ASSESSMENT OF FACTORS AFFECTING EFFECTIVE PARTICIPATION OF YOUTH IN HORTICULTURE FARMING IN TANZANIA: A CASE STUDY OF ZANZIBAR ISLANDS

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT FOR THE REQUIREMENTS OF THE DEGREE OF MASTER OF PROJECT MANAGEMENT OF THE OPEN UNIVERSITY OF TANZANIA

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CERTICICATION

The undersigned certifies that has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation entitled, ñAssessment of Factors Affecting Effective Participation of Youth in Horticulture Farming: A case study of Zanzibar Islandsò in partial fulfilment for the requirements of the Degree of Master of Project Management of The Open University of Tanzania

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(Supervisor)

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Date

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DECLARATION

I, Chogohe Edwin Mundo, do hereby declare that this dissertation is my own original work, and that it has not been presented and will not be presented to any other university for a similar or any degree award.

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Signature

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Date

DEDICATION

This work is dedicated to my dear wife Grace Piniel Eliyahu and son Edison Edwin, as well as my parents Mr and Mrs E. Mundo. They offered me spiritual, moral and financial support throughout the process of conducting this study. God bless you abundantly.

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Glory and Honour to the Almighty God helping me to pursue this study. First and for most, I express my sincere gratitude to youth whose trust and cooperation made this study possible. Secondly, my thanks go to Youth, Extension officers and Agronomist who accepted to take and respond to my questionnaires and interviews.

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ABSTRACT

The study aimed at assessing factors affecting effective participation of youth in horticulture farming in Zanzibar Islands. The specific objectives were to assess knowledge of youth about good agronomic practices, socio-cultural factors affecting effective participation of youth and socio-economic factors affecting effective participation of youth in horticulture farming. The study used purposive sampling and randomly selection of respondents among Youth, Agronomists and Government Extension Officers engaged in horticulture farming. Data was collected from 43 respondents using structured questionnaire, semi-structured interviews and focus group discussion. The key findings revealed that knowledge about good agronomic practices among youth isnôt a limiting factor affecting effective participation of youth in horticulture farming. Poor believe that muscular work is not for people from Zanzibar Island affected utilization of the available land for production. Loan process being complicated discouraged majority of youth participating in horticulture farming. There is need to conduct field exchange visit among farmers who succeed in applying knowledge of good agronomic practices for other unsuccessful youth to learn the effect of applying GAP. Youth should be mobilized in small groups and trained about SILC methodologies to access small loan amongst themselves instead of waiting only bank loan. Finally, youth should be encouraged to make the best use of the available land for horticulture farming instead of waiting to employ labour from mainland especially Sukuma.

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LIST OF ABBREVIATIONS

AU	African Union
FAO	Food and Agriculture Organization
GEO	Government Extension Officer
GDP	Gross Domestic Product
MnM	Mboga na Matunda
SILC	Saving and internal lending communities
TAHA	Tanzania Horticultural Association
TPB	Theory of Planned Behaviour
TRA	Theory of Reasonable Action
UN	United Nation
USDA	United State Department of Agriculture
USAID	United State Agency International Development
URT	United Republic of Tanzania

CHAPTER ONE

INTRODUCTION

This chapter includes the background of the study, statement of problem, objectives, research questions, relevance of the study and organization of the study.

1.1 Background of the Study

Agriculture sector in large parts around the world, covers a wide array of industries such as farming, animal, fisheries, food processing, plantation and many more (Silva *et al.,* 2010). Despite all facts agriculture still stand as fundamental to poverty reduction and economic growth in the 21st Century. An estimated 75% of the worldôs poor are from rural areas and most are involved in farming, an activity which requires sustenance especially by the youth who are the leaders of tomorrow (World Bank, 2008). In agriculture sector, horticulture farming as one part has overtaken most of the traditional cash crops in terms of foreign exchange earnings, family income, employment creation and other indirect effects which contribute to economic growth in many places.

The horticulture farming, recently has grown significantly, but by volume still represents a small part of the overall agricultural sector. It makes significant contribution to nutrition, job creation, food security, and economic growth. It is mainly practised by small scale farmers with a few large scale farmers in many places. Umeh and Odom (2011) argue that, the contribution of agriculture to farmersô income and rural development depends on how fully youth who are the potential labour force do participate in the sector. Youth have innovation mind, less conservative and can make dynamic change, less fear of failure, great physical

strength and sharp in mind to learn new thing. For farming to be sustainable it requires physical strength, innovativeness and agility (Brooks, *et al.,* 2013).

Youth productive force give the reliance on horticulture farming for nutritious food production, agribusiness and economic growth at domestic, regional and global level. It has been noted that youth have the time, power, abilities and the capacity to innovate and take risks, although many young people have been underutilized Donye *et al.,* (2012); DôSilva *et al.*, (2012). For the sustainability of horticulture sector, youth are very important resource required for the development of every nation. 88% or 1.2 billion of the worldôs youth aged 15ï34 years live in developing countries where agriculture is the backbone of their economies (FAO, 2016). However, with ineffective participation of youth in horticulture farming, the future of the industry is questionable.

The unemployed and energetic youth are perceived as the future farmers and future drivers of Africaôs economic development. Horticulture farming offers a potential, and become a source of youth economic opportunities in many part of Africa. Many countries in Africa understand the need to integrate the youth in horticulture for the development of the sector in particular and the country in general. The 2012 census in Tanzania established that around 35.5% of the countryôs population are youth. Tanzania like other sub-Saharan countries is facing the problem of youth unemployment. According to Chikezie (2012) unemployment of the youth is an opportunity as well as a threat. It is an opportunity because the un-utilized labour can be employed in horticulture farming which is now growing agriculture sector but also a threat in the sense that the idle youth can be a source of insecurity and

instability.

A large mass of youth enters the labour force every year, but the formal sector (private and public) is unable to accommodate them (United Republic of Tanzania (URT), 2003). The Government of Tanzania, through its Rural Development Strategy and National Five-Year Development Plans, has recognized youth unemployment and underemployment as among the nationôs most critical challenges (URT, 2001; URT, 2016). In Tanzania, the agricultural sector is the most important employer (Maïga et al., 2015; FAO, 2014). The agricultural sector provides 70% of employment overall and accounts for about 23% of GDP and 30% of exports.

Youth involvement in agricultural farming is also limited by their lack of access to finance (USAID, 2016). It is imperative for any agricultural based economy to motivate and encourage the youth to engage in agriculture to enable such economy to thrive and be stable (Daudu, *et al.,* 2009). Youth labour is necessary and required to enhance the income that rural and urban farmers received from agriculture sector especially horticultural value chain. In most places of Tanzania both mainland and island horticultural production is highly initiated with the presence of private sector.

Generally, agriculture has continued to be a base to Zanzibar economy, providing food, and accounting for 31% of GDP, 70% for export and 70% of employment opportunities of the population principally in rural areas (OCGS, 2014). Profit generated through vegetable production in Zanzibar is very high because it requires minimal land space, little water for irrigation and due to highly importation of horticultural produce the market for vegetables is readily available. Horticultural

sector is an emerging opportunity for people in Zanzibar. This is facilitated by rapid urbanization, fast technological transfer in urban areas and presence of many unemployed youths that could offer labour in urban areas (Adedeji & Ademiluyi, 2009; Drescher, 2004).

However, currently it has been recognized that the market potential for vegetables in Zanzibar is absolutely high due to the increase in demand for vegetables through tourism sector; which accounts for almost 50% of the GDP (OCGS, 2014). Before horticultural initiatives by private sector about 80 % of the fresh vegetables consumed in the islands or supplied to the hotel industry are not from the island, the majority are imported from Tanzania mainland, Kenya and South Africa to meet the market needs (ITDP, 2002, Thembi, 2011), despite the fact that such vegetables could be produced profitably by youth in the islands. The net import of fruits and vegetable has gone down by almost half in the past decade (TAHA, 2016). This study aimed at assessing factors affecting youth effectively participating in horticulture farming in Zanzibar.

1.2 Statement of the Problem

The plan of many youths in various places in Tanzania is getting better life using the available opportunities. Those who are in school have gone there with bigger expectation knowing after school will get a white collar job and building their life better. But this isnôt the reality outside. Youth unemployment is serious issue in Tanzania. About 65% of the total labour force is youth, but their engagement in agricultural activities overall, including emerging agricultural opportunities, lags

older cohorts (URT, 2015). Despite emerging awareness but still some youth have negative attitudes towards agricultural sector work. Agriculture policy (1997) aims to reduce poverty by encouraging youth to engage in horticulture to improve living standards and create employment through agriculture (URT, 1997).

Older age in most places in Tanzania do agriculture work because most youths are moving from rural to urban areas in large numbers in search of office work. However, the urban areas are not able to generate jobs as fast as the growth in population (Leavey and Hossain 2014). Youth donôt see an opportunity in agriculture for them to engage effective, which has led to high levels of youth unemployment. Zanzibar island is among places where most of household own wells at their homes which encourage people to engage in horticulture farming. Youth in Zanzibar Island can use that advantage of available water source to effectively engaging in agribusiness.

Production of vegetables is a key factor in ensuring a continuous supply of raw materials for the development of agribusiness in horticulture. It is often argued that vegetable production in Zanzibar has reasonable advantages but the information regarding the commercial potential of local farmers in producing and retailing vegetables is limited. However, many youths in Zanzibar are highly engaged in tourism as the only opportunity when dropped out of school. Okello (2014) also documented the low participation of youth in farming. This study aimed at assessing factors that affect effective participation of youth in horticulture farming.

1.3 Research Objectives

1.3.1 General Research Objective

To analyze factors hindering effective participation of youth in horticulture farming

1.3.2 Specific Research Objective

i. To examine knowledge of youth about good agronomic practice on horticulture farming

ii. To identify the socio-cultural factors hindering effective youth participation in horticulture farming

iii. To identify the economic factors hindering effective youth participation in horticulture farming

1.4 Research Questions

1.4.1 General Research Question

What factors hinder effective participation of youth in horticulture farming?

1.4.2 Specific Research Questions

i. What level of knowledge do youths acquire on good agronomic practices?

ii. What are socio-cultural factors hinder effective youth participation in horticulture farming?

iii. What economic factors hinder effective youth participation in horticulture farming?

