

DETERMINANTS OF RURAL YOUTH'S PARTICIPATION IN AGRICULTURAL ACTIVITIES: THE CASE OF KAHE EAST WARD IN MOSHI RURAL DISTRICT, TANZANIA

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Abstract

Though youth have desirable qualities that can promote agriculture, most of them have strong apathy toward it. This has resulted in mass unemployment and lack of sustainable livelihood among youth. With fewer youth into agriculture, the long term future of agriculture sector is in question. The study aimed at finding out on the role played by agriculture to rural youth socio-economic needs, types of agricultural activities which are engaged by rural youth and the factors which influence rural youth participation in agriculture. Data for this study were collected from Kahe East Ward in Moshi district through questionnaires and interviews. Study found that majority of the respondents were attracted to invest more in their own farms rather than being employed as labour or involved in family farms. The findings of the study also revealed that rural youth in Kahe are provided with their socioeconomic needs through their participation in agriculture. These include food, education and health services. Furthermore the study found out that age, sex, marital status, education level, family background, availability of rural credit facilities, land, agricultural knowledge, lack of job alternatives and perceptions are important factors associated with rural youth's participation in agricultural activities.

Keywords: Rural, Youth, Agricultural activities, Employment, Attitudes, Socioeconomics

INTRODUCTION

Agriculture is an important sector in the economy of the most developing countries in the world. In Sub Sahara Africa, it accounts for 25% – 40% of total Gross Domestic Product, although this share has been declining over the past decade. For example it showed a declining trend in Kenya from 29.03% to 23.13%, Uganda from 26.15% to 23.42%, Zambia from 22.57% to 20.72% and Nigeria from 42.71% to 32.7% from 2000 to 2011 (AGRA, 2013). In Tanzania the percentage of GDP increased steadily from 10.9% to 16.0% in 2008/09, but it showed a decline in 2009/10 falling below the MKUKUTA 1 target of 16.4% (The Guardian, 2012). The economy of Tanzania depends on agriculture which accounts for more than one-quarter of the GDP, provides 85% of exports and employs about 80% of the work force (CIA, 2012).

The reliance on agriculture for food production and food security at domestic, regional and global level depends on youth productive force. This is the generation which is expected to rise in the coming years for food production and food security (Proctor and Lucchese, 2012). Also the contribution of agriculture to farmers' income and rural development depends on the active participation of youth who are the potential labour force. They are characterized by innovative behaviour, minimal risk aversion, less fear of failure, less conservativeness, greater physical strength and greater knowledge acquisition propensity (Umeh *et al.*, 2011).

'Youth' are all people aged 15 to 24 years old. Globally, youth population aged 15 to 24 is more than 1 billion and by approximation 85% live in developing countries (WPAY, 2012). In Tanzania, according to the 2012 census youth constitute about 35.5% of the population. In many countries youth integration in agricultural activities is important for the development of agricultural sector. This is because that youth are potential to overcome some major constraints in agriculture development as they are more open to new ideas and practices than adult farmers (Daudu, 2009).

Tanzania's government has attempted to stimulate youth interest in agriculture since 1960s when the government introduced agriculture as a subject in schools. This was intended to inculcate the positive attitude to youth toward agriculture as well as preparing them for rural life. Youth were directly involved in farming activities through planting, weeding, livestock keeping and harvesting. According to Ruta (2012) the participation of youth in agriculture became a problem in the country since the time of the introduction of Structural Adjustment Programs in 1980s. Youth have been more disenchanted with agricultural activities due to the diversity of non-agricultural activities as a result of privatization and free market economy.

Though youth have desirable qualities that can promote agriculture, most of them have strong apathy toward it. This has resulted in mass unemployment and lack of sustainable livelihood among youth. With fewer youth into agriculture, the long term future of agriculture

sector is in question (Chikezie, 2012). Young people living in rural areas are forced to migrate to cities as they do not find enough incentives, profitable economic opportunities and attractive environments in rural areas. Poor policies coupled with poor performance of the sector itself have led to youth's disinterest in agriculture sector despite of its available opportunities. Also lack of rural credit, unemployment, rural poverty, weak profitability of the sector and capacity constraints are perceived to be the factors which hinder youth participation in agricultural activities in rural areas (Akpan, 2010).

Statement of the Problem

The poor participation of youth in agricultural activities in Africa has been a problem to agriculturalist, administrators and agricultural researchers due to the current situation of agriculture production. The agriculture sector calls for more improvement in order to ensure the sustainability of food security for the increasing population in Sub Saharan African countries. The integration of youth in agricultural activities is therefore an important factor toward agricultural sector development in many countries. This is because of their innovative behaviour, greater physical strength and a fast rate of learning. The existing literatures are limited and do not clearly indicate the issue of rural youth's participation in agriculture. Literatures were supposed to show clearly on the type of agricultural activities in which youth are involved and the important roles of agriculture in meeting youth socio-economic needs in order to justify youth involvement in the development of agriculture sector. Also literatures were supposed to discuss on the key issues which need to be considered for rural youth participation in agricultural activities.

However, some studies (Akpan, 2010 and Rutta, 2012) show that the perceptions of grater job opportunities, poor physical infrastructure and social amenities in rural areas and general dislike of village life to be the factors for youth participation in agriculture. Also the awareness of agricultural initiatives to youth is very low and for them agriculture is unprofitable business which is supposed to be done by the old, retired or for those who lack other alternatives. But due to the fact that reasons vary from one area to another, the study was conducted in order to reflect and clarify on what is going on the ground. Also most of the upcountry areas like Kahe east ward were not well reflected in the literature for the proper policy decisions and implementations.

Therefore this study was conducted on the Determinants of Rural Youth Participation in Agriculture: The Case of Kahe east ward In Moshi Rural District, Tanzania

Research Objectives

The general objective of this study was to assess the determinants of rural youth's participation in agricultural activities.

Specific objectives include-

- (i) To determine types of agricultural activities in which rural youth are involved in Kahe east ward.
- (ii) To examine the roles of agriculture on rural youth socio-economic needs in Kahe east ward.
- (iii) To examine issues influencing rural youth's participation in agricultural activities in Kahe east ward.

Research Questions

- (i) What are the types of activities in which youth are involved in agriculture?
- (ii) What are the contributions of agriculture on the socio-economic needs of rural youth?
- (iii) What are the issues influencing rural youth participation in agricultural activities?

Significance of the Study

The study will contribute to the current implementation of the "KILIMO KWANZA" initiative by the government toward the development of the agricultural sector. The findings and recommendations from this study will provide knowledge to policy makers and the Ministry of Agriculture and Co-operatives for the amendments and formulation of agricultural policies and initiatives for the direction of youth participation in agricultural development. Also this study will assist the government, NGOs and other private sectors in dealing with the problem of youth unemployment through involving them into agricultural activities.

The study findings are expected to contribute significantly towards the global and national efforts of increasing production and ensuring food security through increasing youth participation in agriculture. By so doing the findings are expected to meet the National Strategy for Growth and Reduction of Poverty and millennium development goals. Since agriculture is the country's base for the economic development, it is significant to empower youth in agricultural activities for their socio-economic demand and for the national development. Therefore, if the government was to largely focus on agriculture, it is significant to explore their participation in different types of agricultural activities and their awareness on the roles agriculture can play to their socio-economic needs.

LITERATURE REVIEW

Definitions of the key terms

Youth: According to W.P.A.Y (2012) 'youth' are all people aged 15 to 24 years old and the terms "youth" and "young people" are used interchangeably. Taking understanding of its types, African Union adopts the 15-35 as the age definition of youth. In the context of this study youth referred to all people with the age between 15-35 years who engage themselves in agricultural activities in rural areas.

Participation: Piere and Stiefel (1979) defined the "concept of participation" as organized efforts to increase control over resources and regulative institutions in a given situation, on the part of groups and movements of those efforts until the point in time excluded from such control. This study will refer to youth participation in small scale agriculture and other agricultural business activities showing how they are involved, what hinders their involvement, how they benefit and how they contribute to agriculture.

Agriculture: The word agriculture was derived from the two Latin words which are "Ager" and "Cultura" meaning land or field and cultivation respectively. Therefore, agriculture means cultivation of land which implies the science and the art of producing crops and livestock for economic purpose. The primary goal of agriculture is to use the land in order to produce more plentifully with consideration of its protection from depletion and misuse (Bhavikatti, 2005). In this particular study agriculture will refer to small scale agriculture and other agro-business activities which youth can participate in order to improve the agricultural sector and their wellbeing.

Review of Relevant Theories

Theory of reasoned action

The study is supported by the theory of Reasoned Action (Ajzen and Fishbein, 1975). The theory is primarily concerned with identifying the factors underlying the formation and change of behavioural intent. It assumes that a person's behaviour is determined by his/her intention to perform the behaviour and this intention is in turn a function of his/her attitude toward the behaviour and his/her subjective norm. The theory is based on the assumption that a human being usually behaves in a sensible manner, that humans take available information into account and implicitly or explicitly consider their action. A person's intention to perform or not perform behaviour is the immediate determinant of that action, barring unforeseen events people are expected to act in accordance with their intentions.

The theory helped to determine the gap between the behaviours of rural youth and their actual attitudes on agricultural activities. Also it was of help in determining the relationship between the behaviour, actions and attitudes of rural youth's attitudes in agricultural activities.

Faralu (2003), evidenced the application of this theory by suggesting that a person's intent to pursue a study in a field of agriculture or to become actively involved in agriculture as a carrier may be predicted by analysing his/her beliefs on agriculture. Therefore youth personal experiences, observations and values about agriculture, would in turn affect their beliefs, intentions, and decision to participate in agricultural activities.

Three lens approach to youth participation

This approach was developed and advocated by the Youth Working group of the UK Department for International Development in 2007. The approach advocated that development assistance should be for the benefit of youth as target beneficiaries (first lens), with youth as partners (second lens) and be shaped by youth as leaders (third lens). The approach assumes that, it is important for institutions and practitioners to consider all three lenses because they are not mutually exclusive. Youth participation in development is often a combination of all three. The central target is to develop youth as partners and leaders in development which based on youth having their capacity to act, their skills, capabilities and ability to change their own lives. Therefore the approach stress that, youth should be target group which is adequately informed, there should be collaborative interventions where young people are fully consulted and enabled youth-initiated/directed interventions.

National youth development policy 2007

Rutta (2012) acknowledged that, the current National Youth Development Policy of December 2007 has been developed and adopted by Ministry of Labour, Employment and Youth Development that has mandate on youth development issues in Tanzania. This policy comes after review of the previous Youth Development Policy of 1996 that received challenges due emergence of new cultures, new values and orientation.

The policy Vision is to have empowered, well-motivated and responsible youth capable of participating effectively in social, political and economic development of the society and Mission to create an enabling environment for youth empowerment and enhancement of employment opportunities and security. The National Youth Development Policy overall objective is to empower and guide youth and other stakeholders in the implementation of youth development issues.

The policy recognizes the problem of youth unemployment among youth completing primary and secondary schools as well as those in higher learning institutions. It further acknowledges that most of these young people are unable to work in an informal sector because of lack of capital, lack of work facilities, insecurity and lack of work premises. However the policy recognizes agriculture and animal husbandry as the largest employer in Tanzania. It also acknowledges that due to poor infrastructure many young men and women have not been attracted to join the sector.

