellbeing.

1.8 Organization of the Dissertation

The dissertation is arranged in eight chapters. **Chapter one** describes the background to the study, statement of the problem and objectives of the study. It also presents research questions, scope and significance of the study and lastly gives a conceptual framework behind the study. **Chapter two** is a review of literature on the study. The literature review is based on the objectives of the study. These are the formation dynamics of farmer groups, perceptions of farmers about group and individual farming approaches and motivating and constraining factors for group and individual farming as well as benefits accruing from GF and IF to farmers**. Chapter three** presents a discussion of the methodology that was used in the study; it includes the study design, a justification of the

area of study, sample size and selection, data collection methods and tools, data processing and analysis, limitations and ethical considerations of the study. Chapters **four** to **seven** present the findings whereas chapter **eight** presents summary of key findings, conclusions and recommendations**.**

Chapter four presents the background features of study respondents and formation dynamics of FGs in the two sub counties of Kapeka and Kasangombe in Nakaseke district. Formation of farmer groups depends on several factors. They include, trust, level of resources, age, gender, friendship among other factors. These factors determine how farmers group are formed and also explain why some farmers avoid group practice. **Chapter five** presents the perceived farming problems in the study area as well as strategies that address these farming problems. It also discusses farmers' perceived ownership, acceptance and awareness on these strategies. **Chapter six** discusses considerations farmers make to form groups or remain as single farmers and challenges faced as group or individual farmers as well as the perceived solutions to these challenges. **Chapter seven** is an assessment of benefits of group or individual farming to farmers. These involve a comparison of acreage of farm land, farm yields, income and farming knowledge between group and individual farmers. Lastly chapter **eight** presents a discussion of findings from the study and explains major conclusions and recommendations of how best to organize rural farmers for effective and efficient delivery of extension services.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

In this section, literature is reviewed according to the relative importance of agriculture and the recognized need for using FGs for delivering AES in order to improve the wellbeing of people whose lives depend on the sector. Secondly, the review presents the dynamic process of forming FGs. Thirdly, an assessment of how rural farmers perceive the delivery of AES using FGA compared to individualistic approach is presented and farmers' perceived ownership and acceptance of the delivery system. The last part looks at facilitating and constraining factors of the approaches and the benefits that accrue to farmers from using group compared to individual based approach for their well-being.

2.2 Contextual Analysis of Agricultural Approaches for Farmers' Wellbeing

World over the economies of developing countries are heavily reliant on agriculture which accounts close to 20% of Gross Domestic Product, 50% of total export revenue and 60% of the countries' labor force (World Bank, 2003, Food Agricultural Organization, 2003). About 70% of the population of developing countries lives in rural areas and agriculture is their daily concern. However, the agricultural sector is heavily characterized by subsistence production with low input and low productivity and the challenge has been how to provide the necessary support in order to move the predominantly rural economy out of poverty and improve the welfare of the majority of the population. In order to practice beneficial agriculture and improve the wellbeing of

farmers, there have been demands for new approaches to providing agricultural extension services (World Bank, 2002; Anderson and Feder, 2003).

This led to world-wide demands for reforming national agricultural services (Anderson and Feder, 2003; Anderson and Crowder, 2004). The reforms are bringing major changes in the mandate, organization and working modalities of earlier approaches. The narrow and passive traditional system of delivering AAS was challenged in view of an approach that builds on organized groups of farmers (Anderson and Feder, 2003). Consequently in a number of countries including Indonesia, New Zealand, Australia, Philippines, Ghana, Kenya, Tanzania, Uganda, Mozambique and Mexico, there has been growing realization that higher participation rates through farmer groups are required more than ever before to speed up service and impact delivery of AAS (Marsh and Pannell, 2000; Anderson and Crowder, 2004). The farmer group approach has been adopted in these countries. The purpose of formation of farmer groups is to create institutions that can enable farmers to effectively organize, formulate and prioritize their needs for appropriate extension delivery (Marsh and Pannell, 2000). However the dominance of group-based approaches has raised many issues most of which relate to how effectively can rural development projects rely on farmer groups for effective delivery of AAS and ultimately improve the lives of rural people. The study reviews the formation dynamics of farmer groups, the perceptions of farmers about farmer group approach and motivation and constraining factors for the approach as well as the likely benefits to farmers.

2.3 Significance of Agriculture to Uganda's Economy

Agriculture is the main sector of Ugandan economy - it employs over 68% of the labor force, contributes 85% of the exports earnings and 38.5% of Gross Domestic Product. Crops contribute 67% to agriculture‘s component of GDP while livestock contributes 16%, fisheries 12% and forestry 4%. Despite the fact that Uganda's economy is predominantly agrarian, subsistence production has remained the pattern; 70% of the area under cultivation is used to produce locally consumed food crops. Women provide over half of agricultural labor, traditionally focusing on food rather than cash crop production. For the rural population - more than the 85% of the total population - agriculture is the main way of making a living either as pure subsistence farmers or with a little semi-commercial farming (DENIVA, 2005). The majority of these subsistence farmers are poor people faced with many constraints that keep them poor such as lack of knowledge and skills, lack of credit, lack of information and knowledge about what to produce and how to produce to earn more money.

The Plan for Modernization of Agriculture (PMA) - a central element of Uganda's poverty eradication strategy - is key to enabling the rural population to improve their livelihood and ensure food security through changing subsistence agriculture to doing farming as a Business (FaaB). FaaB involves producing with the objective of selling produce to earn money. Commercializing agriculture is hoped to result into many people being able to earn incomes to meet other needs, improve their lifestyle, create more jobs in rural areas, ensure food security and use natural resources sustainably. Modernizing agriculture has embraced the support of local informal and formal institutions known as farmer groups and farmer fora respectively. Therefore the need for empowering local

institutions to ensure that they have the necessary capacities to undertake the challenges of FaaB has intensified.

2.4 Formation Dynamics of Farmer Groups

Today, the interest in working with organized community groups is intensifying. The hope for the future is based on the current experience and success in organizing and working with community groups. The increase in group-based activities for agricultural service delivery is partly a response to demand driven approaches that created a push for Formation of farmer groups as proactive and not passive institutions in which farmers are able to demand what is due to them and not just accepting what is provided, and being able to challenge whoever is accountable and their ability to network amongst themselves to build bigger capacity for effective participation and presenting their demands. Case studies from various countries like Wales, New Zealand, The Netherlands, Venezuela, Mozambique and Uganda among other countries indicated that attempts to come up with solutions to providing extension services to farmers have recognized and promoted the importance of local group, associations and or institutions for development. This is coupled with the upsurge and promotion of participatory approaches which emerged given the past failures of top-down approaches (Africa Highland Initiative (AHI), 2006). In areas where community groups have been lacking, it has been proved necessary to promote their formation.

There has been considerable debate on how community farmer groups are formed and there are many issues emerging at this point in time as regards how best to organize rural

populations for effective delivery of AAS. The process of farmer group formation is relatively a complex one; it is socially determined, dynamic and requires sufficient time. Stroud et al (2004) wrote that it is important to recognize characteristics and dynamics that influence the formation of farmer groups. Shulman (1999) highlights that, farmer group formation and membership depends among other factors on the basis of: adjacent farm, gender, age, neighborhood, family ties, common interests, friendships, religious affiliation and furthermore, willingness to accept mutual responsibility for group activities. For example, forming groups of Agronomists in Indonesia was influenced by location, if all the members of a particular farmer group were from one area, farmers of other areas did not join. Similarly gender and wealth may also limit members from joining a farmer group (Lamb, 1994). In Uganda, a field study on farmer institutions working with NAADS found that self-help groups are besides the social factors, are also formed on the basis of free expected handouts (fertilizers, seeds, pesticides and credit), later, when farmers realize there are no immediate personal benefits and free handouts, they pull out from groups (Stroud et al, 2004 and International Center for Tropical Agriculture (CIAT), 2003).

Stroud et al (2004) recognized these dynamics in forming and working with farmer groups, but also found out that the needs and interests of 'poor' people are easily represented through these groups. They argued that community groups usually include a high proportion of women and the poor resource farmers. However, a study done in Uganda by Community Development Network (2002) challenged the belief that the needs and interests of poorer people are directly or indirectly represented through

community groups and therefore a route to poverty reduction. The study found out that organizations working in the Ugandan context did not consider some important aspects in group formation. It was important for this study to not only look at the factors that farmers consider when forming groups, but also find out the social barriers that keep some people from forming and participating in group activities.

Given the high number of farmer groups in Uganda and Nakaseke in particular-over 400 farmer groups (NAADS, 2007), truly there was need to establish the dynamics in forming these groups as it would help to determine why groups were formed, who were likely to form groups and the factors that determined group membership.. Working with farmer groups followed a number of guidelines for instance groups required to have mixed membership-women and men as being complementary to each other in skills and knowledge, group membership needed not exceed thirty and not less than ten members and lastly the need for farmer groups to select and prioritize their activities. As groups become the dominant form of contact between agencies and farmers, study findings revealed important aspects in organizing farmers for delivering services that are aimed at improving farmers' wellbeing.

2.5 Perceptions of Farmers on Group and Individual Farming Practices

The need to understand local peoples' perceptions including farmers provide the basis for problem-solving strategies for local communities. Seeking farmers' views, by investigating first, what local communities want, know and have can improve understanding of local conditions and provide a productive context for activities designed

to help communities. When a farming approach is introduced, adoption rates differ amongst farmers because their perceptions are unique. Therefore to ensure widest possible acceptance and ownership of proposed approaches, efforts should be based on local peoples' knowledge because they (locals) best explain their situations, their capacities, what works and does not work for them. The positive and negative individual attitudes towards a given approach may influence the way farmers adopt to farming approaches.

Therefore doubts on which approach is appropriate, empowering or beneficial may be appropriately answered when people's attitudes and perceptions about the practice are sought (World Bank, 1998 and Murray, 2000). Attitudes affect the implementation and performance of rural development projects. For instance a study conducted in 121 rural water projects in 49 countries found that 70% succeeded when the intended beneficiaries' knowledge and perceptions were sought and included in the project design compared to a 10% success rate among programmes where they did not (World Bank, 1998). As the following example illustrates, local knowledge and understanding of any approach and the involvement of organized community groups can be a powerful tool for effective acceptance, adoption and participation in community development projects.

Awareness of possible new practices is not sufficient to ensure their implementation. Factors affecting the adoption of new practices in agriculture relate to the characteristics of the new practice and to farmer beliefs, values and social systems (Barr and Carey 2000). People may, for example, carry strong values of individualism as opposed to

collective efforts and they become deeply suspicious of any attempt to be organized in groups Juska (2005). Hagmann (1999) argues that before engaging people for any development project, regard must first be given to how local members perceive it, what their capacities and limitations are. In an expressed desire to have a more relevant agricultural extension in Australia, New Zealand and The Netherlands, questions arose of whether extension should be person-focused or group-based extension. Stakeholders' attitudes reflected the dominance of latter approach. Tanui (2006) notes that, in Kenya, efforts to incorporate Land care activities through grass root structures in a demand driven way of group formation and partnership building amongst farmer organizations are embraced because grass root knowledge and capacity geared towards strengthening these initiatives reflected peoples' concerns. Lessons from Southwestern Uganda showed that communities perceived NAADS to have abundant resources. This created high expectations and mushrooming FG in rural communities to take advantage of the vast resources (Opondo et al, 2006).

While literature suggested the implications of people's perceptions in promoting community based strategies elsewhere in Australia, New Zealand, Kenya and even in Southwestern Uganda, this study looked at the preferred approach by farmers in Nakaseke district to solving the perceived farming constraints. It was evident that at the disposal of farmers there was the condition of forming and farming in groups so as to access advisory support from NAADS. However, the continued call to farmers to form groups, some chose to form them while others did not. It therefore proved necessary to

establish the nature of circumstances in which farmers chose to practice group or remained as individuals.

2.6 Motivating Factors for Group Farming and or Individual Farming

It was understood that the group approach was designed to respond positively to the farming constraints and needs of resource poor farmers. More often than not, group farming raised individual curiosity of whether as an individual farmer one would benefit from group practices. Accordingly, the motivation to select a given farming approach was a conscious calculation of an individual farmer. There was need to understand what motivated farmers to adopt group farming approaches. In so doing, intervention measures geared towards strengthening group approaches would be developed. In many countries, the formation of farmer groups is engineered by externalities such the presence of funding from certain projects or in some cases by farmers to solve challenges they face. In the latter case, the idea of group is copied from experiences of existing groups in the neighborhood, friends or relatives that belong to such groups.

In Western Australia for example, there were about 4,500 Land care groups with substantial support from government (Marsh and Pannell, 2000). In Uganda, NAADS by 2005 had a total of 20,194 registered FG (Ministry of Agriculture Animal Industry and Fisheries, 2005). In Nakaseke district, there were over 400 registered farmer groups (District Production Office, 2007). In the recent review of farmer groups in Uganda (Development Network of Indigenous Voluntary Associations, 2005), the study concluded that one ought to understand the reasons why farmers form particular groups

so as to render them assistance. Although figures for single farmers were not captured, this did not mean that all farmers were in groups, despite the attributes of group farming; some farmers had remained skeptical of the group approach and remained as single farmers. A study conducted by Kilpatrick (2003) showed factors that inhibited farmers from forming farmer groups. Among other factors were; reluctance to share information, perceived benefits of group not convincing, poor experience in past with groups and individuals reluctant to change practices.

The interest in group-based approaches that lead to formation of farmer groups as engineered by externalities or outsiders, has been because of several factors; first, there have been financial and human resource constraints associated with delivering AAS to individual farmers; with group farming, technology transfer can occur very effectively and can have spread off effects (Murray, 2000) These led to adoption of FGA. However, farmers have fixed reactions for either group or individual approaches. Whereas Australian farmers believed that with GF they could share inputs in a cooperative manner and that also GF facilitated the entry of rural people into agricultural issues (Marsh and Pannell, 2000). In SSA, many farmers expected that with GF, they could have access to free handouts like fertilizers, seeds, pesticides and credit (CIAT, 2003; Katleen, 2002 and Opondo et al, 2006). As noted, the decision to either join groups or not largely remains an individual attribute and the ultimate of these actions whether in Australia or in SSA, is to raise the incomes of farmers. However, the extent to which the factors that motivated farmers to form groups differed for among farmers. It was in the intent of this study to examine motivating factors for participation in group or individual farming approaches.

2.7 Constraining Factors for Group Farming and or Individual Farming

There were issues of concern regardless of whether farmers took on the group or individual farming practices. From studies done in many farming communities, where the farmer group approach is used, empirical evidence showed that farmers easily form groups especially when there is a new service or project. Once they realize that the project is not meeting their expectations, they abandon the group practice (Kilpatrick, 2003 and AHI, 2006). Besides, there are issues of inclusion of women, the very poor farmers and power relationships within farmer groups. These barriers keep some sections of the farmers from participating in group activities and or abandon group farming completely (AHI, 2006). Therefore it is possible to say that quite a number of challenges are still faced by the farmer group approach and part of this study was to find out the constraints embedded in farmer group practices in Nakaseke district.

When farmers abandon group farming, they opt for individual farming. However, even with individual farming the constraints they encounter challenge the practice of individual farming as an option for group farming. Belshaw (2002) and Tanui (2006) identified constraints to individual farming. Among other problems that individuals farmers faced with, were the absence of a platform to discuss their problems, unlike with group farming that foster linkages among farmers and between farmers and group promoters, for instance in Tanzania, farmers through their groups became members of wider planning and decision making fora. At the national level farmers were part of the National Agriculture Research Fund. At the zonal level they were members of Zonal Agricultural Research Committees. At all these levels, only group farming issues were discussed thereby the views and concerns of individual farmers are not considered.

Belshaw (2002) noted that in countries where group approaches are used, individual farming concerns are not typical of only a given country, but countries such as in Latin America and the Caribbean, East Asia and Pacific, Middle East and North Africa, Eastern Europe and Central Asia and SSA face concerns of non representation. Vanclay and Lawrence (1995) further noted that in New Zealand, farmers with greater wealth and large properties were over represented in group farming. Similarly women involvement still lagged behind.

Past research indicated that financial constraints were 'self-reported' by farmers as an important barrier to the adoption of group strategies (Cary et al., 2002; Lockie and Rockloff, 2004 and Byron et al., 2004). Farmers did not have sufficient resources to meet their own needs thus, they unlikely engaged in innovative agricultural practices. Poor or low financial viability may therefore have constrained the adoption of group approaches (Cary et al., 2002*).* While economic factors most certainly have a significant role to play, they are amongst a myriad of factors that influence farmers' decision-making. This study explored potential constraints of a social and economic nature that affected the likelihood of farmers undertaking either individual or group approaches.

2.8 Benefits of Group and Individual farming Practices

Group farming was implemented in order to solve problems of small farmers in many undeveloped countries. Furthermore, group farming is a production unit which is voluntary formed by the farmers in order to get more benefits than individual farming (Engindeniz and Yercan, 2002). The aim of group farming is to use more efficiently the

scarce resources which might be land, labor or capital. Thus in various countries group farming is introduced to get more benefits from it to both farmers and the champions of the approach. Group farming can promote more efficient use of resources in terms of greater farmer participation, more effective delivery of inputs and other support services such as extension and credit, better utilization of farm machinery and agricultural machinery and improved marketing of agricultural products (Engindeniz and Yercan, 2002; AHI, 2006 and International Food Policy Research Institute, 2007)

Many governments and development organizations are considering the adoption of approaches that would yield multiple benefits to people especially in rural areas where majority of the people live and are engaged in farming. These benefits include improving farm production and productivity, improved incomes and consequently improved standards of living (Kydd et al, 2004; AHI, 2006). An important part of a thorough argument will be that, given the complexity of individual decisions, no one approach will provide the necessary benefits to all farmers. Indeed we believe that a thorough argument may require farmers to have both individual and group work available so that both experiences can be used productively (Shulman, 1999). This implies a pluralistic approach which allows farmers to choose from a range of approaches that suit their interests. This argument is an adaptation of the ideas outlined in Jackson (1999) who argues that maximum benefits can be obtained from the combined use of diverse models.

The emphasis on group based approaches in modern farming practice is broadly thought of as a positive development. It enhances the potential for farmers to learn from their

peers and relevant experts. Studies in Philippines, Australia and Kenya have showed that the Land care group approach has proved successful in creating awareness; it has enabled information and resources to be shared among farmers. It has also recognized local knowledge and enabled farmers to set their own priorities and strategies (Marsh and Pannell, 2000; Tanui, 2006). In Uganda, a midterm review of farmer groups supported by NAADS indicate that farmer group savings have increased, this has brought forward the development of informal mechanisms that allows savings to be passed on to other members on a rotational basis (NAADS, 2004). However, the group saving and credit approach has not had a substantial improvement in the lives of most people as it is true that 38% of the population still lives below the poverty line and 96% of reside in rural areas (DENIVA, 2005)

The assessment of the benefits from group farming was an objective of this study to bring to the attention of developmentalists, researchers and farmers how actually benefits if any from group farming mean to farmers and how they utilize these benefits. Although data on benefits of individual/single farming was limited, what was written showed that this practice favored the better off sections of the population; the better educated and wealthy farmers (Marsh and Pannell, 2000; Van Heck, 2003; Masako, 2005) who could afford loan, farm and market costs.