1.5 Relevance and Contribution of the Research

Horticultural industry has been one of the most dynamic agriculture sub-sectors in many regions of Tanzania in recent years. It is the fastest growing agriculture sub sectors which can create employment opportunities to many youths. If the youth are motivated to effectively engaging in horticulture value chain, they will also refrain from other socially unacceptable activities as they will be busy doing something constructive.

This study is significant to Zanzibar government, private sector, donors who want to invest in mobilizing more youth joining with horticulture sector in Tanzania. It acts as framework or a guide in formulating policy that encourage more youth to engage in horticultural farming. This study is relevant to urban use planners especially on use of urban land for vegetable production in Zanzibar island. Also by looking this as new opportunity, stakeholders in agriculture sector may generate new business. The finding of this study have great importance to the youth, as they reflect on the enablers and hindrances of their participation in horticulture farming projects, for employment and income generation, as well as their own and their familiesô food security. The study provided relevant factors hindering effective participation of youth in horticulture farming thus created an attention and awareness for youth that there is something profitably in horticulture despite existing challenges.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This Chapter intends to explore the various literature works done by various scholars related to the study, such as understanding the research that has been done in oneôs area of interest (Mugenda, 1999). Literature review tries to show what is already known and what the gap in knowledge is and the research capitalizes on the gap discovered in the existing literature and make current research and answer the questions which was discovered not answered in the literature. Specifically, the chapter covers, conceptual definitions, youth participation in horticulture farming and challenge facing. Others are, empirical literature review, conceptual frame work and research gap.

2.2 Conceptual Definitions

2.2.1 Horticulture

Horticulture despite of being the sub sector in agriculture is also a science, as well as, an art of production, utilisation and improvement of horticultural crops, such as fruits and vegetables, spices and condiments, ornamental, plantation, medicinal and aromatic plants. It is derived from two Latin words hortus, meaning ógardenô, and cultura meaning ócultivationô. Horticulture refers to crops cultivated in an enclosure, i.e., garden cultivation.

Other people understand horticulture as the branch of agriculture that deals with the garden crops. For the purpose of this study, Horticulture is a branch of agriculture, concerned with growing plants that are used by people for food (USDA, 2005).

Horticultural crops referred with this study are such as tomatoes, cabbages, onions, carrots, passion, sweet pepper etc.

2.2.2 Participation

The concept of participation has been used in a wide variety of fields, and that has obtained an evenly large range of meanings. Many researchers, academicians and practitioners have provided various insights to understand the concept of participation with a common definition (Felix, 2003). It is not easy to find an ideal definition of participation, as it is historically related with different ideologies, thus acquiring different meanings. In most cases the term participation in development aimed at actively involving people and communities in identifying problems, formulating plans and implementing decisions over their own lives (DFID, 2002). Since the young people are the foundation for effective development when fully engaged they may improve many of the structural development challenges that we face today and advancing livelihood opportunities. Young people are the bridge between effective development policy and valuable practical action on the ground (DFID 2010: 89).

DFID, (2010) defined Youth participation as the active, informed and voluntary involvement in activities relating to horticulture, a decision that affect the life of youth and their communities both locally and globally. Also, USAID define it as involvement of youth in horticultural activities to meet genuine needs through agriculture, with opportunity for planning or decision making affecting others, in an activity whose impact or consequences extends to others ï outside or beyond the youth participants themselves (USAID, 2008).

In this study youth participation defined as a process of involving young people aged 15-35 in the decisions that affect their farming lives. The World Bank (2005) defines participation as a process through which stakeholdersô influence and share control over development initiatives, decisions and resources. Different studies show that participation can strengthen social development, build organizational capacity, and create changes in the environment. Quality participation shows some effect on outcomes, including its effect on community change.

Louise B. Jennings, Deborah M. Parra-Medina, DeAnne K. Hilfinger Messias, and Kerry McLoughlin formulated a critical social theory of youth empowerment as a way to understand youth participation. They draw upon a number of existing empowerment modelsï including adolescent empowerment, youth development, transactional partnering, and the empowerment education model formulated by Paulo Friereï as a basis for framing their own notion of participation whose dimensions include assessing its effects at the individual and community levels

2.2.3 Youth

Youth is usually defined with reference to age brackets; there is little agreement as to either the upper and lower limits (Afande et al, 2015). For example, In Ghana, the National Youth policy (2010) puts the youth bracket at 15-35. In Ethiopia the Ministry of Youth, Sports and Culture (2004) puts the youth bracket at 15 ï 29 years. Most people define youth differently depending on their desire and need. The definition of youth may vary from people mind, organization, government etc. Many countries and regions have even larger ranges of the concept of youth. For example, the UN defines youth as a person aged between 14-24 years in this age the youth is

expected by the community to start participating in various activities and becoming self-reliant in some extent (URT, 1996). The African Union (AU) considers anyone between the ages of 15 and 35 to be a part of the youth population. The definition of youth varies among different cultures and takes into consideration numerous subjective variables. Rituals, traditions, and age are all cultural factors that can determine a personôs label of youth and they can vastly differ between cultures.

The term Youth in Tanzania varies due to the specific purpose. In marriage issues the law of marriage of 1971 allows a young person of 15 years to get married. Generally, youth is the period between childhood and adulthood. This study referred to the youth as people between the age of 15-35years. Majority of Tanzanians with this age range are expected to be out of school and started to run their life by their own. This category of people is not only the productive backbone of every society, the major source of ideas and innovation, but also the main market for food consumption and very often the leaders and drivers of public opinion, public policy and action (Akpan, 2010).

2.2.4 Good Agronomic Practices

Good agricultural practices (GAP) referred to Practices that address environmental, economic and social sustainability for on-farm processes and result in safe and quality food and non-food agricultural products. (FAO COAG 2003 GAP paper). GAP applies available knowledge in addressing environmental, economic and social sustainability for on-farm production and post-production processing, resulting in safe and healthy food and non-food agricultural products. Simply, GAP stands on four pillars i.e economic viability, environmental sustainability, social acceptability

and food safety and quality. Awareness, knowledge and skills that address the needs of improving production practices that incorporate GAP is essential to help youth engaged in horticulture ensure the safety of their produce. For the purpose of this study knowledge about GAP include land preparation, planting spacing, proper sowing, integrated pest management, fertilizer application, mulching, crop rotation, seed selection, storage of produce, adherence with market standards etc.

2.3 Theoretical Review

2.3.1 Theory of Planned Behavior

The Theory of Planned Behaviour (TPB) which was developed from the Theory of Reasonable Action (TRA) inform this study to investigate factors hindering effective participation of youth in horticulture value chain in Unguja Zanzibar. The theory argued that human behaviour is under volitional control and therefore can be predicted from intentions and subjective norm (Ajzen, 1991; Ajzen, 2002). Ideally the theory was an individualôs intention to perform a given behaviour (Ajzen,1991). According to (Ajzen, 2002) the theory postulates that human behavior is guided by three types of considerations: Attitude towards behaviour, subjective norm and perceived behavioural control (Ajzen, 1991).

The attitude includes the degree to which a person has a favourable evaluation or appraisal of the behaviour in question (Ajzen, 1991). Subjective norm refers to the perceived social pressure to perform the behaviour (Ajzen, 1991). It also involves the beliefs about the normative expectations of other individuals (normative beliefs) [Ajzen, 2002). Perceived behavioural control include the perceived ease or difficulty of performing the behaviour and it is assumed to reflect past experience as well as

anticipated hindrances and obstacles (Ajzen, 1991). Ajzen (2002) revealed that the perceived behaviour control was included in the Theory of Planned Behaviour with an aim to deal with cases which human beings have incomplete volitional control over the behaviour in question.

This theory proposes that the more favourable the attitude and subjective norm with respect to behaviour the greater the perceived control; the stronger should be an individualôs intention to perform the behaviour in question (Ajzen, 1991). Furthermore, when an individual believe that they are accessible to necessary resources and opportunities (skills, money, cooperation of others and time) and they believe that the challenges they are likely to experience few and manageable, they would have the confidence to perform the behaviour (Ajzen, 2002). This theory has been used in horticulture value chain as well. Clark-Richardson (2003) applied the

Theory of Planned Behaviour in predicting attendance at environmental horticulture extension programs in Florida, United states of America. She gathered information using questionnaires mailed to 3000 horticulture professionals in Florida. In her studies, those that attend horticulture based extension programs had a more positive attitude towards attending those programs that those who rarely attend. Youth farmers decide to engage in horticulture farming because of their own decisions. This theory was essential in explaining the role of other individuals in influencing access to farming resources and minimizing challenges to vegetable farming. Young farmers obtained land, financial assistance, farm inputs, agricultural information and skills and farm labour from other people such as parents, friends, mass media and the county government.

2.4 Empirical Analysis of Relevant Studies

2.4.1 Youth Participation in Horticulture Farming and Challenge Facing

Despite the promise of agricultural sector, youth involvement in agriculture is declining in Africa (Mibey, 2015). Literature reveals that, there is decline of youth interest in farming even though they are most productive and are in the prime of their lives both mentally and physically. Checkoway *et al* (2003) note that, it is only through participation that youth develop their project skills, build competencies, create the sense of ownership, empower youth in participation for sustainable development.

Effective participation of youth in horticulture depend on number of factors. There must be hindrance factors as to why youth may not effectively engage in horticulture. Low participation of youth in horticulture farming is also due to lack of awareness on horticulture farming which brought about the youthôs insufficient access to information, knowledge and education. Youthôs access to knowledge and information is crucial for addressing the main challenges they face in horticulture farming. Young people perceive agriculture as a profession of intense labour, not profitable and unable to support their livelihood compared to what white collar jobs offer (Youth in Farming, 2011).

The decline in participation of the youth in agricultural production is linked to the rural-urban migration phenomenon. The decision to migrate involves both ñpushò and ñpullò factors (Afande *et al*., 2015). Agriculture is seen as a less worthwhile subject or as a last resort for under-achievers hence influencing rural youth aspirations in a negative way; while urban students see agriculture as a ódirty jobô

(Njeru, *et al.,* 2015).

Limited access to land has been noted to be another socio-cultural factor that affects the participation of youth in agricultural programmes (Divyakirti, 2015). Report by FAO (2010) revealed that inheritance is still the most common system to obtain land in most developing countries including Tanzania. As a consequence, rural youth often have to wait many years before inheriting their share of the family land. Access to land is very important for youth trying to earn a livelihood in horticulture farming from rural areas. Land access is not only the number one requirement for starting farming, but it can also contribute to household food security and is a means for employment creation and income generation. Although access to land is fundamental to starting a farm, it can often be difficult for young people to attain (Njenga, *et al*., 2012).

