

Sokoine University of Agriculture



MA. Dissertation

**Community perception and participation
in agricultural projects in Kishapu
District, Tanzania**

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May 2024

**COMMUNITY PERCEPTION AND PARTICIPATION IN
AGRICULTURAL PROJECTS IN KISHAPU DISTRICT, TANZANIA**

**A Dissertation Submitted in Partial Fulfilment of the Requirements
for Master of Arts in Project Management and Evaluation of
Sokoine University of Agriculture, Morogoro.**

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May, 2024

EXTENDED ABSTRACT

This study focuses on community perceptions and participation in agricultural projects in Kishapu District, emphasizing the need for understanding both positive and negative perceptions. The motivation behind the need of such understanding is that perception towards development projects being introduced or implemented in an area tends to differ among community members, with some projects being perceived negatively and others positively. Community members are more likely to participate if they have a positive perception about the project in question. Therefore, there is a need of understanding the drivers for community perception and drivers for community participation in development projects. Specifically, the study aimed at understanding the community perceptions towards agricultural projects (1st part of the study) and the influence of other socio-economics of the community on participation in agricultural projects (2nd part of the study), using Kishapu District as a case. Data were collected from 100 respondents through questionnaire survey, and from 6 participants through key informant interview and focus group discussion. Descriptive statistics, binary logistic regression model, multiple linear regression model and content analysis were employed for data analysis. Results show that, most of the respondents had a positive perception toward agricultural projects because the projects contribute to community development. Drivers of positive community perception are involvement in previous agricultural projects, education, access to information and farm size. Therefore, community perception toward agricultural projects hinges on the extent to which similar projects have benefited the community in the past. For levels of community participation in agricultural projects the findings revealed that most of the respondents (92%) fall under the category of low level of participation, 6% of medium level and only 2% for high level of participation. Regarding the factors influencing community participation, findings show that variables such as household member information, farm size and involvement in previous projects has a

significant influence ($p>0.05$) on community participation. This study thus recommends that principal investigators of agriculture based development projects must ensure that targeted beneficiaries really benefit in the entire course of their project implementation since community perception toward agricultural projects depends on the past experience from the previous projects' performance. Social and institutional benefits accruing from participation in agricultural projects include; agricultural knowledge and skills, farmer cooperatives formation or strengthening, participation in decision making, contributing ideas in farmers groups' meetings and economic gains. Thus, to achieve positive community perceptions towards agricultural projects there is a need for project implementers to ensure that projects improve people's living standards. Moreover, there is a need to ensure community members are well informed of the projects regardless of their literacy level and that innovative practices to benefit farmers regardless of their farm sizes are promoted.

Keywords: Agriculture, community, participation, development project, perception.

IKISIRI KUU

Utafiti huu unazingatia mitazamo ya jamii na ushiriki katika miradi ya kilimo katika Wilaya ya Kishapu, ukisisitiza umuhimu wa kuelewa mitazamo chanya na hasi. Motisha nyuma ya haja ya uelewa kama huo ni kwamba mtazamo kuelekea miradi ya maendeleo inayowekwa au kutekelezwa katika eneo fulani hutazamwa tofauti kati ya wanajamii, na baadhi ya miradi ikitazamwa kwa mtazamo hasi na mwingine kwa mtazamo chanya. Wanajamii wana uwezekano mkubwa zaidi wa kushiriki ikiwa wana mtazamo chanya kuhusu mradi husika. Kwa hiyo, kuna haja ya kuelewa vichocheo vya mtazamo wa jamii na vichocheo vya ushiriki wa jamii katika miradi ya maendeleo. Kwa kusisitiza, utafiti ulilenga kuelewa mitazamo ya jamii kuelekea miradi ya kilimo (sehemu ya kwanza ya utafiti) na ushawishi wa mambo mengine ya kiuchumi jamii katika ushiriki wa miradi ya kilimo (sehemu ya pili ya utafiti), ukitumia Wilaya ya Kishapu kama kielelezo. Taarifa zilikusanywa kutoka kwa washiriki 100 kupitia utafiti wa maswali. Takwimu zilichakatwa kwa kutumia program za takwimu ikiwemo SPSS na STATA . Matokeo yanathibitisha kwamba, wengi wa washiriki walikuwa na mtazamo chanya kuelekea miradi ya kilimo kwa sababu miradi hiyo inachangia katika maendeleo ya jamii. Vichocheo vya mtazamo chanya wa jamii ni ushiriki katika miradi ya kilimo iliyopita, elimu, upatikanaji wa habari, na ukubwa wa shamba. Kwa hiyo, mtazamo wa jamii kuelekea miradi ya kilimo unategemea kwa kiasi gani miradi kama hiyo ilivyonufaisha jamii hapo awali. Kuhusu viwango vya ushiriki wa jamii katika miradi ya kilimo, matokeo yalionyesha kwamba wengi wa washiriki (92%) walikuwa katika kategoria ya kiwango cha chini cha ushiriki, 6% walikuwa katika kiwango cha wastani na ni 2% tu walikuwa katika kiwango cha juu cha ushiriki. Kuhusu mambo yanayopelekea ushiriki wa jamii, matokeo yalionyesha kwamba vitu kama sifa muhimu za mwanakaya husika aliyehojiwa, ukubwa wa shamba na ushiriki katika miradi iliyopita vina athari kubwa kwa ushiriki wa jamii katika miradi hiyo. Hivyo, utafiti huu unapendekeza kwamba wachunguzi wakuu wa miradi ya maendeleo ya kilimo wahakikishe kwamba wanufaika lengwa kweli wananufaika katika kipindi chote cha utekelezaji wa miradi yao

kwakuwa mtazamo wa jamii kuelekea miradi ya kilimo unategemea uzoefu wa hapo awali kutoka kwa utendaji wa miradi iliyopita. Faida za kijamii na taasisi zinazopatikana kutokana na ushiriki katika miradi ya kilimo ni pamoja na; maarifa na ujuzi wa kilimo, kuunda au kuimarisha vyama vya wakulima, ushiriki katika maamuzi, kuchangia mawazo katika mikutano ya vikundi vya wakulima na faida za kiuchumi. Kwa hiyo, ili kufikia mtazamo chanya wa jamii kuelekea miradi ya kilimo kuna haja ya watekelezaji wa miradi kuhakikisha kwamba miradi inaboresha maisha ya watu. Zaidi ya hayo, kuna haja ya kuhakikisha wanajamii wanapata taarifa muhimu kuhusu miradi bila kujali kiwango chao cha elimu au hali yao ya kipesa.

Maneno muhimu: Kilimo, jamii, ushiriki, mradi wa maendeleo, mtazamo.

DECLARATION

I, **Abia Jason Shinyanga**, do hereby declare to the senate of Sokoine University of Agriculture that this dissertation is my own original work done within the period of registration and that it has neither been submitted nor being concurrently submitted to any other institution.

Abia Jason Shinyanga
(MA. Candidate)

Date

The above declaration has been confirmed by;

Dr. Emmanuel T. Malisa
(Supervisor)

Date

Dr. Angela Jesse
(Supervisor)

Date

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ACKNOWLEDGEMENTS

I am grateful to the Almighty God for his grace and blessings during my academic journey. I extend my gratitude to my parents Ross and Jeanne Noble who have been there to encourage me and support me financially.

I also want to express my appreciation to my supervisors Dr. Emmanuel Malisa and Dr. Angela Jesse for their mentorship and guidance through my research work, their insights have shaped my research and helped me to achieve my postgraduate qualification.

I am incredibly grateful to the management of Kolandoto College of Health Sciences for encouragements and support towards this achievement of postgraduate level. I am also grateful to my friend Alpha Mlifinge who supported me with my research and everyone who played a role in helping me, supporting and encouraging me to achieve my postgraduate qualification. Thank you.

DEDICATION

I dedicate this dissertation to my daughter Faith Paul who has made me to keep on moving so far up to the level of attaining this postgraduate qualification. Also my parents for supporting me and showing their love throughout my academic journey.

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LIST OF ABBREVIATIONS

ASDP	Agricultural Sector Development Programme
DC	District Council
FDG	Focus Group Discussion
KII	Key Informant Interview
PRDP	Proceedings of Research and Documentation Project
SDGs	Sustainable Development Goals
VEOs	Village Executive Officers

CHAPTER ONE

1.0 GENERAL INTRODUCTION

1.1 Background Information

Perception is the study of how sensory information is treated to perceptual skills. There are five senses, whereby all the five senses share joint goal of perceiving sensory information from external environment and processing the information into a perceptual skill, that is, each individual chooses, arranges and assesses sensory information from external environment to provide meaningful skills for himself or herself (Atmadia and Sills, 2016).

According to Kisauzi *et al.* (2012), perception and knowledge guide decision making. In the context of this study, perception defines opinions thought by many people based on how things seem to them due to how their brains make them see and hear. Community perception of development projects has bearing on their willingness to participate in the projects, and hence the importance of understanding their perception. Several studies are concerned with the importance of using community perception as a contribution for designing suitable management plans for sustainable development (Kleftoyanni *et al.*, 2010). However, more often local communities' perceptions do not receive much consideration as they deserve; there is low attention to them (Guthiga, 2008). Perceptions of adopters are significant in persuading decision making of adoption (Prager and Posthumus, 2010). Community perception can be positive or negative, hence they are important since they have consequences on the acceptance and sustainability of any development project. Njau and Mruma (2004), assert that the willingness of the community to participate in different projects is determined by the community perception, so it requires first the community perception in order for participation to be determined, hence the project performance. When a community fails to be aware with the project it is a rising hindrance to the active implementation and sustainability of the project (Haddad, 2009).