National agricultural and livestock policy 2013

According to the National Agriculture Policy (2013), Tanzania's Agricultural sector is guided by Agricultural and Livestock Policy of 2013 that seeks to ensure that the direction and pattern of development in the agriculture sector meets social objectives and outputs. The goal of the policy is to improve the well-being of the people whose principal occupation and way of life is based on agriculture mainly smallholder and livestock keepers.

The evolution of the agricultural policy in Tanzania has been strongly influenced by macroeconomic changes. The post-independence period (1961-1967) was marked by an emphasis on improved peasant farming through extension services and the provision of credit and marketing structures. At the same time, the Government continued to support large scale farming in selected areas.

Following the Arusha Declaration, the Government became the manager, entrepreneur and investor. These policies had unexpected results of causing stagnation of the agricultural sector causing substantial reduction in productivity and incomes. In the post 1990s Tanzania managed to reverse the negative growth rate of the economy experienced in the 1980's. The sector continued its evolution towards market orientation with reduced intervention by the state. The Government measures included increased investment in infrastructure, improved Government ability to design and implement market based incentives, improved functioning of markets for all factors of production, induced technological changes by improving efficiency of input supply markets and increasing the effectiveness of agricultural extension and research services.

Empirical Review

Agriculture situation in Tanzania

In Sub Saharan African countries, agriculture is among the most important sectors contributing to the GDP (up to 40 per cent) and it has the potential to employ the large population of youth which is estimated to exceed 300 million by 2015 (Britai, 2013). In Tanzania agriculture remains

the principle employer accounting for 62.3% and produces a quarter of Tanzania's Gross Domestic Product. However the sector is characterized by poor pay, job insecurity and poor work conditions (Kayombo, 2012). It is dominated by small scale subsistence farming characterized by the reliance on hand hoe as the main cultivating tool which sets obvious limitations on the area of crops that can be grown using family labour and the achievement of food security and poverty reduction.

The government has never stopped in placing their efforts to further improve this sector. This can be proved through the introduction of Agriculture Sector Development Strategy which recognizes the significant role of youth in providing active productive force. Also "KILIMO KWANZA" strategy which addresses youth matters by suggesting the introduction of agricultural loans, provision of land to agricultural graduates, providing full scholarships or loans to agricultural undergraduates, developing incentives to attract and retain youth in agriculture, mainstreaming gender issues and strengthening the position of women in agriculture (URT, 2013).

The government has also attempted to stimulate youth's interest in agricultural production and processing whereby the parliament 2013 passed a resolution to form a new programme that will provide loans to youth under 35 years who are interested in starting agricultural business, The youth fund was pointed out as an important means to curb the problem of youth unemployment in the country. The government set about 200 billion shillings annually from the national budget as youth development fund.

For instance, the study on Current and Emerging Youth Policies and Initiatives with a Special Focus and Links to Agriculture in Tanzania Main Land by Ruta (2012), found out that youth's awareness of agricultural initiatives programmes is very low. Agriculture is perceived as an unprofitable business and work to be done as one gets old or retired because it takes too long to earn money and offers no opportunity for a better life, so they engage in agriculture due to the lack of other alternatives.

Ruta (2012), succeed in reviewing youth's policies and initiatives with the linkage to their participation in agriculture through secondary data. But the limitation of his study focused much on secondary data and used very limited time. Due to these limitations, the study did not reach the upcountry areas where many rural youth are found.

Agriculture and rural youth socio-economic needs

In Tanzania Rural youth are informally employed in subsistence agriculture and family based livelihood activities such as handcrafts, fishing and shops. However the performance of subsistence agriculture is unfavourable due to overdependence on rainfall, low use of

agriculture inputs, and poor marketing systems (TAYEN, 2012). With this situation, young people living in rural areas are forced to migrate to cities as they do not find enough incentives, profitable economic opportunities and attractive environments to live and work. Also poor policies coupled with poor performance of the sector itself have left many youth in Tanzania not attracted to the sector despite its available opportunities (TAYEN, 2012).

However, with the changing dynamics of farming and agri-food markets domestically and internationally, agriculture offers new opportunities for job creation. Agriculture accounts for the second largest source of employment in the world and employing over one billion people globally in 2009 (Proctor and Lucchesi, 2012). Therefore the sector can be the main source in assisting the government to provide employment opportunities to youth. Youth may actively join farmers' communities or associations and having different economic activities where they can get better income as well as having a desire to develop their own community (Sarah *et al.*, 2010 cited by Abdullah *et al.*, 2012).

Despite of its shortcomings, investing in young people living in rural areas is a key to enhance agricultural productivity and food security. Young people have enormous potential for innovation and risk-taking that is often at the core of growth and development in rural areas particularly in smallholder agriculture. Young farmers and producers often have greater capacity for innovation and entrepreneurship than older adults. This capacity may better equip them to address the emerging requirements of agriculture and the rural non-farm economy (IFAD, 2010).

Furthermore, rural youth have an important responsibility for their development and wellbeing as well as for the improvement of their locality. Because of their energy, enthusiasm and relatively uncommitted time, young men and women are valuable human resources for agricultural and rural development. Given the opportunity, organization, direction and support, rural youth can participate and contribute significantly to agricultural and rural development. Therefore as future adult participants in agricultural and rural development, rural youth need to be prepared to improve their capabilities in food production and to conserve productive resources in the rural environment.

For instance, the study done by IFAD (2013) revealed that, young men and women are critical to the prosperity of agriculture in Sub Saharan Africa and for efforts to ensure food security. They are the most active segment of the population and the engine that can produce the most in society (Aphunu *et al.*, 2010).

Also Chidoko and Zhou (2012), study on Impacts of Agricultural Development on Youth Employment in Zimbabwe revealed that, agriculture is the most income generating activity including fruit, vegetable and firewood trade in most households. Also, the agricultural education

system employs a multitude of young farmers. This study recommended that heavy investments be put in agriculture and agriculture related projects to enhance employment level in the study area.

Rural youth participation in agricultural activities

Mobilization of youth for national development is the common phenomena amongst the western and developing countries. For instance in such countries like UK, Netherlands, Denmark, Germany, United States of America and Tanzania, the involvement of youth in agricultural production had contributed significantly to agricultural development and empowering youth to always meet their needs (FAO, 1999). But inability of governments to integrate youths in agricultural activities has been the major problem for country agricultural development. Therefore, for the country to be economically stable the agricultural sector must be strong and youth have to be encouraged on their participation in activities (Daudu *et al.*, 2009).

Youth constitute the most important sector in a society and they are one of the greatest assets that any country can have and legitimately regarded as the future leaders. They are potentially and actually the greatest investment for a country development. Youth in rural areas provide opportunity for generating the farming entrepreneurs (Chikezie *et al.*, 2012). This is due to the fact that they have the potential to overcome some major constraints to expand agriculture production because they are often more open to new ideas and practices than adult farmers (Daudu *et al.*, 2009).

Many countries in Africa and Sub-Saharan regions for instance Nigeria have realized that, in order to reduce food insecurity there must be policies for youth integration in agricultural activities. This is through providing incentives to young people who are engaged in agriculture, availing fair market opportunities for youth, providing training opportunities in new technology and presenting agriculture as profitable venture (Ommani, 2011).

For the future food production and youth development, the identification for constraints which face youths toward their involvement needs to be discussed. There is still a long way towards increasing youth participation in agricultural activities. Youths face many push back factors including inadequate rural credit facilities, low returns to agricultural investments, poor perceptions of farmers, lack of modern farming technics and lack of access to tractors and other farming inputs (Adekunle *et al.*, 2009).

Literatures have critically examined possible problems facing the involvement of youths in agricultural activities. (Njoku 1999), explained these problems to be the drudgery of the agriculture sector due to the dependency on hand hoes, investments in developing countries usually discriminate against agriculture, backwardness of the rural areas where farming

activities predominate and lack of social amenities such as electricity, good roads, market and schools.

Daudu *et al.*, (2009) study on Roles of Rural Youth in Agricultural Development in Makurdi Local Government Area of Nigeria revealed that youths play important roles in the supply of labour, project initiations and the use of initiations to gain outside help. Also their participation in agricultural programmes is mainly through youth's organizations which include age grades, local social clubs and young farmers' organizations.

Also the study done by Nnadi and Akwizu (2008), on determinants of youth's participation in rural agriculture found out that the participation of youth is determined by their ages, marital status, youth dependence status, parents' income and household size. Their study recommended that institutional support services for agriculture should be extended to the youth and intervention strategies for youth's agricultural activities should be guided and guarded by their ages, marital status, parents' income, parents' occupations, family size and youth dependence status.

Rural youth's perceptions on agriculture

Although agriculture is perceived as the significant alternative solution to youth's unemployment and ability to overcome economic issues, it seems that youth have negative attitudes toward agriculture (Jeffrey *et al.*, 2012 cited by Abdullah *et al.*, 2012). They are not interested to join agriculture because they do not view the agriculture field as an attractive area to work (Abdullah *et al.*, 2012).

The sector is characterized by limited incentives like poor pay, climatic changes, capacity constraints, job insecurity and poor work conditions which results in the poor attitude of youth in agriculture. However, agriculture remains for consumption more than income generation, so rural youth are often the working poor with no salaries. In terms of young females, they face a triple burden as they are more affected by unemployment (Kayombo, 2011).

The study on Assessment of Socio-Economic Factors Affecting Rural Youth Attitudes on Agricultural Occupation in Iran by Ommani, (2011) revealed that the variables of farming systems, the rate of association to organization, participation in extension and education causes, insurance, age, and income play major roles in showing the variations of attitudes of rural youth toward agricultural occupation. The study described the effective social and economic characteristics of rural youth's attitudes on employment in agriculture as well as the level of their attitude. However, Iran is termed as an upper middle income economy by the World Bank which means Iran is a richer country compared to Tanzania, whereby youth's

attitudes and characteristics in Iran may differ from that of Tanzania. Therefore, although there are a lot of cross cutting issues between Iran and Tanzania, there is a need for further investigation specifically in Tanzania due to the existing poor participation of youth in agriculture.

Research Gap

The limited literature on rural youth's participation in agricultural activities does not clearly indicate the determinants of rural youth's participation in agriculture activities. For instance, Nnadi and Akwizu (2008) revealed that institutional support services for agriculture should be extended to the youth and intervention strategies for youth's agricultural activities should be guided and guarded only by their ages, marital status, parents' income, parents' occupations, family size and youth dependence status. This study extended far including their perceptions, agricultural knowledge, lack of job alternatives, availability of land and rural credit facilities.