In places like Zanzibar access to land isnôt easy and may be obtained through inheritance. The challenge of access to land by youth still poses as a constraint to youth participation in horticulture farming activities. Though there is an option of some youths acquiring land by buying, this might not be feasible given the low youth savings, high rates of youth unemployment, and low wages for most rural youth and high land prices (FAO, 2011a). Farming is not seen by youth as an attractive or prestigious career.

Despite the lack of appeal, youth are valuable in agriculture because of their energy and increased likelihood to adopt new agricultural technology needed to increase yields. Youth also represent the next generation. Therefore, the more youth involved

in agriculture the more successful a countryôs agriculture sector will become. Amongst issues facing youth to engage in agriculture generally are such as access to inputs and assets, capital investment, market and education.

2.4.2 Youth Awareness and Participation in Agriculture Industry

According to Man (2007), youth have a negative acceptance towards agriculture and that new ways to run the agriculture are required in order to attract the interests of youth and enhance their effective participation in horticulture. Current generations of children and youth often see agriculture only in terms of narrow stereotypes - a farmer, a cow, and/or a tractor, with the stereotypical farmer only visualized as an old man that "wears bib overalls and chew on strawò Blackbum (1999). According to Ganpat and Webster (2010), youth perceived horticulture as an unsatisfactory employment option unless they see instant economic gains or appreciate the value of agriculture or the impact this industry can have on their immediate lives and future. Studies done by Mann and Kogl (2003) revealed that bigger profits generated through farming will be an impetus for creating positive attitude of the people, especially the younger generation, towards farming and this will boost their acceptance towards farming.

A study in Iran by Ommani (2011) investigated the socio-economic factors contributing to the attitudes of rural youth towards agriculture. The findings from the study revealed that income, access to extension services and education, farming systems, association to organizations, age and insurance played significant roles in shaping the attitude of the youth towards participating effectively in agriculture. According to Adrian *et al.,* (2005) constructs of knowledge, attitude support and

belief plays a significant role in enhancing youthsô acceptance towards farming.

McLarty (2005) reported that education have an impact on peopleôs acceptance towards farming. He noted that university graduates were surprisingly found to not get actively involved in agriculture. Ifenkwe (2012) notes that youth are barely interested to engage agriculture since they do not perceive farming as an attractive career field. According to Mathivha (2012), urban-based youth see agriculture as alienating from youth popular culture and of low status, offering little opportunity for making money and only reserved for the elderly and the poor in rural areas.

2.4.3 Knowledge of Youth about Agriculture Industry in Africa

Despite the recognition of the potential of the agriculture sector internationally and nationally, literature points to the decline of youth interest and engagement in farming. Akinwunmi (1997) in the studies conducted in Nigeria reported that youthsô interest in farming activities is diminishing. Programmes trying to engage youth in agriculture specifically on horticulture are most done by private sector initiatives in most places of Africa and created awareness. One study shown, majority youth (56.6%) indicated that they were not aware of any agriculture oriented programmes in their areas (Njenga *et al.,* (2012).

Although the Youth Development Fund and the Women Enterprise Fund are an attempt to provide structured support to increase awareness and youth participation, many groups have not had any significant support from these funds. Some have not even heard about the funds (Lagat *et al.,* 2012). The lack of youth awareness on horticulture programmes is mainly brought about by the youthôs insufficient access

to information, knowledge and education.

Dalrymple (2012) reported a lack of interest among todayôs youth towards agricultural careers and revealed that it was due to the perception that agricultural careers involved labour intensive work that yield low monetary returns. Abdullah *et al.* (2012) postulates that though agriculture is fronted as a noteworthy alternative solution to youthôs joblessness and inability to overcome economic challenges, youth still have adverse attitudes towards agriculture. Youthôs access to knowledge and information about horticulture is crucial for addressing the main challenges they face in agriculture.

Krueger and Riesenberg (1991) found that students often have misperceptions of the agricultural industry and agricultural careers. Factors hindering effective participation of youth in agriculture include but not limited to few incentives like low pay, job insecurity, climatic changes, large investment and poor working conditions. These factors resulted to the poor attitude that the youth have towards agriculture. Moreover, Kayombo (2011) observes that most agricultural activities in rural areas do not act as income generation activities but only caters for consumption, thus leaving the young farm labourers with no income.

2.4.4 The Economic Factors and Participation of Youth in Horticulture

Accessibility to credit facilities especially loan has been noted to be another socio-economic factor that affects the participation of youth in agricultural programmes (Divyakirti, 2015). Access to land is extremely important for youth trying to earn a livelihood in agriculture and rural areas. Land access is not only the number one

requirement for starting farming, but it can also contribute to household food security and is a means for employment creation and income generation. Report by FAO (2010) revealed that loan process in many cases need number of procedures. In many places farmers are limited by accessibility of input in their localized areas

2.5 Research Gap Identified

Reviewed literature shows youth do participate generally in agriculture activities without specifying type of those agriculture whether horticulture or otherwise. Some of the researches that were conducted did not adequately investigate factors hindering effective participation of youth specific in horticulture farming. Considering Tanzania as low income country, factors influencing effective participation of youth towards agriculture particularly horticulture may be different from other few countries have observed in the literature.

Though there are many factors that can be comparable, there is need to investigate the factors hindering youth effective engagement specific in horticulture farming in Tanzania so that specific policies can be designed to deal with the challenge of poor youth participation in horticulture in the country. The involvement of youth in horticulture farming which emerged to be most dynamic sub-sector of country economy has the potential of reducing the problems of youth unemployment and this calls for securing the interest and participation of young people in agriculture in the form of deliberate shift in policy, training and promotion that specially targets the youth. This study investigated factors hindering effective participation of youth in horticulture farming in order to supplement the existing literature and knowledge.

2.6 Conceptual Framework

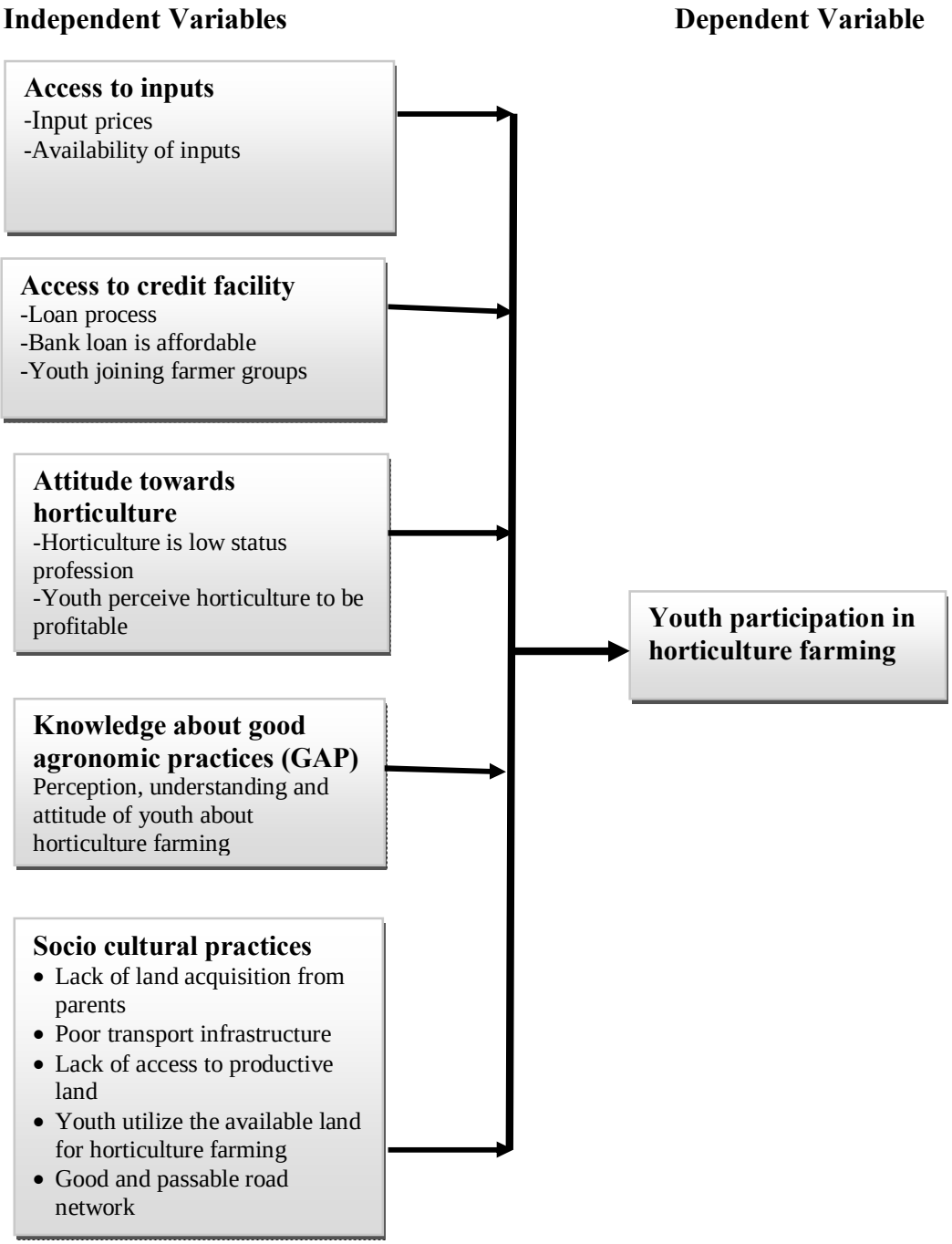

Figure 1.1: Conceptual Framework

Source: Author 2019

Conceptual framework is a scheme of concept (variables) which the researcher operationalized in order to achieve the set objectives (Mugenda & Mugenda, 2003). This is illustrated in figure 1 above, showing the two types of the variables. The independent variables in this study were Access to land and inputs, Access to credit facilities, Attitudes towards horticulture, Knowledge about Good Agronomic Practice (GAP) and Socio-cultural factors while the dependent variable was Youth participation in horticulture farming. Independent variables included both socio-cultural i.e lack of land acquisition from parents, lack of access to productive land, Utilization of the available land and socio economic variables i.e access to inputs, access to credit facility.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This chapter presents the research methodology that was applied in the study. The chapter presents the research philosophy; research design selected and also provides the justification of why that research design was selected. The chapter also presents a discussion on the population of study, sampling procedures, sample size and the study location. Moreover, the chapter presents the data collection instruments and the data collections procedures applied in the study. Moreover, the procedure applied to test validity and reliability of the questionnaire. Finally, this chapter presents the data analysis.