In Tanzania community participation has been introduced since 1960s but it was implemented and emphasized in the 1990s. In this study participation is described as how different authors have described that is involving people in different processes of the project. Different authors have described it as follows; Participation means involving people, men and women, in the development process as active participants and not as passive recipients at all levels (Njau and Mruma, 2004). Similarly, Taneja (2006) defined community participation as an active and meaningful involvement of the beneficiaries in project planning, project development, project implementation, its operation and maintenance. As for Reid (2000), participation is the heart that pumps the community's life blood, its citizens into the community's business. Howlett and Nagu (2001) assert that participation is one of the essential components of the project to succeed. That is, for any project to succeed and achieve its intended goals it has to have an active participation. Community participation is a highly noticeable as an important factor for the sustainability of development projects. However, community perception whether correct or incorrect are important as they have consequences on the participatory approach in the development projects. So, community perception makes people whether to participate or not in the development projects since perception is how people have opinions on their brain on how they see the project so through perception they can involve or not involve in the projects.

1.2 Statement of the Problem

Development projects are meant to improve people's lives. That is, the living standards of community members are expected to be improved through development projects. This is supported by a study by Foley (1990), which found that, people's living standards can be improved through electricity supply projects through which local entrepreneurs are able to produce different productive products. In the same vein, Gustave (2004) observed that Zulu community benefited from electricity

project through doing tailoring and brick making which improved their living standards since the use of electricity introduced the technology which tend to be time manageable hence increasing production. Also, a study by Spey *et al.* (2019) showed that people's living standards is expected to be improved through road infrastructure development projects as the community is able to get employment for local indigenous people during the construction period and get access to markets, school and hospital.

Perception towards development projects being introduced or implemented in an area tends to differ among community members, with some projects being perceived negatively and others positively. According to Kinyashi (2006), though people have the same sense organs, they can have a different perception about the same event. Examples of positively perceived development projects include rural water project in Morogoro Rural District; according to Ngoja (2015), majority of the community members perceived the project positively since they expected that the project was going to be a solution to the water shortage problem they had.

Cases of negative community perception towards development projects are also evident. For example, a study by Miller *et al.* (2009) on a perception-influence model for the management of technology implementation in construction project showed that the community had a negative perception towards the project. Also, a study by Lukasz (2018) on local residents' perceptions of a dam and reservoir project in the Teesta Basin indicated negative perception toward the dam project. The negative community perception towards development projects shown above had negative consequences on the citizens' participation in the projects.

For a project to be successful there is a need for active community participation. Lungeyana (2006) asserts that community participation is a vehicle towards implementation of sustainable development projects. Community members are more likely to participate if they have a positive perception about the project in question. Therefore, there is a need of understanding the causes of negative community perception on development projects since negative perception on development projects may result in low participation in the projects. This study aimed at understanding the causes of the negative community perceptions towards development projects and the influence of community perceptions on participation in agricultural projects.

1.3 Justification for the Study

The findings of this study will be helpful to government and development partners to understand the relationship between community perception and success of agricultural projects. These governmental partners and organizations likely to benefit from the findings of this study include but not limited to research and development (R&D) institutions such as Tanzania Agricultural Research Institute (TARI-Ukiliguru), Sokoine University of Agriculture (Research and Consultancy unit) as well as the Kishapu District Council (Agriculture and Community development departments). Also, the study will be helpful to determine the role of community perception on community participation in development projects. In addition, the study is in line with the Sustainable Development Goals (SDGs), particular goal number 2 which emphasizes on zero hunger through promote sustainable agriculture by devoting attention to agricultural research and extension services. Also, the study is in line with the Agricultural Sector Development Programme Phase II (ASDP II), particular component 2 which emphasizes on enhanced agricultural productivity and profitability through strengthening agricultural extension and training.

1.4 Objectives of the Study

1.4.1 Main objective

To determine the influence of community perceptions on their participation in agricultural projects in Kishapu District, Shinyanga Region.

1.4.2 Specific objectives

- i. To assess the community perceptions of agricultural projects
- ii. To examine factors influencing perceptions of the community towards agricultural projects
- iii. To establish the level of community participation in agricultural projects
- iv. To determine factors influencing participation in agricultural projects

1.5 Research Questions

- i. How does the community perceive agricultural projects implemented in their locality?
- ii. What are the determinants of community perceptions towards agricultural projects?
- iii. What is the level of community participation in agricultural projects?
- iv. What are the factors influencing participation in agricultural projects?

1.6 Theoretical Framework

Participation theory explains about community participation in community-based projects. The theory reflects on community involvement which leads to project ownership and sustainability. Jennings (2000) believes that, community participation is the full participation of community members and other stakeholders in the implementation and development projects, aiming to improve

community life. The theory of participation is highly applicable to this study simply because it emphasizes on the mutual participation of all important actors, especially the use of the respective members of the community to make decisions on the project which will help to improve their lives through project, all these have been closely considered in this study at the pre-requisite of the community's full participation to agricultural projects. Therefore, this study uses participation theory to analyze the influence of participation in agricultural projects.

1.7 Conceptual Framework

A conceptual framework elaborates and summarizes the variables and their indicators in relation to the study objectives. Community participation in project development (active or inactive) it depends on their perceptions (Njau and Mruma, 2004). Conceptually, the idea behind this study revolves around three interlinked components namely, peoples' socio-economics (1st component), Community perceptions towards agricultural project (2nd component) and Community participation in agricultural project (3rd component).

The community perceptions (positive or negative) may be influenced by household awareness of the current project or previous project, access to information, market access, performance of previous project and sense of ownership. This study uses community participation in project development and perceptions as the dependent variables and household socio demographic characteristics, awareness of the current project or previous project, access to information, market access, performance of previous project and sense of ownership as independents variables. The relationships are presented in Figure 1.

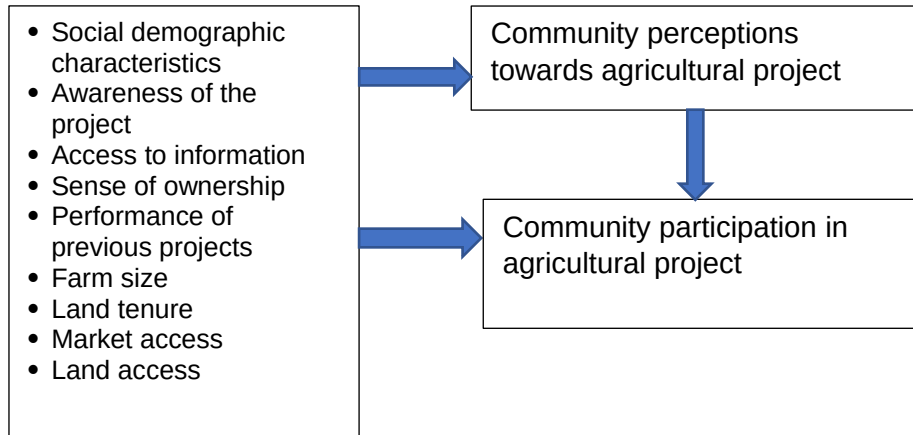


Figure 1: Conceptual Framework

Source: Researcher's own construction

The conceptual framework shows that community participation in project development may be influenced by community perceptions and other factors like household age, education level, marital status, occupation, average household income, awareness of the project, access to information, sense of ownership, market access and land tenure. This conceptual framework is useful to assess the community perceptions of agricultural projects, to analyze factors influencing community perceptions towards agricultural projects on community perceptions towards agricultural projects and to analyze the determinants of community participation in agricultural projects.

CHAPTER TWO**MANUSCRIPT I****2.0 Community perceptions toward agricultural projects in Kishapu District, Tanzania**

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ABSTRACT

Perception towards development projects being introduced or implemented in an area tends to differ among community members, with some projects being perceived negatively and others positively. Understanding local communities' perceptions towards agricultural projects and factors that influence these perceptions is important because perception on a project has a bearing on participation in the same. However, more often than not local communities' perceptions do not receive as much attention as they deserve. This study surveyed the communities' perceptions toward agricultural projects in Kishapu District. Data were collected from 100 respondents through questionnaire survey, and from 6 participants through key informant interview and focus group discussion. Descriptive statistics, binary logistic regression model and content analysis were employed for data analysis. Results show that, most of the respondents had a positive perception toward agricultural projects because the projects contribute to community development. Drivers of positive community perception are involvement in previous agricultural projects, education, access to

information and farm size. Therefore, community perception toward agricultural projects hinges on the extent to which similar projects have benefited the community in the past. Thus, to achieve positive community perceptions towards agricultural projects there is a need for project implementers to ensure that projects improve people's living standards. Moreover, there is a need to ensure community members are well informed of the projects regardless of their literacy level and that innovative practices to benefit farmers regardless of their farm sizes are promoted.