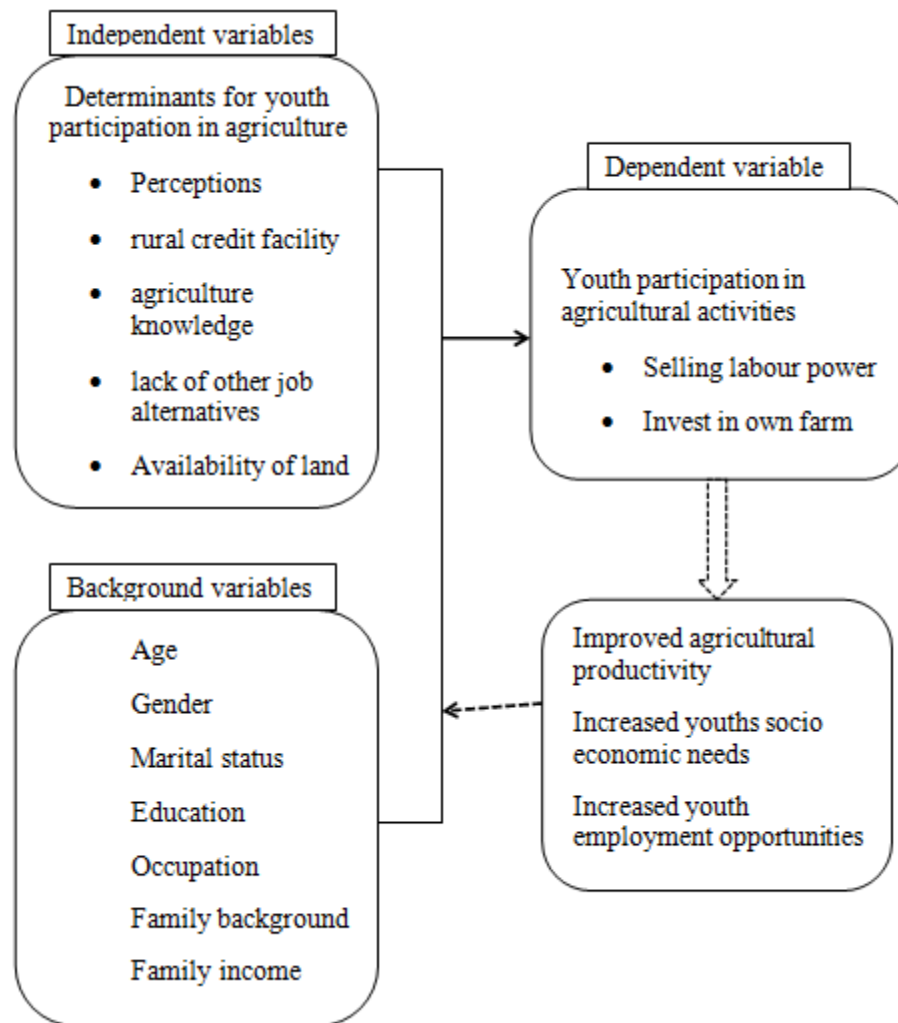
Also most studies do not reflect the most upcountry areas due to the limited time and the diversity of factors that vary from economic, political, socio-cultural realities and geographical disparities between study areas. So these few literatures cannot be substantially reliable, be entirely reflective or be based upon for policy decision and implementation in Kahe East Ward, Moshi Rural District, Tanzania. Therefore, this study was conducted in the Kahe East Ward in order to have more reflection on the determinants of rural youth's participation in agricultural activities.

Conceptual Framework

A conceptual framework gives details of the variables that are examined and their expected relationships of the study. It basically groups the variables into independent, dependent and intervening variables (Mugenda, 1999).

In this study, background variables will be used to depict the background characteristics of the respondents, independent variables will be used to proximate the determinants that affect youth participation in agricultural activities and the dependent variables will be youth participation in agriculture. Also, the intervening variables will be used in this study as illustrated in Figure 1.

Figure 1: Conceptual Framework



Source: Modified from Nnadi *et al.*, (2008).

RESEARCH METHODOLOGY

Research Design

The study used the case study design to achieve its objectives. This design was preferred because it involves detailed, holistic investigation and can utilize of a range of different measurement techniques, i.e. the case study design is not limited to any methodological tool and data can be collected over a period of time relatively to a certain context (Tumaini, 2010). The design was also preferred because it saved time and money. Therefore, a case of Kahe East Ward in Moshi Rural district was used for a careful and complete assessment of the determinants of rural youth's participation in agricultural activities.

Description of the Study Area

The study was conducted at Kahe East Ward in Moshi Rural District which is one among 31 wards of the Moshi Rural district in Kilimanjaro region. According to the URT, (2012) Kahe East Ward has a total population of 11,384. The area was selected due to the availability of stream water and plentiful land which has high potential for agricultural activities. Most of youth in the study area engage in agricultural activities including maize cultivation, beans cultivation and vegetables cultivation. Many other youth migrates to urban areas including Himo Township, Moshi town, Arusha and Dar es Salaam searching for non-farm activities while there are bright agricultural opportunities at home. Therefore major economic activities in the area include field crops cultivation and animal husbandry.

Sampling Techniques

The sample respondents of the study comprised of rural youth including young men and women, older farmers and agricultural officers. The study adopted the stratified sampling method to form three strata and the simple random sampling technique in each stratum used to select the respondents.

The stratified sampling approach was used to select the representative villages. From the list of all five villages in Kahe East Ward three villages were selected to represent the sample which included Soko, Kyomu and Kiterini.

The study used simple random sampling whereby each item or element of the population has an equal chance of being chosen at each draw. A sample is random if the method for obtaining the sample meets the criterion of randomness (each element having an equal chance at each draw). According to Larry *et al.*, (2011) if the goal is to generalize from specific sample to a population, random sampling methods are preferred because they produce representative samples. Therefore youth who were involved in agricultural activities were randomly selected from three villages to represent the sample.

Sample Size

Sample size refers to a number of respondents selected for interview from a research given population. It depends on accuracy needed, population size and heterogeneity, whether the sample will be subdivided or not and the level of resources available (Kayunze, 2000). According to Lenth (2001), sample size is important for economic reasons. An undersized study can be a waste of resources for not having the capacity to produce useful results, while an oversized one uses more resources than are necessary. Matata *et al.*, (2001) argued that having 80-120 persons are adequate for most socio-economic studies in Sub-Saharan Africa.

Therefore, based on this argument, a sample of 95 respondents including 61 young men, 29 young women, four farmers and one agricultural office were taken.

Table 1: Sample Distribution

Respondents	No. of people	Percentage
Young men	61	64.21%
Young women	29	30.53%
Older farmers	4	4.21%
Agricultural officers	1	1.05%
Total	95	100%

Sources of Data

Both primary and secondary data sources were used in this study. According to Kothari, (2004) primary data are data collected afresh and for the first time. In this study questionnaire, interviews and observations were used. Secondary data are those which have already been collected by someone else and which have already been passed through the statistical processes. In this study published and unpublished documentary sources such as reports, journals, newsletters and internet sources were used.

Data Collection Techniques and Tools

Documentary review

Documentary review refers to the analysis of documents that contain information about the phenomenon we wish to study (Milanzi, 2009). This technique assisted the researcher in checking the reliability of data which will be collected by primary sources of data. It included the review of agricultural journals and reports, internet and other sources that responded to the acquisition of relevant data.

Interview

Interview involves collection of information through a live, oral or verbal communication between the researchers and the respondents. The study employed both structured interviews which aim to gather information from a large number of people and open ended interviews which are for more in depth information (Punch, 2005). The reason being that, the researcher not only wanted to gather specific information such as youth education and capacity of agriculture but also want to gain a greater understanding on youth involvement in agricultural activities.

Interview technique was preferred due to the fact that it is designed and conducted in a professional manner, so it was a useful way of exchanging views, exploring perception and therefore seeking opinions from the respondents on various issues concerning youth's participation in agricultural activities.

Survey questionnaires

Questionnaire is a simple way of gathering short responses to questions from respondents and are less time consuming as many more respondents will be reached within a short period of time. The questionnaires which contain structured, semi-structured and contingency questions were administered to youth participants and non-participants in agriculture as well as old farmers and leaders in Kahe East Ward.

In structured questions, respondents selected answers provided on the questionnaire while through unstructured questions respondents had the opportunity to express their view points. Contingency questions were the supplementary questions which helped the researcher to gain additional information on structured questions. The questionnaire allows for feedback from a large number of people, where it is impractical to collect feedback using other more resources intensive methods. At the same time it allows each respondent opportunity to provide anonymous feedback on their experience.

The 5-point Likert's scale used to measure youth attitudes on agriculture. The respondents were able to choose one option that best aligns with their views by asking the extent to which they agree or disagree with a particular question concerning their attitudes on agriculture. The scale used was "Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree". This was preferred due to the fact that it is likely to produce a highly reliable scale which is easy to read and complete.

Data Analysis and Interpretation

The computer software SPSS and descriptive statistics were used in analysing data. The SPSS used to analyse data and provide frequencies, percentages and numbers while the descriptive statistics used to analyse data qualitatively. Therefore the study used both quantitative and qualitative data analysis methods in an attempt to respond to the posed research questions. This is due to the fact that some data were presented in terms of numbers and others in terms of descriptions (words). After analysis, the research findings were put into categories based on the research objectives and presented through the use of tables, pie charts, figures and graphs.

EMPIRICAL FINDINGS AND DISCUSSION

Socio-economic Characteristics of Rural Youth Farmers in the Study Area

Respondents special socio-economic characteristics would affect their participation in agricultural activities. Therefore the socio-economic characteristics which studied include gender, age, marital status, occupation, income, education level and family background.

Age and sex of the respondents

Table 2: Age and sex as related to youth participation in agriculture in Kahe east ward

Age	Gender	18-23		24-29		30-35		TOTAL	
		F	%	F	%	F	%	F(n=90)	%
Participation	M	7	14.6	14	29.2	12	25	33	68.8
	F	2	4.2	7	14.6	6	12.5	15	31.2
	Total	9	18.8	21	43.8	18	37.5	48	100
Invest in own farm	M	2	3	19	28.8	27	40.9		72.7
	F	0	0	7	10.6	11	16.7	18	27.3
	Total	2	3	26	39.4	38	57.6	66	100
Work in family farm	M	6	30	3	15	4	20	7	48
	F	2	10	3	15	2	10	13	52
	Total	8	40	6	30	6	30	20	100

Table 2 indicates that 33 (68.80%) of all respondents were male and 15 (31.20%) were females who participate in agriculture through selling their labour power in agriculture. Findings show that majority (68.80%) of rural youth are males who participate in agricultural activities through selling their labour power and few (31.20%) are female rural youth who participate in agricultural activities through selling their labour power. Through key informant interviews it was found that participation in agriculture through selling labour power is more preferred by male youth because they are more energetic than their counterpart. Women are less involved especially in vegetable cultivation and beans cultivation which requires more physical strength, for example in applying fertilizers and irrigation. Therefore young men are perceived to be more energetic than young women especially for the provision of labour power in agricultural activities. Since young women are less involved in agricultural activities compared to young men can affect the production of agriculture in rural areas.

Also the same table demonstrates that 48 (72.70%) of all respondents were males and 18 (27.30%) were females who participated in agricultural activities through investing in their own farms. Findings shows that most (72.70%) of rural youth who participate in agricultural activities are males and less (27.30%) are females involved in agricultural activities through

investing in own farms. The study found that male youth have big opportunities to access land and capital than young females. This impinges the participation of young women in agriculture through investing in their own farms. Furthermore the table reveals that, about 13 (52%) of all respondents were females and 7 (48%) were males who participated in agricultural activities through working in their family farms. The study found out that participation in agriculture through working in family farms is more practiced (52%) by young women than young males (48%). Through key informant interview it was found that, due to the poor access of land and capital to young women, they participate more through working in their family farms. Generally the study found that male youth are more involved in agriculture than young women through selling labour power and investing in own investment while more women are involved through working in family farms than young males. Chikezie (2012) revealed that the low percentage of the female youth participation in agriculture production could attribute to the fact that female usually involved in several other activities outside farming like food vending, tailoring, petty trading and hair dressing. Oladele *et al.*, (2012) also revealed that males are often more energetic and could readily be available for energy demanding jobs like agriculture production.