3.2 Research Philosophy

Philosophy is the idea that there are different views of the world, and the processes that operate within it. it is also concerned with views about how the world is working and, as an academic subject, focuses, primarily, on reality, knowledge and existence. A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analysed and used. The research philosophy reflects the authorôs important assumptions and these assumptions serve as base for the research strategy.

This study adopts interpretive believe. Interpretive researchers believe that the reality to consists of peopleôs subjective experiences of the external world; thus, they may adopt an inter-subjective epistemology and the ontological belief that reality is socially constructed. According to Willis (1995) interpretivists are anti-foundation lists, who believe there is no single correct route or particular method to knowledge.

Walsham (1993) argues that in the interpretive tradition there are no ócorrectô or óincorrectô theories. Instead, they should be judged according to how óinterestingô they are to the researcher as well as those involved in the same areas. They attempt to derive their constructs from the field by an in-depth examination of the phenomenon of interest.

3.3 Research Strategies

Research design as defined by Gupta and Gupta (2011) is a process that allows the researcher to have an understanding about the significance of the research and the steps that are involved. Kothari (2004) defined a research design as a plan or strategy used to get the expected results. The design to be used by this study is a case study descriptive research. Yin (1984) defines case study research design as an empirical inquiry that instigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidences are used.

This study used this design because the researcher interest is to attain an in-depth understanding about factors hinder effective participation of youth in horticulture farming in a small selected geographical area with a limited number of individual. According to Creswell (1994) this design helped to present facts about the nature and status of the situation as it exists at the time of study. The qualitative accounts given by case study research design help to explore or describe the data in real life environment but also help to explain the complexities of real life situation which may not be easy captured through experimental or survey research.

3.4 Survey Population

A complete set of elements that possess some common characteristic defined by the sampling criteria established by a researcher, is what known Population (Msabila & Nalaila, 2013). This study involved youth currently engaged in horticulture farming, Agronomist who recently working/worked with horticulture project implemented in Zanzibar Islands Government Extension Officers (GEO) who have been working several time with youth. Agronomist and GEO involved due to their experience working with youth in agriculture sectors being the right respondent to provide relevant information. Youth obtained from individual/farmer groups recently existing at the village by selecting representative from them. Agronomist who have bachelor degree and diploma of agriculture, GEO with any level of education and youth between 15-35 years involved.

3.5 Area of the Research

Zanzibar is located in the Indian Ocean between latitude 04°50ô - 06°30ôS and longitude 39°10ô - 39°50ôE and about 35 km off the northern coast of Tanzania, East Africa. Zanzibar has two major Island of Unguja (with an area of 1,554 km2) and Pemba (with an area of 990 km2). Island of Unguja have three regions; West Urban region, South region and Northern region. The climate of Zanzibar is warm and humid influenced by peripheral thicket/forest scrub and tropical climate with bimodal rainfall pattern, the long rain season (Masika) occurs from March to May and the short rain (vuli) from October to November. The hot season occurs during the NE monsoon period (Kaskazi) between December and February and a relatively cool dry season (Kipupwe) occurs between June and September. The average rainfall

varies between 1000mm to 2500mm annually while temperature ranges between 17^{o}C and 40^{o}C. The study conducted at both islands; Pemba and Unguja. These two islands selected due to the fact that horticulture activities have taken place recently. Majority of people at the islands, defined horticulture as the one of major source of income.

3.6 Sampling Design and Procedures

This section provides the sample size that used in the study. In addition, it also gives the sampling procedure that followed in drawing up the sample to be used in the study. Determination of sample size is an important step in any research. An optimal sample size may serve to achieve the researcher objectives. The size of the sample should neither be excessively large nor too small. It should be optimum; an optimum sample is one which fulfills the requirements of efficiency, representativeness, reliability and flexibility (Kothari, 2004). Technique used to obtain sample as well as the sample size is stated under this section.

3.6.1 Sample Size

The sample size of this study included randomly selection of 43 respondents among Youth, Agronomists and Government Extension Officers engaged in horticulture farming. Youth identified from existing farmers in Zanzibar. The study drawn three (3) Agronomist from horticulture project implemented therein and six (6) GEO who have an experience working with youth at horticulture farming. Agronomist and GEO selected through purposive sampling because they possess relevant information about the study and helped in undertaking this study. Youth involved in horticulture were responsible for giving detailed information about their development activities.

3.6.2 Sampling Techniques

This study used purposive sampling. Bowling (2002) defines purposive sampling as a non-random method of sampling, which samples a group of people or settings, with a certain characteristics and usually applied in qualitative research designs. Purposive sampling used to select Agronomists, GEO and Youth involved in this study.

3.7 Types and Sources of Data

The study used primary data. Primary data are information which have been collected afresh and for the first time and thus, happen to be original in character. To obtain this information the researcher used direct communication with respondents through personal interviews, questionnaire and focus group discussion.

3.8 Method of Data Collection

To fulfil the purpose of this study, primary data was collected from respondents using; interviews, questionnaire and focused group discussion.

3.8.1 Interview

The interview method of collecting data involved presentation of oral-verbal stimuli and reply in terms of oral-verbal responses. This method used through personal interviews and through telephone interviews (Kothari, 2004). This study adopted personal interview method in which the researcher faces to face asked questions in structured way to GEOs and Agronomist recently engaged in horticultural activities. The researcher initiated the interview and collecting the information by recording and noting down. The application of this method administered to obtain abundant

information within a reasonable time and to acquire relevant information from Government Extension Officers (GEOs) and private sector Agronomist who often run short of time. Unstructured interview applied to supplement information about the respondentôs personal characteristics and environment which added great value in interpreting results.

3.8.2 Questionnaires

Self-administered questionnaire with both structured and unstructured questions given to all Youth respondents who know how to read and write with questions that address the objective of study with the purpose of collecting primary data. Kothari, 2014 defined questionnaire as a research instruments consisting of a series of questions and other prompts for the purpose of gathering information from respondents. By using questionnaire data collected relatively quickly because the researcher would not necessary present when the questionnaires was completed. Also using questionnaires reduced cost. It was useful for large populations when interviews would not be practical especially for youth which constitute large number of respondents.

3.8.3 Focus Group Discussion

Kothari (2004) defines focus group discussion as a small number of people, usually between 4 and 15, but typically 8, brought together with a moderator to focus on a specific topic. This study used focus group discussion which involved project agronomist and government extension officers engaging in horticultural farming. The purpose of this technique in the study is was to draw respondentôs attitude, feelings, experience and reactions in a way which would not be visible using other

techniques. Focus groups aimed at the discussion instead of an individual response to formal questions, and produce qualitative data which acted as representative to the general population.

3.9 Validity of Data

Validity in relation to research is a judgment regarding the degree to which the components of the research reflect the theory, concept, or variable under study (Streiner & Norman, 1996). This is the degree to which a test measures the variables it claims to measure (Kothari & Pacs, 1998). Validity of an instrument represents the degree to which a test measures what it purports to measure. In this study, content validity of data achieved by selecting the sample to represent the population, it obtained through purposive selection.

Content validity is the degree to which data collected using particular instruments present a specific domain of indicators or content of a particular concept (Mugenda and Mugenda 2003). The study seeks opinion from an experts and supervisor of the study which is in line with (Grinnel & Unrau, 2005) who indicates that research instruments covers a wide range of concepts of the research therefore testing its validity needs consultation from the experts. Opinions from the supervisor ascertain if all themes in objectives are captured in order to assess the content validity.

3.10 Reliability of Data

The consistency of measurement over time, whether it provides the same results on repeated trials, it what known as Reliability. It is a measure of the degree to which a research instrument yields consistent results after repeated trials (Mugenda and

Mugenda 2003). An instrument was reliable since measured variables accurately and consistently and obtain the same results under the same condition over time. An interview guide and the questionnaire of this study administered to the sample to measure reliability.

3.11 Ethical Considerations

This study strived to avoid any form of harm to respondents by considering the ethical rules. This is in line with (Mugenda &Mugenda 2003) who stated that researchers should avoid physical or psychological harm to the participants. The information obtained from the respondents in the process of the whole research kept confidential. An interview guide was not requiring name and gender of respondent. Researchers adhere to ethical consideration by being confidential, anonymous and avoid deceptions, (Sommer & Sommer, 1997). The researcher seek permission from relevant authorities and explained purpose of the study to participants. The data collected from the study kept confidential and researcher make sure to keep personal integrity.

3.12 Data Processing and Analysis

Karma (1999) referred to data analysis as the computation of certain measures along with searching for patterns of relationship that exist among data-groups. In analysing data in general, Yin (1993) also states that a number of closely related operations are performed with the purpose of summarizing the data collected and organizing them in such a manner that they answer the specific objectives (Afande & Uk, 2015). Data organized and classified according to the objectives after data collection. Information obtained through questionnaires and interview guide analysed using Microsoft excel

i.e using pivot table.

3.13 Limitations of the Study

In conducting this study, the researcher faced a number of challenges which are considered as limitation of the study. These were such as follow:

i. Redness of respondents to participate in the study, some respondents requested money to share with the researcher and some of them feared about confidentiality of information. The researcher took time to explain purpose of the study and assured them about confidentiality which in turn made them participate and respond. This also lead forced researcher to use indigenous expert who are trusted by the community.

ii. Another limitation was time constraint, because it was hard to conduct the study after working hours and during weekends. However, the researcher used some official filed visit to conduct the study and also requested for leave that helped him to accomplish the task within time.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the findings and discussions of the study. The presentation of the findings and discussions is organised according to the research objectives. The research starts by presenting general information of the respondents, knowledge of youth about good agronomic practices, socio-cultural factors hindering effective youth participation and economic factors hindering effective youth participation in horticulture farming.

4.2 General Information

This section presents the general information of the respondents. This includes the response rate, gender, age of respondents, level of education and years of experience in horticulture.

4.2.1 Response Rate

The study administered a total of 34 questionnaires to the youth who were aged 15-35 years, interview and focus group discussions were conducted in a group of 9 respondents (Project Agronomist and Government Extension Officers). Out of 34 questionnaires provided to Youth only 30 questionnaires were completed and preceded to data analysis. The research achieved an 88.2% response rate. This study sought: to assess factors affecting effective participation of Youth in horticulture farming.