Keywords: Community, perception, agriculture, project

2.1 Introduction

Perception refers to the study of how sensory information is treated to perceptual skills (Atmadia and Sills, 2016). There are five senses, whereby all the five senses share joint goal of perceiving sensory information from external environment and processing the information into a perceptual skill, that is, each individual chooses, arranges and assesses sensory information from external environment to provide meaningful skills for himself or herself (Atmadia and Sills, 2016).

According to Kisauzi *et al.*(2012), perception and knowledge guide decision making. Perception defines opinions thought by many people based on how things seem to them due to how their brains make them see and hear. Community perception of development projects has bearing on their willingness to participate in projects. Perceptions of adopters are significant in persuading decision making of adoption (Prager and Posthumus, 2010). Several studies indicate the importance of using community perception as a contribution for designing suitable management plans for sustainable development (Kleftoyanni *et al.*, 2010) and for adoption of technologies promoted by projects (Prager and Posthumus, 2010). However, more often local communities' perceptions do not receive much consideration as they deserve; there is low attention to them (Guthiga, 2008). Community perception can be positive or negative; hence they are important since they have consequences on the acceptance and sustainability of any development project. Njau and Mruma (2004) assert that the willingness of the community to participate in different projects is determined by the community perception. Thus, it is important to understand community perception as it influences their participation and the ultimate project performance.

Perception towards development projects being introduced or implemented in an area tends to differ among community members, with some projects being perceived negatively and others positively.

According to Kinyashi (2006), though people have the same sense organs, they can have a different perception about the same event. Examples of positively perceived development projects include rural water project in Morogoro Rural District; according to Ngoja (2015), majority of the community members perceived the project positively since they expected that the project was going to be a solution to the water shortage problem they had. Cases of negative community perception towards development projects are also evident. For example, a study by Miller *et al.* (2009) on a perception-influence model for the management of technology implementation in construction project showed that the community had a negative perception towards the project. Also, a study by Lukasz (2018) on local residents' perceptions of a dam and reservoir project in the Teesta Basin indicated negative perception toward the dam project. The negative community perception towards development projects shown above had negative consequences on the citizens' participation in the projects. Community members are more likely to participate if they have a positive perception about the project in question. Accordingly, negative perception on development projects may result in low participation.

Scholars have researched on the importance of community perception toward their participation in development projects. However, there is inadequate attention to the drivers of community perceptions. Therefore, this study explores the drivers of community perceptions on development projects, focusing on agricultural projects. Specifically, the study: i) assessed the community perceptions of agricultural projects in Kishapu District, this will be assessed using different statements of agricultural projects versus community development, living standards of people, hunger and poverty, time resources, and ii) examined factors influencing community perceptions towards agricultural projects, this will include different variables to be tested such as sex, age, marital status, house member, educational level, information, farm size and involvement in previous projects. The findings of this study will be

helpful to government and development stakeholders to understand the relationship between community perception and success of agricultural and development projects. Also, the study is in line with the Sustainable Development Goals (SDGs), particularly goal number 2 which emphasizes on zero hunger through promotion of sustainable agriculture by devoting attention to agricultural research and extension services. It is also in line with the Agricultural Sector Development Programme Phase II (ASDP II), particularly component 2 which emphasizes on enhanced agricultural productivity and profitability through strengthening agricultural extension and training.

2.2 Methods

2.2.1 Study site

The study was conducted in Kishapu District in Shinyanga Region. Kishapu is one of the five districts in Shinyanga Region located in the North central Tanzania. Kishapu is a semi-arid area characterized by unimodal rains ranging between 600mm and 900mm per year. Kishapu District covers an area of 9226 km², and lies between longitudes 36°30'E and 33°30'E and latitudes 3°45'S and 5°00'S and surface temperature ranges from 16°C in June to 30°C in October. The area lies at an altitude 1000 - 1200 m above sea level. The highest temperature is experienced in October. The district is divided into 3 divisions, which are further divided into 29 wards with 117 villages (Kishapu DC website). The main economic activities in the study area are agriculture and livestock keeping; other economic activities are mining and sunflower oil processing. The major cash crops are cotton, sunflower, groundnuts, green gram, onions, pigeon peas and cowpeas. The major food crops grown are sweet potatoes, sorghum and maize.

2.2.2 Sampling procedure and sample size

The study involved purposive and simple random sampling techniques. The first stage sampling involved purposive selection of Kishapu District based on the reason that the main economic activities in the area are agriculture and livestock keeping with a growing towns linking Simiyu

and Shinyanga Regions, and that there is a number of agricultural projects with some succeeding and others failing to achieve the intended objectives. Also purposive selection of ward and villages from the district followed in the second stage of sampling process. From each of the selected villages, a list of households that were typically involved in crop and / or livestock production as their main livelihood option was obtained from the Village Executive Officers (VEOs). The lists were used as a sampling frame. The third stage involved random selection (using random numbers obtained through Ms Excel) of households from the selected villages. This involved selection of 50 households from each village, making a sample size of 100 households. As Mbeyale (2009) and Akitanda (1994) assert, a sample of at least 30 units is sufficient irrespective of the population for a research in which statistical data analysis is to be done. The sample size can be increased above 30 unit depending on time and resources available (Akitanda, 1994). Further, there was no precise data for the study population in Kishapu District that would have made highly recommended sample size determination using formula possible. Therefore, that sample size of 100 households was considered enough for this study following the suggestion by McClanahan *et al.* (2005), that in absence of precise study population (like what happened in this study), the sample size of 80-120 respondents could be drawn to represent study population.

2.2.3 Data collection

Both quantitative and qualitative data were collected from primary and secondary sources of data. Primary data collection involved the use of questionnaire survey, focus group discussion (FGD) and key informant interview (KII) while secondary data were collected from books, journal articles and from internet.

2.2.3.1 Questionnaire survey

A questionnaire that consisted of open and closed-ended questions was used in the survey. The questionnaire enabled respondents to express their experiences and perceptions regarding agricultural projects. After being pre-tested to maximize reliability and validity of the tool, questionnaires were administered to the heads of the selected households.

2.2.3.2 Key informant interview

Key informants for the study included Extension Officers, Ward Executive Officer, Village Executive Officers and Village Chairpersons. Using a checklist of questions, information on determinants of community perception on agricultural projects was collected.

2.2.3.3 Focus group discussion

Two (2) focus group discussions (FGDs), each with 8 participants (having at least one representative from each sub-village), were conducted using an FGD guide. Selection criteria included involvement in crop/livestock production as the main production option. Moreover, the selection ensured equal number inclusion of male and female farmers, youth and the elderly making sure that all diversity is captured. The FGDs focused on gathering information on determinants of community perception on agricultural projects.

2.2.3.4 Data analysis

After doing data entry and cleaning, the analysis was done as per specific objectives as follows:

For objective one (to assess the community perceptions of agricultural projects in Kishapu District), a 5-point Likert scale was used to measure community perceptions on agricultural projects (Apata *et al.*, 2013). This was done by scale ranging from strongly agree, agree, undecided, disagree to strongly disagree to fit respondent's feelings. A logical

sequence of statements was used to determine the perception of the community on agricultural projects. Scoring involved assigning 5 to strongly agree, 4 to agree, 3 to undecided, 2 to disagree and 1 to strongly disagree. Total scores for community perception were calculated and coded as positive (included those who scored 4 and 5), negative (included those who scored 1 and 2) or neutral (for those who scored 3).

For objective two (to examine factors influencing community perceptions towards agricultural projects), the binary logistic regression model was used to assess the strength of association between independent variables and the dependent variable (community perception toward agricultural projects). Below is the equation of the binary logistic regression model used.

$$\text{Logit}(\pi(x)) = \ln\left(\frac{p}{1-p}\right) = \frac{e^{\beta_0 + \sum_i^n \beta_i x_i + \varepsilon}}{1 + e^{\beta_0 + \sum_i^n \beta_i x_i + \varepsilon}}$$

Where:

$$\pi(x) = \frac{p}{1-p} = \text{odds}$$

P = probability that community has positive perception.

1-p = probability that community has negative perception.

β_0 = Constant parameter.

β_i = Parameter estimates.

x_i = Set of independent variables (age, sex, education level, marital status, household size, access to information, performance of previous projects and farm size).

2.3 Results and Discussion

2.3.1 Respondents' characteristics

Respondents' characteristics included in this study were sex, age, marital status, education level, and a number of household members (Table 1). Findings in Table 1 show that most of the respondents (69%) were male compared to females (31%). Indicating that males are the

one who are the head of the household in most of the family in the study area. As most of the society in the study area are the patrilinear society. Also, most agricultural field works are done by men as compared to female. A study done by Mhede (2012) emphasizing that, with the exception of the female presence in sales, restaurants, and communication services, the core activities of production are undertaken by men.

As summarized in Table 1, the popular number (61%) of respondents falls into the group of 31 – 50, followed by the group of over 50 years old, which makes up 20% of the whole respondents, and least of all is those with 18 – 30 (19%). The overall average age for the respondents was 39.4 years. Referring to Table 1, the findings show that most of the available houses (58%) in the study area are occupied with married people. On the other hand, few houses of about 11% are occupied by a widow/widower.

Results show further that only 22% of respondents didn't attend formal education. The remaining 78% of respondents ended with primary level of education. None of them attended tertiary education to gain agricultural skills but rely largely on apprenticeship skills acquired through learning by doing. Also, Chanjarika (2013) suggested that most entrants into the agricultural business are either "spin-offs" or former apprentices of current projects. Also, most of the respondents (67%) the number of people living in their house range from 6 up to 10. Followed by the families with 1 to 5 people (27%) and the least percent (6%) was the families with 10 people and above.