The formation of farmer groups is discussed as a solution to effective and efficient delivery of AES. The group concept has been applied in many countries aimed at overcoming some of the problems related to individual approaches. But the disincentives

inherent in group approaches have continued to render the approach ineffective. There was need to assess the implications of the group and individual farming approaches for farmers' wellbeing. A study was conducted to assess the formation dynamics of farmer groups, views of farmers regarding group and individual farming as well as motivations and constraining factors for group and individual farming and their likely benefits. This enabled the most suitable circumstances under which farmers can be organized to deliver AES. The next chapter describes study methodology and how respondents were selected whose views are presented in the subsequent chapters.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This section explains the research design, study area and population under study; and describes the size of the sample as well as the procedure for selecting it. It also describes the methods, instruments and procedures for data collection and analysis; and concludes by pointing out study limitations the study and how they were addressed.

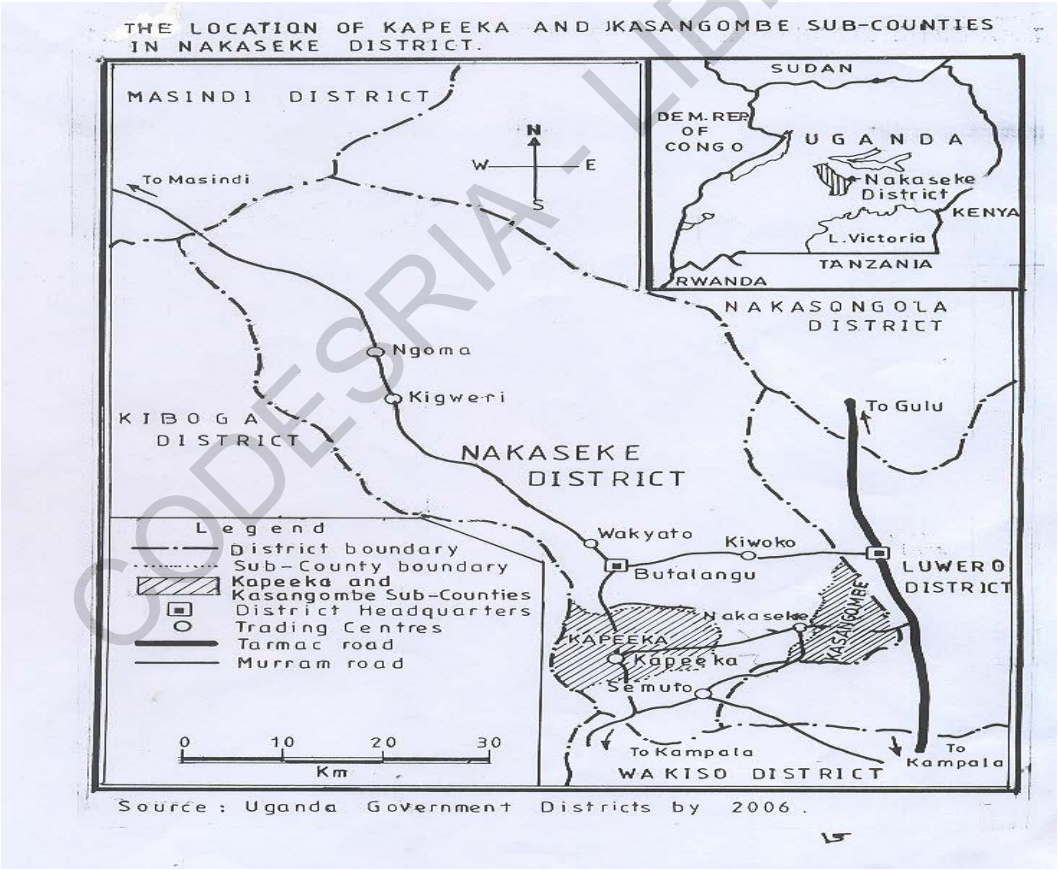
3.2 Research Design

The researcher built on a case study of FGs under the NAADS programme. This was for the fact that in the area of study, there were many organizations or projects including NAADS that work with many groups of farmers. The guidelines for NAADS call for formation and registration of FGs at the Sub County. In addition, the researcher engaged descriptive survey design in collecting data from both grouped and individual farmers. It involved conducting interviews with grouped and individual farmers using semi-structured questionnaires. It also involved key informants and Focus Group Discussions using an interview guide. The study population was group farmers who had spent four or more years in their respective farmer groups and farmers who were not practicing group farming (individual farmers) as well as community/district leaders. In addition, secondary sources of information were carried out in order to understand the nature, organization and delivery of agricultural extension services in the study area.

3.3 Area of Study

The study was carried out in Nakaseke district. Nakaseke District is located approximately 50km off Kampala and 16km from Luwero district. The total area of Nakaseke District is approximately 1924.51sq.kms. It borders with Luwero district in the North, Nakasongola in the East, Kiboga in the West and Masindi District in the south. The district is made-up of eight sub-counties with a total population of 138,990 people (Uganda Bureau of Statistics, 2007). Map 1 below shows the location and Sub Counties of Nakaseke District.

Figure 2: Location Map of Nakaseke District showing the Study Sub Counties



The main economic activity of the district is agriculture and 80% of the total population in the district practice subsistence agricultural farming. Farming is mainly of traditional

crops such as coffee, banana, cassava, potato and grains as well as nomadic pastoralism, small-scale swamp fishing and horticulture, and Kampala offers the biggest market for local produce. Farming is mainly rain-fed and largely labor intensive. About 90% of farmers use traditional farming methods and techniques. According to UBOS (2007), the district is experiencing an increasing number of people living under abject poverty, food insecurity and insufficiency. Other key farming characteristics include; declining land fertility, crop and animal pests and diseases, and limited market access and information.

Eradicating mass poverty through promoting agriculture as one of the district's priority areas is still a major challenge. In this respect, NAADS driven by modernization of agriculture through a gradual shift from subsistence to market-oriented and commercial farming is a major thrust to the delivery of AAS in the district with the aim of improving agricultural production and productivity. NAADS aims to empower farmers to access AAS and market information. Under NAADS, farmers work together in groups known as **farmer groups** to demand and control the delivery of AAS. This kind of approach is implied as the **Farmer Group Approach (FGA)** to help farmers organize into groups for effective and efficient delivery of AAS and appropriately address farming problems in a collective manner. Despite the focus on farmer groups, it is evident that there are farmers who have avoided the FGA either by individual choice or as a result of external factors. This category of farmers that deal with farming problems individually is implied as **Individual Farming Approach (IFA)**

3.4 Study Population

The study population were farmers as one category and district and community development workers as a second category. The first category of farmers was divided into two sub populations (strata) on the basis of the type of farming approach. The first sub population was group farmers who had spent four or more years in their respective farmer groups and the second sub population was individual farmers who had avoided the practice of group farming. District and community development workers were drawn from the District Productions Office, District/Sub County Community Development Office and lastly from NAADS Coordination Offices at the district, Sub County and Parish levels. These were selected for in-depth investigation because they were believed to be knowledgeable about the research thematic areas.

3.5 Sample Size and Sampling Procedure

Nakaseke district was purposively selected. As noted in the area of study, the nature of the area determined its selection criteria. The district has a total of seven sub counties; using simple random sampling, Kapeka and Kasangombe sub counties were randomly selected for the study. NAADS requires that all farmer groups must register at a respective sub county in order to be eligible for assistance. I used quota sampling and identified two categories of respondents, these were the grouped and individual farmers; then decided on a fixed number of respondents (60 farmers) in each category. A list of farmer groups that were formed and registered at the sub county offices was used as a sampling frame. Using the sampling frames from Kapeka and Kasangombe sub counties, twenty (20) farmer groups were selected for the study. Members from each group were

listed; using simple random sampling three (3) members were selected from each farmer group making a sub total of sixty (60) group farmers.

For the category of individual farmers, the fundamental characteristics were farmers who did not belong to any farming group. Although they were not easily located, the initial assignment with the help of parish coordinators was to locate a few individual farmers and establish trust. These farmers helped the researcher in identifying other individual farmers until a planed subtotal of sixty (60) individual farmers was reached. A subtotal of twenty one (21) key informants were selected purposively and interviewed. Four (4) were from district local government, four (4) from Sub county local government and the rest were from study parishes. Key informants were selected because there were especially informative about the community and the system of delivering AAS.

3.6 Data Collection Methods and Tools

The study involved conducting interviews using a semi structured questionnaire, interview guides and documentary review as the principle methods of data collection. Data collection was conducted in phases; first was to administer face to face semi-structured questionnaires with group and individual farmers. This involved riding or walking to farmer's residence's and or gardens in order to explain the purpose of the study and interviews proceeded at the respondent's permission. Approximately 40 -60 minutes were spent with each interviewee. Enumerators were chosen from the study area and these were persons who were in frequent contact with the farmers and they too were knowledgeable about the farming practices. In circumstances when the sampled farmer

could not be found, the researcher made sure that him/her was replaced with another farmer with similar characteristics. The respondents were asked to give information about formation dynamics of farmers groups, farmer's perception about group and individual farming, motivating and constraining factors for participation and non participation in group activities and benefits to farmers.

In Kapeka and Kasangombe Sub counties, four (4) Focus Group Discussion were conducted. Thirty two farmers in sets of eight males and eight females for both group and individual farmers were selected. Participants for FGDs were selected basing on their knowledge of farming in groups and avoidance of the group practice. The discussion focused on formation of farmer groups, perceptions of farming approaches, as well as motivations and constraints of farming approaches and the perceived benefits. In-depth interviews were conducted with key informants using an interview guide. These included persons with knowledge of working with farmers, knowledge of advisory service and agricultural extension. These constituted 14 percent of the study population (21 key informants). Four key informants were from the district, four from the sub counties and 13 from parishes. They were asked about the working modalities of farmer groups, planned action in delivering advisory services to farmers, challenges and way forward for implementing the planned actions. Their experiences were very helpful and some of their references are presented in discussions of findings. Lastly data collected through direct interviews were supplemented with the review of existing written documents in rural farming schemes and delivery of agricultural extension services to farmers. Sources included academic journals, text books and world, national and district reports.

3.7 Data Management and Analysis

Quantitative data were checked for entry to identify errors, missing data and inconsistence before analysis. Questions and responses were compared for consistence and missing, inconsistency or unreliable data were not considered. Data were edited, coded and entered in Statistical Package of Social Sciences (SPSS) for analysis. Frequency tables, cross tabulations, percentages were used to describe study findings. Chi-square tests were used at 5 percent level of significance to determine correlation between sex, education, and marital status, type of farming practice, income and education to establish whether these variables within the study affect a farmer's preference for group or individual farming. Qualitative data from FGD, key informants and farmers' interviews were typed in Ms-Word according to themes talked about during interviews. In most cases qualitative data is presented as direct quotations when writing up findings.

3.8 Limitations of the Study

There were problems with the study population, for there was a challenge of obtaining updated group farmer lists. Some farmer group lists contained names of persons who had left their groups or changed membership to another group or migrated from his/her former village. However, this was solved by replacing such persons with persons of similar characteristics especially gender and type of farming practice. Second, the period when the research was conducted (April 2008) was a rainy season- a time most farmers were in the fields. Farmers were found in their farms and some of them were unwilling to respond to the researcher's request. In worst cases, a few of them refused and

replacements were made accordingly. In addition some farmers were found very far away, this constrained the researcher in terms of resources, those who were not ably located, were replaced. There was suspicion among respondents because of the land question. Non community members are looked at with disbelief. However, the problem was solved by getting proper introduction and identification from area authorities. All in all, limitations were appropriately dealt with and did not affect the validity of the study findings.

CHAPTER FOUR

FORMATION DYNAMICS OF FARMER GROUPS

4.1 Introduction

Although formal acceptance of the idea of group farming in agricultural extension is quite new, the concept of group in community mobilization is not new. It is a concept used by government, non government organizations and the private sector to mobilize communities particularly when there is a service to be passed on to the population. The case proposed in this chapter is that socio-economic characteristics influence the nature of farmers' decisions regarding participation in formation of farmer groups. It also reveals the strength of social factors such as trust, age, gender, neighborhood, common interest, friendship, and level of resources and dynamics that influence farmer's interactions.

4.2 Background Characteristics of Study Respondents

It is often argued that farming communities contain different categories of farmers for instance women, men, very 'poor' farmers, youth, elderly, married and unmarried whose farming needs may not be addressed by a given farming approach. This section is a presentation of study respondents according to age, gender, education, income and marital status to understand the specific characteristics of farmers in the study area. Frequencies and percentages are used to illustrate the distribution of among study respondents.

4.2.1 Age Distribution of the Respondents

The total number of study respondents was 120. Respondent's age was coded into seven age categories. The lowest age distribution was 20 years and below and the highest age distribution was 70 years above. Majority of respondent's age ranged between 41 – 50 years (28.3%). This was followed by respondents between 31 – 40 years (25.3%). On the other hand the least were respondents with 20 years and below (3.3%) and respondents above 70 years (2.5%) It was revealed that this pattern of age distribution engaged in farming was not surprising because young children below 20 years were in neighboring schools, those who were not in schools did not have independent farming fields and could not influence or make any decision. Whereas the population of 31 – 50 was much actively engaged in farming because they had access and control over land. Yet also persons with 60 years and above had lost their capacity to work and had passed on their land to their sons. Table 1 shows age group frequencies of study respondents.

Table 1: The Frequency Distribution of Respondents by Age group (N = 120)

Age group (years)	Frequency	Percent (%)	Cumulative Percent
20 years below	4	3.3	3.3
21 – 30	21	18.3	21.7
31 - 40	31	25.8	47.5
41 - 50	34	28.3	75.8
51 - 60	16	13.3	89.2
61 - 70	10	8.3	97.5
Above 70 years	3	2.5	100.0
Total	**120**	**100**	

4.2.2 Gender and Education Level of the Study Respondents

Of the 120 total number of respondents, there was an equal number of female and male respondents with 50% males and 50% females. Majority 75 (62.5%) respondents had primary 1-7 level of education and respondents with no education were 25 (20.8%). In terms of agriculture, subsistence production has remained the pattern for these people and they lack knowledge and skills about credit, when and how to produce among many constraints. Only 20 (16.7%) had attained secondary and tertiary levels of education. However, there were education level differences between men and women. The proportion of respondents with no formal education was higher in females (28.3%) compared to 13.3% of the male respondents. Although very few, but more males (17 or 28.4%) attained secondary and tertiary levels of education compared to only 3 (5%) female as illustrated in Table 2.

Table 2: Gender by Education Level of Study Respondent (N=120)

Gender	Education Level				Total
	None	Primary	Secondary	Tertiary	
Male	8 (13.3%)	35 (58.3%)	13 (21.7%)	4 (6.7%)	**60 (100%)**
Female	17 (28.3%)	40 (66.7%)	2 (3.3%)	1 (1.7%)	**60 (100%)**
Total	**25 (20.8%)**	**75 (62.5%)**	**15 (12.5%)**	**5 (4.2%)**	**120 (100%)**

X^2= 0.016 P<0.05 N = 120 df = 5

The level of significance is shown as 0.016 (P<0.05) it means that there is a statistically significant difference between gender and education levels of study of respondents. Thus, males are more likely to have a better education than the females. The disparities in reported levels of education between female and male respondents suggest that the male gender has for so long been given priority over female counterparts. Facts have always

remained that males control and determine household resource allocations that favor them and their male children. In addition, this pattern of education emphasize the comment made by one key informant ' *some families have limited income to afford higher education especially for female children, others do not encourage their children to stud……, also to some families, the distance between them and the nearby schools is so long.' (Kapeka Parish chairperson).*

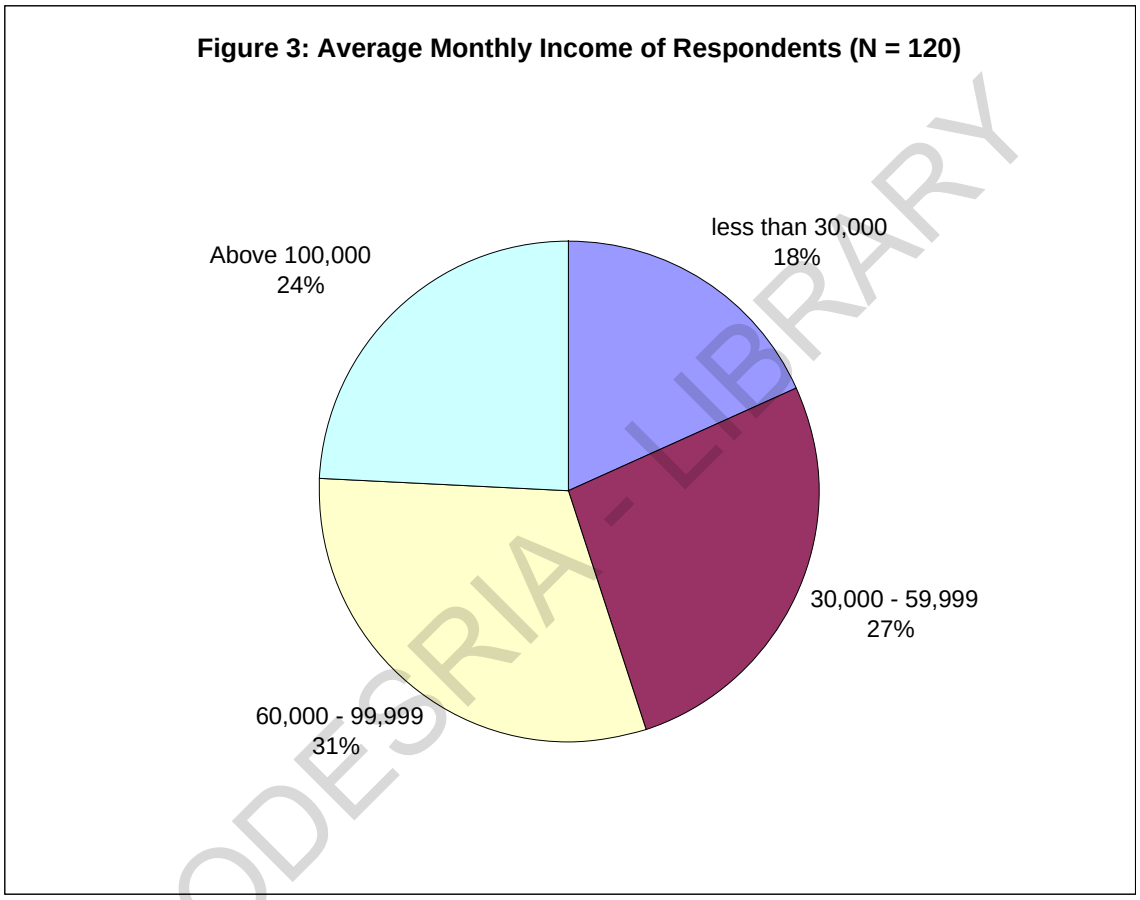
High levels of illiteracy account to a big extent for the farmers' inability to demand what is due to them. There are no adult education programmes running parallel with NAADS to build capacity of farmers to understand simple calculations, for example enterprise gross margins or checking bank accounts**.** Uganda's average literacy rates for the population aged 10 years and above is estimated at 67% for rural areas and 87% for urban areas, but with wide regional variations: Central 79%, Western 74%, Eastern 63% and Northern region 56% (DENIVA, 2005). Related to high levels of illiteracy, is the fear by some farmers to speak, thinking that the programme may be with-drawn from them. The fear has its origin in not being sure of what to say.