4.2.2 Gender of Respondents

The research sought to determine the gender distribution across the study population. This was done in ensuring fairness in uptake of respondentsô opinions, and alleviates the probability of study findings suffering from gender biasness. The analysis involved total of 39 (90.7%) respondents (both officials and youth). Male were 19 (48.7%) and female were 20 (51.3%). Both males and females were involved because they both participated in horticultural production. The respondents were categorised into two main groups. The first group consisted the youth who were participating in horticultural farming. The group of youth had 15 (50%) male and 15 (50%) female which constituted 76.9% of all respondents. The second group had key informants who were officials from the district level and project agronomist with total number of 9 (23%) officials. Table 4.1 summarises number of respondents by sex.

Gender: Table 4.1 shows gender balance in the horticulture farming. Traditionally male youths are expected to provide labour and manpower in the fields while their female counterparts attend to home household chores. The boy child is expected to have good farming skills and be of a responsible character for sustainability when they inherit the land and assets from the parents while the girl joins another family when married.

Table 4.1: Gender Respondents

S/N	Category of respondents	Sex of respondents				Total	
		Male		Female			
		Frequency	%	Frequency	%	Frequency	%
1	Youth	15	50	15	50	30	76.9
2	Officials	4	44.4	5	55.6	9	23.1
	TOTAL	**19**		**20**		**39**	**100**

Source: Research Findings 2019

4.2.3 Distribution of Ages of the Respondents

Ages of the respondents in the study were grouped into age groups of 15-35 years and >35 years. The study found that youth respondents falling in the age-group of 15-35 years were 30 (100%). Ages of the respondents were important for the study because it helped to analyse the relationship of the efforts of the youthôs activities. Table 4.2 summarises the age of respondents.

Table 4. 2 Age of Respondents

S/N	Category of respondents	Sex of respondents			
		Youth		Officials	
		Frequency	%	Frequency	%
1	15-35 years	30	76.9	7	17.9
2	>35 years	0	0	2	5.1
	Total	**30**	**76.9**	**9**	**23.02**

Source: Research Findings 2019

4.2.4 Level of Education

The researcher sought information on education level of the respondents and the information were important because education has the effects on the responses provided. Besides, education level determines oneôs awareness, understanding of the subject, ability to discover new opportunities and challenges handling. In this regard, respondents asked to state their levels of education from primary to university level. The study found 24 (61.5%) attended secondary education and only 2 (5.1%) respondents attained primary level education. The distribution of respondents by education level is summarised in Table 4.3.

Table 4. 3 Level of Education of Respondents

S/N	Category of respondents	Sex of respondents				Total	
		Youth		Officials			
		Frequency	%	Frequency	%	Frequency	%
1	Primary Education	2	5.1	0	0	2	5.1
2	Secondary Education	24	61.5	0	61.5	24	61.5
3	Diploma Education	**0**	**0**	**6**	**15.4**	**6**	**15.4**
4	Degree Education	**4**	**10.3**	**3**	**7.7**	**7**	**18**

Source: Research Findings 2019

4.2.5 Years of Experience in Farming

The level of experience by youth respondents in horticulture farming varied from 1 ï 3 years. 31 (79.5%) of the youth respondents had more than two years of experience in horticulture farming. The more an individual gets experienced in horticulture farming, the more they realize the benefits and become aware of the importance of the industry. All officialôs respondent had diploma level and above. Benefits are realized through efficiency and effectiveness in the production process. An individual has means of reducing production costs while improving product quality (Table 4.4).

Table 4.4: Years of Youth Experience in Horticulture Farming

S/N	Years of Experience	Frequency	%
1.	1 years	1	2.6
2.	2 Years	31	79.5
3.	3 Years	7	17.9
	Total	**39**	**100**

Source: Research Findings 2019

4.3 Knowledge of Youth about Good Agronomic Practice

Consistent with the objective, the researcher asked the youth if they really know about horticultural good agronomic practices. 38 (97.4%) of youth respondent they know about good agronomic practices. Those who know about good agronomic practices were asked to mention what they know. The majority mentioned ñspacing planting, fertilizer application, land preparation, seed selection and Integrated pest management (IPM)ò as good agronomic practice. This implies that, sufficient knowledge about good agronomic practice is ready available amongst youth.

Availability of GAP knowledge amongst youth revealed the good work done by either existed horticulture programs, government extension officers or project

agronomist in engaging youth in horticulture farming by eliminating knowledge gap through training and demonstration plot. This finding contradicts with the study by Njenga (2012) which found youth not aware with the agriculture oriented programmes in their areas. Youth being not aware imply the knowledge isnôt well spread amongst them. Having knowledge about GAP isnôt enough to investigate youth engagement in horticulture farming.

4.3.1 Youths Perception, Understanding and Attitudes on Horticultural Activities

It was thought important to get understanding and attitudes of the respondents about horticulture farming and their general perception. In this view, all respondents including government extension officials and project agronomist were asked if they have engaged in horticulture farming in three recently years and their attitudes. When they were asked to rate the profit generated by horticulture farming. The finding showed 20 (51.3%) youth respondents rated horticulture farming as an activity with high profit based on their experience engaged in farming. This is different with the study by (Young in Farming, 2011) which stated that horticulture farming is not profitable activity. Only 4 (17.4%) rated horticulture farming as very profitable profit generating activity. Moreover, only 10 (25.6%) youth respondent stated that horticulture farming as an activity of moderate profit. Profit generated from horticulture farming perceived to be caused by adherence with good agronomic practices.

Through interview and focus group discussion with project agronomist and government extension officers regarding knowledge of youth about good agronomic

practices (GAP) on horticulture farming, they admitted that GAP for those youth working with horticulture projects in Islands is really known to the majority but the problem is application. They went further and explained that, the knowledge about GAP is spreading faster even to those farmers outside the project areas. Government extension officers admitted than at their working areas farmers arenôt aware about horticulture GAP instead appreciated the initiatives by horticulture projects by TAHA and Mboga na Matunda (MnM) in expanding not only the knowledge about horticulture GAP to youth but to them as well along the islands where horticulture farming is an important agriculture activity. They went further and explained how Mboga na Matunda (MnM) Project initiated Bootcamp training aimed at increasing the knowledge of government extension staff about horticulture farming good agronomic practices.

Project agronomist, admitted the lack of horticulture knowledge to government extension staff before their engagement in project activities.

> ñ*For the sake of spreading knowledge about GAP to government extension officers we have now decided to work hand to hand with government extension officers on horticulture farming by establishing demonstration plots which is supervised by them*ò. Said Senior Agronomist from MnM Project. He went further and explained that, demonstration plot aimed not only at engaging government extension staff but spreading knowledge about horticulture good agronomic practices to many youths around the islands.

Through discussion also they explained that, it is difficult for some of youth engaged in horticulture farming to read and follow the instructions about good agronomic practices provided to them because they always need to hurry and save time. In addition, horticultural producers do not value much knowledge provided by agricultural experts because there was low rate of farmers attending agricultural

training.

Also it was mentioned that, inadequate of competent extension staff is another problem to low level of knowledge by farmers engaged in horticulture farming. CUTS (2011) say, Tanzanian farmers still lack technical knowledge and inadequate number of extension staff in most districts. From the findings, it can be concluded that youth knowledge about good agronomic practice is a not limiting factor for effective engaged in horticulture farming. Many youths have knowledge but the number of youth effectively engaging in horticulture farming is moderate, said by officials and project agronomist.

Low level of GAP application by youth engaged in horticulture farming caused people to regard horticulture farming as moderate income generating activity this may be resulted low number of youth effectively participating in horticulture farming. This finding is similar to what Dalrymple (2012) reported as lack of interest among todayôs youth towards agricultural careers and revealed that it was due to the perception that agricultural careers involved labour intensive work that yield low monetary returns.

4.4 Socio-Cultural Factors Hindering Effective Youth Participation in Horticulture

Researcher asked socio cultural factors such as land acquisition by youth from parents, utilization of available land, accessibility to productive land for how much have affected effective participation of youth in horticulture farming. Results summarized in the figure 4.1.

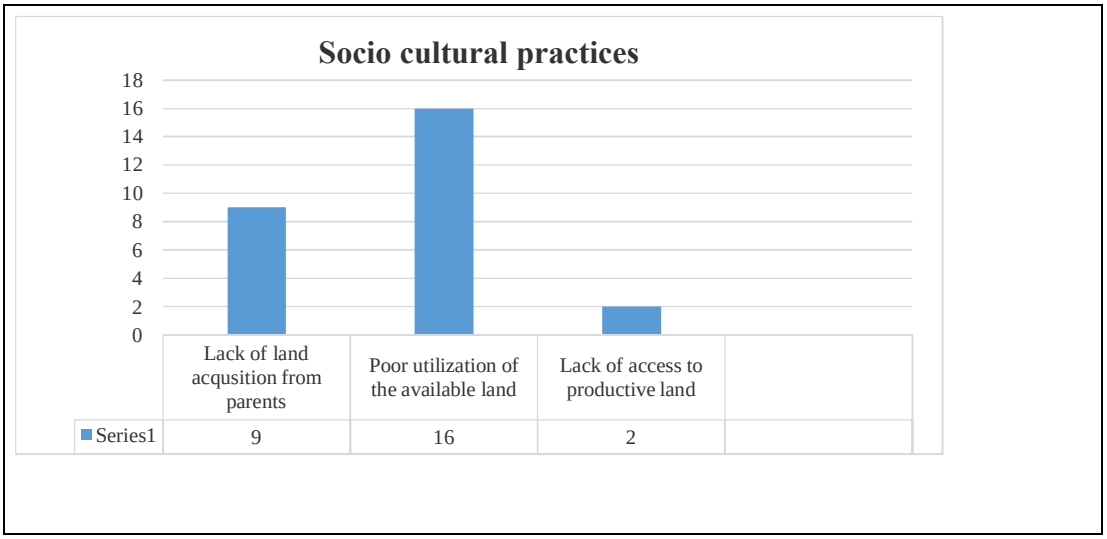

Figure 4.1: Socio Cultural Factors hinder Youth Participation
Source: Research Findings 2019

Respondents were asked to select more than one socio cultural factor, the findings shown that poor utilization of the available land by youth is a limiting factor hinder their effective participation in horticulture farming. Majority of Youth along the Island acquire land through inheritance although is not a case for many places as shown in the figure above. This is different result compared to the research conducted by Divyakirti, 2015 which found limited access to land as a limiting factor hinder participation in horticulture farming. The finding is similar to the report by FAO (2010) which revealed that inheritance is still the most common system to obtain land in most developing countries including Tanzania. People at the islands inherit land from their parents but never utilize that land. Accessing land through inheritance lead to poor access to productive land since it has been inherited many years back. Although lack access to productive land were not that serious case in many places.