Table 1: Characteristics of respondents in Kishapu District (n=100)

Category	Frequency (F)	Percentage (%)
Sex		
Male	69	69
Female	31	31
Total	100	100
Age (years)		
18 – 30	19	19
31 – 50	61	61
Above 50	20	20
Total	100	100
Marital status		
Single	14	14
Married	58	58
Divorced/separated	17	17
Widow/ Widower	11	11
Total	100	100
Education level		
No formal education	22	22
Primary education	78	78
Total	100	100
Household member		
1-5	27	27
6-10	67	67
Above 10	6	6
Total	100	100

2.3.2 Community perceptions toward agricultural projects in Kishapu District

Study findings (Table 2) show that agricultural projects in the study area have three general areas of advantages which are agricultural projects improve living standards of the people, are solution to poverty and hunger and result to community development. These are discussed as follows:

Table 2: Villagers opinions towards agricultural projects

Statement	Strongl	Ag	Ne	Disa	Strongly
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	Strongly agree (%)	Disagree (%)	Neutral (%)	Agree (%)	Disagree (%)
Agricultural projects are beneficial to community development	45	27	28	0	0
Agricultural projects improve people's living standards	42	30	8	18	2
Had it not been the presence of agricultural projects in this area, I would be in a lower state of living	23	22	34	4	17
Agricultural projects are solution to hunger and poverty in my area	37	32	25	6	0
Agricultural projects are not a wastage of time	52	24	18	6	0
Agricultural projects result to community development	45	33	22	0	0

2.3.2.1 Role of agricultural projects on households' living standards

About three quarter (72%) of the respondents were of the opinion that agricultural projects improve households' living standards (Table 2). As it is to most communities in African countries that they depend on agriculture as their mainstay (Haggblade, 2013), the community members in the study area depend on agriculture as their main source of income. Therefore, projects which support agricultural activities works towards improving their main livelihood option. The findings are comparable to Fuglie (2008) who found that most of Africans hinge on agriculture as their main source of earnings. Farmers in Africa tend to sell their crops and use their earnings to buy asset, paying school fees for their children, and cover other living costs (Jayne *et al.*, 2017; Haggblade, 2013). Some of respondents argue that they started engaging in agricultural activities after the coming of agricultural projects in their area.

Even from direct observation some of the families were observed selling some of the harvested crops (sunflowers), as it was happen after the kid was asking for the school uniform and exercise book and their parents responded to him to wait after they receive their cash from sunflowers buyers.

The fact that nearly half of the respondents (45%) commented that they would be in a lower state of living had it not been the advent of agricultural projects in their area provides a further clue that the projects were considered important. According to Andinet *et al.* (2017), agricultural activities play an important role on improving living standard to local communities in African countries; that is, agriculture acts as a backbone for livelihoods of local communities. The focus group discussion participants indicated that through agricultural activities and with the support of agricultural projects, farmers are able to buy home furnishings; build own houses, and send children to school. Being able to meet those needs from projects' supported agricultural activities shows that people's living standards have improved, and this is attributable to their involvement in agricultural projects.

2.3.2.2 Contribution of agricultural projects on reduction of hunger and poverty

More than a half (69%) of the respondents saw agricultural projects as a potential solution to hunger and poverty in their community (Table 2). This could be the reason for them to have a positive attitude towards agricultural projects and their active participation in projects implementation. Findings from the focus group discussion show that, through agricultural projects, farmers receive agricultural inputs such as fertilizers, good seeds, and pesticides freely or through cost sharing; and training on improved agronomic practices. As a result, as compared to the period when there were no such projects, higher crop yields have been realized, and this caters for household food and income needs. One key informant remarked that: *"last season, after selling my harvest,*

I was able to open a small shop (home use commodities) which serves as an alternative source of income during the dry season."

Study findings show further that agricultural projects have a positive effect on employment creation in the areas they operate. On this, the FGD participants acknowledged those who bring agricultural projects in their area mentioning that the projects employ their youth. Overall, the findings are consistent with Haggblade (2013) who contends that increasing investments in the farm economy can deliver high-impact development returns such as increasing rural incomes, boosting food security, making cheap and more nutritious food available to Africa's bustling cities and protecting the environment through innovations such as climate smart agriculture. Several projects for poverty alleviation in Tanzania invest in agricultural activities since it is the main livelihood activity in the country (Andinet *et al.*, 2017). Agro-industrialization is a formidable strategy to maintain the recent growth momentum, reduce poverty and inequality, create decent jobs, and improve the quality of lives and well-being of Africans (Andinet *et al.*, 2017).

2.3.2.3 Agricultural projects and community development

Majority of the respondents (78%) subscribed to the opinion that participating in agricultural projects is positively correlated with community development. In the same vein, 76% of the respondents saw participation in agricultural project as a prudent use of a person's time as opposed to wastage of time (Table 2). The focus group discussion participants interpreted community development as when all that is done by an individual farmer contributes to the welfare of other community members, particularly in terms of their social services. Building on this interpretation, and in view of the findings reported above (Sections 3.2.1 and 3.2.2), it is clear that a community member participating in agricultural projects is likely to increase their harvest and sell the surplus for income gain. In this process the government gains taxes which in turn support her effort to provide services to the whole community. The focus group discussion participants indicated that

agricultural projects create job opportunities and improve individual development; they lead to overall community development. Community members employed as a result of the agricultural projects pay taxes as well as supporting their households to access services thereby contributing to community development in general. On this, a key informant said: *“these agricultural projects create job opportunities to the families in rural and urban areas.”*

The importance of agricultural projects lies in their support to agriculture whose role in community development cannot be overemphasized. Allen and Heinrigs (2016); Cockx *et al.* (2019) indicate that, agriculture has become a priority in the development agenda; the agenda strives to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture. The agenda seeks to double the agricultural productivity and incomes of small scale food producers, in particular women, indigenous people, family farmers and pastoralists, as well as ensure sustainable food production systems (Jayne *et al.*, 2017). Across Africa, agriculture is the predominant sector in the economies of most countries, accounting for between 30 to 40 percent of the gross domestic product, and the sector is a leading source of jobs for over two-thirds of Africa’s population (Allen and Heinrigs, 2016).

2.3.2.4 Overall community perception towards agricultural projects

Study findings show that, majority of the respondents (78.7%) had a positive perception towards agriculture whereas about a quarter (17.5%) were neutral. Only 3.8% had a negative perception about agricultural projects. Lukasz (2018) asserts that community perception towards projects can be classified into three main groups which are positive, negative and neutral perceptions.

The positive perception towards agricultural projects can be explained by respondents' high scores with regard to the effect of agricultural projects on households' living standards, the undoubted contribution of agricultural projects to hunger and poverty, and the attribution of community development to the agricultural projects as discussed in Sections 3.2.1, 3.2.2 and 3.2.3.

As for the neutral position, which corresponds with 17.5% of the respondents, the explanation could revolve around the fact that there are farmers who are engaged in other activities in addition to agriculture and therefore could be realizing better earnings from the non-farm activities. Such community members are farmers who are engaged in income generating activities such as running a shop, carpentry, masonry, food vending, and tailoring. Since they do not depend fully on agriculture, they see themselves as able to earn a living through other means. The group with negative perception (3.8%) could be those who had not participated in any agricultural project and therefore could not imagine of any value associated with the existence of the projects. On this, one key informant commented: *"Agricultural projects are beneficial for sure; however, there are cases (some projects) where they bring nothing but wasting farmers' time for the benefit of those initiating the projects. As a result some farmers refrain from participating in any agricultural project."*

2.3.3 Factors influencing community perceptions towards agricultural projects

The binary logistic regression model was used to determine the influence of the community perceptions toward agricultural projects. Table 3 summaries the factors influencing community perceptions towards agricultural projects. The results show that four explanatory variables, namely education level, information about the projects, farm size and involvement in previous projects, are significant at 5%

significant level (α) in influencing the community perceptions. The remaining explanatory variables, namely sex, age, marital status and number of household members did not have statistical significance and therefore are considered as having negligible impact on shaping community perceptions towards agricultural projects.

Table 3: Binary logistic regression results for factors influencing community perceptions towards agricultural projects

Variables	B	Std. Error	Wald	df	Sig.
Sex (1)	2.291	.038	1.450	1	0.130
Age	4.571	.034	1.223	1	0.101
Marital status	7.224	.029	1.394	3	0.126
House member	0.692	.036	0.564	1	0.406
Education level	0.835	.053	6.432	1	0.020*
Information	0.906	.098	18.562	1	0.001*
Farm size	0.803	.074	23.469	1	0.000*
Involvement in previous project	1.089	.077	17.245	1	0.002*

*=Statistically significant at $\alpha = 0.05$

The findings show that education level of a person influences significantly ($0.02 < 0.05$) and positively (at rate of 0.835) their perception toward agricultural projects. This means that the more educated the person is the more likely they are to have positive perception toward agricultural projects. Educated people are more likely to have better access to agriculture-related information such as agricultural projects, markets, production technologies, and credits, than the less educated or those with formal education. The educated ones are more accessible to information presented in form of print or media, as well as those shared through seeing what others are doing, that is, they are more exposed. Since education increases access to information about agricultural projects and the interventions they promote, it is logical that those with

higher education fall into the positive perception category because they have better awareness. According to Lukasz (2018), awareness is positively correlated with perception. Lukasz (2018) found that the level of education had the strongest impact on the sense of security; illiterate respondents felt least secure; the higher their level of education, the safer people felt.