4.2.3 Income Levels of Study Respondents

Identification of respondents' income is important in understanding farmers' earnings from their economic activities and determines farmers' well-being. The analysis of data about respondent's monthly income illustrates that majority of study respondents (31%) reported their monthly earning between 60,000 – 99,999 shillings. Next were respondents (27%) who reported their monthly earnings between 30,000 to 59,999 shillings. 24% of

the respondents reported monthly earning of more than 100,000 shillings whereas 18% earn less than 30,000 shillings. The reported income pattern reflects low levels of useful farming activities and the prevailing high income poverty illustrated in Figure 3.

Figure 3: Average Monthly income of Respondents (N=120)

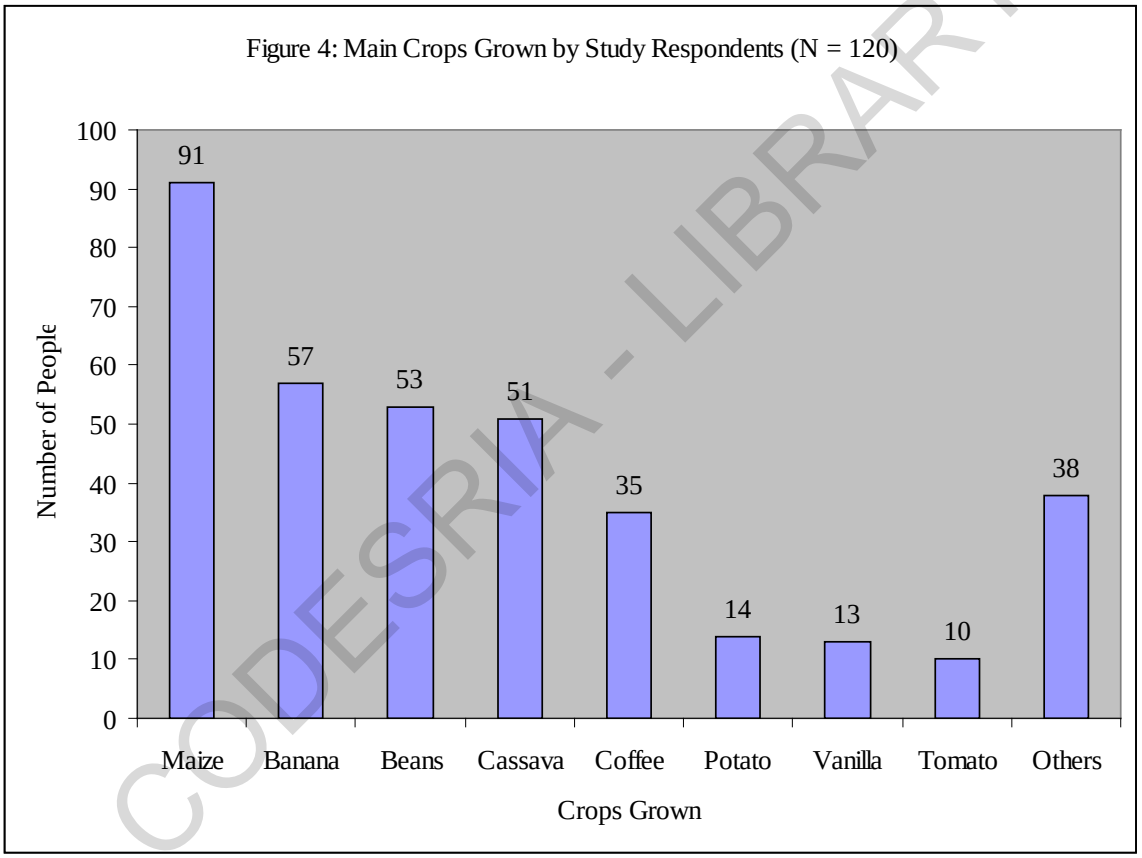


4.2.4 Main Grown Crops by Respondents

Information about farm crops grown by respondents in Figure 4 shows most respondents (91) growing maize, followed by banana (57), beans (53) and cassava (51) among other crops. The category of 'others' include crops such as; Ground Nuts, Sorghum, Soybeans, Vegetables, Pineapples, rice and cabbages. The reported crop pattern was largely at

subsistence level and was a mixed cropping type whereby a farmer grows for instance maize with cassava, beans and maize among other mixed grown crops. Using a statement of one respondent, *'most of the crops we grow are for food, very little if any is left for selling except for crops such as vanilla, coffee tomato among others that we sell to get income for our families,'* (a female 28 year old individual farmer).

Figure 4: Main crops Grown by Study Respondents (N=120)



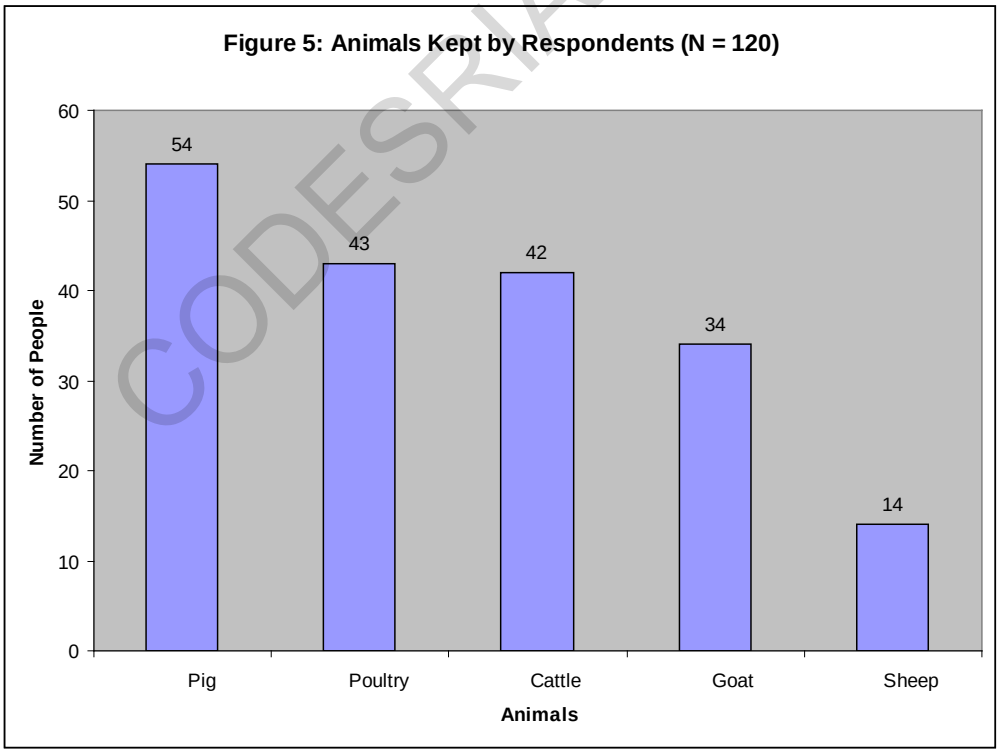
The pattern in Figure 4 is a challenge to the implementation of NAADS because one of the fundamental reasons for its sustained funding from government and other donor agencies is based on the assumption that, the program is transforming subsistence farming into market-oriented farming. However all respondents including those under

the NAADS programs were still at the subsistence level, which certainty explains the low incomes poverty prevalent in the area. This is true for most parts of the countryside (IFPRI, 2007), since efforts for market-oriented farming are still far from helping the peasant farmers.

4.2.5 Animals kept by Respondents

Figure 5 gives an illustration of the type and frequency of animals kept. Majority of respondents reported piggery (54), followed by poultry (43), cattle (42) and the least was sheep with 14. As with crops, animals are more at a subsistence level, except that they are sold to meet the costs of non-farm needs like medical, school fees and other social obligations like marriage and Kampala offers the biggest market for local produce.

Figure 5: Animals Kept by Respondents (N=120)



4.3 Dynamics of Farmer Group Formation

It is important to note that Farmer Group formation is voluntary. However, it is essential to identify characteristics of farmers who choose to participate in group based farming activities and those who avoid group practice. According to (CIAT, 2003) on Farmer Research Dynamics in Eastern Africa, gender, income levels, education among other factors need to be used in distinguishing who participates in groups activities. This section presents chi-square tests to establish the level of significance of these factors on participation in group and individual farming practices.

4.3.1 Marital Status and Type of Farming Practice

The analysis of marital status and type of farming shows that more married respondents (56.6%) practiced group farming compared to 43.3%of individual farmers. Farmers who had never married (singles) were more of individual farmers (69.2%) than group farmers (30.8%). However, these differences are not statistically significant as the level of significance (X^2= 0.219 P>0.05) shows no relationship between marital status and the type of farming practice as illustrated in Table 3.

Table 3: Marital Status and Type of Farming Practice (N=120)

Marital Status	Farming Type		Total
	Group Farming	Individual Farming	
Single	4 (30.8%)	9 (69.2%)	13 (100%)
Married	43 (56.6%)	33 (43.3%)	76 (100%)
Widowed	10 (45.5%)	12 (54.5%)	22 (100%)
Separated	3 (33.3%)	6 (66.7%)	9 (100%)
Total	**60 (50%)**	**60 (50%)**	**120 (100%)**

X^2= 0.219 P>0.05 N = 120

Although there is no difference between respondents' marital status and the type of farming practice, data from FGD indicated for most married women, their participation in group formation and group activities is influenced by their husbands. Married women who were not practicing group farming mentioned their husbands as limiting them to belong to any farmer group. *'My husband instructed me not to belong to any group because, I did not like the idea, but I also fear him,'* (a 48 year old married woman). It is possible that whereas to the married, participation in group activities is influenced by one's partner especially for the women, for most single individual farmers, it is considered that they are under no influence to belong to groups or stay as individual farmers. The proportion of respondents using IFA is high among the unmarried including those living as singles, widowed and separated, whereas the married highly preferred group farming. This is explained partly due to the experience of the married persons living or working together which is a prerequisite for group farming.

4.3.2 Average Monthly Income by Type of Farming Practice

The results of respondent's monthly income and the type of farmer showed that majority (62.1%) of the group farmers earn between 60,000 to 99,999 shillings whereas more (65.5%) of the individual farmers earn more the 100,000 shillings. This is a reflection of what one respondent lamented on *'farmers who are economically superior do not to group with us whose incomes are low,'* (a 48 year old female group farmer). However, of the 22 farmers earning less than 30,000 shillings, more (54.5%) were individual compared to 45.5% group farmers. This results in what (Rosemary et al, 2003) described as the middling effect, whereby the poorest and the richest tend to be excluded from FGs.

While the rich may not need groups in order to produce effectively, the poor may be excluded because they have no assets to contribute to group enterprise. Nevertheless, the analysis of respondent's average monthly income and the types of farming practices reveal that there was no statistical difference between the two variables as the statistical level of significance observed was 0.152 ($p>0.05$). Farmers observed no income differences between group and individual farmers and this was mentioned as a limiting factor for participation in NAADS program. The findings concur with Opondo et al (2006) whose findings suggest that in order to raise the participation of farmers under NAADS; the program must aim at improving the incomes of farmers.. Respondent's monthly income and type of farming practice is shown in Table 4.

Table 4: Average Monthly Income and Type of Farmer (N=120)

Farming Type	**Average Monthly Income (shillings)**				
	Less 30,000	**30,000-59,999**	**60,000-99,999**	**Above 100,000**	**Total**
Group Farming	10 (45.5%)	17 (53.1%)	23 (62.1%)	10 (34.5%)	60 (50%)
Individual Farming	12 (5.5%)	15 (46.9%)	14 (37.8%)	19 (65.5%)	60 (50%)
Total	**22 (100%)**	**32 (100%)**	**37 (100%)**	**29 (100%)**	**120 (100%)**

X^2= 0.152 P>0.05 N = 120

4.3.3 Education and Type of Farming Practice

Anyone may argue that literate members have a high propensity to belong to and easily accept community mobilization in form of groups than the illiterate or semi-illiterate. Education can also play an important role in mobilizing and motivating farmers to join

groups. Evans et al (1999) showed that the extent of female education correlated with participation in credit groups among the poor in Bangladesh. In Table 5, more (75%) farmers reported primary level of education, out of these, there more (50.7%) were individual farmers compared to 49.3% group farmers. Similarly although very few, but there were more individual farmer than group farmers with tertiary education. However, the analysis of formal education and membership or none membership to farmer groups illustrates that there is no statistical differences between one's education and type of farmer (p-value > 0.05) as shown in Table 5.

Table 5: Relationship between Education and Type of Farming Practice (N=120)

Education Level	Type of Farmer		Total
	Group Farmer	Individual Farmer	
None	13 (52%)	12 (48%)	25 (100%)
Primary	37 (49.3%)	38 (50.7%)	75 (100%)
Secondary	8 (53.3%)	7 (46.7%)	15 (100%)
Tertiary	2 (40%)	3 (60%)	5 (100%)
Total	**60 (50%)**	**60 (50%)**	**120 (100%)**

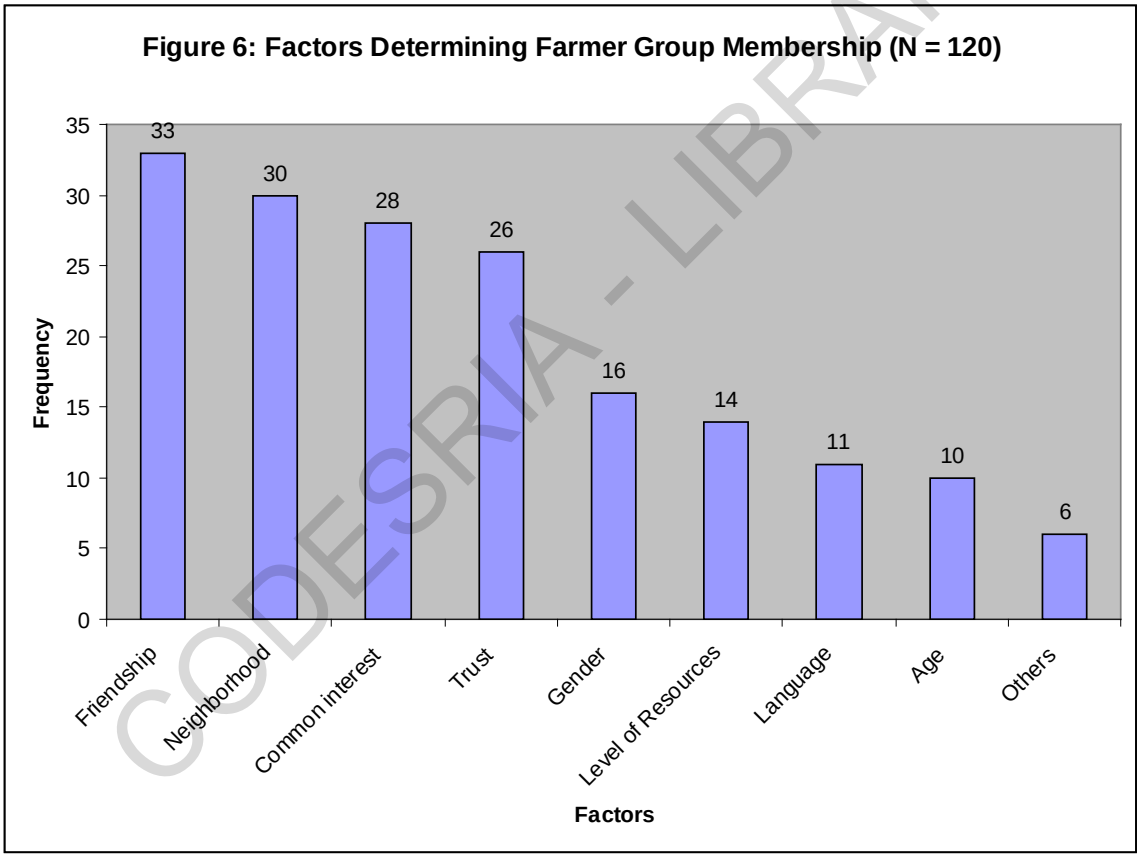
$X^2 = 0.886$ $p>0.05$ N = 120

4.4 Factors Determining Farmer Group Membership

Identification of specific characteristics of farmers such as education, marital status, income levels, among other factors has shown that although these factors may seem to be essential for participation in group activities, apparently there are no statistical differences between these factors and participation in FGs. What this means, there were no differences for instance in education, marital status and income between group and individual farmers. However for participation in group formation, there are quite a

number of factors influencing group membership. Findings showed that majority of respondents (33) mentioned friendship as the most determining factor, 30 mentioned neighborhood, 28 reported common farming interest and 26 talked about trust. Other factors highlighted were gender (16 respondents) and level of farm resources 14 respondents. By level of farm resources meant one's ability to possess big land, farm tools, farm knowledge and money.

Figure 6: Factors Determining Farmer Group Membership (N=120)



In ideal terms, a sub county service provider is tasked to catalyze the process of forming groups. The service provider takes on this process with first, sensitizing farmers on the advantages, opportunities, roles and responsibilities of farmer groups. The process also involves a number of key issues such as size of the group (15 - 25), common farming

activity as a group, writing a simple group constitution. At this stage farmers are left and given time to interact and come up with different farmer groups. The study revealed a great deal of issues that needed to be highlighted in as far as forming farmer group particularly among women. The questions still remained, how are women who provide 75% of agricultural work force be targeted and given AAS? The strategy of mobilizing farmers particularly women was problematic. The study found out that gender was a pertinent issue that needed urgent attention. Some female participants complained of their husbands not giving them permission to form or join farmer groups, men form farmer groups and leave out women despite the fact that women may want to belong to such groups. From a female FGD, responses below pointed towards the exercise of male power in determining the level of their wives' participation in groups. *'My husband threatened to beat me before I joined my group. He later allowed, but demanded that he should also be a member of our group. My husband and I are now members of Kamu Kamu Farmers Group,' (*FGD for Women Group Farmers, Kapeka).