Through focus group discussion and interview with officials they have disagreed that parents arenôt giving youth land for horticulture farming and they have agreed that

youth arenôt utilizing the available land. The problem with poor utilization of the available land brought by the believes that muscular work (labour work) is not for people from islands. In most cases people from mainland i.e Sukuma were used by many families as labour worker on their farms. This affected the majority of youth to engage in horticulture farming when they donôt have enough capital to employ Sukuma. From the findings, it shown that poor believe affect the majority of youth on utilization of the available land and thus hinder effective participation of youth in horticulture farming. Traditionally in Zanzibar islands majority of youth given farm from their parentsô land until when they get married. However, the majority are not free to start projects for personal income generation. This has a negative bearing on youth participation and perception towards farming.

4.5 Economic Factors Hindering Effective Youth Participation

The study went further assessing the economic hindering effective youth participation in horticulture farming. The researcher asked respondents to select more than one factor related to accessibility to credit facilities hinder youth effective participation in horticulture farming. The factors were loan is provided to youth group only, loan process is too complicated and bank loan isnôt affordable. The findings here by summarized in the Figure 4.2.

The results are showed that 59% of respondents argued that loan process is too complicated which hinder youth effective participation in horticulture farming. Youth are slow in taking loan which discouraged them effectively to invest in farming. Through interview and focus group discussion conducted to officials were argued that loan process being complicated and youth not joined in the group is a

limiting factors hindering their access to credit facilities which affect their effective participation in horticulture farming. They went further and explained that, horticulture farming needs investment so that to adhere with good agronomic practices.

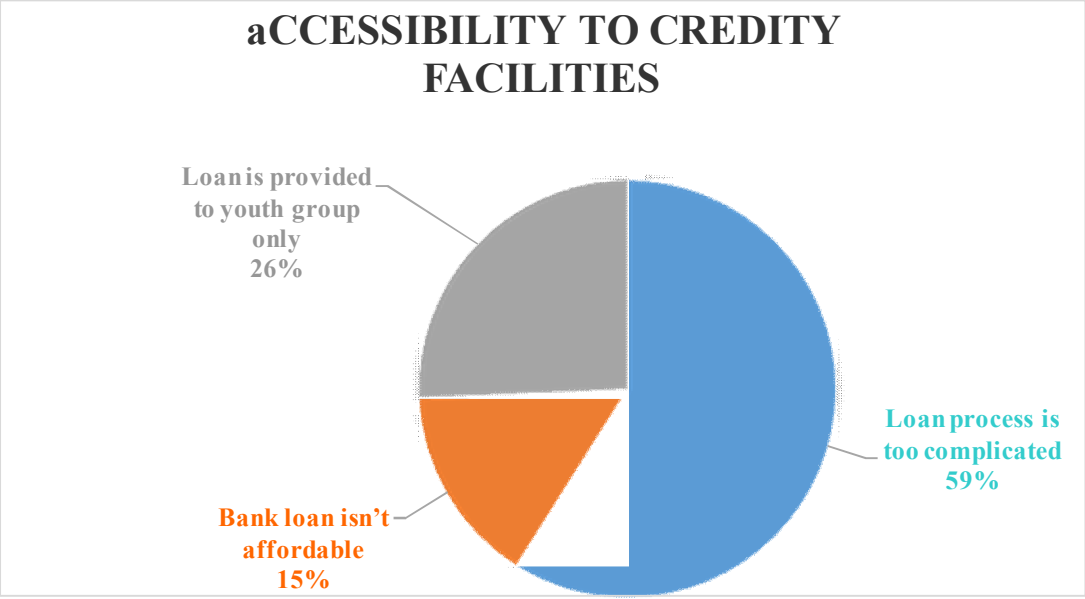

Figure 4.2 Accessibility to Credit Facilities

Source: Research Findings 2019

Lack of capital affect majority of youth to effectively invest in horticulture farming They revealed that, horticulture needed intensive care in terms of protecting the plants from diseases and keeping the land fertile. With high price of subsidies, horticulture can only be implemented by people with large capital. One of the respondents during focus group discussion stated:

> *"If you don't have enough capital, horticulture is difficult. Just imagine, you fail to get good yields from vegetable this season and if capital is not enough how are you going to implement horticulture the next season? You need to buy subsidies, hire labourers and money to hire land if you don't own land, will you manage?"*

In the other hand, access to input also were mentioned to be a serious factor hinder fully participation of youth. This was due to lack of enough capital to afford price of specific inputs. Mboga na Matunda Project worked to mobilize regional agro-dealers to introduce centres and work with local agro-dealers to increase accessibilities of input in localized areas. Through FGD Officials admit that giants agro-dealers are available at town and not in localized areas.

From the findings, loan process being complicated, youth not organized in groups and bank loan being not affordable in one way affect effective participation of youth in horticulture farming but the mostly loan process being complicated discouraged many youths to engage in horticulture farming. Loan process includes, opening bank account, preparing business plan, verification of project that need loan etc. Officials revealed that, majority of youth are not aware with the so called business plan when asked by loan officers. One respondent argued that, in an area where the MnM project isnôt operated farmers are not that aware about the business plan or farming as the business.

CHAPTER FIVE

SUMMARY, CONCLUSIOON AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the summary of the research findings, discussions, and conclusions, recommendations.

5.2 Summary

The study was based on factors affecting effective participation of Youth in horticulture farming in Tanzania, a case study of Zanzibar Islands. The primary objective of the study was to analyze factors hindering effective participation of youth in horticulture farming. The specific objectives were to examine knowledge of youth about good agronomic practice on horticulture farming, to identify the socio-cultural factors hindering effective youth participation in horticulture farming and to identify the economic factors hindering effective youth participation in horticulture farming.

The study was conducted in Zanzibar Islands. Data were collected through interview, focus group discussions and questionnaires. The study comprised 43 respondents who were purposively and randomly sampled. The data were analysed using Microsoft excel in descriptive statistics where multiple responses and frequencies were acquired. Data were presented in figures, tables and charts. Any modern farming requires knowledge about good agronomic practices (GAP). This knowledge may act as accelerating factor to invite more people effectively engaging in farming industry. This study found 97.45 of youth with knowledge about GAP.

Horticulture farming just like any other entrepreneurial entity require capital either start-up or working and hence access to credit facility is crucial to the young people who want to join this industry. The youth cite access to fund as the limiting factor in their effectively participation in horticulture farming as 59% stated that loan process in very complicated, this concur with the findings of Njeru and Gichuru (2014) that despite the existence of such funds by the government, many young people are yet to embrace them.

The study indicated that loan process is tedious and complicated this could be due to requirement such as business plan which many young people may not have knowledge of how to draft it, the finding reflects the FAO (2010) Report that despite availability of funds, rural youth do not have the knowledge on how to draft business plan and how to sell the agri-entrepreneurial ideas to the financial institution for financing. 15% of the respondents stated that Bank loans are expensive youth do not afford them as they may lack collateral to secure loans this concurs with an earlier study by Fletcher and Kenney 2011 who found young agri-entrepreneurs lack sufficient collateral against which credit can be mobilized. 26% of responses by youth agreed that they have joined self-help groups to facilitate access to credit.

On the influence of socio-economic factors like availability of good transport infrastructure for produce to the market no one mentioned about the poor transport. This mean that transport in Zanzibar doesnôt hinder youth effective participation in horticulture farming. The youth have access to market and information, the findings concur with World Bank Report (2012) that lack of direct access to institutional systems and structures within government severely impedes the ability of the youth

to advocate for their rights.

5.3 Conclusions

5.3.1 Knowledge of Youth about Good Agronomic Practice

Youth have knowledge about horticulture good agronomic practices (GAP)in those areas where there are agricultural extension officers who mobilize training at farm groups or to individual farmers or lead farmer plots. The results shown absence of project initiatives was very difficult for youth acquiring knowledge about horticulture good agronomic practices. Government extension officers commented that the knowledge about horticulture made readily available due to the presence of horticulture projects at the islands.

Majority mentioned horticulture as moderate profitable activity, revealed that their knowledge to good agronomic practices doesnôt give the desired out-put, this might be the problem with not knowledge but application. On the other hand, youthôs attitude towards agriculture has negative impact on their involvement in agriculture; a large percentage did not aspire for a career in agriculture as it is seen as unattractive and not profitable. Although a number of youth have aspiration to join agribusiness lack of crucial information and inability to access agricultural extension services negative impedes them.

5.3.2 Socio-Cultural Factors Hindering Effective Youth Participation in Horticulture

The study has identified that there is no socio cultural factor related to land hinder effectively participation of youth in horticulture farming instead youth arenôt ready

to utilize the available land readily available. Although the land price is real high along islands but never limiting youth in horticulture farming due to the fact that, the majority of people born at islands are inherit land from their parents and not purchasing it. There is this culture that people may use someone else land without paying any amount from it.

Availability of agricultural infrastructure is very crucial in horticulture farming; however poor road and communication centres and lack of market information could be a catalyst to the push factor of youth out of horticulture farming. Although this is different in places like Zanzibar where transport and market encourage youth to engage in horticulture farming particularly those born at islands. Those people came of Zanzibar can faces difficulties in conducting horticulture business but not for those who born at islands.

5.3.3 Economic Factors Hindering Effective Youth Participation

The youth are unable to access credit facility due to loan process being complicated making them unable to strengthen their investment position in horticulture farming. Though has government in Zanzibar and horticulture project implemented therein initiated a way to help youth access credit through Zanzibar Economic Empowerment Fund (ZEEF) and Tanzania Growth Trust (TGT), many young people are not yet to benefit from it. Although a percentage of youth have joined self-help groups to facilitate access to credit, uptake of bank loans is slow among youth due to rigidity of the process as well as collateral requirements which the youth may not be able to provide.