The findings show further that, the amount of information an individual receives has a significant ($0.001 < 0.05$) positive (at the rate of 0.906) influence on people's perceptions toward agricultural projects (Table 4). This means that, for every additional information a person gets about the aims of the project, the more positive the perception becomes. The findings imply that for a person to have a positive attitude toward a project they must receive information related to the project. Most of the people in rural areas do not involve themselves in the projects implemented in their areas due to lack of enough information received about the project and the approach used by the implementers (Andinet *et al.*, 2017). The findings are also consistent with that of Kisauzi *et al.* (2012); Andinet *et al.* (2017) who indicated that, for the community to have positive attitude toward the project and participate effectively, they should be informed about the project from the first stage; this will also ensure the sustainability of the project.

As for farm size, the findings show that it significantly ($0.000 < 0.05$) influences people's perceptions toward agricultural projects in a positive way (at the rate of 0.803) (Table 4). The more the farm size owned the more the likelihood of the owner to have a positive perception toward agricultural projects. This could be due to the reason that the project is looked at as an opportunity to cause an impact to a large piece of land in terms of reducing the cost of production (for projects that offer farm inputs), and increasing crop yields upon adopting agricultural practices recommended by the project (Allen and Heinrigs, 2016). That is, a

farmer with a large farm will often times is figuring out as to how the whole farm can be made useful rather than leaving some portion lying idle. Therefore, agricultural projects are seen as an opportunity for such farmers to make their land resource productive.

Involvement in previous projects was also seen to influence people's perceptions toward agricultural projects positively (at the rate of 1.089) and significantly ($0.002 < 0.05$). This means that, as person's experience in projects increases, the chances of the person to have positive perception toward agricultural projects increase. The reason could be the increase in trust to these projects which is cultivated as a person continues to implement similar projects. The findings are supported by Miller (2009) who assert that, the more the person becomes veteran in certain project the more he/she trust and have positive motives toward the repeated projects. The success of the previous project activates and convince individual to participate to the next project of similar kind (Kleftoyanni *et al.*, 2010; Allen and Heinrigs, 2016).

The remaining explanatory variables like sex and age, marital status and number of household members did not have statistical significance because variation in these demographic aspects among respondents in the study area did not explain variation in the chance of respondent whether to have positive or negative perception. Such variation in the likelihood of perception has instead deemed decisive for socio-economic variables like educational level and size of land owned by respondent

2.4 Conclusions and Recommendations

In the study area, community members had positive perception toward agricultural projects because the projects improve their living standards, reduce hunger and poverty and ultimately contribute to community

development. Therefore, community perception toward agricultural projects hinges on the extent to which similar projects have benefited the community in the past.

Drivers of positive community perception toward agricultural projects are involvement in previous agricultural projects, education, access to information and farm size. This implies that in order to achieve positive community perceptions towards agricultural projects there is a need for project implementers to ensure that projects improve people's living standards, reduce hunger and poverty and contribute to community development. Moreover, there is a need for projects to ensure community members are well informed of the projects regardless of their literacy level through frequent trainings and the use of extension materials like posters, leaflets and brochures.

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CHAPTER THREE**MANUSCRIPT II****3.0 Factors influencing community participation in agricultural projects: A case of Kishapu District, Tanzania**

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ABSTRACT

Despite the efforts that implementers of development projects such as agricultural projects in convincing people to participate in projects, experience shows that the levels of their participation in agricultural projects is largely suboptimal. This study therefore was conducted to determine the factors influencing community participation in agricultural projects, levels of participation as well as the social and institutional benefits accruing from participation in agricultural projects. Data were obtained from 100 sample respondents through questionnaire survey, key informant interview and focus group discussion. Content analysis, descriptive statistics and multiple linear regression model were employed for analysis. For levels of community participation in agricultural projects the findings revealed that most of the respondents (92%) fall on the category of high involvement on implementation phase, 6% of monitoring of the project and only 2% for planning phase. Regarding the factors influencing community participation, findings show that variables such as household members' information, farm size and involvement in previous projects have a significance influence ($p > 0.05$) on community participation in agricultural projects. Social and

institutional benefits accruing from participation in agricultural projects include; agricultural knowledge and skills, farmer cooperatives formation or strengthening, participation in decision making, contributing ideas in farmers groups' meeting and economic gains. For positive outcomes and sustainability of agricultural projects, the study recommends that project implementers make sure that, local communities as the key stakeholders are involved to all stages of the projects.

Keywords: Agriculture, community participation, development project, perception.

3.1 Introduction

In Tanzania community participation has been introduced since 1960s but it was implemented and emphasized in the 1990s. Different authors have described participation that is involving people in different processes of the project. Different authors have described it as follows; Participation means involving people, men and women, in the development process as active participants and not as passive recipients at all levels (Njau and Mruma, 2004). Similarly, Taneja (2006) defined community participation as an active and meaningful involvement of the beneficiaries in project planning, project development, project implementation, its operation and maintenance. As for Reid (2000), participation is the heart that pumps the community's life blood, its citizens into the community's business. Howlett and Nagu (2001) assert that participation is one of the essential components of the project to succeed. That is, for any project to succeed and achieve its intended goals it has to have an active participation. Community participation is a highly noticeable as an important factor for the sustainability of development projects.

Most of projects pass through a series of distinct stages or phases from the time they start, through implementation, and ultimately close-out. Whatever one wishes to study on the level of community participation in a project, it is important to be aware of at what stage of the project the community has been involved. There are typically a large number of tasks and efforts taking place in parallel with a project. According to ADB (2012), the work can be subdivided into four distinct stages, or phases. These four phases are:

Identification/Initiating; this initial phase is brief, but four major things occur during it. First, the project has to be formally created and the manager needs to be given the authority to lead the project. Second, the key external stakeholders associated with the project are identified.

Third, a clear, written understanding of what the project manager is tasked with delivering has to be generated. Finally, the project is kicked off and started.

Planning; the second primary phase of a project is where the unpacking and planning of the project takes place. There are a large number of tasks and work that comprise this phase.

Implementation; this is the phase when the actual work of creating the project's deliverable occurs. The primary functions during this period include directing and managing the work of the project staff, managing and mitigating risks that threaten project success, and ensuring that external stakeholders are engaged appropriately and that their expectations are being met.

Monitoring and evaluation; during the execution phase, the project manager also has to monitor (i.e., measure) the progress of the work, and control changes to the work and plans. This will lead to the last step of the project which is closing.

On the other hand, the participation of the community members in development projects has been placed into different groups/levels. In providing clear understanding of participation, Arnstein (1969) came up with an eight staged framework which she calls 'a ladder of citizen participation. This ladder shows how much power is embodied in each rung, denoting the amount of power citizens have in influencing development outcomes. The higher one moves on the ladder, the more power citizens have in terms of influencing development outcomes. Stage eight which is citizen's control implies the highest level of participation. In here, citizens have absolute power to influence development outcomes.

The ladder has eight rungs illustrated as follows;

Table 1: Eight ladder rungs illustrated

Level (from the top)	Type of participation
8	Citizen's control
7	Delegated power
6	Partnership
5	Placation
4	Consultation
3	Informing
2	Therapy
1	Manipulation

Adopted from Arnstein (1969)

On the contrary, level one which is Manipulation entails fake participation in which there is no power at all. Citizens are just deceived as if they are involved, when in actual sense; development outcomes are influenced and determined by the power holders. This is nothing but a window dressing ceremony in which there is No participation at all. Notwithstanding all the different definitions and understandings, true and effective participation should be anchored on principles such as; promotion of accountability and transparency, allowing for participation at all levels and ensuring participation is accessible to all stakeholders, valuing diversity, ensuring participation is voluntary and should encourage stakeholders to create their own ideas and solutions among others (ADB, 2012). The ultimate goal is to ensure that citizens have the power to determine and influence development outcomes.

For a project to be successful there is a need for active community participation. Lungeyana (2006) asserts that community participation is a vehicle towards implementation of sustainable development projects. Despite the effort that implementers of development projects such as agricultural projects invest in convincing people to participate in projects, experience shows that the levels of their participation in

agricultural projects is suboptimal. This study was therefore conducted to determine the factors influencing community participation in agricultural projects, levels of participation as well as the social and institutional benefits accruing from participation in agricultural projects. The discoveries of this study will help to inform government and development partners on factors that have significant influence on peoples' participation in agricultural projects. Also, the reveals levels of community participation which is an important aspect for project sustainability. In addition, the study is in line with the Sustainable Development Goals (SDGs), particularly goal number 2 which emphasizes on zero hunger through promote sustainable agriculture by devoting attention to agricultural research and extension services. Also, the study is in line with the Agricultural Sector Development Programme Phase II (ASDP II), particular component 2 which emphasizes on enhanced agricultural productivity and profitability through strengthening agricultural extension and training.