'Ours is a women's group, but the leader brought her husband and is part of us. When it came to distributing maize seeds NAADS gave to us, our group leader and her husband took most of the seeds,' (FGD for Women Group Farmers, Kasangombe). *'My husband refused me to belong to any farmer group, that I will learn bad behavior,'* (FGD for Women Individual Farmers, Kapeka). Such statements call for attention to address gender issues in mobilizing farmers and persuading them to participate in innovative agricultural programs like NAADS. Most women still do not make farming decisions.

This is why efforts aimed at community mobilization need to address social factors and dynamics of human relations.

4.5 Farmer Group Membership and Size

A sample of 60 group farmers was drawn from 20 FGs. FG membership took two forms; group whose membership were mixed and groups whose membership were only women. NAADS guidelines indicate that groups should be mixed and that farmer groups should have between 15-25 group members. However, in the first scenario that groups should be mixed is not followed in Nakaseke district because some groups were only for women. Data from key informants and FGD shows reasons why women prefer exclusively women groups. First, when a farmer group is mixed, men dominated leadership positions and determined the distribution of group benefits/resources. Secondly, some men preferred their wives to belong to 'only women groups' because of the fear that mixed groups provoked suspicion among married men. Thirdly, women did not express themselves freely when they were in the same groups with men and last but not least, although there were not 'only men groups', but one of the findings was that some men do not want to work with women because women had a lot of household work which meant little time for group work.

In the second guideline that 15 – 25 group size is desirable, the study observed that some groups had less that 15 group members while other groups had more than 25 group members. In farmer groups whose membership was above 25, it was found that some members do not know each other; they too do not know the names of their farmer groups

that they belong to and participation is very passive for some members. The size of the farmer groups varied from group to group as shown in Table 6.

Table 6: Size of Farmer Groups and Composition by gender (N = 20)

No.	Names of Farmer Groups	No. of males	No. of Females	Total No.
1	Bukuuku Farmer Group	10	6	16
2	Harvesters of Christ	10	10	20
3	Kivumu Farmers Group	9	7	16
4	Pineapple Growing Project	7	3	10
5	Zinunula Omunaku FG	9	8	17
6	Nfuniramuwa Farmers Group	16	4	20
7	Kasangombe Women's Group	1	17	18
8	Lukyamu Bukuku Association	20	10	30
9	Kamu Kamu Farmers Group	4	6	10
10	Twegate Farmers Group	11	9	20
11	Twekembe Farmers Group	6	2	8
12	Mukiisa Group	15	10	25
13	Mwera United Farmers Group	12	10	22
14	Basiima Bageya FG	19	9	28
15	Kalagala Tukolerewamu FG	30	42	72
16	Kapeka Youth Development	17	3	20
17	Akwata Empola FG	5	2	7
18	Kalagala Women's Group	0	11	11
19	Twezimbe Women's' Group	3	12	15
20	Namusaale Baale FG	13	14	27

Source; Sub County Farmer Group Lists

4.6 Participation and Selection of Group Enterprises

Enterprise identification, selection and development is a process through which farmer group identified potential enterprises and NAADS assisted the establishment and development of selected enterprises so as to generate income profitably to farmer group members. Most farmers in the study area were smallholder farmers; they grew and kept verities of crops and animals at a small scale. This meant that when they come together in groups, they must prioritize certain crops or animals that they engage in. Selection of the

most suitable enterprise (crop and or animal) was, determined by the group through a dialogue between all group members and focused on production, market and profitability. *'However, the challenge we have here in Kasangombe, when farmers realize that NAADS is giving out say maize seeds all group choose to grow maize, if we give out poultry, they all want to choose poultry'* (Kasangombe Sub county NAADS coordinator). What this statement meant was that groups and selection of enterprises were formed and determined on the basis of expected services from NAADS. When asked whether in their respective groups farmers have a common farming activity, Table 7 illustrates that all farmers earning more than 100, 000 shillings have common farming enterprise(s), a larger percentage (44.4%) of farmers who do not have a common farming enterprise earned less than 30,000 shillings. *'Farmers with common farming enterprises are committed to their groups and are able to engage in a variety of economic activities that yield more incomes,'* (Kasangombe Sub County NAADS Coordinator).

Table 7: Relationship between Income and Common Farming Activity (N = 60)

Income Levels (shs)	**Does your Group have a common farming activity?**		**Total**
	Yes	**No**	
Less than 30,000	6 (11.8%)	4 (44.4%)	10 (16.7%)
30,000 – 59,999	15 (29.4%)	2 (22.2%)	17 (28.3%)
60,000 – 99,000	20 (39.2)	3 (33.3%)	23 (38.3%)
More than 100,000	10 (19.6%)	0	10 (16.7%)
Total	**51 (100%)**	**9 (100%)**	**60 (100%)**

Agricultural Advisory Extensionists (AAE) strongly commend farmers to unite with common farming enterprises or activities because of the fact that it tantamount to increased commitment to group activities and subsequently a better income. Table 7 shows that of the 60 farmer group respondents, 51 farmers in their groups have common farming enterprises. However, when asked whether they participated in selecting their respective farming enterprises, women reported that their choices are not represented during the selection process. Table 8 indicates that of all the farmers who participated in selecting farming enterprises, more (76.9%) were males compared to only 23.1% females. Similarly, of farmers who did not participate in the selection process, more (80%) were females compared to only 20% males.

Table 8: Relationship between Gender and Participation in Selecting Faming Activity (N = 51)

Gender	**Did you participate in selecting this activity?**		**Total**
	Yes	**No**	
Male	20 (76.9%)	5 (20%)	25 (49%)
Female	6 (23.1%)	20 (80%)	26 (51%)
Total	**26 (100%)**	**25 (100%)**	**51 (100%)**

The current NAADS guidelines warrant group farmers to actively participate in enterprise selection as it has implications on their participation in group activities and their wellbeing. During farmer interview, the following issues regarding participation were identified and discussed in the FGD. Collection of data on participation showed that out of 51 group farmers who had common group farming enterprises, 20 (39.2%) selected the farming activities as a group, 13 (25.5%) said that selection was done by their group

leaders, 7 (13.7%) mentioned that selection was done by the men, 8 (15.7%) were absent when the selection was done and 5 (9.8%) joined their groups when selection was completed as illustrated in Table 9.

Table 9: Classification of Participation in Selecting Group Activities (N = 51)

How did you or why didn't participate?	Frequency	Percent	Cumulative Percent
Selected by all of us in our group	20	39.2	39.2
Selected by the group leaders	13	25.5	64.7
Selected by the men	7	13.7	78.4
Was absent	6	11.8	90.2
Joined later/when selection was completed	5	9.8	100
Total	**51**	**100**	

It was therefore important to know who actually made such decisions. Responses collected from FGD have helped in answering this question. The first demonstrated the monopolization of authority by group leaders in identifying group enterprises and group leaders were mostly men. The second consideration but still acknowledged authority of men, was the influence of other people. These 'other' people were called 'the significant others' who were trusted to make decisions on behalf of the group. The third was the direct influence of male farmers in terms of decisions related to group farming activities. The last put the blame on farmers who kept away from group meetings in which group farming decisions were taken. This meant that less outspoken or less dominant group members mainly women, their choices in enterprise enterprises selection were a compromise among the male group members. However, focus group interviews showed that the process of selecting enterprises varied from group to group. Most important was

that traditional crops were more selected because farmers were already familiar with them and they feared to take risks of new crop enterprises.

4.7 Challenges in Formation of Farmer Groups

From study findings, it was found out that forming farmer groups was a challenging process. The study revealed that, the following problems identified as; communication, gender, exclusion, bureaucracy, leadership, mobilization and double or multiple membership were critical concerns to farmers that government, civil society interested in supporting farmer groups must address in order to effectively organize farmers for service delivery. Table 10 below clearly shows that although there is percentage differences in the mentioned challenges, there were no big statistical differences among these percentages; it was an indication that a given challenge must not be addressed in isolation.

Table 10: Challenges of Forming Farmer Groups (N = 60)

Challenges of forming groups	Tally	Percent
Communications barriers	18	30.0
Exclusion of some farmers	17	28.3
Bureaucratic NAADS process	15	25.0
Gender inequalities	13	21.7
Struggle for leadership	12	20.0
Challenge of mobilizing farmers	12	20.0
Double/multiple membership	9	15.0

Multiple responses

Through FGDs, these challenges were briefly explained. Communication barriers implied that some farmers got information about projects that supported farmer groups, but did not want to communicate such information to their fellow farmers. *'At times we get this*

information so late, we rush to form groups, in a way you end up in a poor group or a group in which you have different interests' (FGD for Male Group Farmers, Kapeka).

Exclusion of some farmers implied that, farmer group formation excludes certain categories of the local people especially women, the very poor resource farmers and the sick that were believed not to have the ability to absorb the costs of participation in a group. Gender inequalities did not only mean excluding some women from forming or joining farmer groups, but also implied some married women being restricted to form groups by their husbands. On the other hand male participants put forward examples of farmer groups in promoting unfaithfulness among the married, and women neglecting their household responsibilities. Such reasoning forbidden some women from group activities. These findings challenged the belief that the needs, interests and participation of poorer people were easily represented through community groups. Farmer groups for example in Nakaseke district were not all inclusive. Group leadership as a challenge implied that leadership took on the authority to determine group membership, the authority to champion very important farming decisions like enterprise selection and distribution of group benefits. So when the groups were forming, there were always struggle for group leadership.

NAADS required that a farmer group should be approximately between 15 – 25 group members. To FGD participants, this meant a small number, but they also said that mobilizing farmers to raise this number was a challenge. It was said that farmers had mixed reactions regarding group farming. Participant's reactions ranged from some

farmers having bad experiences with groups, other farmers not wanting to change from individual farming practices, others wanted immediate tangible benefits while others questioned the working modalities of NAADS and lastly the challenge of farmers wanting to belong to more than one farmer group to maximize benefits were all challenges indicated to affect the process of forming farmer groups in Nakaseke district.

4.8 Guidance to Farmers and Farmer Groups

Key informant interviews gave the idea that before NAADS began its activities; it started with sensitizing farmers about the new service delivery system that depended on the demands made by farmers through farmer groups. NAADS contracted the services of private firms to mobilize and sensitize farmers about the benefits that come along with group farming, group formation process, by laws such as registration with the NAADS programme, operation mechanisms of farmer groups such as enterprise selection for which NAADS could support. At this point farmers were left with an option of forming groups. Consequently, many farmer groups were formed. After farmers identified themselves with particular groups, group lists were forwarded to the sub county for registration. Sub counties contract private firms to undertake a range of sensitization and capacity building activities for farmers in their respective groups.

However, from group focus group interviews conducted, respondents commented on how they were sensitized before forming groups and during group activities. More often than not, many FGD participants although commented differently on the quality of sensitization agreed that they were sensitized. Very few mentioned that they simply

registered without being sensitized but they made sure that they had the necessary conditions like group name, constitution, enterprise selection required for registration. From FGDs, farmers felt adequately trained or guided but requested that more effort be put in material access such as credit, fertilizers, and seed and animal varieties. '*We have had much of the trainings in our groups; we need to be given things they promised to group farmers'* (FGD for Male Group Farmers Kasangombe). All FGD participants overwhelmingly expressed the need for tangible benefits like credit, farm tools and farm seeds and crops. Even farmers who had not been trained mentioned that they did not want skills training, instead money spent in form of lunches, transport refund and allowances should be spent in buying for them material farming inputs.

4.9 Farmer Groups Activities

This variable describes to a certain extent, the nature of activities of farmers in their respective groups. 50% of the respondents were members of farmer groups and when asked to point out what kind of activities they engaged in, the main group activities were; group meetings, group trainings, labor and land sharing, group saving and credit and bulky group purchase and marketing. FGDs and key informant interviews pointed out what was involved in each activity and also brought out what farmers said on each activity. It should be noted that these activities did not apply to all groups. Table 11 shows how often these activities were mentioned by farmers in their respective groups.

Table 11: Farmer Group Activities (N=20)

Group Name	Farmer Group Activities				
	Meetings	Training	Labor and Land	Saving and loan	Purchase and Marketing
1. Bukuuku FG	x	x			
2. Harvesters of Christ	x				
3 Kivumu FG	x	x			
4. Pineapple Project	x	x	x	x	x
5. Zinunula FG	x	x			
6. Nfuniramuwa FG	x				
7. Kasangombe W G	x	x	x		
8. Lukyamu Ass	x	x	x	x	x
9. Kamu FG	x		x		
10. Twegate FG	x	x	x		
11. Twekembe FG	x	x			
12. Mukiisa Group	x	x	x		
13. Mwera United	x	x	x		x
14. Basiima FG	x	x			
15. Kalagala FG	x	x	x		
16. Kapeka YD	x	x	x	x	x
17. Akwata Empola	x				
18. Kalagala WG	x	x	x	x	
19. Twezimbe W G	x	x	x	x	x
20. Namusaale FG	x	x			

Source: Farmer group interviews

4.9.1 Group Meetings

Table 12 above shows that all respondents reported group meeting as an activity in their respective groups. One of the requirements for benefiting from the NAADS support is evidence of regular meetings (minute of meetings). This partly explains why group

meeting as an activity was undertaken by all farmer groups. The key issues undertaken in meetings varied from group to group, but most frequently involved communication on a range of issues from group leaders, electing leaders if necessary, prioritizing and selecting new enterprises, activities due to take place, sharing of experiences among others. However, remarks were made concerning the nature of group meetings. Among the concerns were the distance to meeting venues, the frequency of meetings, absenteeism in meetings, and monopoly in group discussions. When farmers realize that they did not benefit from their groups, they showed no interest in attending group meetings.

4.9.2 Group Training

Farmer group training was central to NAADS because through trainings farmers were equipped with better farming knowledge and skills, they also got the potential to realize their worth, their voices were heard when they were in groups and their problems were prioritized and solutions sought collectively. Although participants agreed to having been trained, they challenged the quality and nature of the trainings. First, FGD participants complained that the sites selected were unusually distant from the farmers; secondly, trainings are carried out under tree shades, or in school compounds or at sub counties. These venues were not practical and they did not practically learn. Another important issue was that the trainers who were hired for training were knowledgeable about group formation but when it came to practical aspects like farming techniques they lacked expertise. Participants emphasized that contracts were awarded to firms which hired services of young people who were not skilled.

4.9.3 Group Saving and Informal Loan Schemes

Groups with informal saving and credit arrangements engaged in several activities than those without. Group members made monthly member contributions to the group fund. The range of monthly member contributions at the time of the study was between 500 – 3,000 shillings. At the end of every month the group fund was lend to a group member(s) on a rotation basis. S/he is supposed to pay back after an agreed period, but without interest. Nearly all group farmers interviewed whether they had informal credit arrangement or not, expressed their desire to have or continue with it. However, FGD participants mentioned that income differences among members of particular farmer groups made it hard to fix the amount to be saved by each individual while contributions to social functions like burials, weddings disrupted the accumulation of group funds. Negative attitudes to group savings due to past experiences of dishonesty and failure to pay back loans greatly affected farmers' abilities to contribute to a group fund.

4.9.4 Land and Labor Sharing

Farmer interviews revealed that all study respondents were peasant farmers who owned land privately. A system of land and labor sharing was introduced among group farmers to ensure that farmers increased their land holdings and maximized labor productivity. Group member either contributed land to develop group enterprises, or shared land among and between group members. Aside from this, sometimes some group members arranged to contribute labor to someone's farm on a rotational basis until when all members within a circle had been covered. FGD participants in whose groups they encourage sharing land and labor had this to say; *'This has proved very helpful for some*

one like me who do not have older children and my husband died, I have benefited from group labor.' (A widow from Kasangombe FGD) *'Before I joined this group, I did not have enough farm land, but with this arrangement, I now have land from where I can cultivate.'* (FGD for Female Group Farmers, Kapeka). Challenges were highlighted with this kind of arrangement; often mentioned was when a member within the circle fell sick and he/she failed to contribute labor as well as lazy members within the circle. In such circumstances, the mechanisms adopted involved contributing money to compensate labor or excommunicated such members from the circle.

4.9.5 Farmer Group Purchase and Marketing

Owing to limited financial and storage facilities, farmer groups offered farmers an opportunity to jointly purchase farm inputs like farm tools, farm fertilizers, seed, and plant materials and marketing possibilities at bargained and better prices. Group purchase and marketing were potentially and certainly profitable than one-on-one relationship between a single farmer and a buyer. NAADS encouraged group farmers to identify farm inputs that they needed, then NAADS purchased and distributed such inputs to farmer groups. NAADS also linked farmers to buyers and several examples were quoted in this regard, for instance in Kapeka parish farmer groups growing maize were linked to the bulk buyers, in Kasangombe mango and bean growers were linked to buyers. However, members of some groups criticized their leaders of manipulating market prices and that sometimes they disapproved the prices given to them. For instance; '*We individually grow crops, after harvest take them to place where a buyer can access, normally our*

group leaders mobilizes the collection. But one time our group leader gave a price sale different from what the buyer paid for.' (FGD for Female Group Farmers, Kapeka)

There were a number of group activities that farmer mentioned, groups that took all the activities were those begun the group concept before NAADS, such groups already had informal arrangements such as land, labor and credit sharing and group meetings. NAADS only strengthened these activities. However, groups that were formed simply to take advantage of the services provided by NAADS, did not have any other agenda apart from taking on a few group activities like meetings and trainings, such groups lacked cohesion among group members. Farmer groups that are engaged in various group activities not only evolved to benefit from NAADS, but they had on their agenda an interest in improving living conditions of members.

In conclusion, it is important to note that although farmers varied according to socio-economic factors, findings indicated that these factors (age, gender, education, marital status among others) are not different between group and individual farmers. However, membership to farmer groups mostly depended on friendship, neighborhood, trust, common interest, gender and farm resources. Although gender and lack of farm resources greatly limited farmers from participation in GF, group members were both male and female and are of poor farmers with limited assets for production and limited incomes. Given the experience and knowledge farmers had with traditional crops and animals, majority of farmer groups selected maize, banana, coffee and cattle as their farming enterprises. However, there were challenges in both group formation and enterprise

selection as respondents indicated experiencing difficulties inherent within these processes. Averagely, all respondents had spent four years as members to their respective FGs, where as each FG had at least one activity, FGs with many farming activities group members shared a common farming interest. The next chapter presents perceived farming problems and survival strategies and how the perception shape respondents choices for participation or non participation in FGs.

