

International Journal of Agricultural Science, Research and Technology in Extension and Education Systems (IJASRT in EESs) Available online on: http://ijasrt.iau-shoushtar.ac.ir

Available online on: http://ijasrt.iau-sh ISSN: 2251-7588 Print

ISSN: 2251-7596 Online **2022:** 12(1):11-20, OR: 20.1001,1.22517588.2022.12.1.2.1

Received: 23 October 2021
Reviewed: 01 December 2021
Revised: 05 December 2021
Accepted: 20 December 2021

Youth Engagement in Agricultural Activities: Status and Prospects for Tanzania Agricultural Sector Development

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bstract

Keywords:

Youth, Tanzania, farming

his paper presents findings of the study about youth engagement in agricultural activities in Tanzania: It highlights the status and prospects for the Tanzania's Agricultural Sector Development. The study was conducted in Makambako Town Council, Njombe region in Tanzania. The overall objective of the study was to assess the contribution of youth engagement in agricultural activities onto their livelihoods and the states' agricultural sector development. Specifically, the study sought to: identify socio economic characteristics influencing youth involvement in agricultural activities in the study area, identify the potential agricultural activities and other income generating activities affecting youth livelihood in the study area, examine the contribution of the identified activities in addressing their needs, determine the level of their involvement in agricultural activities and identify factors influencing their engagement in agricultural activities. The study employed a crosssectional research design to a sample size of 120 respondents. A structured questionnaire was the main tool while information from Key Informants and Focus Group Discussions (FGDs) compliment the quantitatively generated information. Quantitative data analysis was aided by computer software known the Statistical Package for Social Science (SPSS) to yield some statistics like frequencies and percentages which were later interpreted to conclude the assumptions. Content analysis technique used to analyse qualitative data. The findings revealed that youth perceived agriculture as their first-rate occupation and that majority said they see a lot of prospects as they engage with agriculture, both on and off the farm. The study recommends that intervention strategies for improving youth engagement in agricultural activities should revolve around sufficiently attracting innovative public investment in supportive rural public goods and services to farmers, including making agriculture a national priority promote it as a decent and productive employment.

1. Introduction

Most countries in the world have the economy that is dependent on agriculture (IED, 2015). Consequently, is anticipated its people including youth to be actively engage with agricultural activities for their growth. According to (FAO, 2013; Eissler and Brennan, 2015) the contribution of agricultural activities to community development depends on the active engagement of youth who are potential labour force. According to (FAO and IFAD, 2014), youth engagement in agricultural activities is considered essential due to their innovative behaviour, greater physical strength and a fast rate of learning on new agricultural technologies. Several United Nations (UN) entities, instruments and regional organizations have somewhat different definitions of youth, which the United Nations secretariat recognizes. The definition of youth changes with circumstances, especially with the changes in demographic, financial, economic and socio-cultural settings. Table 1 summarizes these differences. Perhaps, we may conclude that the definition that uses 18 to 35 age cohort (Table 1) fairly serves its statistical purposes for assessing the needs of the young people and providing guidelines for youth decent employment (International Labour Organization, ILO, 2017).

Table 1. Unite Nations' Recognized definition of youth

Entity/Instrument/ Organization	Age	Reference
UN Secretariat/UNESCO/	Youth: 15-24	UN Instruments, Statistics
UN Habitat (Youth Fund)	Youth 15-32	Agenda 21
UNICEF/WHO/UNFPA	Youth: 15-24	UNFPA
The African Youth Charter	Youth: 15-35	African Union, 2006
UNICEF/ILO	Youth: 18-35	UNFPA

The engagement of youth in agriculture in Tanzania can be traced back from early 1970s when a great emphasis was made by the government to both primary and secondary pupils and students, respectively. According to Rutta (2012), during this period agriculture was taught as a subject in school to enable youth secure and gain knowledge in agriculture as gainful employment and school agricultural programs were stimulated by the introduction of Education for Self-Reliance (ESR) in support of 1967 Arusha Declaration towards self-reliance.