3.2 Methodology

3.2.1 Study area

The study was conducted in Kishapu District in Shinyanga Region. Kishapu is one of the five districts in Shinyanga Region located in the North central Tanzania. Kishapu is a semi-arid area characterized by unimodal rains ranging between 600mm and 900mm per year. Kishapu District covers an area of 9 226 km², and lies between longitudes 36°30'E and 33°30'E and latitudes 3°45'S and 5°00'S and surface temperature ranges from 16°C in June to 30°C in October. The area lies at an altitude 1 000 - 1200 m above sea level. The highest temperature is experienced in October. The district is divided into 3 divisions, which are further divided into 29 wards with 117 villages (Kishapu DC website). The main economic activities in the study area are agriculture and livestock keeping; other economic activities are mining and sunflower oil processing. The major cash crops are cotton, sunflower, groundnuts, green gram, onions, pigeon peas and cowpeas. The major food crops grown are sweet potatoes, sorghum and maize.

3.2.2 Sampling procedure and sample size

The study involved purposive and simple random sampling techniques. The first stage sampling involved purposive selection of Kishapu District based on the reason that the main economic activities in the area are agriculture and livestock keeping, and that there is a number of agricultural projects with some succeeding and others failing to achieve the intended objectives. Also purposive selection of ward and villages from the district followed in the second stage of sampling process. The Village Executive Officers of the two selected village were asked for the total number of households who are typically dealing with agricultural activity in their respectively village. The list of household provided were used as a sampling frame and placed to the third stage of sampling. The third stage involved random selection (using random numbers from Ms Excel) of the households from the two selected villages. The sample size of the study was 100. A total of 50 household from each village were selected. This sample is supported by Mbeyale (2009) and Akitanda (1994) who indicated that, a sample of at least 30 units is sufficient irrespective of the population. The sample size can be increased above 30 units depending on time and resources available.

3.2.3 Data collection

Both quantitative and qualitative data were collected from primary and secondary sources of data. Primary data collection involved the use of questionnaire survey, focus group discussion (FGD) and key informant interview (KII) while secondary data were collected from books, journal articles and from internet source.

3.2.3.1 Questionnaire survey

A questionnaire that consisted of open and closed-ended questions was used in the survey. The questionnaire enabled respondents to express their experiences and perceptions regarding agricultural projects. Questionnaires were administered to households who were randomly selected.

3.2.3.2 Key informant interview

Key informants for the study included extension officers, ward executive officer, village executive officers and village chairpersons. Using a checklist of questions, information on determinants of community perception on agricultural projects was collected.

3.2.3.3 Focus group discussion

Two (2) focus group discussions (FGDs), each with 8 participants (having at least one representative from each sub-village), were conducted using an FGD guide. The FGDs focused on gathering information on determinants of community perception on agricultural projects.

3.2.4 Data analysis

After doing data entry and cleaning, the analysis was done as per specific objectives as follows:

For objective one, an index scale was constructed to measure the levels of participation in agricultural projects whereby for every 'Yes' response he/she was receiving 1 score and for every 'No' response he/she was receiving 0 score. Therefore, maximum score was 5 and this occurred if respondent responds 'Yes' for every stage of project. Index score levels was constructed as follows based on calculation, 5 was a maximum score, whereas 3 was an average score. Thereafter, any score below average score was regarded as a low level of participation, average score regarded as a medium level of participation and any score above average score was regarded as a high level of participation. Such levels have also been used by other scholars (Mroto and Jeckoniah, 2017).

For objective two, multiple linear regression was used to analyze factors influencing participation in agricultural projects. The dependent variable was participation in agricultural projects. Based on Uyanik and Güler (2013), the multiple linear regression model was specified as follows;

$$Y = b_0 + b_1X_1 + b_2X_2 + \dots + b_nX_n + \epsilon_i,$$

Whereby:

- Y = expected value of dependent variable
- b_0 = the value of Y when all of the independent variables (X_i through X_n) are equal to zero
- b_1 - b_n = estimated regression coefficients, i. e. change in the outcome variable resulting from a unit change in the predictor variable, holding all other independent variables constant (i.e., when the remaining independent variables are held at the same value or are fixed)
- X_1 - X_n = predictor variables entered in the linear regression model
- ϵ_i = An error term representing a proportion of the variance in the dependent variable that was unexplained by the regression equation (due to inherent errors in the model and other variables which were not entered in the model).

For the third objective, descriptive statistics were used to determine the social and institutional benefits accrued from participation in agricultural projects. Qualitative findings from the content analysis complemented the quantitative findings.

3.3 Results and Discussion

3.3.1 Respondents' socio-demographic and economic characteristics

Respondents' characteristics included in this study were sex, age, marital status, education level, and a number of household members (Table 2). The study findings (Table 2) show that most of the respondents (69%) were male compared to females (31%). This indicates that males are many as household members compared to female in the study area. Also, most agricultural field works are done by men as compared to female. A study by Mhede (2012) observed that, with the exception of the female presence in sales, restaurants, and communication services, the core activities of production are undertaken by men.

As summarized in Table 2, the popular number (61%) of respondents falls into the age group of 31 – 50, followed by the group of over 50 years old, which makes up 20% of the whole respondents, and least of all is those with 18 – 30 (19%). The average age for the respondents was 39.4 years. As for marital status, the findings show that most of the houses (58%) in the study area are occupied with married people. On the other hand, few houses (11%) were occupied by a widow/widower.

Results show further that only 22% of respondents did not attend formal education. The remaining 78% of respondents ended with primary level of education. None of them attended tertiary education to gain agricultural skills but rely largely on apprenticeship skills acquired through learning by doing. Chanjarika (2013) suggested that most entrants into the agricultural business are either "spin-offs" or former apprentices of current projects. Household size for the majority of the respondents (67%) ranged from 6 to 10, followed by the families with 1 to 5 people (27%). The least (6%) was families with 10 people and above.

Table 2: Characteristics of respondents in Kishapu District (n=100)

Category	Frequency (F)	Percentage (%)
Sex		
Male	69	69
Female	31	31
Total	100	100
Age (years)		
18 – 30	19	19
31 – 50	61	61
Above 50	20	20
Total	100	100
Marital status		
Single	14	14
Married	58	58
Divorced/separated	17	17
Widow/ Widower	11	11
Total	100	100
Education level		
No formal education	22	22
Primary education	78	78
Total	100	100
Household member		
1-5	27	27
6-10	67	67
Above 10	6	6
Total	100	100

3.3.2 Levels of community participation in agricultural projects

According to ADB (2012), the four main phases of the project include initiation, planning, implementation and performance/monitoring. The involvement of respondents in these phases was determined. The

findings (Table 3) show that most of the individuals within the community were involved in the project during the implementation stage. The FGD findings show that, the respondents got information from their leaders that there was an agricultural project planned to be implemented in their area and that they had to be prepared and show enough cooperation during implementation. That means the early stage of initiation and planning was not on their side. The findings are consistent with that of Atmadia and Sills (2016) that most of the development projects are planned by educated people or leaders and implemented to local people without being asked their views or suggestion toward such project. Leaders of various local communities do not have confidence in the level of locals' knowledge and abilities to express their thoughts and participate on project initiation and planning (Cockx *et al.*, 2019). Involving local people in different stages of project implementation may help for sustainability of the project. Aref (2011) reported that involving local communities to several stages of a project makes them feel more attached and responsible toward the project and it is important for its sustainability.

Table 3: Frequencies and percentage of community involvement in different phases of the project

Project stages	Yes		No	
	Frequenc y	%	Frequenc y	%
Initiation	2	2	98	98
Planning	4	4	96	96
Implementation	100	100	0	0
Monitoring	12	12	88	88
Project close	6	6	94	94

3.3.3 Factors influencing the community participation in agricultural projects

The results (Table 4) show that some explanatory variables (household member, information, farm size and involvement in previous project)

significantly influence community participation. Of the seven independent variables used in the model, four variables are significant at a 5% significant level (α).

Table 4: Multiple regression results for the factors influencing community participation in the agricultural projects

Model	B	Std. Error	Beta	Sign.
(Constant)	.996	.261		.002
Age	-.078	.026	-.020	.549
Marital status	-.269	.121	-.017	.640
Household members	.197	.074	1.020	.000*
Information	.166	.098	.134	.001*
Farm size	.475	.053	.084	.020*
Involvement in previous project	.177	.061	.124	.004*
Education	-.035	.038	-.021	.486

*=Statistically significant at $\alpha = 0.05$

Household members

As shown in Table 4, the results reveal that the number of household members influences individual participation toward agricultural projects positively and significantly ($p < 0.05$) at rate of 0.197. The reason behind this could be due to the fact that, as the family size increases the need for food also increases (Aref, 2011). To increase the amount of food production will need to increase the size of area for cultivation and skills so as to higher crop production. One who has large family size will need to attach himself/herself to agricultural projects that offer knowledge and capital (Atmadia and Sills, 2016). This will help to reduce the cost of crop production and uses the acquired skills to improve production to the cultivated land. Cocks *et al.* (2019) reported that agriculture extension services add agricultural skills to local community which is important for improving crop production to their field.

Information

The results in Table 4 indicate that, the information an individual receives on the existence of a project has a significance influence on people's participation to the agricultural projects ($p < 0.05$). The results shows that for every added information the respondents get concerning the project aims the more chance of individual participation to the project at rate of 0.166. The information required may include the objective of the project, how is it going to be implemented and clear benefits. Andinet *et al.* (2017) reported those community members are more likely to participate in a project if they are clearly familiar with the benefits they will obtain from the project. Also Kisauzi *et al.* (2012); Andinet *et al.* (2017) reported that for the community to have positive attitude toward the project and participate effectively should be informed about the project from the first stage this will also insure the sustainability of the project.