CHAPTER FIVE

PERCEIVED FARMING PROBLEMS AND SURVIVAL STRATEGIES

5.1 Introduction

The area of study is predominantly rural, where farming is the main occupation especially among women. In the more densely populated areas, subsistence farming is practiced while in the sparsely populated areas, nomadic pastoralist persists. However, farming constraints have affected crop and animal production. This chapter highlights the perceived farming constraints as highlighted during farmer interviews and strategies used by NAADS to deliver advisory services for solving the perceived farming problems. It goes on to reflect farmers' awareness, acceptance and ownership of AAS delivery system.

5.2 Perceived Farming Problems

In the sub counties where the study was carried out, about 97 percent of the study population depended on agriculture (predominantly subsistence farming) for food and income. Women contributed to a larger percentage of the farming labor and met largely the subsistence needs of their households. Following farmer interviews, a number of farming constraints were identified; the major constraints in crop production in order of importance were recorded as low farm yields mentioned by 74.2% of study respondents- this meant difficulties of producing enough food for families which threatened food security and income of most households. Crop and animal pests and diseases by 69.2%, low farm gate prices by 63.3% mainly due to lack of organized efforts and storage facilities. Other problems were mentioned as unpredictable and unreliable weather

conditions (44.2%) characterized by too much or less rainfall, limited financial resources (39.2%) to purchase proper farm implements thus many farmers continued using simple farm tools like hand hoes and pangas. The category of 'other' involved limited knowledge on improved farming methods, inadequate extension service (most mentioned by individual farmers), declining soil fertility, personal illnesses and animal theft

Table 12: Perceived Farming Problems (N=120)

Perceived Farming Problems	Tally	Percent (%)
Low farm yields	89	74.2
Crop and animal pests and diseases	83	69.2
Low farm prices	76	63.3
Unpredictable weather	53	44.2
Limited of financial resources	47	39.2
Lack of improved crop and animal varieties	41	34.2
Others	31	25.8

Multiple Responses

The key informant interviews acknowledged the existence of these farming problems. However, they mentioned that a program is in place (referred to NAADS) to address them. They also added that all farmers' concerns could not be solved completely, but NAADS aided farmers to deal with these problems gradually. They also added that farmers needed to realize and embrace the NAADS programme and accept to use the knowledge, information and technologies that were so far given to them. As one key informant said, '*Some farmers deliberately refused and ignored to use the knowledge*

extended to them. They want seeds, tractors and money….yet the information given is to help realize their potential and use their resources, if they could follow, farming constraints cease.' (Community Development Officer, Kapeka). Much emphasis has been placed on provision of information and knowledge and little has been done to extend farming implements like credit, market facilities, new seed and planting material that would enable farmers apply the knowledge and skills acquired. Group discussions indicated that knowledge without provision of inputs would still be of no value since most of the farmers are poor to afford better seeds, credit and such other facilities.

5.3 Attempts to address Farming Constraints

In an attempt to address and eliminate these farming constraints, the government of Uganda embarked on a campaign to transform farming activities from predominantly subsistence to modernized/commercial farming. One of the intervention areas was to institute a Plan for Modernization of Agriculture (PMA) to specifically address problems of low productivity, market, information and technology access. NAADS was designed as a component of PMA to focus on increasing access to information and technology for profitable agriculture and ultimately increase the incomes of the farmers. When asked how the NAADS system in Nakaseke district operates, the district and sub county NAADS coordinators were quoted in the following statements; '*We are empowering subsistence farmers to access private extension services, provide them with technologies and market information, develop private sector capacity and professional capability to supply agricultural services with the aim of moving towards commercial farming.'* **(**Nakaseke District NAADS Coordinator).

> …NAADS was designed in order to empower farmers determine access and control over agricultural advisory service provision, market information and technological improvement necessary for transforming and improving their farming activities. NAADS is built on principles of farmer groups as grass root institutions and farmers' willingness to participate in NAADS activities is the principle determinant of our success. We encourage farmers forming groups, because groups are a target for NAADS.' (NAADS Coordinators, Kasangombe and Kapeka).

5.4 Farmers Knowledge, Awareness and Acceptance of the NAADS Programme

Based on the key informant interviews, the implementation of NAADS activities is guided by farmers' local knowledge, awareness and acceptance of the programme. When asked whether farmers were aware of and understood the working principles of the NAADS programme, 69.2% of the farmers interviewed demonstrated a clear understanding and knowledge of the NAADS programme compared to 31.7%% who were not aware of the NAADS programme as shown in Table 13. Respondents indicated that NAADS had done much sensitization through training and through posters. Across the different levels of education, all respondents with tertiary and secondary levels of education had knowledge of how NAADS works. Although many of respondents with no education or primary education had knowledge of how NAADS works, a significant number of respondents were not aware.

Table 13: Relationship between Level of Education and Knowledge of NAADS Programme (N = 120)

Level of Education	Do you know how NAADS works?		Total
	Yes	No	
None	20 (80%)	5 (20%)	25 (100%)
Primary	43 (57.3%)	32 (42.7%)	75 (100%)
Secondary	15 (100%)	0	15 (100%)
Tertiary	5 (100%)	0	5 (100%)
Total	**83 (69.2%)**	**38 (31.7%)**	**120 (100%)**

X^2= 0.009 (P<0.05) df = 5 N = 120

However, when asked whether they accepted the technique of using FGA to deliver advisory services, in aggregate figures, majority (62) respondents indicated that they do not like the approach, many 53 (85.5%) of these were women who had avoided the approach as shown in Table 14. Although NAADS has been trying to focus on numbers of women in the program but details of how they are benefiting and in which form has been a big challenge. Most of the women are not sharing the benefits from the program because the program is not addressing their specific needs and interests due to challenges in program implementation. Some women indicated that men claim most of the group benefits, their husbands restrict them from forming groups yet also, they find themselves with many home duties and little time for group activities.

Table 14: Relationship between Gender and Acceptance of NAADS Farmer Group Approach (N = 120)

Gender	Do you like the farmer groups Approach?		Total
	Yes	No	
Men	27 (65.9%)	9 (14.5%)	36 (28%)
Women	14 (34.1%)	53 (85.5%)	67 (72%)
Total	**41 (100%)**	**62 (100%)**	**103 (100%)**

There were various reasons as why some farmers accepted and other disapproved the NAADS farmer group approach. These reasons were sought out in the FGDs and the following quotations present participant's expressions.

> …NAADS tells us to form groups as a way of accessing services, but group members disagree on many issues, for example membership, common farming activity, how to distribute farming items got from NAADS. For me farmer groups cannot work.' (FGD for Male Group Farmers Kasangombe)....You see we are so many, and like any other projects like World Vision, VEDCO; they work with people in groups, because with a group you can reach so many people, since we all need help, groups are better. (FGD for Female Group Farmers, Kapeka).

For some categories of farmers like the females who complained that their husbands frustrated their efforts to form or join farmer groups, the very old farmers and the very 'poor' (farmers without farming resources) argued for reconsideration to be assisted as individuals because the FGA does not favor them. These findings agree with Chambers (1997) who argued that there is no single approach that can claim support and include all rural people and noted that a multiplicity of approaches is needed to transform the lives of rural populations. It is also true that if any approach is to benefit the poor and contribute to their welfare, it must operate within their knowledge, awareness and acceptance of the approach.

5.4.1 Ownership of the NAADS Programme

Basing on the available records on NAADS and data collected from key informants, it was written and said that NAADS operates as a farmer owned and managed extension delivery system that sees farmers as the primary implementers and beneficiaries of the programme. When asked about the ownership of the NAADS programme, the district and sub county NAADS coordinators unanimously reported that farmers form groups at the village level, the chairpersons of village farmer groups meet at a parish level to elect representatives at sub county level to form a Farmer Forum (FF). The FF is the main institutional farmer structure that takes decisions on behalf of the grass root farmers. FF contract private providers (private consultancies and professionals) to provide advisory services such as information, training, technology and other farm supplies to farmer groups. The outlined functions of farmer forum were to determine priorities and allocate resources, and to monitor and evaluate services provided by private consultancies and professional. In line with premise of NAADS design FF are composed of farmers. The composition of these FF qualifies NAADS to be called a farmer owned programme. However, while the farmers constitute FF at the sub county, complete ownership is not yet achieved as explained below.

During FGDs, it was apparent that the situation as described by the NAADS coordinators was an ideal one. Whether the FF had the powers to make decisions and whether the FF were a clear representation of farmers' interests were issues of contention. The realities on the ground revealed many issues about farmers' ownership of the programmes. Some participants were skeptical of the powers of FF, they emphasized that so many calls were made to NAADS to use demonstration sites during training, but nothing was so far done

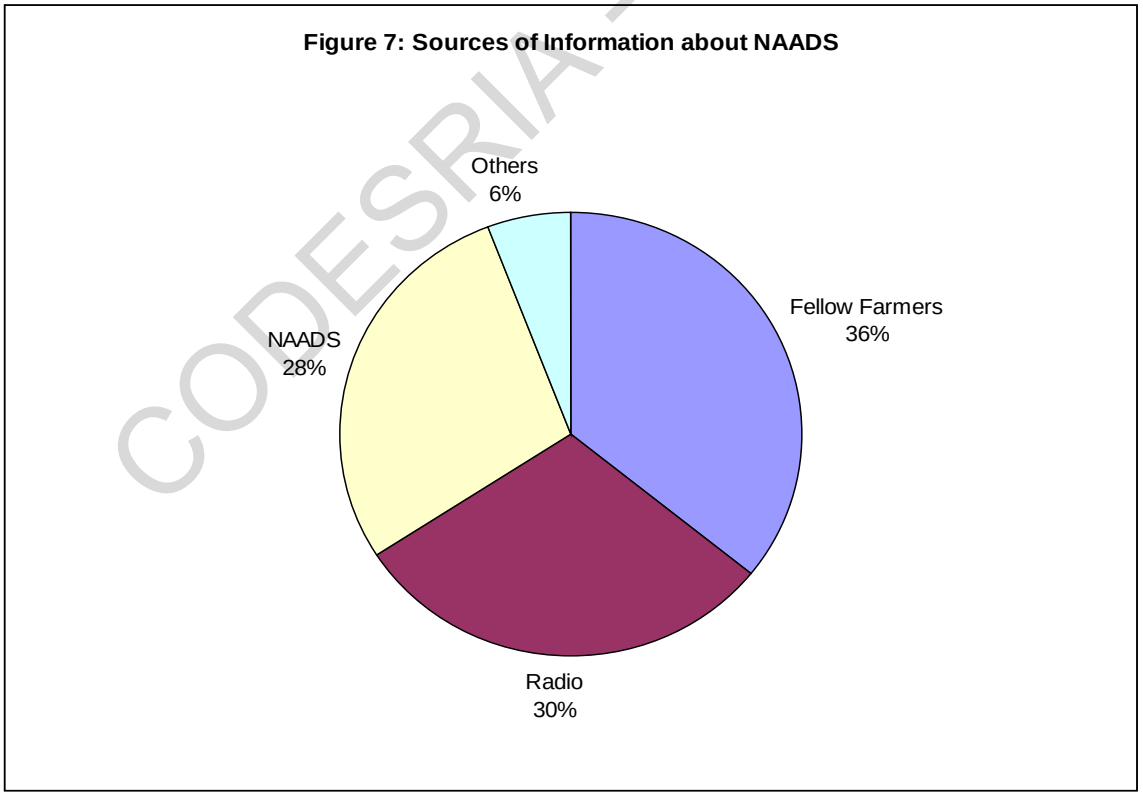
and trainings continued to be conducted under tree shades, sub county headquarters contrally to farmers' requests. Secondly, participants also indicated that many farmers struggled to belong to FF, the reasons were that FF representatives and higher authorities corrupted the process of awarding contracts, they asked for bribes and secondly they presented their selfish issues of interest and not the interests of farmers and lastly FF members are given allowances whenever they meet in meetings. These and so many other issues were mentioned about ownership of the NAADS programme and many respondents felt that they did not own it. Quite noticeable were the words used to refer to NAADS, for instance ***"they", "them".*** Also quite evident was that some farmers did not interact with forum members to have their ideas represented

However, there were controversies because some FGD participants and the representatives of the FF were in support of the current framework. They argued that there were so many farmer groups making it so impossible to represent each of the group or individual interests. The fact that FF were comprised of chairpersons of Farmer group, some farmer groups' chairpersons were not members of FF, because there were more farmer groups making it impracticable to have every chairperson of a farmer group a member of FF. There has not been any capacity for groups that are not represented to demand for their interests to be represented in the FF, partly due to high levels of illiteracy and a fear by some farmers to speak out thinking that any such pressure on the programme may lead to withdrawal of the programme

5.5 Source of Information about the NAADS Programme

As Figure 7 indicates, most farmers (36%) came to know about NAADS through fellow farmers contrary to what implementers and literature say that farmers got to know about the NAADS programme through sub-county leadership and extension staff. Radio programmes (30%) played a bigger role in information flow to farmers whereas 28% knew about it from NAADS service providers who included private firms that provided extension, NAADS sub county staff and local adverts using posters erected in gardens/plantations of successful farmers. There was some initial misinformation given to farmers about NAADS. Farmers expected to get free farm inputs (and probably some money) which led to formation of false groups in anticipation of getting free inputs

Figure 7: Sources of Information about NAADS (N=120)



Problems were highlighted with these types of information accesses; first, farmers had networks like neighborhood ties, friendship ties, family ties, and political ties and these were very influential in determining who accessed information. For instance, when a farmer gets valuable information that needs to be passed on to fellow farmers, he or she considers members within his or her network. One time NAADS supplied seeds and fertilizers (urea) to farmer groups, some respondents indicated that they received the information so late and other never received at all due to none membership to particular networks. In a second scenario, in ways of informing farmers about NAADS, they (NAADS) put tags or labels on people's farms, sometimes they look out for big and fertile farms. Farmer whose farms are labeled indicated that they got frustrated because they used their efforts and not because of the NAADS support. *"I had a flourishing maize garden along the road to the trading center and farmers liked it. One day, I found a poster that read, 'NAADS PROGRAMME, KASANGOMBE SUB COUNTY', I did not like this-it should be put somewhere else."* (FGD for Individual Farmers Kasangombe)

5.6 Choice of Practicing Group Farming

When asked whether any farmer can practice group farming, majority 86.7% of respondents indicated that the farmer group approach was open to all farmers and only 13.3% indicated that not all farmers are free to form or join farmer groups. The proportion of farmers who mentioned that not all farmers are free to form or join FGs was higher in females (26.7%) than in males (8.3%) as Table 15 shows. This is an indication that the FGA favors men more than females

Table 15: Relationship between Gender and Openness of Group Formation (N=120)

Sex	Are farmer groups open to all farmers?		Total
	Yes	No	
Male	55 (91.7%)	5 (8.3%)	60 (100%)
Female	44 (73.3%)	16 (26.7%)	60 (100%)
Total	**104 (86.7%)**	**16 (13.3%)**	120 (100 %/)

Categories of farmers who indicated being excluded from group farming involved the very 'poor' farmers, the very 'sick' and some married females who are restricted by their husbands from participating in group farming. The very poor included farmers who said they lacked land, farm tools, and without any income. Whereas the 'sick' meant HIV/AIDS infected farmers who were so weak to engage in group activities or who were discriminated by fellow farmers.

5.7 Expectations from the NAADS Programme

The study noted that expectations from the NAADS programme were diverse. At the onset of the NAADS programme in Nakaseke district, some farmers thought that the government had extended free financial aid and agricultural support to them through NAADS; others indicated that it was an effort to help farmers mobilize their own resources and advance their interests through farming together in groups. To others, NAADS seemed to be a deliberate effort by government to popularize its governance and lastly some farmers did not know what to expect from NAADS. Farmers who expected to obtain farming assistance hurriedly formed farmer groups. This supported the argument

by Sanginga et al (2002) who mentioned that the number of FGs normally went high when a new development programme was introduced and many such groups collapsed once they realized that the new programme did not cater for their expectations. On the other hand, some farmers who were skeptical of the NAADS programme were hesitant to form groups, although later some of them formed or joined existing farmer groups, others refused to form or join any farmer group. This explains why some of the initial groups formed were fake, composed of family members or of the same people belonging to a number of groups as a strategy for reaping from the programme free farm inputs. Such groups have since disappeared after realizing there were no free gains from the programme. These irregularities partly explain the low the downward trend in the number of farmer groups in the study sub counties.

Contrary to what farmers expected from NAADS, the Government of Uganda developed the NAADS to enable farmers shift from predominantly subsistence farming to producing for the market. The move was expected to transform agriculture from subsistence to commercialization by supporting farmers to access agricultural information, knowledge and technology. Despite these splendid strategies, the study indicates that all the farmers interviewed were still at a subsistence level. From the FGDs conducted, all the participants expressed the need for large scale production. But they also pointed out that NAADS was still far from helping them commercialize farm production. Participants highlighted a number of issues needed to transform subsistence farming into market oriented agriculture. Table 16 shows that investment in heavy farm machinery like tractors was mentioned by majority of the participants (23.3%); secondly was the call for

concerned authorities to redistribute or avail land for farmers who want to practice large scale farming (21.%). Limited land access coupled with the traditional land inheritance method had fragmented land into meager plots and farmers sighted it as a factor that inhibited the desire to commercialization that NAADS can not address. Also mentioned was the need to provide credit and financial incentives to farmers (19.2%) such that they ably meet the costs of large scale production. Mentioned lastly were the aspects of market opportunities to farmers (15.8%). Others included provision of fertilizers, pests and disease control assistance among others.