In addition, Table revealed that, 21 (43.3%) between 24-29 years, 18 (37.7%) between 30-35 years and 9 (18.8%) between 18-23 years participated by selling their labour power. It can be seen that most (43.3%) of youth who are between 24-29 years preferred to participate in agriculture through selling their labour in in agriculture. Others (37.7%) preferred to sell their labour power in agriculture while few (18.8%) of them who are between 18-23 years participated in agriculture through selling their labour. The findings show that young youth are less involved in agricultural activities than the older youths although older youth between 24-29 years are likely to participate in agriculture through selling their labour power than those who are between 30-35 years. Youth between the ages of 30-35 years are perceived to be more grown up and self-dependant who see agriculture as the most important income generating activity for their wellbeing. This is due to the needs and responsibilities of their families. Young people between 18-23 years are still young and dependant so they do participate in agriculture through working in their family farms in order to secure their socio-economic needs.

Also the study found out that 57.6% of the respondents were between 30-35 years, 39.4% were 24-29 years and three per cent were 18-23 years participated in agricultural activities through investing in their own farms. Findings show that most (57.6%) of rural youth in Kahe East Ward who participate in agricultural activities through investing in own farms are between 30-35 years. Others (39%) who participate in agriculture through investing in own farms are between 24-29 years while very few of them about three per cent who participate in agriculture are between 18 to 23 years. Therefore the study found out that the more the older

the youth the more they do participate in agricultural activities by investing in their own farms. This is because of the roles and needs of the growing family responsibilities. Older youth also have the wider opportunity to raise capital in order to invest in their own farms while young people in particular have little opportunity to get capital and land for the investment.

Also the findings in the table reveals that 60% aged 18-23 years, 30% aged 24-29 years and 10% aged 30-35 years participated by working in their family farms. This indicates that most (60%) of youth who participate in agriculture through working in their family farms are younger youth between 18-23 years. Older youth (30%) between 24-29 and (10%) between 30-35 years are less involved in agriculture through working in their family farms. This is due to the nature of the responsibilities of older youth compared to older youth. Younger youth are more dependant from their families while majority of older youth are married with the growing families which requires them to invest more in agriculture than being just working in their family farms. The size of labour force in a country is determined by the number of the people in the age group of 15-59 years (Agwu *et al.*, 2012). Also Chikezie (2012) revealed that the majority of youth are at the productive age where by their energies could be harnessed and utilized for productive venture in agriculture. Therefore it can be seen that, individuals within the age of 18-40 are the active segment in the production activities of a country.

Marital status of the respondents

Table 3: Marital Status as related to participation in agriculture in Kahe east ward

Participation	Married		Single		Separated		Widowed		Total	
	F	%	F	%	F	%	F	%	F(n=90)	%
Farm labour	25	52.1	17	35	5	10	1	2.1	48	100
Invest in own farms	52	78	6	9.1	8	12			66	100
Work in family farms	5	25	15	75					20	100

Table 3 shows that, 25 (52.1%) of all respondents were married, 17 (35.4%) were unmarried, 5 (10.4%) were separated and 1 (2.1%) was widowed who participated in agricultural activities through selling their labour power. This indicates that rural youth who are married are more likely to participate in agricultural activities than unmarried ones. This is due to the fact that married youth have more family responsibilities than unmarried youth. Therefore they normally opt to participate in agricultural activities in order to fulfil their daily family socio-economic needs. The table also shows that, (78.8%) married, (12.1%) separated and (9.1%) unmarried respondents participated in agricultural activities through investing in their own farms. Therefore

the study found that most of the rural youth who participated in agriculture through investments in their own farms are married especially those who aged between 30-35 years.

Furthermore Table 3 shows that, (75%) of respondents who are not married and (25%) who are married participated in agricultural activities by working in their family farms. This testifies that the majority of rural youths who are single and younger are more involved in agricultural activities through working in their family farms. Young people in this age group are still dependants on their family for their daily needs. They cannot afford to invest in their own projects. Therefore working on their family farms is important in order to meet their daily needs. Some of them are employed in other farms so that they can earn their daily needs.

Generally the study found out that married youth are more likely to participate in agricultural activities than unmarried ones. This is due to the fact that married youth have more family responsibilities than unmarried youth. Nnadi *et al.*, (2009) argued that marriage has a positive influence toward the intensity of youth participation in rural agriculture. The predicted of participating in rural agriculture is higher for married youth, which could be adduced to ownership of land resources especially by males, who are heirs, increased concern for household welfare and food security following the marital responsibilities and conviction overtime of the importance of agriculture in rural livelihood.

Family background and occupation of the respondents

Table 4: Relationship between family background of the respondents and their participation in agriculture in Kahe east ward

Participation	Family Background	Frequency(n=90)	Percentage
Farm labour	Farmer	45	93.8
	Non farmer	3	6.2
	Total	48	100
Own investment	Farmer	65	98.5
	Non farmer	1	1.5
	Total	66	100
Work in family farm	Farmer	20	100
	Total	20	100
	Occupation		
	Farmer	57	63.3
	Public servant	9	10
	private sector	5	5.6
	Business	11	12.2
	Others	8	8.9
	Total	90	100

The findings in Table 4 show that 45 (93.8%) respondents who participated in agriculture through selling their labour power originated from farmer families while 3 (6.2%) originated from non-farmer families. This implies that most (93.8%) of rural youth who participated through selling labour power belonged to farmers. About 65 (98.5) respondents who participated through own investment originated from farmer families while 1 (1.5%) originated from non-farmer families. This also shows that rural youth who invest on their own farms are mostly (98.5%) originated from farmers.

On the other side the table show that 20 (100%) respondents who participated through working in family farms were originated from farmer families. This testifies that, it is directly accepted that participation through working in family farms is always by farmers' siblings. Therefore it was found out that majority of rural youth who participate in agricultural activities were belonged to the farmer families. Youth who are not originated from farmer family are less likely to participate in agricultural activities.

Furthermore, Table 4 indicates that 63.3% respondents were farmers, 12.2% were small businessmen, (10%) employed in government sector, 5.6% employed in private sector and 8 (8.9%) had other occupations. The finding shows that most (63%) of rural youth farmers had farming as their main occupation. Therefore it can be seen that farming is a major occupation for the mot of youth in rural areas. Also few of them who are businessmen, employees in both public and private sectors had farming as their part time job.

Income and education level of the respondents

Table 5: Income, education and participation in agriculture in Kahe east ward

Participation	Income	Primary		Secondary		Vocation		Total	
		F.	%	F.	%	F.	%	F. (n=90)	%
Farm labour	Much in agriculture	18	38	7	14.6	0	0	10	21
	Much on other sources	4	8.3	5	10.4	1	2.1	13	27
	Both	10	21	3	6.2	0	0	25	52
	Total	39	84	8	16	1	2.1	48	100
Invest in own farm	Much in agriculture	24	36	9	13.6	0	0	33	50
	Much on other sources	7	11	3	4.5	1	1.5	11	16
	Both	17	26	5	7.6	0	0	22	33
	Total	48	73	17	26	1	1.5	66	100

Work in family farm	Much in agriculture	11	55	3	15	14	70
	Much on other sources	2	10	0	0	2	10
	Both	3	15	1	5	4	20
Total		16	80	4	20	20	100

Table 5 shows that among rural youth who participate in agriculture through selling labour power, (84.4%) respondents had primary education, (15.6%) had secondary education, only two per cent had vocational training and none had higher education. Those who invested in their own farms include 72.7% with primary education, 25.8% with secondary education, only one per cent of all respondents had vocational training. Also among rural youth who work in their family farms, 80% of respondents attained primary education, 20% attained secondary education and none of them had attained higher education. The analysis shows that most of rural youth had attended basic education where they can read, write and doing some simple arithmetic.

However, for those who attained secondary education are eager to participate through investing in their own farms. This is due to the fact that they have wider knowledge than those who attained primary education. Also the study shows that youth with primary education are more likely to participate through selling their labour power compared to secondary school leavers. Furthermore the study found out that rural youth who attained higher education are less involved in agricultural activities. They migrated to cities and towns for white colour job and other job alternatives. Therefore with the level of education increasing among youth, their participation in agriculture goes low. The majority of youth who participate in agriculture in Kahe east ward had primary education level and few of them had secondary education level. With the increasing educational attainment among the youth, the probability youth participation in agriculture reduces (Agwu *et al.*, 2012).

On other hand the table reveals that, for the rural youth who participate in agriculture through selling labour power, 25 (52.1%) respondents relied much on both agriculture and other sources as their main sources of income, 13 (27.1%) relied much other sources and 10 (20.8%) relied much on agriculture. This shows that selling labour power in agriculture is insufficient for rural youth needs, so they tend to engage themselves in other sources in order to cover their needs.

Also among those who participated through investing in own farms, 33 (50%) respondents relied much on agriculture as a main source of income, 22 (33.3%) relied on both agriculture and other sources and 11 (16.7%) relied much on other sources. The analysis shows

that majority of youth farmers who invest in their own farms have agriculture as their most source of income. They invest highly expecting to secure the needs and responsibilities of their families. Others depend on both agriculture and other source.

Additionally, for youth who participated through working in family farms, (70%) respondents depend much on agriculture as a source of income, (20%) depended on both agriculture and other sources and ten per cent depended much on other sources. This indicates that youth who are working on family farms are directly from farmers who relies their income on agriculture. Therefore they depend on agricultural activities for their daily social and economic needs. Also rather than fetching income from agricultural activities rural youth engage themselves in other activities in order increase their income. Given the subsistence nature of agricultural production in rural areas many households seek for additional income through other livelihood activities (Agwu *et al.*, 2012). Sometimes these activities may be fetching them more income when compared to farming which lead to their low participation in agricultural activities.

Ways in Which Rural Youth Participate in Agricultural Activities

Table 6: Ways in which youth participate in agriculture in Kahe East Ward

Participation in Agriculture	Frequency (n=90)	Per cent
Selling labour power	48	35.8
Invest in own farm	66	49.3
Work in family farm	20	14.9
Total	134	100

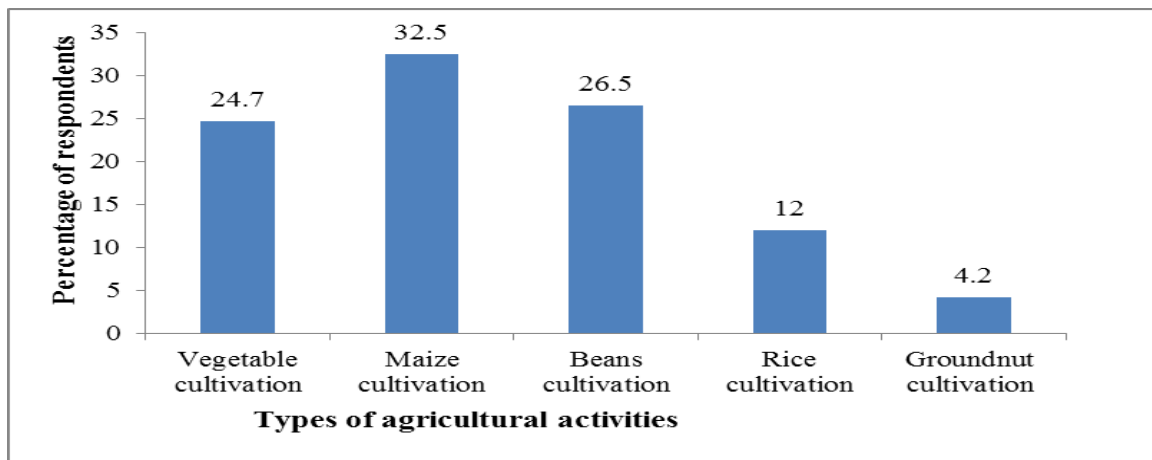
Participation of rural youth in agriculture through selling labour power refers to the situation where by youth are either temporary or permanent employed in farms in order to earn income. Participation through own investing in own farms implies that rural youth with their capital buy, rent or use family land for the investment in agricultural activities. Participation in agriculture through working in family farms refers to the situation that youth as the part of their family work in family farms which are owned by their parents.