Farm size

Increase in the size of land for cultivation has a significant influence on people's participation on the agricultural projects ($p < 0.05$) in a positive way at rate of 0.475 as indicated in results (Table 4). This implies that those farmers owning large farms were mostly involved in agricultural project implemented in the study size compared to those with small farmers. This may be because the project will have an effect on the sizable area he owns in different ways, such as lowering production costs if the project offers farm supplies or increasing production since he will heed professional recommendations and guidelines (Allen and Heinrigs, 2016).

Involvement in previous project

According to Table 4 results, people's participation on agricultural projects are positively and significantly ($p < 0.05$) influenced by their involvement in prior projects, at a rate of 0.177. As people saw how the preceding initiative was carried out and benefited from it, their trust in

these projects may have grown. Miller (2009) provides more evidence in support of the findings, showing that as a person gains experience with a particular project, this increases their faith in and motivation for future similar projects. The success of the preceding initiative motivates and persuades people to take part in the following similar endeavor (Kleftoyanni *et al.*, 2010; Allen and Heinrigs, 2016).

3.3.4 Social and institutional benefits accruing from participation in agricultural projects

Different aspects of empowerment were taken into consideration. The aspects include agricultural knowledge and skills, farmer cooperatives formation or strengthening, participation in decision making, contributing ideas in farmers groups' meetings and economic gains through participation in agricultural project. The results in Table 5 revealed that, most of the empowerment 100% was on knowledge and skills in agricultural project and the least empowerment (24%) was on participation in decision making.

Table 5: Empowerment obtained by local community after participating in agricultural projects

Aspect of empowerment	Yes (%)	No (%)	Total (%)
Agricultural knowledge and skills	100	0	100
Farmer groups/cooperatives formation or strengthening	87.3	12.7	100
Participation in decision making	24	76	100
Contributing ideas in farmers groups' meeting	94.3	5.7	100
Economic gains through participation in Agricultural project	89	11	100

The study strove to understand some of the benefits obtained by local people after their participation in agricultural projects. The results (Table

5) shows some of benefits obtained includes; agricultural knowledge and skills, farmer cooperatives formation or strengthening, participation in decision making, contributing ideas in farmers groups' meeting and economic gains. The results indicated that the most targeted thing of agricultural projects to community is to enhance their knowledge and skills on agricultural activities. The findings are consistent with that of Echiegu (2018), who reported that most of agricultural projects aimed at improving knowledge and ability of farmers toward crop production so as to increase productivity of their farms. Agriculture projects aims at increasing incomes in the rural areas by encouraging high value agriculture and catalyzing investments into high value production (Atmadia and Sills, 2016). Other agricultural projects such as ASDP is a "basket fund" project which addresses the development challenge of enabling farmers to have better access to and use of agricultural knowledge, technologies, marketing systems and infrastructure, all of which contribute to higher productivity, profitability, and farm incomes (Aref, 2011). The overall strategy is through increasing control of resources by beneficiaries, providing a wider choice in service providers to increase cost-effectiveness and competition, ensuring that resource allocations are more transparent and equitable, and integration with existing government financing and planning systems to ensure sustainability, and avoid un-harmonized, project-based approaches with parallel implementation mechanisms (Echiegu, 2018). The implementation of the agricultural projects in the study area were also involved different institutions/persons such as political leaders, village council, farmers group, micro-financing institutions, religious leaders and tradition leaders as indicated in Figure 1. As every institution has own contribution and its important in convincing power to make local people participate in agriculture project. In general, all institutions were important stakeholders for the project objective to be achieved.

The study also determined the extent to which disadvantages groups such as albino and others have been involved in these agricultural projects. The information collected from different respondents (Table 6) it shows that most of their views (84%) suggested medium extent of involvement and the remained amount (16%) goes to small extent involvement.

Table 6: Extent of the project involvement on disadvantage groups

Involvement of disadvantage group	Frequency (F)	Percentage (%)
Not at all	0	0
small extent	16	16
Medium	84	84
Large extent	0	0
Total	100	100

As the most of projects give less consideration to disadvantaged group such as albinos, women and other disabled people (Kicheleri, 2020), the study strove to understand the extent of participation has been given to disadvantaged group. The findings in Table 6 indicates that most of the respondents' views 84% suggested that disadvantaged groups have been involved at medium level as the projects offer an equal chance of participation. The increase in extent of participation for disadvantaged group could be due to the increases in campaign for equal chances of participation in projects as the Tanzanian policy insisted. Also having a female president in Tanzania could be another reason for female to have chances of deliver their ability in projects as they have been trusted from top level of leadership.

3.4 Conclusions and Recommendations

This study was conducted to answer three objectives which are; to determine levels of community participation in agricultural projects, to

determine the factors influencing community participation in agricultural project as well as to assess the social and institutional benefits accruing from participation in agricultural projects.

For levels of community participation in agricultural projects the findings revealed that most of the respondents were involved only during implementation phase of the project. Thus during the projects life cycle most of the people only participated during the implementation stage and were not involved in other project stages. Referring to the factors influencing community participation in agricultural projects, the study findings show that some explanatory variables including household members, information, farm size and involvement in previous projects have a significant influence on community participation. Therefore, implicitly, these are the determinants of community participation in agricultural projects.

Social and institutional benefits accruing from participation in agricultural projects include agricultural knowledge and skills, farmer cooperatives formation or strengthening, participation in decision making, contributing ideas in farmers groups' meeting and economic gains. Different institutions such as political leadership, village council, farmers group, micro-financing institutions, religious leaders and traditional leadership were influential in community participation in agricultural projects.

For success and sustainability of agricultural projects the study recommends that the government and other agricultural stakeholders should make efforts to ensure community members local communities as the key stakeholders are involved from the beginning to the end of the project. That means local communities should be involved in all stages of the project.

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CHAPTER FOUR

4.0 GENERAL DISCUSSION

This study aimed at understanding the community perceptions towards development projects and the influence of community perceptions on participation in agricultural projects. The study reviewed the literatures regarding community perceptions and community participation to the development projects and agricultural projects. Positive community perceptions are influenced by: the role of agricultural projects on households' living standards, where by about three quarter (72%) of the respondents were of the opinion that agricultural projects improve households' living standards; the contribution of agricultural projects on reduction of hunger and poverty as more than a half (69%) of the respondents saw agricultural projects as a potential solution to hunger and poverty in their community. One key informant remarked that: *"last season, after selling my harvest, I was able to open a small shop (home use commodities) which serves as an alternative source of income during the dry season."*

Study findings show further that agricultural projects have a positive effect on employment creation in the areas they operate: agricultural projects and community development as majority of the respondents (78%) subscribed to the opinion that participating in agricultural projects is positively correlated with community development. In the same vein, 76% of the respondents saw participation in agricultural project as a prudent use of a person's time as opposed to wastage of time. Overall community perception towards agricultural projects shows that, majority of the respondents (78.7%) had a positive perception towards agriculture whereas about a quarter (17.5%) were neutral. Only 3.8% had a negative perception about agricultural projects. The findings from regression revealed four explanatory variables, namely education level, information, farm size and involvement in previous projects are drivers of the community perceptions.

Different phases of project include initiation, planning, implementation and performance/monitoring. The study attempted to determine the community participation in all these phases. The findings show that most of the individuals within the community are involved in the project during the implementation stage. In one of the FGDs, the participants indicated that they only got information from their leaders that there is an agricultural project planned to be implemented in their area they have to be prepared and show enough cooperation during implementation.

Factors with significant influence to the individual participation in agricultural projects include; number of household members as the findings show that the number of household members influences individual participation toward agricultural projects positively and significantly ($P < 0.05$) at rate of 0.197; as for information, the results show that, the information an individual receives on the existence of a project has a significant influence on people's participation in agricultural projects ($p < 0.05$). The results show that for every added information the respondents get concerning the project aims the more chance of individual participation to the project at rate of 0.166. The information required may include the objective of the project, how is it going to be implemented and clear benefits; Farm size as increasing in the size of land for cultivation has a significance influence on people's participation on the agricultural projects ($P < 0.05$) in a positive way at rate of 0.475. This implies that those agriculturalists owning large farms were mostly involved in agricultural project implemented in the study size compared to those with small farmers; Involvement in previous project, people's participation on agricultural projects are positively and significantly ($P < 0.05$) influenced by their involvement in prior projects, at a rate of 0.177. As people saw how the preceding initiative was carried out and benefited from it, their trust in these projects may have grown.

The study also strove to understand some of the benefits obtained by local people after their participation in agricultural projects. The results show some of benefits obtained include; agricultural knowledge and skills, farmer cooperatives formation or strengthening, participation in decision making, contributing ideas in farmers groups' meeting and economic gains. The results indicated that the most targeted thing of agricultural projects to community is to enhance their knowledge and skills on agricultural activities.