Table 16: Concerns for Commercialization of Agriculture (N =120)

Priority issues raised	**Tally**	**Percent**
Investment in agricultural machinery	28	23.3
Land redistribution/access	26	21.7
Credit/financial provision	23	19.2
Market opportunities	19	15.8
Others	27	22.5

Multiple responses

'NAADS has invested more in training farmers and cannot go for any of their training, unless when I do not have anything to do and maybe I also go there to get transport and feeding allowance.' (FGD for Male Group Farmers Kapeka Sub County). *'I have benefited from farm, market and group development trainings, although now what is needed is to invest more money into credit and market development.'* (FGD for Male Group Farmers Kasangombe Sub County)

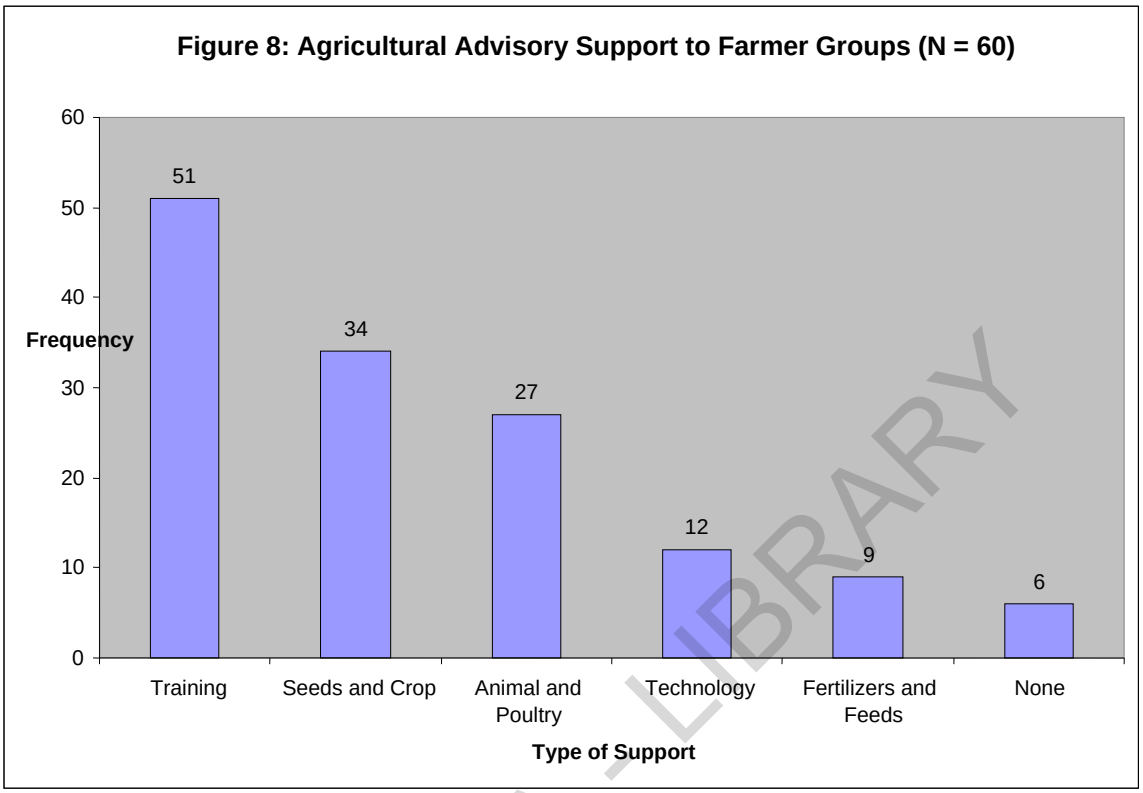
FGD participants indicated that although NAADS was committed to transforming subsistence agriculture into commercialized agriculture, the issues raised in Table 16

need to be addressed in order to transform into commercial farming. The preceding quotations were an indication that instead of spending resources into training, farmers preferred that such resources need to be spent in other activities like market development and credit/loan facilitation. Even where farmers might have had a possibility of learning new ideas, trainings have been repeated several times and farmers have lost interest.

5.8 Agricultural Advisory Support to Farmer Groups

The main beneficiaries of the NAADS programme were the farmer group members. NAADS encourages farmers to organize themselves in small groups that are sharing the same social-economic interests. It was up to the farmers to choose how and with whom they want to form a group with. According to NAADS, the formation of small farmer groups is to enhance their access to advisory services like information, training, technology and improved seed and crop varieties. In the long run, the groups may attract additional funds and support, since outside agencies are eager to work in areas where rural people are well-organized and development oriented. Respondents were asked to identify the kind of service they received from NAADS. As already emphasized, majority of respondents indicated training/capacity building with (51 respondents), quite a big number too (34 respondents) indicated having received crops and seed verities (beans, maize, cassava, banana, mangoes etc), 27 respondents received animal and poultry (cattle, pigs, chicken) , 12 received improved technology (animal and poultry houses, farm tools) and 9 received fertilizers, animal and poultry feeds and lastly were 6 respondents who had not received anything as shown in Figure 8.

Figure 8: Agricultural Advisory Support to Farmer Groups (N=60)



The actual implementation of NAADS takes place at sub county level with the sub county NAADS coordinator as the focal point and technical person. Each sub county in consultation with sub county FF makes its own NAADS plan. Although respondents indicated that they have received more training than any other service, the sub county budgetary proposals are guided by budgetary estimates given by the NAADS secretariat. And to the farmer, there is no information given in relation to budgetary arrangements and on which services they should expect in both quantity and quality.

5.9 Individual Farmers Perceptions about Group Farming

NAADS recommends that for farmers to profit from its advisory services, they must form or join FGs. However in Nakaseke district, it was evident that not all farmers belonged to groups. Surprisingly, some IF were desirous of NAADS services and were aware that group farming was a must, but they did not like the idea of group farming. Asked whether they wished to benefit from NAADS services, out of the 60 individual farmers, 25 (41%) were willing to benefit from NAADS, 35 (58.3%) were not willing to benefit from NAADS. However, Table 17 displays a pattern that indicates that the poorest and the rich tend to be less likely to form groups. The percentage of IF not willing to benefit from NAADS was highest among farmers whose monthly income was above 100,000 shillings, partly due to what farmers mentioned that the rich may not need groups to access AES. Whereas, the poor although may be willing to form or join groups, they may have no assets to contribute to groups thereby handicapping and excluding them in FGA.

Table 17: Relationship between Income Levels and Willingness to Benefit from NAADS (N = 60)

Level of Income(Shillings)	Are you willing to benefit from NAADS?		Total
	Yes	No	
Less than 30,000	5 (41.7%)	7 (58.3%)	12 (100%)
30,000 – 59,999	11 (73.3%)	4 (26.7%)	15 (100%)
60,000 – 99,999	6 (42.9%)	8 (57.1%)	14 (100%)
More than 100,000	3 (15.8%)	16 (84.2%)	19 (100%)
Total	**25 (41.7%)**	**35 (58.3%)**	**60 (100%)**

Individual farmers who wished to get hold of assistance from NAADS but did not like farming in groups pushed for NAADS to think about different alternatives to include all

farmers in their efforts to accessing and providing agricultural advisory services to all farmers. *'I want to be a beneficiary of NAADS; but in groups you work for a few members, especially the group leaders who take decisions, they personalize group deliverables. I think NAADS should devise ways of reaching to all farmers.'* (FGD for Women Individual Farmers, Kapeka Sub County)

The analysis of data collected from individual farmers who were neither unwilling to obtain NAADS' assistance nor form groups revealed socio-economic characteristics that were quite distinct from other respondents. Data compiled indicated that this group of persons was heterogeneous. For instance, some farmers were too isolated, their households were too distant form other fellow farmers and they occasionally moved to trading centers, others were so reserved i.e. they seemed unconcerned to know the happenings in community and others were comparatively so 'weak or so poor' i.e. without any farm resource especially land. On the other hand, some individual farmers were comparatively resource empowered (lots of farm land, financially well) and where not willing to participate under NAADS.

The basics for this chapter have been to highlight the perceived farming constraints, to underline the attempts in addressing these constraints and present respondent's knowledge, awareness, acceptance and ownership of these attempts. Based on these, respondents had a preference for either group or individual farming types and what they expected from the preferred type. It was not surprising to find that similar farming constraints like low yields, pests and diseases, low prices, use of rudimentary farming

tools, lack of access to market and credit as mentioned by respondents were also experienced elsewhere in most rural farming populations. These led to the design of the NAADS programme to assist farmers to effectively deal with these constraints by extending AAS to farmers in a demand driven approach. It was necessary that farmers had to mobilize into groups for effective delivery of AAS. However, the study found out that majority of farmers were aware of NAADS, but their acceptance of FGA differed. There were categories of farmers who were not aware of NAADS group approach and farmers who were for several reasons left out of the group approach; these expressed their desire to form groups. Whereas farmers in groups were quite skeptical of the nature and quality of AAS, they also expressed their need to improve the delivery of AAS. The next chapter presents motivation and constraining factors inherent in group and individual farming practices.

CHAPTER SIX

MOTIVATION AND CONSTRAINTS IN FARMING APPROACHES

6.1 Introduction

This chapter lists factors that may act as motivators for farmers to participate group based farming activities and factors that may affect commitment or membership to farmer groups. The chapter underlines barriers to the practice of group farming starting with factors that affect participation in group activities and what farmers perceived as likely solutions. The section goes on to present factors that prevent farmers from coming together and working as a group, the constraints they face a individual farmers and key issues to solving individual concerns.

6.2 Motivation for Group Farmers

Under the NAADS programme, it is evident that farmer groups are formal, voluntary and self-controlled groups of farmers composed of 15 - 30 members from the same village or community. They aim at facilitating the delivery of advisory services like information, knowledge and technologies and ultimately determine the control and ownership of the process of delivery. When asked why they were interested in working with farmer groups, key informants gave a range of ideas that they considered of importance in working with groups of farmers. It was said that the mechanism leads to major cost savings for NAADS in the delivery of advisory services to farmers, allowing to significantly expanding their service coverage. It also helps farmers in groups to reduce their individual cost of input purchasing, production and marketing costs. *'Many are small scale farmers, resource constrained, cannot easily access farming resources like*

farming skills/knowledge, improved plant/seed varieties, and markets that aim to transform farming into better outcomes. Therefore, when farmers get organized into groups, they overcome such challenges.' **(**Secretary Productions Office, Nakaseke District**).** However, the decision to participate in group activities is an attribute of an individual farmer. Group farmers were asked to enumerate the factors that drove them to participate in group activities; and a number of reasons were given for as;

Majority of the farmers mentioned that at the onset of NAADS activities in the study sites, farmers where mobilized to form groups. As a result many farmers formed groups expecting to receive farming assistance. For such farmers, their participation in group farming was driven by anticipation for free handouts. For farmers who formed groups shortly after NAADS started operating mentioned that, they saw their colleagues in groups benefiting and they rushed to form groups. In other wards, their participation in group farming was influenced by seeing fellow farmers benefiting from group farming. The other category of farmers saw group farming as an opportunity to share with others, pool resources and take other advantages of group farming like increased bargaining for input and produce prices. To them participation in group farming was a self-help mechanism and such farmers were more willing to maintain membership to their groups with or without the NAADS programme.

Quite a small number of respondents mentioned that they were told to join groups by their fellow farmers. Surprisingly, some were coerced especially for groups which had failed to raise the required number of 15 – 25 group members. All respondents who

mentioned coercion were women and blamed it on their husbands. The least number of respondents pointed out that group farming to them was an opportunity to use and advance their skills. These were farmers who wanted to advance their leadership skills or ambitions to wider community positions of responsibility for example village chairmanship and parish councilors. To them participation in group farming was a stepping stone to mobilize fellow group farmers to voting them into leadership positions.

The study was conducted at a time when the President of the Republic of Uganda had issued attacks against the NAADS Programme and had threatened to put a ban on its funding. When asked whether farmers would still belong to their respective farmer groups without NAADS, active discussions during FGDs revealed mixed arguments. Some participants indicated that at first NAADS influenced them to form groups, after they formed groups they have been able to take advantage of group efforts and their commitment to their groups was no longer influenced by NAADS.

'We began our group because NAADS had promised free seed varieties and improved animal breeds. Apart from trainings and some who received maize seeds, but we are benefiting from sharing labor, tools and household items..will continue even without NAADS.' (FGD for Male Group Farmers, Kapeka Sub County). Participants who were so proud of the NAADS programme asserted their loss of interest in group farming if a ban was put on NAADS. They attributed their improved conditions to NAADS; these were farmers who depended on the seeds, crops, knowledge and they had attained because of NAADS and condemned any action against the programme. They too indicated that

farmer groups were in place because of NAADS without it they were not there. '*While NAADS has given more training, but still need them. Although we need more inputs like seeds, crops, fertilizers etc; if you remove NAADS, then whom will we ask for these things. NAADS has been our voice.'* (NAADS Parish Chairperson, Kapeka).

Lastly were participants who were not bothered by any argument for or against NAADS and to them with or without farmer groups their lives had always remained the same. Although some were hesitant to leave their groups others considered leaving and in fact at the time of the discussion, their commitment to group participation was very passive. *'I don't have anything to do with NAADS, and I have not got anything, stopping it is not my decision but it does not trouble me. Even some farmers left their groups others are considering leaving,'* (FGD for Individual Male Farmers, Kasangombe Sub County).

6.3 Factors Affecting Membership to Farmer Groups

In terms of membership to farmer groups, it was realized that when farmers formed a group, membership was often calculated on the basis of what farmers thought would be the benefits to them as individuals as opposed to the group as a whole. For a farmer to sustain membership to his/her group meant that he/she ought to have gained from the group. On the question of whether farmers left one farming group to another, and whether farmers left farming groups completely, all respondents unanimously agreed that it was a common occurrence for farmers to either leave one group to another or leave from their respective groups completely. There were several reasons farmers gave for this phenomenon as mentioned below;

Many farmers formed or joined farmer groups thinking that they would yield socio-economic or political benefits to themselves. If the group yielded any benefits to the farmer, he or she would sustain his/her membership. On the contrary when there were no benefits to the person, the options were to try membership with another group or left farming groups completely. Secondly were the issues of migration and marriage or marriage disintegration. The youth (18 – 35 years of age) frequently migrated to other areas in search of a living. This meant that if they formerly belonged to groups, they left them. Also females who got married to men from other areas had to leave their groups. Marriage breakups meant that if couple was in one group, one had to leave to another group or abandoned group practice completely.

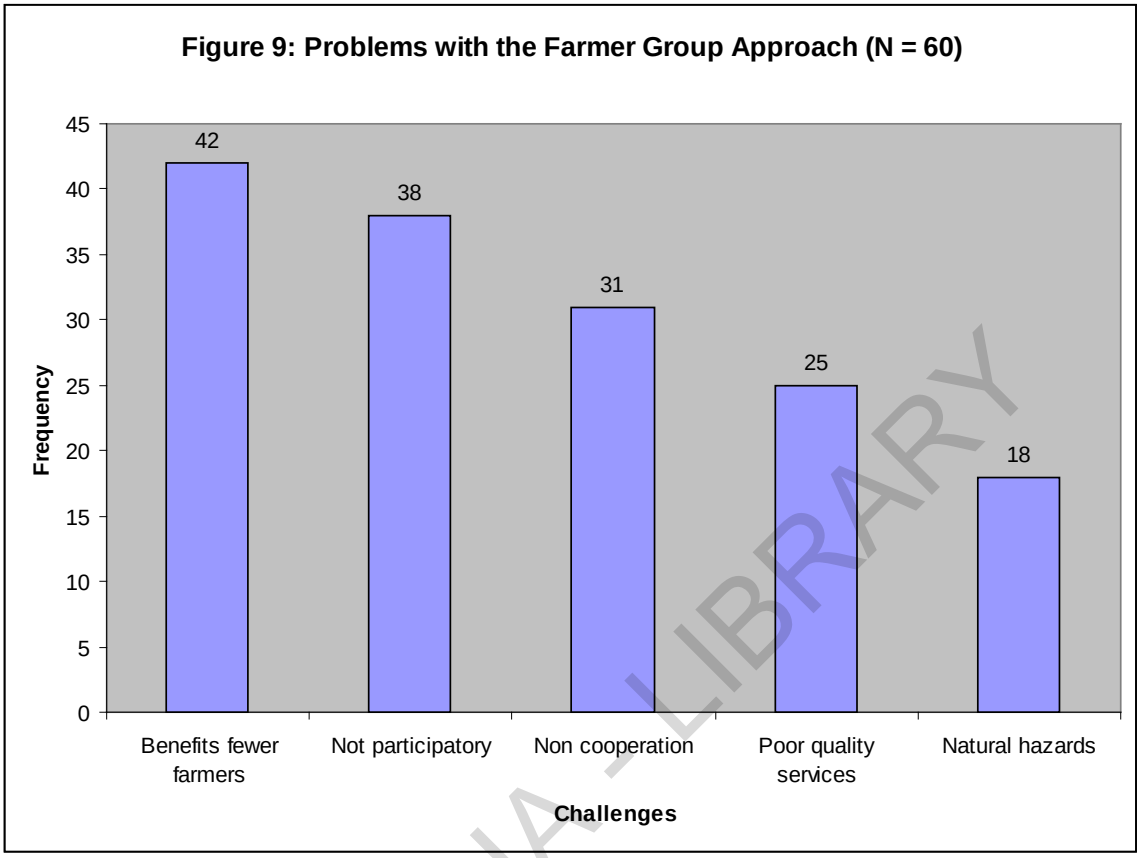
Also mentioned were the concerns for sickness and laziness. Farmers who had prolonged illnesses (AIDS was an example) were stigmatized, either were coerced or felt uncomfortable and left their groups. Similarly, mostly to husbands, if it was rumored that the group to which his wife belonged contained someone with AIDS, he forced his wife to leave that particular farmer group. Likewise if identified to be lazy and not contributing to the group, such persons were indirectly excommunicated from their respective groups. Lastly farmers sustained membership to their groups if they collectively agreed on key group matters like leadership, common farming enterprise, allocation of group benefits. Or if they disagreed, there were mechanisms of solving any differences.

Although there were several issues highlighted as far as sustaining group membership was concerned, the continued existence and sustained membership to farmer groups depended much more on the economic gains to group affiliate members than any other factor. If members felt needs were meant then, obviously member's commitment and sustainability were effected and vice versa.

6.4 Challenges with the Farmer Group Approach

While there has been a growing interest in working with organized groups of farmers at a village level, it must also be recognized that the approach of using farmer groups has not come up to the expectations of both the farmers and authorities of these programmes. Findings from one to one interviews with the farmers, FGDs and key informants pointed out that some of these challenges stem from the authorities who champion this approach whereas also from the farmers. Figure 9 illustrates problems with the FGA as mentioned by the farmers.

Figure 9: Problems with the Farmer Group Approach (N=60)



Frequencies in Figure 9 demonstrate that many farmers challenged the approach of its inability to yield benefits to majority of the farmers. 42 of the 60 group farmers indicated that the approach only benefits fewer farmers. Categories of farmers that were more likely not to benefit from group farming were the very resource constrained poor farmers, the women in male dominated groups and the very old. Besides, group leaders were said to take advantage of group benefits than any other group member. To respondents, these were cases that indicated that the farmer group approach only benefited a few sections of farmers. Secondly, respondents pointed out that farmer groups have been used as a mechanism of controlling farmers rather than a means for farmers to control their own destinies. This was made known when they said that NAADS makes decisions on behalf of the farmers, in other wards its non participatory- mentioned by 38 of the respondents.

For instance, farmers lamented on their numerous call for NAADS to divert resources for training into purchasing farming inputs, an aspect that NAADS resisted. Others also mentioned of the need to receive farming assistance as individual not in group-also an issue that NAADS rejected.

Respondents suggested that the farmer group approach would be an insight into helping organizing farmers for effective delivery of AAS, because of the fact that some rural farmers were unwilling to cooperate makes its implementation difficult, 31 of respondents openly discouraged fellow farmers from using it. When farmers succeeded in coming together, there were numerous problems faced with these groups; problems such as gender inequalities, double membership, group leadership among others. Also mentioned of the challenges, was the disagreement about the nature and quality of services given to farmer groups. Examples included the non-practicality of the training given to them, the quality of farming seeds that were not different from what respondents called 'local' and the experience of private providers that left a lot to be desired. Some respondents indicated that in their effort to cope with these limited and low quality seed and animals, they faced natural disasters like seasonal variations, pests and diseases and loss of soil fertility.