Table 6 illustrates that 66 (49.3%) of the respondents participated through investing in their own farms, 48 (35.8%) participated through selling their labour power and 20 (14.9%) participated through working in their family farms. This shows that majority (49.3%) of rural youth in Kahe East Ward were attracted to invest more in their own farms rather than being employed as labour or involved in family farms. Most of them benefit from agriculture through investments on their own farms. The study also found out that most of rural youth who participate in

agriculture through investing in own farms are between 30-35 years. Also most of youth who participate in agriculture through selling their labour power are between 24-29 years. Youth who are between 18-23 years are mostly involved in agriculture through working in their family farms.

Types of Agricultural Activities Participated by Rural Youth in the study Area

Figure 2: Types of agricultural activities in which respondents participated



The findings presented in Figure 2 indicate that among agricultural activities that young people are engaged in the study area include the cultivation of maize, beans, rice, vegetables and groundnuts. Results shows that (32.5%) engaged in Maize cultivation, (26.5%) engaged in beans cultivation, (24.7%) engaged in vegetable cultivation, (12%) engaged in rice cultivation and (4.2%) engaged in groundnuts cultivation.

The majority of youth in Kahe East ward involve themselves in agricultural activities including maize cultivation, vegetable cultivation, rice cultivation, groundnuts cultivation and beans cultivation. Maize cultivation seems popular as large percentages of respondents cited involvement in maize cultivation more than other crops. This is due to the low cost in maize production. Production of other crops like beans and vegetables require more capital.

Agricultural activities provide employment opportunity for rural youth labour force in developing countries especially Tanzania. Through active participation of rural youth in agricultural activities, the problem of unemployment especially on rural areas will be reduced. Therefore governments, NGOs and other private sectors should put more efforts on increasing youth participation in agricultural activities in order to achieve the millennium development goals as well as reducing poverty in developing countries. Farm labour is a major source of employment opportunity for the rural labour force (Ruben and Berg, 2001).

Table 7: Marital status and sex as related to the type of agriculture activities in Kahe east ward (percentage)

Types of Agriculture	Married	Single	Separated	Total	
Vegetable cultivation	Male	46.3	19.5	9.8	75.6
	Female	19.5	2.4	2.4	24.4
	Total	65.9	22	12.2	100
Maize Cultivation	Male	42.6	22.2	7.4	72.2
	Female	16.7	5.6	3.7	27.8
	Total	59.3	27.8	11.1	100
Beans cultivation	Male	36.4	20.5	2.3	59.1
	Female	29.5	6.8	4.5	40.9
	Total	65.9	27.3	6.8	100
Rice cultivation	Male	40	15	15	70
	Female	20	5	5	30
	Total	60	20	20	100
Groundnut	Male	28.6	28.6	14.3	71.4
	Female	14.3	14.3	0.0	28.6
	Total	42.9	42.9	14.3	100

The results in Table 7 shows that (75.6%) respondents were male and (24.4%) were female participated in vegetable cultivation. Among them (65.9%) were married, (22%) single and (12%) separated. This indicates that in vegetable cultivation women are less (24%) involved whereby male respondents were noted with high participation than women. The study found that males are more energetic which is essential in vegetable cultivation which requires a lot of fertilizer application which are difficult to most of women. Also the results shows that married youth have more association with vegetable cultivation than unmarried ones. One of the respondent argued that “vegetable cultivation requires big capital and the one who can access big capital are those who are married because they have asserts for them to get loans”. Therefore unmarried youth cannot access to big loans compared to married ones.

Also results in Table 7 shows that (72.2%) respondents were males and (27.8%) females participated in maize cultivation whereby (59.3%) were married, (27.8%) single and (11.1%) were separated. For those who participated in beans cultivation, (59.1%) respondents were males and (40.9%) were female whereby by (65.9%) of them were married, (40.9%) single and (6.8%) were separated. Also those participated in rice cultivation, (70%) respondents were male and (30%) were female whereby among them (60%) were married, (20%) were single and (20%) were separated. Furthermore among respondents, who participated in groundnut cultivation, (71.4%) were males and (28.6%) were females. Between them (42.9%) were married, (42.9%) single and (14.3%) were separated. These results testify that male youth in Kahe East ward were involved much in agriculture than female youth. Male youth are the one

who work much in farms especially in clearing farms, watering, weeding and other farm activities while female youth are specifically involved in planting and harvesting. These findings are consistency with the study by Agwu *et al.*, 2012 that males are fully engaged in bush clearing which is the exclusive type of operation reserved for the male gender in the study area. Also in mound making operations males were also engaged more in stamp collection, bush burning and harvesting. Therefore the nature of specific activities involved in agriculture make male youth participates more than female youth.

Contribution of Agricultural Activities to Rural Youth’s Socio-economic Needs

Figure 3: Awareness of the Provision of Socio-economic needs in Agricultural Activities

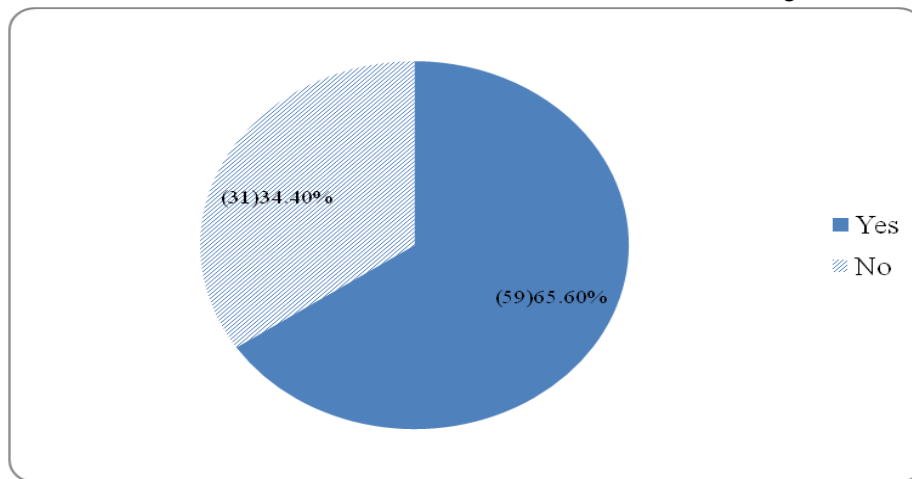
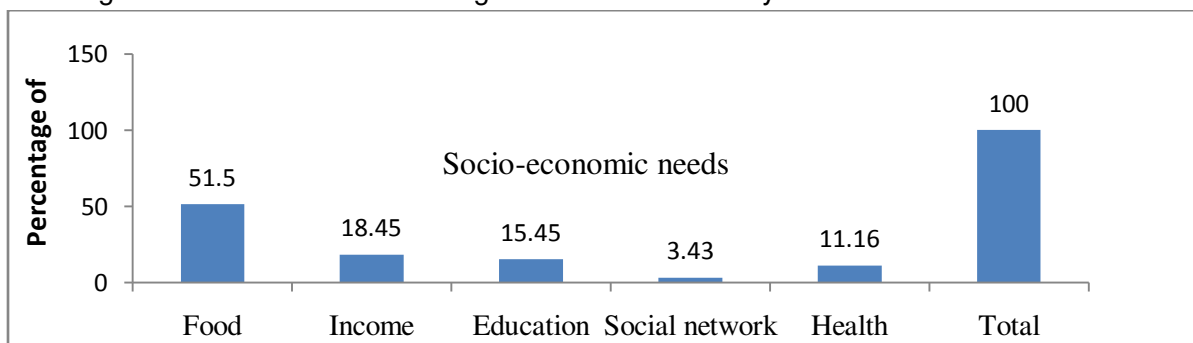


Figure 3 above reveals that 59 (65.60%) of all the respondents were aware that agricultural activities can provide them with socio-economic needs while 31 (34.4%) of all respondents were not aware that agricultural activities can provide them with their necessities. This testifies that rural youth who are involved in agricultural activities are aware that agriculture can provide them with basic socio-economic needs.

Figure 4: The contribution of agricultural activities to youth socio-economic needs



Data presented in Figure 4 shows that 51.5% of all respondents were able to get food, 18.45% received income, 15.45% were able to get education services, 11.16% were able to get health services and 3.43% were able to create social networks from agricultural activities. These results testify that food is a major socio-economic need which forces most of rural youths to embark on agricultural activities in order to secure food. Other respondents mentioned other socio-economic needs such as income, education services, health services and creation of social networks.

Food

It has been observed that the dependence on agriculture for food production and food security domestically, regionally and globally depends on youth productive forces who are the generation expected to rise in the coming years for food production and food security (Proctor and Lucchese, 2012). Therefore it can be seen that agriculture is a most significant sector which expected to provide food for the current and future generation. Through youth participation in agriculture there will be food security for the society. The study also found that rather than getting food direct from agriculture, youth in Kahe East buy some of other types of food which they are not particularly produce from local markets. They sell part of their production in order to get money for buying food which is not directly available from their farms.

Table 8 Types of food produced in Kahe east ward

Type of food	Food	Frequency(n=90)	Percentage
Food from farm	Rice	24	12.3
	Maize	56	28.7
	Beans	55	28.2
	Vegetables	49	25.1
	Groundnuts	11	5.6
	Total	195	100
Food bought	Rice	65	18.3
	Maize	38	10.7
	Beans	32	9
	Sugar	90	25.3
	Salt	87	24.4
	Vegetables	44	12.4
	Total	356	100

The study found that maize, beans, vegetables, rice and ground nuts were the major food crops in Kahe East Ward. Table 8 shows that, 56 (28.7%) get maize from farms while 38 (10.7%) bought maize from local market, 55 (28.2%) get beans from farms while 32 (9%) bought beans from local market, 49 (25.1%) get vegetables from farms while 44 (12.4%) bought vegetables

from local market, 24 (12.3%) get rice from farms while 65 (18.3%) bought rice from local market and (11)5.6% get groundnuts from farms.

During interview respondents who get food direct from their farms said that they were supposed to buy other types of food which requirements they don't get direct from their farms. They had to sell some of the products in order to buy food which is not produced on their farms. Others use other income from other sources like small business and entrepreneurship activities in order to buy food they cannot produce on their farms.