5.4 Recommendations

5.4.1 Knowledge of Youth about Good Agronomic Practice

There is a need to emphasis application of good agronomic practices acquired by youth by continuously monitoring youth farming plots. Government should also train extension officers who will be capable in training farmers about horticulture farming. Furthermore, government extension officers should establish demonstration plots by selecting lead farmers through whom the results and success of application of good agronomic practices will be observed with the farmers around. This comply with the Studies done by Mann and Kogl (2003) which revealed that bigger profits garnered through farming will be an impetus for creating positive attitude of the people, especially the younger generation, towards farming and this will boost their acceptance towards farming.

Also, there is need for government extension officers to conduct field exchange visit form one village to another village for farmers to see the results and success achieved by those who are applying good agronomic practices at their individuals plot. This might have budget implication but for the sake of improving and promoting the available knowledge impacted by the availability of horticulture projects along the islands government should allocate budget for it.

5.4.2 Socio-Cultural Factors Hindering Effective Youth Participation in Horticulture

Socio cultural practices along islands discourage people coming from outside the islands particularly from mainland to invest in horticulture farming rather than those born at the islands. People in Zanzibar are not good at labour work compared to

those from mainland. For the sake of promoting horticulture farming at the islands government should establish policies that will encourage more youth coming from mainland to purchase land and invest in horticulture farming. There is market for horticulture produce in Zanzibar compared to mainland although the land size in Zanzibar is minimum. Furthermore, the government should put emphasis on encouraging youth from Zanzibar to engaged in horticulture work which seems to be the labour work for them.

5.4.3 Economic Factors Hindering Effective Youth Participation

Bank loan being not affordable and the loan process revealed to be complicated youth must be trained to establish saving and internal lending communities (SILC) groups among themselves that may enable them to take loan than might supplement production activities. Government through community and development department should work to mobilize youth in small groups and train them the SILC Methodologies. This may weaken the problem of capital investment among youth and will encourage the bigger number of youth to effectively engage in horticulture farming.

5.5 Policy Implications of the Study

The findings showed that youth effective participation in horticulture farming faces various limitations. This implies that relevant policies are important to enable youth to effectively participate in horticulture farming so as to maximise the effectiveness of horticulture farming in reducing the problem of unemployment in Zanzibar island and Tanzania at large. Basing on the research findings the following recommendations for policy actions are important.

Understanding that horticulture farming in place like Zanzibar is highly profitable when done by majority of youth. The efforts to help the youth to free from unemployment through horticulture farming depend on understanding on how much horticulture market need and what type of produce is highly demanded. Production of tomatoes, okra and sweet pepper in Zanzibar was higher than other vegetables. Thus, support in vegetable production should be dealt with great attention even when the existing project ends its life cycle. The support in terms of education, methods and technology in horticulture should be geared in what the youth engaging in horticulture are interested in producing. ZEEF, TGT and Other Financial Institution should review the terms and condition to minimize loan process so as to attract many youths to access loan so to supplement production activities. The government should work hand to hand with existing agro-dealers to identify input need in horticulture farming and facilitate accessibility at the localized areas.

The outcomes of youth horticultural production in reducing poverty in rural areas depend on creation of favourable environments for production of horticulture. The implementation of horticultural activities needs availability of enough subsidies at a low cost, financial support in terms of loans or credits, widening horticulture market, improving transport facilities and construction of agro-industries to add value in horticultural products. Development stakeholders in the country should focus on knowledge dissemination, fostering application and raising awareness among the farmers to recognise and apply the knowledge. Lastly, universities and NGOs should work hand in hand to ensure that horticultural activities help people in Tanzania at large in improving their life standards by reducing the level of poverty and

unemployment.

5.6 Recommendations for Further Research

The study should be seeking to analyse the impact of application of good agronomic practices in horticulture farming.

REFERENCES

Adedeji, O. H., & Ademiluyi, I. A. (2009). Urban agriculture and urban land use planning: . Need for a synthesis research proposal in Metropolitan Lagos, *J. Geogr. Regional Plann Nigeria.* , 243-50.

Afande, F. & Maina, W. (2011). Youth Engagement in Agriculture in Kenya: Challenges and Prospects. *Journal of Culture, Society and Development,* 7, 4-14.

Afande, F. O., Maina, W. N., & Maina, M. P. (2015). outh engagement in agriculture in Kenya: . challenges and prospects, *Journal of Culture, Society and Development*, 7, 4ï 20.

Ajzen, I. (1991). The Theory of Planned Behaviour. *Organizational behaviour and human decision process,* 50, 179-211.

Ajzen, I. (2002). Perceived Behavioural Control, Self-Efficacy, Locus of Control and the Theory of Planned Behaviour. *Journal of Applied Social Pyschology,* 32(4), 665-683.

Akpan, S. B. (2010). Encouraging youthôs involvement in agricultural production and processing. *International Food Policy Research Institute,* Abuja.

Brooks, K., Zorya, S., Gautam, A., & Goyal, A. (2013). Agriculture as a sector of opportunity for young people in Africa. World Bank Policy Research Working Paper (6473).

Checkoway , B., Kameshwari, , P., & Finn, J. (1995). Youth participation in community planning: What are the benefits? Journal of Planning Education and Research. 14(2), 134-139.

Chikezie,, N. P., Chikaire, J., Osuagwu, C. O., & Ihenacho, R. A. (2012). Factors

Constraining Rural Youths Involvement in Cassava Production in Onu-Imo Local Government Area of Imo State, Nigeria. *Global Advanced Research Journal of Agricultural Science,* 3(2), 1-10.

Donye, A. O., Gwary, M. M., Nuhu, H. S., & Zhintswen, A. A. (2012). Assessment of Youth Involvement in yam production in Wukari Local Government Area of Taraba State, Nigeria. *Agriculture and Biology Journal of North America,* 3 (8), 311-317.

Drescher, A. (2004). Food for the cities: Urban Agriculture in developing countries, Applied Geography of the Tropics and Subtropics (APT), Freiburg, Germany.

FAO. (2010). The state of food insecurity in the world: addressing food insecurity in protracted crises. Rome, 2010. Retrieved on 16th March, 2016 from http://www.fao.org/docrep/013/i1683e/i1683e.pdf.

FAO. (2014). Gender inequalities in rural employment in Tanzania Mainland. An overview., pp64.

FAO. (2016). G7 International Forum for Empowering Women and Youth in the Agriculture and Food System, Tokyo, pp21.

Fekade, W. (1994). Local determinants of Development sustainability. A study of Rural development project in Tanzania. Dortmund: The SPRING. Research Series No.7.

Felix, A. (2003). Making Youth voice a community principle. Youth service journey. Youth serve America. Washington D.C.

Grinnel, M. R., & Unrau, A. R. (2005). *Social Work Research and Evaluation.* New York: Sage.

Ifenkwe, G. E. (2012). Mobilizing and Empowering Youths for Sustainable Community and Rural Development in Nigeria. *International Journal of Academic Research in Progressive Education and Development*, 1(2), 144-152.

Kothari, C. R. (2004). *Research Methodology and Techniques,* (2nd Ed ed.). New Delh: K.K Gupta for New Age International (P) Ltd.

Leavey, J., & Hossain, N. (2013). Who want to farm? Youth Aspiration and Rising Food Prices. *IDS Working Paper,* (439) 1-44.

Mibey, M. C. (2015). Factors influencing youth involvement in agribusiness projects in Bomet Central Sub-county, Kenya: Unpublished project, University of Nairobi.

Msabila, D. & Nalaila, S. G. (2013). *Research Proposal and Dissertation Writing. Principal and Practice.* Dar es Salaam: Nyambari Nyangwine Publisher.

Mugenda, A. & Mugenda, O. (2003). *Readings in research methods; quantitative and qualitative approaches,* Nairobi: African Centre for Technology Studies.

Mugenda, O. M. & Mugenda, A. G. (1999). *Research methods,* Nairobi: Acts Press.

Njenga, P., Mugo, D. F. & Opiyo, R. (2012). Youth and women empowerment through agriculture in Kenya, VSO Jitolee.

Njeru, K., Gichimu, B. M., Lopokoiyit, M. C., & Mwangi, J. G. (2015). Influence of Kenyan youthôs perception towards agriculture and necessary interventions;. *A Review- Asian Journal of Agricultural Extension, Economics & Sociology* 5(1), 23-33.

Silva, L., Mohamad, L., Shaffril, Uli, H. A., Abu J. & Samah,, B. (2010). Socio-demography factors that influence youth attitude towards contract farming.

American Journal of Applied Sciences, 7(4), 603-608.

Sommer, B., & Sommer, R. (1997). *A Practical Guide to Behaviour Research Tools and Techniques.* . 4th Edition. New York: Oxford University Press.

Streiner, D. & Norman, G. (1996). *PDQ Epidemiology,* 2nd Edition. St. Louis. Mosbey.

Umeh, G. N. & Odom, C. N. (2011). *Roles and Constraints of youths associations in agricultural and rural development.* Lagos: IDOS Publications.

URT, (2003). Small and Medium Enteprise Development Policy. p. pp 42.

URT, (2016). *National Five Year Development Plan 2016/2017-2020/21."Nurturing Industrialization for Economic Transpformation and Human Development". Ministry of Finance and Planning*, pp 316.

USAID, (2016). *Youth Engagement in Agricultural Value Chains across Feed the Future: A synthesis report.*, pp 62.

World Bank, (2006). *Where is the wealth of nations? Measuring capital for the 21st century.* World Bank, Washington, DC.

Yin, R. K. (1984). *Case Study Research Design and Method. Applied Social Research Method*, Paperback: SAGE Publications.

APPENDICES

APPENDEX I: QUESTIONNAIRE FOR ASSESSMENT OF FACTORS AFFECTING EFFECTIVE PARTICIPATION OF YOUTH IN HORTICULTURE FARMING

Introduction

My name is Chogohe Edwin Mundo a Masterôs student at Open University of Tanzania (OUT) pursuing Master of Science in Project Management (MPM). I am conducting a study titled Assessment of factors affecting effective participation of Youth in horticulture farming in Tanzania: A case study of Zanzibar Unguja. I would be grateful if you could give me a support in my study by answering the questions. The questions aimed at meet academic purposes only. Thus, you are assured of your identity and confidential of all your response.

Village nameé é é é é é é é é é é ..Ward nameé é é é é é é .

A. Demographic Information

Tick (√) where appropriate

1. Sex of respondent
    a) Male é é é é
    b) Female é é é .
2. Age of respondent
    a) 15-35 years é é é
    b) >36 years é é é é
3. Education level
    a) Secondary education é é é .

b) Diploma level é é é .

c) Degree é é é ...