Key informant discussions yielded yet other challenges embedded in the use of farmer group approach. These are explained in the use of illustrations/quotations: *'There is never any approach with support from all farmers. Farmers voluntarily form groups; unfortunately their attitudes frustrate such efforts. They have representatives who tell us*

what farmers need. We continuously hear farmers opposing group farming.' (District NAADS Coordinator, Nakaseke).

> …There are politicians and researchers who openly campaign against NAADS, it is a big problem especially when they do not propose alternative strategies. You have continued to write against NAADS-something needs to be done.' (Sub county NAADS Coordinator). 'We have a problem of limited funding. Farmers present many farming enterprises, but with little funding we cannot provide for all. That is why some farmers say they have not benefited simply because we cannot meet all farmers' interests. **(**Sub county NAADS Coordinator).

To deliver advisory services that addressed the needs of farmers, respondents suggested that there was need of developing a more differentiated approach; Overall men appeared to have greater access of the services provided by NAADS yet their contribution to agricultural production even at the household level was marginal compared to women. While NAADS targets economically active poor, emphasis needs to be placed on how women could access AAS and whose contribution was much more that the men. Respondents said that NAADS needed to develop programmes that reached out to the elderly and the sick who could not afford the costs of group farming. It was also mentioned that it is too early to assess the impact of the approach. One key informant said, *'If you come back here in 2012 and you do not find evidence of success then you can criticize the approach'* (NAADS Coordinator, Kasangombe Sub County). There was a concern that the expectations of farmers exceeded the resources available to meet them. More financial resources were needed to match the expectations of farmers. Farmers' responses also implied that NAADS should improve the nature and quality of advisory services extended to them.

6.5 Reasons for Practicing Individual Farming

Studies have shown that collective action in form of farmer groups is essential in helping poor farmers pool farm resources like skills, land, labor and financial in order to build a resource base that is capable of meeting costs associated with farming. Farming groups also facilitate advocacy and provision of other services that could be costly if undertaken by individual farmers (Hussein, 2001). Therefore as a basis of targeting poor farmers (farmers with limited physical and financial resources, skills and knowledge), NAADS supports and encourages farmers to form groups. However, in Nakaseke district despite the fact that the programme (NAADS) is meant for all farmers, there was almost an equal number of farmers in groups and not in groups. Individual farmers gave a number of reasons for not practicing group farming. It is important to highlight that some of the reasons given were by choice yet others were not by choice as shown in Table 18.

Table 18: Reasons for Practicing Individual Farming (N = 60)

Reasons for practicing individual farming	Frequency	Percent	Cumulative Percent
Group farming is problematic	20	33.3	33.3
Can manage on their own	12	20.0	53.3
Absence of farming partner	10	16.7	70
Were denied the opportunity	8	13.3	83.3
Group farming not for all farmers	6	10.0	93.3
Have not heard about group farming	4	6.7	100
Total	**60**	**100**	

Due to various problems (some of which were discussed in FGDs), majority (33.3%) of the individual farmers indicated that group farming is problematic. These were farmers

who had been in groups before but were forced out due bad experiences. It also involved farmers who had never been in any farmer group but perceive group farming as an unrealistic undertaking. 20% of the 60 individual farmers indicated that there were capable of solving their own farming problems without having to seek for support from collective action. For such farmers, they varied in education levels but had their average monthly income above 100,000 Ugandan shillings and 2 -3 average acreage of farm land. 16.7% of the individual farmers mentioned that as much as they were willing to form groups and benefit from collective action, they did not have a farming partner(s). These were farmers located so distant from the average distance between and among households, also described under this, were farmers who were considered very poor in terms of ownership of farm resources and lastly were HIV/AIDS affected farmers who were discriminated against. Those who were denied the opportunity for group farming were 13 %, all these were women whose husbands declined them from group activities. Individual farmers who believed that GF was not for all farmers were 10% and these were farmers who believed that group farming only benefited a few farmers-mainly the group leaders and their friends and that GF is meant for such people. Lastly (6.7%) were farmers who had not heard about group farming. These were farmers who were so isolated from the general society.

6.6 Challenges with Individual Farming

Regarding the challenge faced by individual farmers, respondents reported experiencing unique problems compared to their counterparts in farmer groups. They mentioned their inability to participate in decision making on matters related to community activities and

how well they were represented in development plans at the community level. They were not empowered to express their views like their counterparts in farmer groups. *'Whereas group farmers elect representatives to the parish, Sub County and district levels, individual farmers have not got that opportunity. Representatives report the need for group farming ….....they go on to provide training and seeds to only group farmers'*. (FGD for Male Individual Farmers, Kasangombe Sub County).

Farmers also reported poor access to technology and information which were accessible to farmer groups. Such is due to the fact that NAADS only provides technology and information to only 'organized' groups of farmers. Here too, although some were unconvinced of what their fellow farmers received, they argued that it was better than not to receive anything. *'If it was not for my husband to reject me from taking collective action, I would prefer group farming because my neighbor has been trained, last season she got maize seeds and I need them also'* (FGD for Female Individual Farmers, Kapeka Sub County). Also pointed out was the reality that some categories of individual farmers are discriminated by colleagues in farmer groups. Among these were the HIV/AIDS infected persons and the very poor farmers whose ability to participate in collective action was highly doubted.

6. 7 Suggested ways of Solving Individual Farmers' Concerns

Table 19, gives an illustration of what respondents mentioned as likely ways to solving individual farmers' concerns.

Table 19: Ways of Solving Individual Farmers' Concerns (N = 60)

Solutions for Individual Farmers'	Tally	Percent (%)
Need for a platform for representing all farmers' concerns	43	71.7
More awareness and sensitization programmes	37	61.7
Need for other projects	31	51.7
Individual efforts	29	48.3

Multiple responses

Majority of respondents (71.7%) talked about creating a general platform to share the needs and interests of all farmers including both group and individual farmers. There were parish, Sub County and district Farmer Forums, but these committees consisted of representatives from farmer groups. Individual farmers were technically left out and their concerns not addressed. Individual farmers argued for an all inclusive FF, which would represent all farmers' needs and not only the interests of only group farmers. Secondly, 61.7% made a call for more awareness programme for farmers who were not knowledgeable about NAADS and its approach of group farming. Also meant more sensitization to husbands to let their wives practice group farming or look for an alternative to group farming. Given the negative views about NAADS, some respondents (51.7%) proposed for other projects that would cater for the interests of farmers who are cynical of NAADS or who are disadvantaged with the working modalities of NAADS. lastly, 48.3% of responses emphasized individual endeavors as one respondent mentioned; '*What is important is for me and fellow farmers to work hard than waiting for help from government and other project…… At least if they find you with something is*

better than finding you with nothing'. (A Male 37 year old Individual Farmer, Kapeka Sub County).

The study tried to capture reasons why respondents chose to practice either group or individual farming types. There were five different basics for choosing group farming, i.e. on the basics of expected benefits, benefits to fellow farmers, self-help mechanism, coercion and advancement of individual skills. On the contrally the practice of individual farming depended on the problems inherent in farmer group, one's ability to cope individually, absence of farming partners, other were denied the opportunity yet the rest had not heard about group faming and the option left to them was single farming. However within each type there were inbuilt challenges and suggested responses or solutions to them.

CHAPTER SEVEN

COMPARISON OF BENEFITS FROM FARMING PRACTICES

7.1 Introduction

Group farming under NAADS is a collective effort which is voluntarily formed by the farmers in order to get more benefits than with individual farming. Group farming is aimed at maximizing the scarce resources such as land, labor, capital and technologies to improve the wellbeing of majority farmers. In the data collection instrument, respondents (both group and individual farmers) were asked to indicate changes they had experienced for the last five years, and then they were asked if they had improved. They were asked perceived changes in farmer's status in terms of acreage of land, income, level of farm production and knowledge. The analysis below focuses on the perceived benefits from each farming practice.

7.2 Acreage of Farm Land and Farm Production

In the area of study, estimates showed that there were no significant differences in the amount of cultivatable land between group and individual farmers, also there were no significant differences in cultivatable land before and during the practice of group farming for group farmers. Average amount of cultivatable land was 1.5 acres. The study population remained dependent on household based small scale agriculture. However, respondents were asked if they perceived any changes in relation to farm production, there were noticeable differences in the responses. First, a high proportion of group farmers (50%) perceived that their farm production had increased compared to 33.3% of the individual farmers. Of the farmers who had not experienced any difference in the

farm production, 33.3% were group farmers compared to 51.7% who were individual farmers. Almost an equal proportion of group and individual farmers perceived their farm production to have decreased. Illustrations are shown in Table 20. Overall, although with a very narrow difference, more farmers (42.5%) had not improved their farm production levels compared with 41.7% whose farm production increased and 15.8% reported a decline.

Table 20: Relationship between Type of Farmer and Changes in Farm Production (N=120)

Type of Farmer	Level of Farm Production			Total
	Increased	Not Improved	Decreased	
Group Farmer	30 (50%)	20 (33.3%)	10 (16.7%)	60 (100%)
Individual Farmer	20 (33.3%)	31 (51.7%)	9 (15%)	60 (100%)
Total	**50 (41.7%)**	**51 (42.5%)**	**19 (15.8%)**	**120 (100%)**

It was in the interest of the study to find out whether the type of farming explained the respondents' perceived farm production in Table 20. Table 21 clearly demonstrates a yes or no picture of whether one's farming type explained his/her production levels.

Table 21: Relationship between Type of Farmer and Whether the Farming Practice Explains the Level of Farm Production (N=120)

Type of Farmer	Does your farming practice explain the level of farm production?		Total
	Yes	No	
Group Farmer	27 (47.4%)	33 (52.4%)	60 (50%)
Individual Farmer	30 (52.6%)	30 (47.6%)	60 (50%)
Total	**57 (47.5%)**	**63 (52.5%)**	**120 (100%)**

More often, majority 63 (52.5%) respondents believed that their farming type had nothing to do with their farm production compared to 57 (47.5%) who agreed that their farming type explained their production levels. The proportion of farmers whose level of farm production is not attributed to their farming types is more (52.4%) for group farmers than (47.6%) for individual farmers. Farmers who believed that their farming types were responsible for their level of farm production varied in argument. For instance; respondents who believed in GF mentioned collective efforts, advisory and material support including training, seed and plant varieties from NAADS as major contributions to improved farm productions. Whereas respondents who blamed group farming criticized it for wasting farmers' productive time in meetings and trainings with no significant support in which only a small proportion of people benefited.

> …I have been able to grow and harvest more crops like beans and ground nuts because of collective cultivation. In my group we share land and labor and this has helped me than when I was still cultivating alone (28 year Female Group Farmer, Kasangombe Sub County). NAADS has been very helpful in providing seeds and crop varieties, this way I have been able to expand my fields than before when the programme was not there (Tukolerewamu Farmer Group Leader, Kapeka Sub County). If NAADS did not raise our expectations of free inputs, I would have worked for myself. But they told us to form groups and wasted much time in meetings and trainings without giving us seeds and crops they promised. (39 year old Group Farmer, Kasangombe Sub County)

Those who did not argue for or against their farming types, explained reasons for the changes in farm production. Those whose production had improved mentioned their hard work, their ability to have good farming knowledge and tools. Whereas respondents whose production did not improve or declined mentioned aspects of sickness, loss of partners, migration of family labor and limited farm lands. Although some farmers remained skeptical, on the importance of group farming towards increasing farm production, NAADS key persons said that the better organized farmer group had reported

improvements if production levels. NAADS trainers helped them develop farming plans and taught them basic farming techniques, as well as farm management. NAADS established demonstration sites where farmers could learn about crop management and improved production technologies.

The farm production sub sector, in general, and farmer crop production in particular continue to face a number of challenges. Generally, there is a new chance of improved food prices, but this only benefits farmers who can afford large scale production, processing and marketing. Many farmers still rely on traditional methods of production and hence do not realize full potential from their production activities. There is need for innovative ways to promote large farm production. There is also a need to develop viable farmer groups or promote linkages that would enhance vertical integration production and marketing.

7.3 Changes in Farmers' Incomes

Data collected from NAADS coordinators showed that the programme is working to break the farming constraints identified in chapter five by providing farmers with the tools and opportunities to enhance farmers' production and productivity so as to increase their incomes and build better lives for themselves and their families. They went ahead to say, given the fact that 95% of the area population was in farming, the only way for farmers to increase their incomes was by selling what they produced. The district NAADS coordinators said that NAADS had tried within its mandate to improve the incomes of farmers, but he also said that getting crops to the markets was still a

formidable task because no single road in Nakaseke district was tarmacked-all were marrum and in poor conditions. *'With better roads and markets farmers would be motivated to increase their production and that will mean higher incomes for them and improved standards of living,'* (NAADS Coordinator, Kasangombe Sub County)

It was in the interest of the study to find out the changes in farmers' incomes before and after the NAADS concept of group farming and also to find out the income differences between farmers who practiced group farming and individual/single farmers. Analysis of respondent's (group farmer's) income before and after they adopted NAADS group concept shows that although there were variations in farmers income before and after group farming, for instance; majority (51%) farmers earned between 30,000 – 59,999 shillings before group farming whereas more farmers (33.3%) earned between 60,000 – 99,999 after adopting group farming, these differences were not statistically significant ($p>0.05$). Similarly only 5 of the 60 group farmers earned more than 100,000 shillings before group farming compared to 14 (23.3%) after group farming, but statistics do not show any difference between these periods.

Table 22: Relationship between Period of Group Farming and Income Level (N=60)

Farming Period	**Income Level (shs)**				
	Less than 30,000	**30,000 - 59,000**	**60,000 - 99,999**	**100,000 and above**	**Total**
Before Group Farming	16(26.7%)	31 (51.7%)	8 (13.3%)	5 (8.3%)	60 (100%)
After Group Farming	10(16.7%)	16 (26.7%)	20 (33.3%)	14 (23.3%)	60 (100%)

p>0.05

During the analysis of socio-demographic characteristics of study respondents, it was considered statistically of no difference between group and individual farmers regarding their reported monthly earnings, FGD gave an idea about the kind of farmers who were more likely to have or improved their incomes; and these were farmers with more farming assets like more land, more equipments and livestock as these were the most contributors to farmers' incomes but not just because of NAADS. This is consistent with Walusimbi and Nkonya (2004) results on positive association between ownership and control of these factors as having a direct link with improved production and welfare. So, one's belongingness to a farmer group did not directly translate into increased farmers incomes unless when the group facilitated ownership and control of these assets.

Nevertheless, as with perceived farm production differences between farmers, respondents attributed their income variations to various aspects. Both group and individual farmers whose incomes had improved commended their individual hard work, knowledge and farming experiences. Yet also others believed in small family sizes with little responsibilities and socio-economic support from their kith and kin as contributing elements to their improved incomes. Correctly, some group farmers paid tribute to their farmer groups for facilitating improvements in their incomes through group lending, group marketing, and group acquisition of farm inputs from NAADS among other such benefits that came along from their respective groups. On the other hand, both group and individual farmers whose incomes had not improved or deteriorated apportioned blame to their inability to access farming resources, lack of will from the authorities to assist them, too much family responsibilities and sickness as major contributing elements to their

inability to improve their income coupled with persistent farming constraints reported in chapter five. In some cases especially when a respondent belonged to a farmer group and he/she had ever been in meetings and trainings but when he/she had not benefited materially, blamed his/her income status to the group and overall to NAADS.

7.4 Changes in Farming Knowledge and Skills

Key elements in rural development programmes aiming at improving farmers' incomes is building farmers' capacity and empower them to cope with farming constraints. One of the key principles of NAADS is to empower farmers with knowledge, information and skills necessary to organize and create institutions through which they can act collectively and get their voices heard in / control the decision-making processes. Farmers were asked how well they perceived their expertise to deal with farming problems and demand for the services that they require, an illustration is shown in Table 23;

Table 23: Relationship between Type of Farmer and Level of Farming Knowledge (N = 120)

Type of Farmer	**Level of Farming Knowledge**				
	Adequate	**Moderate**	**Limited**	**Do not Know**	**Total**
Group Farmer	36 (60%)	19 (31.7%)	5 (8.3%)	0	60 (100%)
Individual Farmer	23 (38.3%)	20 (33.3%)	16 (26.7%)	1 (1.7%)	60 (100%)
Total	**56 (49.2%)**	**39 (32.5%)**	**21 (17.5%)**	**1 (1.7%)**	**120 (100%)**

(X^2= 0.022 P<0.05).

Figures in Table 23 above show that majority of study respondents (56, 49.25%) perceived that they were well equipped with knowledge and skills necessary for better farming, fewer respondents (21, 17.5%) reported having limited farming knowledge. The reported pattern was because, for most respondents under NAADS they reported better equipped with necessary farming knowledge, except those who were absent during the trainings-the results suggest that NAADS must have heard a very big impact in training farmers. For individual farmers, the perceived better farming knowledge could be that although they were not trained by NAADS, may be farmers have had a long experience in solving these problems and developed better understanding of farming 'techniques'.

However, there were discrepancies between level of farming knowledge and type of farmers. For example, the proportion of respondents with limited knowledge was high among individual farmers (26.7%) compared to only 8.3% among group farmers. Similarly group farmers who reported having better farming knowledge were by 21.7% more than individual farmers. This reported pattern is attributed to the fact that group farmers received training from NAADS and actually it was easier for them to suggest that NAADS had given them enough training. Whereas individual farmers were more concerned about being neglected by NAADS. The statistical level of significance **(X^2= 0.022 P<0.05)** is an illustration that group farmers have better knowledge of farming practices than individual farmers.

Farmer FGDs generated data on how farmers have been trained-farmers views below indicate farmers' perspectives about capacity building and empowerment under NAADS

program. *'Before NAADS came, no one would tell me how to plan for my small farmland, with NAADS I have attended several of their training and I can now know plant varieties of crops on the little land I have.'* (FGD for Male Group Farmers, Kapeka Sub County) *'NAADS gave us training on the most profitable enterprises and how we can exploit the available market opportunities. I am so desirous of this because I now grow crops and find market.'* (FGD for Female Group Farmers, Kasangombe Sub County) *'One can blame NAADS for other things but not for training. It has given us more training that we need now. If only it can provide more farming materials like seeds, fertilizers and loan-this would be a great deal.'* (FGD for Male Group Farmers, Kapeka Sub County)

Analysis of findings from farmer interviews indicate that most group farmers unanimously agreed that NAADS had done much in training farmers for better farming practices. However concerns were raised regarding the nature of trainings; first, farmers added their voices on the need for practical or on-farm training rather that classroom-like training. Secondly, emphasis was laid on the need to provide material farming inputs, this rose out of the fact that some farmers do not have such inputs to apply the knowledge and skills they acquire after training. Lastly, authorities need to let farmers determine training needs-this is because facilitators come with already made training manuals-sometimes contrary to the expectations of farmers.