Table 9: Annual food production in Kahe east ward

Food production and usage		Frequency(n=90)	Percentage
Annual food production	0-5 bags	21	23.3
	6-10 bags	34	37.8
	11-15 bags	18	20
	16-20 bags	17	18.9
	Total	90	100
Food consumption from agriculture	25% of production	23	19
	50% of production	27	26
	75% of production	31	37.6
	100% of production	17	17.4
	Total	87	100
Source of money for buying food	Selling of agricultural products	78	52
	From other sources	42	28
	From selling labour power	30	20
	Total	150	100

The study found out that, about 34 (37.8%) of all respondents produce between 6-10 bags, 21 (23.3%) produce 1-5 bags, 18 (20%) produce 16.-20 bags per year. This testifies that there is a probability for rural youth to get food from agricultural activities by considering their annual production from agriculture. On average, the majority of rural youth can produce up to 10 bags per year ranging from 5 to 20 bags. Those who produce up to 5 bags per year indicates that it was due to low capital for the big investments, lack of associations, poor government support and dependence on rainfall. They said that for those who produced more than 20 bags had enough capital at their disposal.

On expenditure the findings show that majority of youth 31 (37.6%) use almost 75%, 27 (26%) use 50%, 23 (19%) use 25% and 17 (17.4%) use all of their annual production for food. During interviews respondents said that their primary aim for the participation in agriculture is to ensure food security for their families. This testifies that agriculture is the most important sector for rural areas youth's family food security.

Furthermore the study revealed that, over 78 (52%) of all respondents use the money from selling agricultural products in order to buy food which they cannot produce on their farms. 42 (28%) use other sources of income to buy food which they don't produce in their farms. This justifies that majority of rural youth use the money which they get from selling part of their produce for buying types of food they don't produce on their farms.

According to Faridi and Basit, (2011) participation in rural labour market is an important strategy for poverty alleviation and food security in developing countries. The socio-economic condition of rural population may be uplifted by attaining the goals of increased productivity which agricultural labour is capable of providing. Also Olaitan *et al.*, (2003) argued that food if food needs of the country are to be met and economic development is to proceed, trained men at hand to carry out the whole complex carrier in agriculture. Therefore it can be concluded that agriculture has the positive contribution to rural youth food security. This is due to the facts that, majority of them secure food through their participation in agricultural activities.

Income

The researcher examined the contribution of agriculture to rural youth whereby it was found that Agriculture provides income to rural youth through selling their labour power, own investments and working in family farms. In Kahe East ward, majority of youth have no alternative income generating activities rather than agriculture. Therefore agriculture is their main income generating activity.

Table 10: Obtaining income from agriculture in Kahe east ward

	Frequency	Percentage
Employed as labour force	75	51
Own investment	66	44.9
Work in family farm	6	4.1
Total	147	100

Table 10 reveals that, about 75 (51%) of all respondents earned their income from agricultural activities through employment as labour force in agriculture. 69 (44.9%) earned income through investing on their own farms, and only 6(4.1%) earned income through working on their family farms. This indicates that most of rural youth earned income from agriculture through employment or selling their labour power in agricultural activities. Others earned income through selling of agricultural products from their farms.

Table 11 Annual earnings from agriculture in Kahe east ward

Tshs '000	Frequency(n=90)	Percent
100-500	16	17.78
500-1000	29	32.22
1000-1500	15	16.67
1500-2000	17	18.89
Above 2000	13	14.44
Total	90	100

The finding also revealed that 29 (32.22%) of all respondents who got income from agriculture earned between Tanzania shillings 0.5M–1M, 17 (18.89%) earned between 1.5M-2M, 16 (17.78%) earned between 2M-2.5M, 15 (16.67%) earned between 1M-1.5M and 13 (14.44%) earned between 2.5M-3MTsh in a year. This testifies that the majority of rural youth in Kahe East Ward earned up to 1M from agricultural activities per year. Findings show that most of rural youths earned income from agriculture through selling their labour power or producing some crops. Therefore the analysis of the contribution of the agricultural activities to rural youth's income shows that agricultural activities can be associated with their income.

The findings are consistency to the study by Omelehim *et al.*, (2007) who argued that in many parts of the world, agriculture activities and rural people cannot be separated. It can also be proved that agriculture can increase the income of the rural poor and provide bigger opportunity. Also Man, (2007) argued that, even though the general perception of the people towards agriculture is negative, there still exist in the belief that agriculture sector has ability to offer a high income provide it is operated in the right way.

Education

Through the agriculture production youth are provided with educational needs. The study found out that, despite of the poor production due to low capital and climatic changes youth are able to use some of their production for the education purposes. This includes paying school fees and contributions for their child. Also others use it for their self-educational developments.

Table 12: Provision of education services through participation in agriculture in Kahe east ward

Provision of education from agriculture	Frequency(n=90)	Percent
Contribution of agriculture in education		
Paying school fees	49	80.3
Self-education development	12	19.7
Total	61	100

Uses of agriculture production for education	0-5 per cent	8	8.9
	5-10 per cent	19	21.1
	10-15 per cent	20	22.2
	15-20 per cent	18	20
	20-25 per cent	9	10
	None	16	17.8
	Total	90	100

The results in Table 12 indicate that, 49 (80%) used to pay school fees for their children with the money earned from agricultural activities and 12 (19.7%) use the income from agriculture for their self-education development. In addition, the study found that (22.2%) use between 10%-15%, (21.1%) use between 5-10%, (20%) use between 15-20%, 16 (17.8%) use none, ten per cent use between 20-25% and eight per cent use up to five per cent of their agricultural produce for the education services.

This implies that the majority (54.4%) of rural youth who participate in agricultural activities use the income from agriculture for their education services. This manifests that agricultural activity is the most important income generating activity for youth in rural areas which help them in the provision of education services to their children.

Factors for Rural Youth Participation in Agricultural Activities

A number of factors have been associated with youth participation in agricultural activities. This section has analysed a number of factors associated with rural youth participation in agriculture including socio-demographic and economic factors. The socio-demographic factors included marital status, gender, family background and level of education. Also the other factors included perceptions, availability of rural credit facilities, availability of land for agriculture, agricultural knowledge and of job alternatives.

Socio-demographic factors: Age

Age is meant to refer to the individual age appropriate for agricultural activities. The rate of the age of youth attribute to the increasing of their consciousness and self-realization of the importance of agriculture in development. The analysis of data in this study shows how age was associated with the rate of youth participation in agricultural activities. It was found that the participation of rural youth in agriculture depend on their oldness.

Figure 5: Age distribution of the respondents

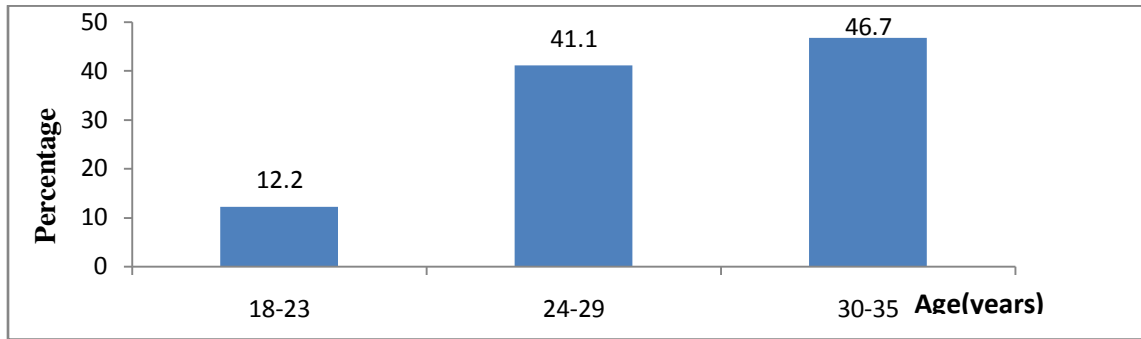


Figure 5 shows that majority of youth 46.7% aged between 30-35 years participated in agricultural activities. 41.1% of all respondents aged between 24-29 years and 12.2% of respondents aged 18-23 years participated in agricultural activities. This indicates that a unit increases in age increases the chance of youth involvement in agricultural activities. Therefore as youth are getting older they are more likely to participate in agriculture.

Gender

Gender is one of the indicators for the factors which determining rural youth participation in agriculture. The study analysed this factor by showing the extent of participation in agricultural activities between male youth and female youth.

Figure 6: Gender distribution of the respondents

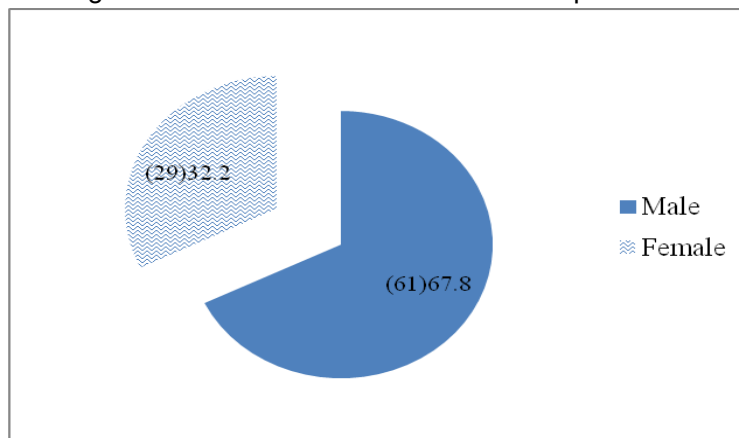


Figure 6 shows that about 61 (67.8%) of respondents were males and 29 (32.2%) were females. This indicates that male youth participate more in agricultural activities than female youth. Therefore the analysis shows that gender/sex positively associated with rural youth's participation in agriculture. Traditionally most of women in rural areas do not inherit land from

the family. This impinges their participation in agriculture. More males are involved in youth-in-agriculture Programme than females. This is most likely to be due to the fact that men are capable of doing more tedious work which is usually associated with farming than the females (Muhammad *et al.*, 2009).

Marital status

The study found out that rural youth marital status is well associated with their participation in agricultural activities. For instance, married youth are more likely to participate in agricultural activities than unmarried ones. This is due to the fact that married youth have more family responsibilities than unmarried youth (fulfilling the daily socio-economic needs).

Figure 7: Marital status of the respondents

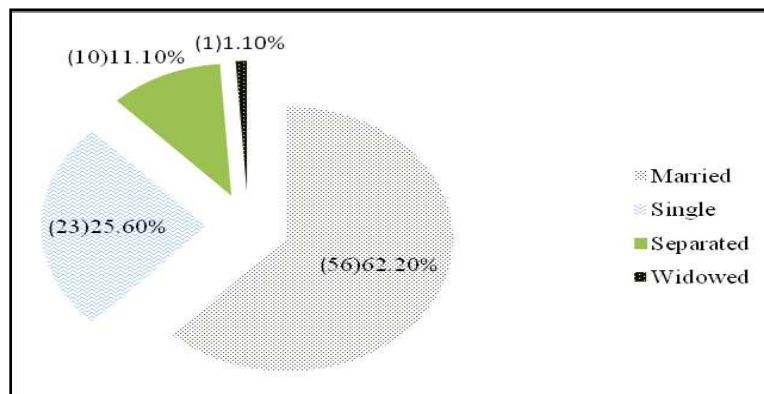


Figure 7 illustrates that (62.2%) were married, (25.6%) were not married, (11.1%) were separated and (1.1%) were widowed. This indicates that marriage is well associated with rural youth's participation in agriculture. Married youth had more experience in farming and due to their family needs agriculture became their most important occupation. The study found that most of rural youth who are married rely on agriculture for the socio economic needs which include food, education, income and health. Most of youth who are married are more involved in agriculture (Muhammad *et al.*, 2009). They may have a reasonably large family size which may provide more family labour in production than other households with different marital status.