CHAPTER FIVE

5.0 GENERAL CONCLUSIONS, RECOMMENDATIONS AND AREAS FOR FURTHER STUDIES

5.1 General Conclusions

From the study findings, community members had positive perception toward agricultural projects as they improve their living standards, reduce hunger and poverty and ultimately contribute to community development. This has been driven by community involvement in previous agricultural projects, extension services, access to information and farm size. During the project's life cycle most of the people only participated during the implementation stage and not involved in other project stages such as initiation or planning and monitoring. Community participation in agricultural projects has been significantly influenced by some of explanatory variables such as number of household members, information, farm size and involvement in previous projects.

From the findings social and institutional benefits accruing from participation in agricultural projects includes; agricultural knowledge and skills, farmer cooperatives formation or strengthening, Participation in decision making, Contributing ideas in farmers groups' meeting and Economic gains.

5.2 General Recommendations

For the positive perceptions and outcome and sustainability of these agricultural projects the study recommends the government should make sure that the implemented projects improve people's living standards, reduce hunger and poverty and ultimately contribute to community development. Also to improve participation of the local community during the implementation stage of the project, it is important to consider number of family household members, informing the local community, farm size owned by a farmer and people involvement in previous projects as it has a significance influences to community participation.

5.3 Areas for further Studies

This study has been majoring its focus on what is considered by the community in Kishapu District before deciding to participate in agricultural projects. Such that the issue of perception and its drivers towards these projects, other socio-economic aspects of the community in relation to their participation in the projects were the centers of discussion throughout the dissertation. The communication of the findings and recommendations from this study is just the first and necessary step but by itself not sufficient to make full participation of the community in agriculture based projects, still the information on the long-term impacts of community participation on agricultural sustainability and resilience is essential to induce more community participation. This is therefore presenting a clear and obvious area for other scholars to research on, using research methodology like evaluating the differences before and after participation in agricultural projects among individuals in communities not just in Kishapu but also Tanzania at large.

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APPENDICES

Appendix 1: Questionnaire and checklist for the respondents

Section A: General Information of the Respondent

Name of ward:

Name of village:

Date of interview.....

1. What is the sex of the household head? 1) Female 2) Male
2. Age of Respondent _____ (Years).
3. Sex of Respondent 1) Female 2) Male
4. Marital Status of the respondent 1) Single 2) Married 3) Divorced/Separated
- 4) Widow/Widower 5) Never married
5. Education level of the respondent _____ [Years of schooling].
6. Main Occupation of the respondent 1) Crop farming 2) Livestock keeping 3) Wage employment e.g., teacher 4) Non-farm self-employment e.g., business 5) Not able to work [too young or old] 6) others specify
7. How many people are in your household? _____ [Numbers]. [i.e., Household members are defined as all those who normally live and eat their meals together here. Include household members temporarily studying elsewhere or travelling, but who spent AT LEAST ONE continuous month living and eating here since last 12 months]

Household Member	Age	Sex	Education	Main Occupation	Relationship to HH
P1					
P2					
P3					
P4					
P5					
P6					
P7					
P8					

- HH: Household Head
- P1-P5: Household members to start with household head and spouse
 - Age: Numbers
 - Education: Years of schooling
 - Sex: 1) Female 2) Male
- Main Occupation: 1) Crop farming 2) Livestock 3) Wage Employment e.g., teacher 4) Non-farm self-employment e.g., business 5) Student 6) Not able to work (too young/old) 7) others specify _____
- Relationship with Household Head: 1) Household Head 2) Spouse 3) Father/Mother 4) Uncle/Aunt 5) Brother/Sister 6) Own Children 7) Nephew/Niece 8) In-laws 9) Grandson/daughter 10) Helper 11) Other Specify _____

Section B: Perception of community towards agricultural projects

Based on your opinion please indicate agreement or disagreement of the following statements by ticking (√) the response.

1=Strong Disagree (SD) 2= Disagree (D) 3=Uncertain or Neutral (U) 4=Agree (A) 5=Strong Agree (SA).

S/N	STATEMENT	S A	S	N	D	S D
8.	Agricultural Projects is beneficial to community development					
9.	Agricultural projects are meant to improve peoples' living standard					
10.	If agricultural projects could not exist in your area, you could not be in that state of living					
11.	Agricultural projects are solutions to hunger and poverty in your community					
12.	Development projects like agricultural Projects become more successful if community participates fully in the project.					
13.	Participating in agricultural projects was wastage of time					
14.	Participation of the community in agricultural projects results to community development					

15.	Community members are always aware with agricultural projects brought in their communities					
16.	Community participation is an important factor for agricultural project to succeed.					

Section C: Factors influencing perception of community towards agriculture projects

17. Have you heard about any agricultural project in your area?

1) Yes 2) No

18. If Yes from whom or from where did you hear from?

19. What do you know about agricultural projects?

20. Do you know the people who benefited from the agricultural project. If Yes, mention

21. What was conducted to create awareness to the community about the agricultural project?

22. How many agricultural projects do you?

23. How were you involved in the projects?

24. Do you think the agricultural projects raised your income status?

1) Yes 2) No

If No, skip question 25

25. How much was raised through agricultural projects?

_____ (in Tanzania Shillings)

26. Do you think agricultural projects are necessary to your community?

If Yes, how?

27. Do you think these projects on agriculture are helpful to peoples' well-being?

If Yes, please explain your answer.

28. How do you benefit from these projects?

29. What should be done in order to improve the future agricultural projects which are planned to be implemented in your community?

Section D: Level of Community's Participation on Agricultural Projects

30. Do you know of any agricultural projects in this village?

1) Yes 2) No

31. Did you participate in agricultural projects in this village?

1) Yes 2) No

32. If yes, list down all the agricultural projects that you participated in this village

33. How did you participated in the mentioned above project(s) 1) Committee Member 2) Community member

34. Did you participate in the identification stage of agricultural projects?

1) Yes 2) No

If Yes, what activities did you?

35. If No why you didn't participate

36. Were you satisfied with how you participated in the identification stage of agricultural projects?

1) Yes 2) No

Please explain why? _____

37. Did you participate in the planning/designing stage of agricultural projects? 1) Yes 2) No

If yes, what activities did you do.

38. Were you satisfied with how you participated in the planning/designing of agricultural projects? 1) Yes 2) No

Please explain why _____

39. Did you participate in the implementation stage of the agricultural projects? 1) Yes 2) No

If Yes, what activities did you do _____

40. Were you satisfied with how you participated in the implementation stage of agricultural projects? 1) Yes 2) No

Please explain why _____

41. Did you participate in the Monitoring and Evaluation stage of the agricultural projects 1) Yes 2) No

If Yes, what activities did you do _____

42. Were you satisfied with how you participated in the Monitoring and Evaluation of agricultural projects? 1) Yes 2) No

Please explain why _____

43. Participation Score index (Score level assessment by enumerator). From above response on project stages for every response of YES will score=1 and 0 for the response of NO.

	Project Stage	Score	Index Level	Remarks
1.	Identification stage		0-1	Low participation
2.	Design/Planning stage		2	Medium participation
3.	Implementation stage		3-4	High participation
4.	Monitoring and Evaluation			

Appendix 2: Checklist for Key Informant Interview

1. When did agricultural projects started in this area?
2. Which approach was used to establish the project and why?
3. At which project stage did community involved in projects and why?
4. What were the community roles in each stage of the agricultural projects?
5. What is your perceptions regarding to the achievements of the projects and why?
6. What do you think is the impacts of agricultural projects in this area?
7. Do you think agricultural projects are sustainable and why?
8. What should be done in order to improve the future agricultural projects

Appendix 3: Checklist for Focus Group Discussion

1. When did agricultural projects started in your community?
2. At which project stage where you involved in projects and why?
3. What was your role in agricultural projects and why?
4. What is your perception about participating in agricultural projects?
5. Do you think this project helped you and your community?
6. Do you think agricultural projects had any impacts to your life?
7. In your opinion what should be done to improve the future agricultural projects



Kuhusu Tasnifu Hii

Utafiti huu ulifanyika halmashauri ya wilaya ya Kishapu, ili kubaini mambo yanayopelekea mtazamo na ushiriki wa jamii kwenye miradi ya kilimo. Aidha, taarifa kwaajili ya utafiti huu mfano zinazohusu sifa za mwanajamii (mwanakaya) husika, ufahamu wao kuhusu miradi ya maendeleo ya kilimo na kiwango cha ushiriki wao katika miradi hiyo zilikusanywa kupitia mahojiano ya ana kwa ana na wanakakaya hao. Utafiti uligundua kwamba wengi wa washiriki walikuwa na mtazamo chanya kuelekea miradi ya kilimo kwa sababu miradi hiyo inachangia katika maendeleo ya jamii. Pia, mambo yanayochochea mtazamo chanya wa jamii ni ushiriki katika miradi ya kilimo iliyopita, elimu, upatikanaji wa habari, na ukubwa wa shamba. Utafiti pia uligundua mambo mengine yanayopelekea ushiriki wa jamii kwenye miradi ya maendeleo kilimo ni pamoja na ukubwa wa shamba pia mrejesho wa ushiriki wa jamii katika miradi iliyopita. Utafiti unapendekeza mikakati kadhaa katika kushawishi ushiriki zaidi wa watu kwenye miradi ya kilimo ikiwemo viongozi wakuu wa miradi ya maendeleo ya kilimo lazima wahakikishe kuwa wanufaika lengwa wananufaika kweli katika kipindi chote cha utekelezaji wa miradi yao.