It is evident that the FGA as used by NAADS to deliver AAS has aided some farmers to improve their farm production and productivity, but it is also important to note as one group farmer put it that *'the future belongs to the better organized farmer groups.'*

Farmers that have improved their farming statuses have been those whose farmer groups not only exist for NAADS but have been able to use their groups for other possible undertakings such as shared group labor, savings and credit arrangements and the wider advantages of collective effort. It is evident that individual farmers who have taken on the initiative of hard work, eagerness to exploit other available opportunities have been able to improve their farming statuses. Although the group approach is good, but the major difference between farmers who have improved their farming statuses and those that have not, is the extent of individual commitment to the need for improved farming and consequently better well-being. Most notably, most farmers are still having small-scale farms, use traditional techniques and technologies, depend on family labor, and have little or no capital to invest towards commercialization. Commercialization will be the most single element for the success of NAADS through which farmer groups will be able to increase their financial ability which will continuously challenge and encourage their participation because it will produce tangible outcomes.

CHAPTER EIGHT

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1 Summary of Key Findings

This chapter presents a summary of key findings about formation dynamics of farmer groups, perceptions of farmers about group and individual farming approaches, motivating and constraining factors as well as benefits of each approach to the farmers.

8.1.1 Formation Dynamics of Farmer Groups

Farmers who formed groups considered friendship and neighborhood as membership criteria to FGs and they expected to obtain free farming assistance from NAADS. Such groups only undertook group meetings and training as group activities. However, FGs that evolved around other interests especially land and labor sharing, saving and credit arrangements in most cases considered trust and common interest as criteria for group membership and these groups undertook a range of group activities. Women considered forming 'women-only' farmer groups; this was because men still remained significant decision makers in groups and controlled group benefits. Women preferred having their own groups, although in some 'women-only' groups, they incorporated men as decision makers and advisors. In such a scenario, the need for women to form 'women-only' groups and direct their own progress was curtailed by the presence of men in 'women-only groups.

The very 'poor' farmers were excluded because they often could not make any contribution that make their inclusion worthwhile, this results into what many have called

middling effect (Weinberger et al, 2001; Mercer, 2002), where the poorest and the richest tend to be excluded from group formation and group work. While the rich did not need group to deal with their farming needs, the poorest were excluded because they had no assets to contribute to the group enterprise. Location and information played an important role in mobilizing farmers. Isolation limited knowledge and information access and led to lack of social networks. Isolation was more acute very deep in villages where marginalized farmers are less likely to know what is happening in society and were excluded from the process of forming farmer groups. These isolated farmers were in most cases the individual farmers.

In village communities women especially the married were disadvantaged in terms of their lack of capacity to make farming decisions which made it harder for them to organize and later engage in group activities. Sometimes women had to ask for husband's permission to form groups and this complicated the whole idea of helping them especially for projects that use group approaches. Enterprise selection in groups were in most cases carried out by men very hurriedly and without regard to effective participation and varying farming interests of all group members. Many farmers complained of their interests not represented in enterprises selection process. These were mostly the women in mixed groups and the very resource poor farmers whose choices were not represented. Some of the farmers complained either of having been coerced to take up the enterprise or took it up without relating it to their preferences. More often was the fact that farmers preferred selecting traditional crops like maize, banana, coffee and pineapple as their farming priorities. This could be explained either by the fact that farmers feared to take

risks, or farmers were not experienced with a variety of crops. Most groups for example selected one common enterprise and faced unintended consequences that came along with this dilemma such as price and whether fluctuations.

8.1.2 Perception of Farmers about Group and Individual Farming Approaches

In the start of NAADS in Nakaseke district involved a variety of awareness raising and sensitization activities. During this phase farmers were sensitized and they perceived that NAADS was a new and a unique service delivery that would help farmers access free farming assistance in form of training, credit, farm seeds and crops, fertilizers, livestock, pests and disease control. Farmers also understood that in order to benefits from NAADS they had to form FGs. Therefore there was an urgent need for farmers to form groups. Besides, there were already some existing groups in the study communities and realizing that NAADS works with groups, these old groups registered as new groups under the NAADS programme. Although there were already existing groups before NAADS and the fact that many groups were formed during the inception of NAADS activities, there were individuals who completely avoided the group initiative. These were by far, the isolated individuals who had not received information about group farming, the women who were restricted by their husbands to form groups, the very poor, the very rich and the chronically affected farmers who avoided group farming. The outcome of this was the creation of two categories of farmers, that is, group and individual farmers.

Although NAADS qualifies to be called a farmer owned programme, because all farmer institutions right from the village to district levels, group farmers felt that they did not

own the programme. These and so many other issues were mentioned about ownership of the NAADS programme and many respondents felt that they did not own it. Quite noticeable were the words used to refer to NAADS, for instance ***"they", "them".*** Also quite evident was that some farmers did not interact with forum members to have their ideas represented

8.1.3 Motivations and Constraints to Participation in Groups or Individual Farming

Study findings indicated that the motivation to form and practice group farming was largely based on farmers' expectations to receive free farming assistance in form of seeds and crop varieties, fertilizers, credit or loan facilities while others thought they would receive financial rewards in form of transport and lunch refunds. Sanginga et al (2002) and (Opondo et al 2006) noted that many farmer group are formed when a new program is introduced because farmers expect to get free handouts. On the other hand, it is also true that there were groups which were formed on the basis of expectations of free aid, but once group members realized the need for self help, they used the group advantage to undertake other activities like labor and land sharing and rotation credit for group members.

It was also apparent that besides expecting free handouts, there were other motivators for practicing group farming. Faced with many farming problems especially limited farming resources, some farmers formed groups to better deal with the challenges they faced. In this case the idea of group was perceived as a self-help initiative and in most cases this idea was a replica from the experience of existing groups in the neighborhood, friends or

relatives that belong to such groups. The constraints in group farming were identified mainly as too much of the trainings than actual material and input support from NAADS. The implementation of NAADS has concentrated more on theoretical training than producing tangible commercial farm outputs and this was pointed out as a motivating as well as a constraining factor for individual farmers especially after seeing that their counterparts if group farming were not receiving the material support.

8.1. 4 Benefits from Group and Individual Farming Approaches

A comparative analysis of benefits showed that group farmers had increased farmer production levels and incomes compared to individual farmers except for a few individual farmers who were relatively rich and did not need groups in order to increase their farm production. Group farmers had received sufficient knowledge and information of markets, better farming practices. NAADS supports farmers to produce the enterprises that are profitable and to meet market demands both in quality and quantity, to be able to exploit available or potential market opportunities. Farmers that have improved their farming statuses have been those whose farmer groups not only exist for NAADS but have been able to use their groups for other possible undertakings such as shared group labor, savings and credit arrangements and the wider advantages of collective effort. It is evident that individual farmers who have taken on the initiative of hard work, eagerness to exploit other available opportunities have been able to improve their farming statuses. Although the group approach is good, but the major difference between farmers who have improved their farming statuses and those that have not, is the extent of individual commitment to the need for improved farming and consequently better well-being. Most

notably, most farmers are still having small-scale farms, use traditional techniques and technologies, depend on family labor, and have little or no capital to invest towards commercialization.

8.2 Conclusions

There were some initial misunderstandings by farmers about NAADS. Farmers expected to get free farm inputs (and probably some money) which led to formation of fake groups in anticipation of getting free inputs. This could have a bearing on the sensitization carried out about NAADS and its 'mother', the PMA at the beginning of implementing the programme since many respondents claimed that they only expected free handouts. More sensitization may be necessary although successful implementation would be a better sensitizer.

The challenge that NAADS faced and is still facing is how to ensure that all farmers form groups especially the very resource 'poor' farmers and the women. Working through and within groups has been thought to uplift the economic status of all people including people infected and affected with HIV/AIDS and people with disabilities. Notably, from the research findings NAADS is not addressing the pride of the resource poor who include the very poor farmers, people with HIV/AIDS and persons with disabilities have no resources and have been excluded from participating in farmer groups. Inclusiveness means having all people (men, women, youth and disabilities) participating and benefiting from the programme. Generally men dominated group processes; they influenced formation of groups and influenced group activities. Ownership of farming

resources like land, financial and sometimes labor seemed to be essential for participation in farmer groups thereby automatically handicapping the poor and excluding the poorest. It should however be noted that although the poor farmers did not form or join groups, membership to most groups were poor peasants who had inadequate income to meet their basic needs. So far local governments have tried to include special groups of people into the NAADS programme, but more needs to be done.

In line with premise of NAADS design, all the institutions are composed of farmers. The composition of these institutions qualifies NAADS to be called a farmer owned programme. However, while the composition of the institutions is all farmers complete ownership is not yet achieved. Ownership requires active participation in decision making and demanding accountability at all levels from the village to the centre. This level of ownership is not yet achieved under the NAADS Programme. All weaknesses regarding ownership of the programme stem from lack of farmers' own funds. Programme regulations including financial accountability are drawn in Kampala without active participation of the farmers who 'own' the programme. Such regulations aim at creating a system most suitable for public accountability and not for farmer institutions. This is the fundamental cause of all weaknesses regarding farmer ownership.

The implementation of NAADS has concentrated more on theoretical training than producing tangible commercial farm outputs that would empower farmers financially and encourage their participation and ownership. Some trainings have been repeated several times and farmers have lost interest even where they had chances of learning new ideas

say for example from new trainers. This is the most challenging component facing the NAADS programme, all that is being done under NAADS should be in line with provision of agricultural tangible inputs like seeds/crop varieties, fertilizers, credit alongside information and knowledge. NAADS provides a lot of training to farmers but adoption level of skills gained by farmers and particularly women is low due to lack of capital to access the required inputs and technology.

8.3 Recommendations

An indispensable factor for delivering AAS and increase the income of smallholder farmers is the emphasis on farmer groups that are able motivated and sufficiently represent the interests of most poor farmers. However, the current NAADS effort of working within and through farmer groups is faced with a number of unsolved issues that need to be addressed in order to involve and benefit most rural poor farmers. For example, the implementation to-date has concentrated more theoretical training than producing tangible commercial farm outputs that would empower farmers financially and encourage their participation. The training is not focused to any market and has no market linkages. It is difficult for such training to commercialize agriculture, which requires market specific training. The best alternative is for the training to be market focused and for service providers to move to every household and give husbandry advices to farmers on their farms. In order to achieve this, NAADS districts and sub counties have to involve marketers (traders) in the process of enterprise selection. It is the traders with information of what the various markets require in terms of quantities, quality, delivery time and packaging and labeling. This is the information that traders should pass on to farmers, so that farmers produce for the available markets.

So far local governments have tried to include special groups of people into the NAADS programme, but more needs to be done for special categories of people including the very poor women, persons with HIV/AIDS and people with disabilities. These resource poor people cannot access investment resources for commercial agriculture and cannot therefore participate in the NAADS programme. It is therefore necessary that Government and development partners should design a complementary programme to provide for the resource poor and bring them on board the development path.

Institutional development has concentrated on group dynamics, enterprise selection and constitution making for the groups and not on farmer empowerment and poverty reduction strategies, which would include sensitizing farmers on their rights, roles and responsibilities under the NAADS programme. This is the fundamental cause of all weaknesses regarding farmer ownership. Two alternatives to this problem: Either, strengthening farmer institutions so that donor funding flows directly to these institutions; or**,** farmers raising own funds and making their own regulations to govern NAADS. Before then, effective ownership will remain a problem.

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Appendix 1: Semi-structured Questionnaire for Farmers

Implications of Farming Approaches for Farmers' Wellbeing: A Comparative Study of Group and Individual Farming Practices in Nakaseke District, Uganda.

Section A: <u>Demographic Characteristics of Respondent</u>

1. Age of respondent (in complete years)……
2. Sex of respondent
   (1) Male
   (2) Female
3. Marital status
   (1) Single
   (2) Married
   (3) Widowed
   (4) Separated/Divorced
   (5) Other (specify)…….
4. Education level of respondent
   (1) None
   (2) Primary 1 – 7
   (3) Secondary 1 – 4
   (4) Secondary 5 – 6
   (5) Technical college
   (6) University
   (7) Other (specify)…….
5. Main crops grown by the respondent (at least three)
6. Animals kept by the respondent
7. Average monthly income of the respondent
   (1) Less than 30,000 shillings
   (2) 30,000 – 59,999 shillings
   (3) 60,000 – 99,999 shillings
   (4) More than 100,000 shillings

8. Tribe of the respondent

(1) Muganda

(2) Munyankole

(3) Munyarwanda

(4) Other (specify)……

Section B: <u>Formation Dynamics of Farmer Groups</u>

9. When growing crops and keep animals identified above, do you do it in a group?

(1) Yes

(2) No **(skip to section c)**

10. Explain

…….

11. If belonging to a group, what is the name of your farmer group? .....

12. How many members are in your farmer group? .....

13. How many members are?

(1) Males…….

(2) Females…….

14. When forming your group, what factors did you considered?

(1) Trustworthiness (2) Age (3) Gender (4) Neighborhood (5) Family ties

(6) Common interest (7) Friendship (8) Religious affiliation (9) Language

(10) Distance (11) any other (specify)……..

15. As a group, do you all share a common farming interest?

(1) Yes (2) No (skip to qn 19)

16. If yes, what is that group interest? .....

17. Did you participate in identifying this interest?

(1) Yes

(2) No

18. Explain your answer

……..

19. When you were forming or joining the group, did you face any challenge?

(1) Yes

(2) No

20. Explain your answer

……..

21. Were you guided when forming your farmer group?

(a) Yes (b) No

22. Explain your answer

……..……

23. What tasks do you perform together as a group?

(1)……. (2) ……..

(3) …… (4) ……

24. How long have you been in your group?..... years

Section C: <u>Perceptions of Farmers about Group and or Individual Farming Practices</u>

25. What do you perceive as the common farming problems faced in your community?

(1) Low farm yields

(2) Limited market access

(3) Pests and diseases

(4) Limited access to credit/loan

(5) Others, Specify……

26. As a farmer faced with these problems, what is your preferred farming practice?

(1) To be on my own (individual farming)

(2) To work in partnership with fellow farmers (Group farming)

(3) Do not know

(4) Any other, specify?

27. Explain your answer

……..……

……..……...

29. Have you heard about the idea of group farming?

(1) Yes (2) No

28. If yes, from whom?

(1) Farmers

(2) Government authority

(3) Service provider (specify)……

(4) Others (specify) ……

30. Is the farming group practice open or free to everyone?

(1) Yes (2) No

31. Do you know how it operates?

(1) Yes (2) No

32. Explain

……

33. Do you like the practice?

(1) Yes (2) No

34. Do group farmers get any support from NAADS?

(1) Yes (2) No

35. What kind of support/assistance is given to farmers in groups?

(1) Loans/Credit

(2) Farm training skills

(3) Farm seeds, crops, fertilizers

(4) Others (specify)

36. In your opinion, what type of support should be given to farmers? (Just list)

……..

37. Explain your answer

……..

Section D: <u>Motivating and Constraining Factors for Group or Individual Farming Practices</u>

Instruction: Question, 38 to 45 are for Group farmers.

38. Why are you in your group?

(1) In my group we share farming resources

(2) In my group we receive training in better farming methods

(3) I wanted to receive free farming inputs from NAADS

(4) I saw others benefiting

(5) I was told to join

(5) Any other, specify …….

39. Are there farmers who left from your group to another?

(1) Yes

(2) No

40. Are there farmers who completely leave from their groups?

(1) Yes

(2) No

(3) I do not know

41. If they leave, why?

(1) Migration

(2) If they see that they are not benefiting

(3) Laziness

(4) Any other (specify) …….

42. As you are performing group tasks, do you face any problems?

(1) Yes

(2) No

43. Explain your answer

……..

……..

44. Is there something that can be done to correct these problems?

(1) Yes (2) No

45. Briefly explain your answer

……

……

Instruction: Question, 46 to question 53 are for individual farmers.

46. As an individual farmer, why are you not practicing group farming?

(1) I have not heard about group farming

(2) I can manage on my own

(3) I do not have a farming partner

(4) There are problems with group farming

(5) Benefits from group farming are not convincing

(5) Any other, (specify)……

47. Have you had any problems practicing individual farming?

(1) Yes

(2) No

48. Explain your answer

……

……

49. Is there something that can be done to correct these problems?

(1) Yes

(2) No

50. Briefly explain your answer

……

51. Are you willing to participate in the NAADS program?

(1) Yes (2) No

52. Are willing to form or join farmer groups?

(1) Yes (2) No

53. Explain

…….

Section E: <u>Benefits from Group or Individual Farming Practice</u>

Perceived changes between 2002 and 2007 according to:

54. Perceived changes in acreage of farm land

(1) Less than 0.5 acres

(2) 0.5– 1.9 acres

(3) 2.0 – 3.0 acres

(4) More than 3 acres

55. Explain the reason(s) for the change

……

56. Perceived changes in income

(1) Greatly increased

(2) Slightly increased

(3) Decreased

(4) Not changed

57. Explain the reason(s) for the change

……

58. Perceived changes in farming knowledge and skills

(1) Improved

(2) Not improved

(3) Worsened

(4) Do not know

59. Explain the reason(s) for the change

……

Thank you for your valuable time and responses

Appendix 2: Interview Guide for Focus Group Discussion

Interview Guide

1) What common farming problems are experienced in this community?
2) What are farmer groups and what are they for in responding to these problems?
3) Comment on the process of forming farmer groups?
4) What problems are inherent in forming and practicing farmer groups?
5) Why do some farmers choose group farming and others avoid it?
6) What problems do individual farmers face?
7) Which type of farmers take most interest in practicing group or individual farming?
8) Should the farmer group approach be maintained or not and why?
9) What needs to be done to improve the delivery of agricultural advisory services?
10) Comment on the status of farmers in groups and not in groups according to acreage of farm land, farmers' incomes and level of farming knowledge and skills?

Thank you for your valuable time and responses

Appendix 3: Interview Guide for Key Informants

Interview Guide

1) Comment on the nature of farming constraints in this community?

2) What strategies in place to respond to these challenges?

3) Why do you like to work with farmer groups in providing extension services?

4) How are farmer groups formed?

5) In your opinion, what are farmers' views about farming in groups and not in group?

6) Are more farmers practicing group or individual farming and why?

7) Is there any significant difference between farmers in groups and individual farming?

8) What has motivated farmers to practice group?

9) What challenges do you face in providing extension/advisory services?

10) What can be done to respond to these challenges?

Thank you for your valuable time and responses