Family background

Youths who are originated from farmer families are expected to participate more than those who are originated from non-farmer families. The study found out that the family background of rural youth influence their participation in agricultural activities. For instance the large number of the respondents belonged from farming families.

Figure 8: Family background of the respondents

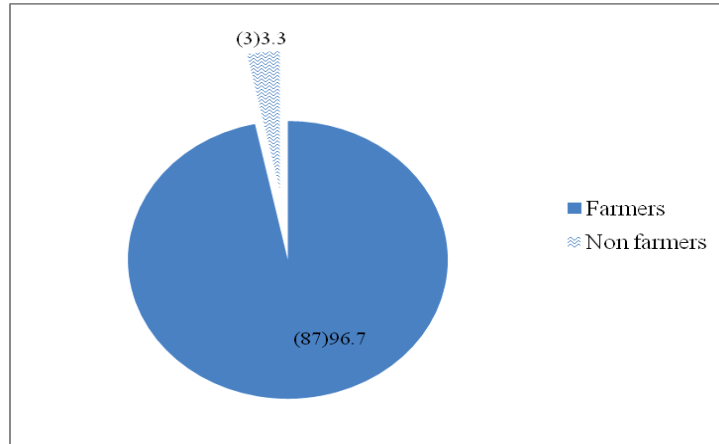


Figure 8 reveals that, majority 96.7% of rural youth farmers were belonged to the farmer families while three per cent were not belonged to the farmer families. This indicates that the family background of rural youth had positive influence on their participation in agriculture. Therefore for those youth who belonged to farmers families were more likely to participate in agriculture than those who did not belong to farmer families. These findings are similar to the study done by Nnadi *et al* (2008) who found that rural agriculture is synonymous with rural household's livelihoods, thus rural youth were born and bred to embrace farming. Also predominant parents' agricultural engagements influence youth agricultural interest.

Level of education

The study found out that rural youth participation in agriculture enabled them to get income which they use for their educational needs. They were able to pay school fees other contributions for their children while others use the income earned from agriculture for their own educational development.

Figure 9: Education level distribution of the respondents

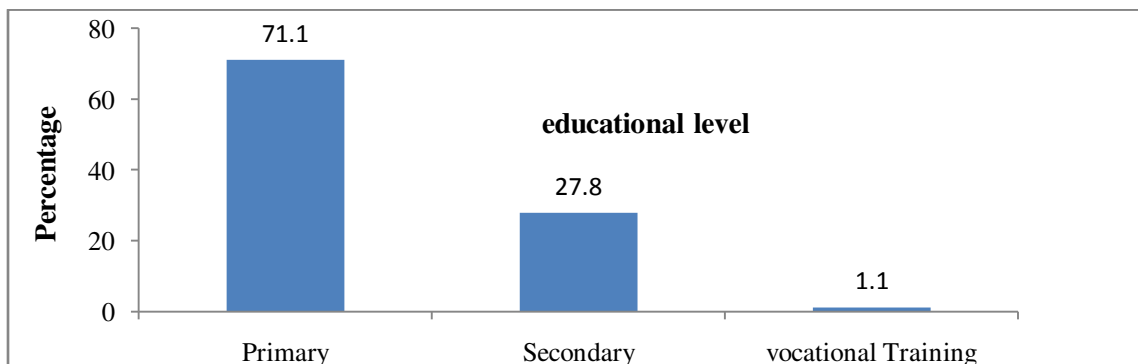


Figure 9 reveals that 71.1% respondents had primary education, 27.8% had secondary education, only 1.1% had attained vocational training and none had higher education levels. Based on the results presented in figure three it can be seen that a large majority of the respondents had primary education level and none of them had higher education. Therefore it can be concluded that most of rural youth who participate in agriculture are those with primary education and they don't have other options to generate income rather than agricultural activities. The results go contrary with the findings of Nnadi *et al.*, (2008) that the increase in educational opportunities increases the probability of participating in rural agriculture by the youth. Participation is defined by their ages, education, marital status, parents' income and youth dependence status (Nnadi and Akwizu 2008).

Other factors

Table 13: Factors for Rural Youth Participation in Agriculture in Kahe east ward

Factors for participation in agriculture	Frequency(n=90)	Percentage
Lack of other job alternative	81	26.7
Agricultural knowledge	87	28.7
Availability of rural credit facilities	57	18.8
Availability of land	78	25.7
Total	303	100

The findings in Table 13 shows that 87 (28.7%) of all respondents participated in agriculture due to their agricultural knowledge, 81 (26.7%) participated due to lack of other job alternatives, 78 (25.7%) participated due to the availability of land and 57 (18.8%) participated due to the availability of rural credit facilities. This means that majority (28.7%) of rural youth are influenced by the agricultural knowledge to participate in agricultural activities. Others are influenced by the lack of other job alternatives, availability of land and the availability of rural credit facilities to participate in agricultural activities. Akpan, (2010) study on Encouraging youths' involvement in agricultural production and processing revealed that rural credits and unemployment are perceived to be the factors for youth's participation in agricultural activities in rural areas.

Perceptions

The study measured perceptions of rural youth toward participation in agricultural activities in order to determine whether rural youth had positive or negative attitude on agriculture. Perception was assumed to be a factor which determined their participation in agriculture. Therefore the study employed the five Likert's scale rating for the statements to measure the

perception of the respondents toward agriculture activities. The statements consist of five positive statements and three negative statements.

Table 14: Rural youth perceptions toward agricultural activities in Kahe east ward

Statements	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
	F.	%	F.	%	F.	%	F.	%	F.	%
Agricultural activities can fulfil rural youth's socio-economic needs	18	20	28	31	30	33	9	10	5	5.6
Agriculture is potentially a major employer of labour for youths	39	43	29	32	17	19	5	6		
Government support and incentives is a good motivator for youth participation in agriculture	35	39	39	43	15	17	1	1		
Inclusion of agriculture in all levels of education can motivate youth participation in agriculture	29	32	39	43	17	19	2	2	3	3.3
Agriculture can provide enough incentives to rural youths	14	16	36	40	21	23	13	14	4	4.4
Agriculture can produce high profit like other sectors	34	38	26	29	25	28	3	3	1	1.1
Availability of alternative income generating activities has no effects in youth participation in agriculture	12	13	45	50	21	23	9	10	3	3.3
Youth involvement in agriculture can lead to the improvement of socio-economic conditions of rural youth.	53	59	20	22	9	10	5	6	3	3.3

Table 14 reveals that, about 18 (20%) respondents strongly agree, 28 31.1% agree (30)33.1% were uncertain,(9)10% strongly disagree and 5 (5.6%) disagree that agriculture can fulfil their socio-economic needs. This indicates that rural youth believe that they can get their socio-economic needs through participation in agricultural activities. This shows that they have a positive attitude towards agricultural activities.

Around 39 (43.3%) of all respondents strongly agree, 29 (32.2%) agree, 17 (18.9%) were uncertain and 5 (5.6%) strongly agree that agriculture is potentially a major employer to rural youth. In addition 35 (38.9%) of all respondents strongly agree, 39 (43.3%) agree, 15 (16.7%) were uncertain and 1 (1.1%) strongly disagree that the government support both ideally and materially can influence the rate of youth participation in agricultural activities. This indicates that rural youth believe that agriculture can provide employments but the government support is a significant factor for the improvement of the sector.

Of the rural youth, 29 (32.2%) of all respondents strongly agree, 39 (43.3%) agree and 17 (18.9%) were uncertain. Only 2 (2.2%) strongly disagree and 3 (3.3%) disagree on including

agriculture as a subject in all levels of education in order to influence youth participation in agricultural activities. This testifies that rural youth believe that the inclusion of agriculture as a subject in all levels of education will positively influence their participation in agricultural activities.

On the other hand (15.6%) of all respondents strongly agreed, (14.4%) agree and (23.3%) uncertain, about 36 (40%) disagree and four per cent strongly disagreed that agriculture can provide high returns like other sectors. In addition to this, about 34 (37.8%) of all respondents strongly agree, (28.9%) agree, (27.8%) uncertain, three per cent disagreed and only one per cent strongly disagree that agriculture can produce high profit like other sectors. This indicates that rural youth have a strong believe that investment in agriculture is economically viable to them.

Furthermore, (13.3%) of all respondents strongly agree, (50%) agree, (23.3%) uncertain, ten per cent disagree and three per cent strongly disagreed that youth involvement in agriculture improves the rate of rural development. Likewise (58.9%) strongly agree, (22.2%) agree, ten per cent uncertain, five per cent disagree and three per cent strongly disagree that the availability of non-farming activities does affect rural youth participation in agricultural activities.

Therefore the analysis of the results in Table 13 shows that, rural youth who participated in agricultural activities had positive attitude towards agriculture. This implies that the factor of attitude have the highest significant relationship with youth participation in agricultural activities. The finding are similar to the study on Factors that Influence the interest of youth in agricultural entrepreneurship as pointed by Abdullah, (2013) who found that attitude is the factor which significantly influence the youth interest in agriculture.

Agricultural knowledge

It is well known that most of rural families in developing countries especially Tanzania are small scale farmers. Therefore most of their children have the life experience in agricultural activities as they take part in family farms since their childhood. Others acquired agriculture knowledge through learning in schools while there are few who just learn through seminars and workshops. Almost all youth farmers had the agricultural knowledge though they acquired it differently.

Based on the results in Table 15, about (100%) of the respondents had agricultural knowledge and among them (88.9%) were encouraged by their agricultural knowledge to participate in agricultural activities, (11.1%) were not encouraged by their agricultural knowledge to participate in agriculture. By 88.9% it means that most of rural youth participate in agriculture because of their knowledge of agriculture and very few of them (11.1%) were not encouraged by their knowledge of agriculture to participate in agricultural activities. The respondents who

were encouraged by agricultural knowledge to participate in agricultural activities said that, “as part of our families we used to work in family farms during our childhood so farming has become the part of our lives since we had knowledge and experience in agriculture.”

Table 15: Rural youth’s agricultural knowledge at Kahe East Ward

Youth agriculture knowledge	Frequency(n=90)	Percentage
Possess agriculture knowledge		
Yes	90	100
Total	90	100
Type of knowledge acquired		
Formal learning	15	11.5
Special trainings (no certificate)	27	20.8
Informal learning	88	67.7
Total	130	100
Reason for participation		
Yes	80	88.9
No	10	11.1
Total	90	100

In table 15, it can also be seen that about 88 (67.7%) of respondents got their agricultural knowledge through informal learning which include learning through experience. About 27 (20.8%) learned through special training which included seminars and workshops and 15 (11.5%) learned through formal education. These statistics shows that, most of rural youth by (67.7%) acquired their agricultural knowledge through informal learning which involved learning by doing. they argued that since their childhood they participated in agricultural activities through their family farms something which enabled them to acquire agricultural knowledge through experience. Others by (20.8%) acquired the agricultural knowledge through special trainings. Some of them said that they were taught in seminars and workshops on how to cultivate paddy by the people from Chama cha Wakulima wa Mpunga Kahe (CHAWAMPU). Also a few numbers of youth (11.5%) acquire agricultural knowledge through formal learning. Respondents who attended secondary school were noted that they acquired it through formal learning. One of the respondents who completed form four from Bishop Moshi Secondary School said that, he had agriculture as a subject during his secondary school studies. Therefore the study found that, agricultural knowledge is associated with the participation of rural youth in agricultural activities.