4. What is your occupation é é é é é é é é é .

B: Information on Youth participation in Horticulture farming

Attitudes towards Horticulture Farming

5. Have you engaged in horticultural farming in recent three years? (***Tick***)

1) Yes ( )

2) No ( )

6. If yes, for how many years have you been engaged in horticulture farming?

é é é é

7. How would you rate profit generated from Horticulture farming? (***Tick the appropriate)***

1) Very profitable activity ( )

2) Moderate Profit ( )

3) Low Profitable activity ( )

4) Donôt know ( )

8. Which area of expertise do you need to have in order to engage in horticulture farming? (***You may tick more than one)***

1) Degree of Agriculture from University ( )

2) Any level of education ( )

3) Passion to agriculture ( )

9. Do you know about Good Agronomic Practices? (***Tick***)

1) Yes ( )

2) No ( )

10. If, Yes explain what do you know about good agronomic practices é é é .

Access to Land

11. What among the following factors related to accessibility to land limit(s) your participation in horticulture? ***(You may choose more than one). Please tick***.

1) Land price is too high ( )

2) Lack of land acquisition from parents ( )

3) Poor utilization of available land for horticulture ( )

4) Lack of access to productive land ( )

Access to credit facilities

12. What among the following factors related to accessibility to credit facilities hinder (s) your effective participation in horticulture farming? ***(You may choose more than one). Please tick***.

1) Loan process is too complicated ( )

2) Bank loan isnâ affordable ( )

3) Loan is provided to youth group only ( )

13. What are the other income generating activities do you involve apart from horticultural activities?

a) é é é é é é é .

b) é é é é é é é ..

c) é é é é é é .....

Horticulture extension services

14. Are horticulture extension services available for you to effectively engage in farming?

1) Yes ( )

2) No ( )

15. If Yes, mention kind of horticulture extension services available to you

é é é

16. Where do you find horticulture extension services among the following (***Tick if its more than one***)

1) Government extension officers ( )

2) Project extension officers ( )

3) Input suppliers ( )

Horticulture infrastructure

17. What factors among the following limit (s) your effective participation in horticulture farming among the following (***Tick if more than one***)

1) Accessibility of input

2) Accessibility and availability of market

3) Poor transport infrastructure

Thank you so much for your cooperation.

APPENDEX II: INTERVIEW GUIDE FOR OFFICIALS (GEO's and AGRONOMIST)

Introduction

My name is Chogohe Edwin Mundo a Masterôs student at Open University of Tanzania (OUT) pursuing Master of Science in Project Management (MPM). I am conducting a study titled Assessment of factors affecting effective participation of Youth in horticulture farming in Tanzania: A case study of Zanzibar Unguja. I would be grateful if you could give me a support in my study by answering the questions. The questions aimed at meet academic purposes only. Thus, you are assured of your identity and confidential of all your response.

A. Demographic Information

Tick (√) where appropriate

1. Sex of respondent
   a) Male é é é é
   b) Female é é .
2. Age of respondent
   a) 15-35 years é é é
   b) >36 years é é é é
3. Education level
   a) Secondary education é é é .
   b) Diploma level é é é .
   c) Degree é é é ...
4. What is your occupation é é é é é é é é é .

B. Information on Youth Participation in Horticulture

I. Attitude of Youth towards Horticulture farming

5. Have you worked with Youth in horticulture farming in recent years? (***Tick***)

   1) Yes ( )

   2) No ( )

6. How do you see youth perceive horticulture farming among the following? (***Tick if more than one***)

1) Horticulture farming is high educated person (s) ( )

2) Horticulture farming is for every one ( )

3) Horticulture farming is less educated person (s) ( )

7. How do you see the level of knowledge by Youth have about Good Agronomic Practices (GAP) in recent three years? (***Tick***)

a) Low knowledge ( )

b) Moderate knowledge ( )

c) High knowledge ( )

If the knowledge about GAP among youth is low, what do you think to be the reasons? é é é é é é é ..

II. Socio-cultural and economic factors hindering youth participation

8. How do you see the level of participation by Youth in horticulture farming? (***Please Tick***)

a) Low participation ( )

b) Moderate participation ( )

c) Full participation ( )

9. Which of the following factors related to access to land limit youth participation in horticulture farming? (***1: Strongly agree, 2: Agree, 3: Disagree, 4: Strongly disagree***)

1) Land price is too high ( )

2) Parent arenôt giving land to youth ( )

3) Youth donôt utilize the available land ( )

4) The available land isnôt productive ( )

10. Which of the following factors related to access to credit facility do you think limit effective participation of youth in horticulture farming (Choose if its more than one)

1) Youth are not in groups

2) Loan process is too complicated

3) Bank loan isnôt affordable

11. What do you think among the following factors related to horticulture infrastructures limit (s) effective participation of youth in horticulture farming?

1) Availability of market

2) Accessibility to input

3) Poor road

12. Have you ever provided extension services to youth about horticulture farming?

1) Yes ( )

2) No ( )

13. If Yes, mention kind of extension services you been provided to youth é é .

14. How important do you regard horticulture as a means which helps youth to improve their life status? (***Circle the appropriate number***)

Very important 1

Important 2

Fairly important 3

Not important 4

Not importance at all 5

15. What do you suggest to be done to attract more youth to effectively participate in horticulture farming é é é é é ..

Thank you so much for your cooperation

DODOSO KUHUSU SABABU ZINAZO ATHILI USHIRIKI WA VIJANA KWENYE KILIMO CHA MBOGA MBOGA NA MATUNDA

Utangulizi

Ninaitwa Chogohe Edwin Mundo, mwanafunzi wa Shahada ya pili (Shahada ya uzamili) katika Usimamizi wa Miradi toka Chuo kikuu huria cha Tanzania. Ninafanya utafiti kuhusu ñSababu zinazo athiri ushiriki wa vijana kwenye kilimo cha mboga mboga na matundaò. Nitashukuru ukinipa ushirikiano wako kujaza dodoso hili. Dodoso hili ni kwa ajili ya matumizi ya kitaluma kwa hivyo taharifa zote hazitotumika vinginevyo.

Jina la Kijijié é é é é é é é é ..Jina la kataé é é é é é é é é é é .

A. Demographic Information

Tiki (√) panapo husika

18. Jinsia ya mhojiwa

1) Mwanaume ( )

2) Mwanamke ( )

19. Miaka ya mhojiwa

1) Miaka kati ya 15-35 ( )

2) Miaka chini ya 36 ( )

20. Kiwango cha elimu

1) Elimu ya Msingi ( )

2) Elimu ya Sekondari ( )

3) Elimu ngazi ya Chuo ( )

B: Taharifa za ushiriki wa kijana kwenye kilimo cha Mboga mboga na matunda

Mtazamo kuhusu kilimo cha Mboga mboga na Matunda

21. Umewai kushiriki kwenye kilimo cha Mboga mboga na matunda kwenye miaka mitatu ya hivi karibuni? (***Tick***)

3) Ndio ( )

4) Hapana ( )

22. Kama ndio, umeshiriki kwa miaka mingapi hadi sasa? é é é é .

23. Unaonaje faida zitokanazo na shughuli za kilimo cha Mboga na Matunda? (***Tiki panapo husika)***

5) Ni shughuli zenye faida sana ( )

6) Ni shughuli zenye faida ya Wastani ( )

7) Ni shughuli zenye faida kidogo ( )

8) Sijui ( )

24. Unafikiri ili uweze kushiriki kwenye kilimo cha Mboga na Matunda unahitaji kuwa na kitu gani kati ya hivi vifuatavyo? (***Unaweza kutiki Zaidi ya moja)***

4) Elimu ya chuo kikuu ya kilimo ya cha mboga na matunda ( )

5) Kiwango chochote cha elimu ( )

6) Utayari wako tu kutaka kulima ( )

25. Unajua chochote kuhusu mbinu bora za kilimo cha Mboga na matunda? (***Weka tiki***)

3) Ndio ( )

4) Hapana ( )

26. Kama ndio, elezea unachokijua kuhusu mbinu bora za kilimo cha Mboga na matunda

é é

é é

Upatikanaji/Umiliki wa Ardhi

27. Zipi kati ya sababu zifuatazo zinazo husiana na upatikanaji wa ardhi zinazweza kuathiri ushiriki wa vijana kwenye kilimo cha Mboga na Matunda? ***(Unaweza kuchagua zaidi ya moja). Tafadhali weka tiki***

5) Gharama za kununua ardhi ni kubwa sana ( )

6) Vijana hawapewi ardhi na wazazi wao ( )

7) Vijana wanashindwa kutumia ardhi iliyopo ( )

8) Ardhi yenye rutuba inakosekana ( )

Upatikanaji wa mikopo

28. Sababu zipi kati ya hizi zinazo husiana na upatikanaji wa mikopo zinaweza kuathiri ushiriki wa vijana kwenye kilimo cha mboga na matunda? ***(Unaweza kuchagua Zaidi ya moja). Tafadhali weka tiki***.

4) Njia za kupata mikopo ni ngumu sana ( )

5) Mikopo ya benki hailipiki ( )

6) Mikopo inatolewa kwa vikundi vya vijana tu sio kijana mmoja ( )

29. Unajihusisha na shughuli gani za kiuchumi kujitengenezea kipato nje na kilimo cha mboga na matunda?

d) é

e) é

f) é é é é é é .....

Huduma za Ugani kwenye kilimo cha Mboga na Matunda

30. Je unapata huduma za ugani zinazo kusaidia kushiriki kikamilifu kwenye kilimo cha mboga na matunda?

3) Ndio ( )

4) Hapana ( )

31. Kama ndio, elezea huduma gani za ugani unazozipata

é é

é é

32. Ulikua ukipata huduma za ugani kutoka kwa nani kati ya wafuatao (***Weka tiki kama ni Zaidi ya mmoja***)

4) Afisa ugani/Bwana/Bibi shamba wa serikali ( )

5) Afisa UganiBwana.Bibi shamba wa mradi ( )

6) Muuza pembejeo ( )

Miundo mbinu ya kilimo cha Mboga na Matunda

33. Sababu zipi kati ya hizi zinaweza kuathiri ushiri wa kijana kikamilifu kwenye kilimo cha Mboga na Matunda? (***Unaweza kuchagua Zaidi ya moja***)

4) Upatikanaji wa pembejeo

5) Upatikanaji wa soko

6) Miundo mbinu mibaya ya usafirishaji

Asante kwa ushirikino wako