According to Oluwole (2008), the self-sufficiency in agricultural production is the result of the society as acceptance as part of its culture to have a child follows the parents even as early as six years of age. He also argued that even at the time when missionaries introduced formal

education, it was still expected that a child goes to work on his father's farm after school hours and at weekends. The child thus obtains an informal education in agriculture through a system of apprenticeship. Therefore the study concluded that majority of youth in the study area acquired their agricultural education through the informal learning.

Availability of land

The predominant rate of rural youth participation in agriculture can be attributed to the availability of farm land and the dependence of land for existence by rural dwellers. As an important sector, agriculture is the first employment to rural youth which needs to be given the first priority for rural development. Most of rural areas in Tanzania are productive with fertile land though they face a problem of climatic changes which hinder agricultural activities. However other rural areas have access to water for irrigation, for instance in Kahe East ward farmers are using water the available water for different agricultural activities. The study found out that, access to farm land by rural youth remains is a crucial factor that determines their participation in agriculture. With the availability of fertile land and water for irrigation rural youth are expected to participate more in agricultural activities.

Table 16: Rural Youth Access to Land in Kahe East Ward

Condition of youth access to land	Responses	Frequency(n=90)	Percentage
Own land	Yes	81	92
	No	7	8
	Total	88	100
Reason for participation	Yes	79	87.8
	No	11	12.2
	Total	90	100
Acres	0-3	54	65.1
	4-6	24	28.9
	7-9	4	4.8
	10 and above	1	1.2
	Total	83	100
Land ownership	Renting	53	44.2
	family land	52	43.3
	own land	15	12.5
	Total	120	100

Table 16 shows that (92%) of the respondents owned land and eight per cent of respondents did not own land. In addition the results shows that (65.1%) of respondents owned land between 0-3 acres, (28.9%) between 4-6 acres, four per cent between 7-9 acres and only one per cent

owned more than 10 acres. Also about (87.8%) of the respondents agreed that the availability of land was among the factors for their participation in agricultural activities and (12.2%) of respondents disagreed that the availability of land was a factor for their participation in agricultural activities.

This indicates that majority 54 (65.1%) of youth who participated in agricultural activities in Kahe East Ward owned land 0-3 acres for agricultural activities especially for crop cultivation. This shows that most of rural youth are small farmers who own a small piece of land for crop cultivations. The availability and access to land has helped most of rural youth for their income generation through agriculture.

Furthermore the results in the similar table revealed that 52 (43.3%) of the respondents owned land which was the property of their families, 53 (44.2%) owned land by renting and 15 (12.5%) owned land which was their own property. This testifies that majority of youth who participate in agricultural activities in Kahe East Ward access land through renting and others own their families' land. Very few of them (12.5%) owned land which was their own property. This is due to their low capital which was not enough to buy their own land for agriculture activities. Therefore it can be concluded that participation of rural youth in agricultural activities depends on the availability and access of land in rural areas. Rural youth who can access land are the one who participate in agricultural activities.

Availability of rural credit facilities

The contributions of rural credit facilities are remarkable on the improvement and development of the agriculture sector in rural areas. They encourage rural youth participation in agricultural activities through providing credits and other assistance. The study found out that, most of rural youth are aware and applied for rural credits although there are some challenges which limit their access including poor organization of youth and other cumbersome procedures in accessing them. Youth in Kahe East ward mentioned rural banks, micro finances, money lenders and peer to peer lending as the source of rural credits.

Table 17: Availability of rural credit facilities to rural youth in Kahe east ward

Condition of youth access to rural credit	Response	Frequency(n=90)	Percentage
Applied credit	Yes	60	66.7
	No	30	33.3
	Total	90	100
Reason for participation	Yes	64	71.1
	No	26	28.9
	Total	90	100

Sources of rural credits	Rural Banks	54	23.2
	Micro finance institutions	83	35.6
	Money lenders	57	24.5
	Peer to peer lending	39	16.7
	Total	233	100

The findings of the study show that, among the factors for rural youth participation in agriculture is the availability of rural credit facilities. Table 17 indicates that 60 (66.7%) of all respondents applied for the credit to finance their agricultural activities and 30 (33.3%) did not apply. Also 83 (35.6%) respondents micro-finance institutions, 57 (24.5%) mentioned money lenders, 54 (23.2%) mentioned rural banks and 39 (16.7%) peer to peer lending as the source of rural credit facilities in Kahe East Ward. Furthermore the table reveals that 64 (71.1%) of respondents were motivated by the availability of rural credits to participate in agriculture activities while 26 (28.9%) were not.

These findings show that, the availability of rural credits is a very important factor which determines the interest of youth in developing and investing in agricultural activities. Through micro finance institutions, money lenders, rural banks and peer to peer lending youth in rural areas were able to finance their agricultural activities. During interview one of the participants said that he was able to finance his farming activities by the money borrowed from his uncle. Another youth said that she was able to finance her farming activities by the money she get by being involved in Village Community Banks (VICOBA). Chikezie, (2012) on Factors Constraining Rural Youth's Involvement in Cassava Production that Credit is a very important factor that is needed to acquire or develop farm enterprise. Its availability could determine the extent of production capacity.

Lack job alternatives

The issue of unemployment in third world countries particularly Tanzania has been a critical problem toward the development of a country. Majority of youth migrate from rural areas to urban areas to seek employment. However youth in rural areas remain with a final option of investing in agricultural activities especially those who did not go to school and standard seven leavers.

Table 18: Lack of job alternatives to rural youth in Kahe East ward

Lack of job alternatives	Responses	Frequency(n=90)	Percentage
Job alternative	Employed by the government	7	7.8
	Employed by the private sector	1	1.1
	Small business	25	27.8
	None	57	63.3
	Total	90	100
Reason for participation	Yes	59	65.6
	No	31	34.4
	Total	90	100
Reason for lacking job alternatives	No training for employment in other sector	36	26.9
	No capital to invest in other sector	38	28.4
	Family poverty	19	14.2
	Low level of education	41	30.6
	Total	134	100

Table 18 shows that the majority of rural youth who participated in agricultural activities have no alternative jobs whereby (63.3%) of the respondents had no alternative job, (27.8%) of respondents engaged in small business, seven per cent are employed by the government and only one percentage employed by the private sector. Also about (65.6%) of the respondents participated in agricultural activities due to lack of alternative jobs while (34.4%) of the respondents were discouraged by the lack of alternatives to participate in agricultural activities. Furthermore the study found the reasons for lack of alternatives jobs among rural youth. Therefore it can be seen that (30.6%) of respondents had low level of education, (28.4%) lack capital, (26.9%) lack training for jobs and (14.2%) faced by poverty.

Therefore, the lack of alternative jobs among rural youth is also associated with their participation in agricultural activities. Most of rural youth have low level of education whereby majority of them had attended basic education who can read write and doing some simple numeric work. This limits them to be employed in other sectors which need them to be professionals. One youth who engaged in vegetable cultivation claimed that agriculture was his final alternative because he had only standard seven educations so he can't get other job than being involved in agriculture. Other claimed that agriculture is the most income generating activity for youth in rural areas as there are very few opportunities in rural areas. With the prevalent substance farming practice, poverty is unparalleled and it becomes difficult to mobilize resources for engaging in other livelihood activities (Nnadi, 2008). The only choice available is the agricultural band-wagon employment.

CONCLUSION

The objective one of the study determined the types of agriculture activities involved in by rural youth. The findings revealed that youth in Kahe involved in agricultural activities such as cultivation of maize, beans, groundnuts, vegetables and rice. They participate in agriculture through selling their labour power, investing in own farms and working in family farms. However, majority of them were attracted to invest more in their own farms rather than being employed as labour or involved in family farms. The study also examined the roles played by agriculture on rural youths socio-economic needs and it was found that rural youth in Kahe were provided with their socio-economic needs through their participation in agriculture. These include food, education and health services. Furthermore, the study found out the factors influencing rural youth participation in agricultural activities. Age, sex, marital status, education level, family background, availability of rural credit facilities, land, agricultural knowledge, lack of job alternatives and perceptions were found to be important factors which are associated with rural youth participation in agricultural activities.

The findings show that rural youth in Kahe east ward are involved in different type of agricultural activities including vegetable cultivation, maize cultivation, beans cultivation, rice and ground nuts cultivations. The study also found out that agriculture plays an important role in provision of socio-economic needs to rural youth needs. This includes food as a major socio-economic need which forces most rural youth to embark on agricultural activities. Others include education services, income and health services. Youth get these socio-economic needs through selling their labour power in agriculture, investing in their own farms and working in their family farms.

The study also revealed that majority of youth involves themselves in agricultural activities through growing different crops. This include maize cultivation which seems popular as large percentages of respondents cited involvement in maize cultivation more than other crops due to the low cost in maize production. Others are involved in vegetable, beans, rice and groundnuts cultivations. Furthermore the study revealed the factors which determine rural youth participation in agriculture. The factors include age, sex, marital status, education level, family background, perception, agriculture knowledge, availability of land, availability of rural credit facilities and lack of job alternatives are the important factors which favours youth interest in agricultural activities.

Therefore, it is hoped that this study can act as guideline or explore new ideas for future researchers to conduct studies in similar issues. The findings will also help to enlighten the related authorities in their efforts to have more youth in agriculture field. All in all agriculture based activities is the future to a more self-reliance nation.

RECOMMENDATIONS

Agriculture is the most important sector for rural development for the nation Gross Domestic Product. Rural youth are perceived to be a significant engine for the agricultural development whereby they are energetic, creative and innovative which is the important pillars for the agriculture development. Rural youth are the potential labour forces who are characterized by innovative behaviour, minimal risk aversion, less conservativeness, greater physical strength and a fast rate of learning which are all being perceived as the significant engine for agriculture development. Regarding the issue of dependence on agriculture domestically, regionally and internationally makes it significant for ensuring food production and food security through the inclusion of youth who are the expected generation for future food production and food security. The following recommendations are suggested for further improvement and development of agriculture sector via rural youth's involvement in agriculture.

Recommendation to Government

Among rural youth challenges in their participation in agricultural activities is lack of enough inputs and capital. The government should reform and formulate the development policies which are in favour for rural youth participation in agricultural activities. The government should ensure the availability of enough inputs and capital for rural youth. This will improve rural economy as well as reducing the rate of youth migration from rural areas to urban areas.

Also the intervention strategies for youths' agricultural improvement should be guided by their age, education, household size, marital status, income, parents occupation as well as youth dependences status.

Recommendation to Rural Youth

Among the challenges youths face for their participation in agricultural activities is the lack of organisation. Rural youth should organize themselves in groups in order to share knowledge and experience for the improvement of agriculture production. This will also help them to secure loans from micro and macro credit institutions.

Rural youth should know that they are the important asserts for agriculture and rural development. The government should provide more sensitization programs for rural youth participation for their awareness on agriculture and their development. Given the opportunity, organization, direction and support, rural youth can participate and contribute significantly to agricultural and rural development.

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