Despite efforts made by the government of Tanzania to create the enabling environment and enforce for effective engagement of youth into agricultural development still there is low commitment of youth in agricultural activities (URT, 2016; Eissler and Brennan, 2015). However, there has been little participation of youth in the Agriculture sector (Kruijssen 2009; Rutta, 2012 and NSYIA, 2016). For instance, Rutta (2012) portrayed that youth engagement in agricultural activities has been a problem in Tanzania because most of youth leave old people in villages and go to towns searching for non-agricultural jobs, the situation which decrease man power for agricultural development. While the non-engagement of youth in agriculture is well documented, for instance, Rutta (2012) portrayed that is not clearly pointed out in literature as to why youth don't like to engage in agricultural activities hence the need for this study. Thus, the study attempted to find out the reasons why there is low youth engagement in agricultural activities and workable strategies for addressing the issues

The overall objective of this study was to assess the contribution of youth engagement in agricultural activities onto their livelihoods. Specifically, the study sought to; 1) Determine types of agricultural activities and other job alternative which youth are engaged with in the study area 2) Examine the contributions of the identified agricultural activities in the study area on youth economic needs 3) Assess the perception of youths of getting engaged with agricultural activities in the study area 4) Determine factors leading to low engagement of youth in agricultural activities in the study area. There is a lot of research that shows the factors affecting the presence of young people in agricultural activities. These factors include: Land availability and tenure system (FAO, CTA, IFAD, 2014), NGOs supporting youth in agriculture (Franzel et al., 2019), Accessibility to financial services (Demirguc-Kunt, et al., 2015), Supply of agricultural inputs (Franzel et al., 2019), Access to knowledge and information (Flink et al., 2018), Capital availability (Demirguc-Kunt, et al., 2015), Social services availability, Linkage to extension services (Meena, 2018).

Conceptual Frameworks

According Patrika (2015) a conceptual framework is basically the researcher's map of understanding how particular variables in the study connect with each other in groups of context, independent and dependent variables (Patrika, 2015). In this study, background variables will be the Tanzania national context, while the independent variables will be the factors that influence the engagement of youth in agricultural activities. The dependent variable will be engagement of youth in agricultural activities as further illustrated in figure 1.

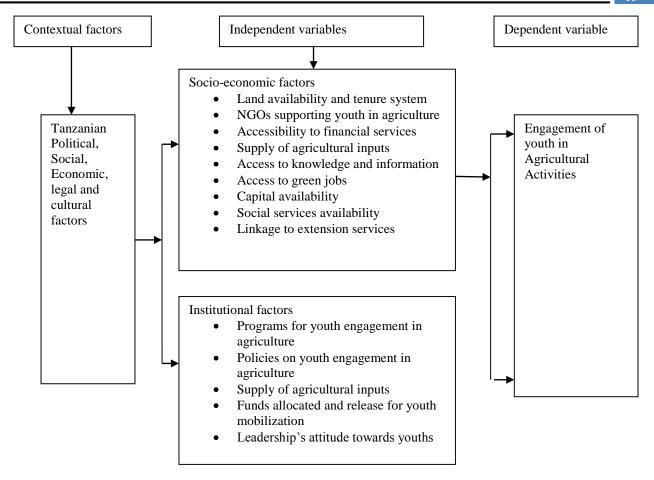


Figure 1. A Conceptual Framework of Youth Engagement in Agricultural Activities in Tanzania

2. Materials and Methods

The study area conducted in Makambako Town Council which is one of the six Councils of Njombe Region. According to the District Agricultural Development Programmes 2015/2016, Makambako town Council has big number of unemployed youth groups in formal sectors majority being involved in different non-agricultural activities. Agriculture is the main economic activity in the Town council whereby 78% of its inhabitants depend on agriculture and livestock production. Agricultural production is mainly done by small holder farmers (Peasants) of whom 80% use hand hoes, 19% use animal draught power and 1% using motorized equipment such as tractors. The major food crops produced in the Town council are maize, potatoes, sweet potatoes, beans, paeans, and finger millet. The main cash crop produced in the Town council is sunflower, avocado fruits (recently introduced) and Tomato.

In livestock, farmers keep poultry, dairy, beef and some goats types of small animals. In agricultural industry and trading, business men practice on buying the crops and animals, processing and selling crop and animal products and by products. In forestation, farmers practice on trees planting and bee keeping (URT, 2013a). The non-agricultural activities include shops keeping with different commodities, selling of transport services, soldering, carpentry and mason works, hotels and bars

Geographically, Makambako Town council is located along the main road of Dar es Salaam to Mbeya City. Its boundaries are: Mufindi District Council to the North and North East of the council, Njombe District Council to the South and South East while to the West is Wanging'ombe District Council (Fig. 2). Makambako Town Council is within the middle area which lay between 1000 - 2000 m above sea level and $8^{\circ}8 - 9^{\circ}8$ latitudes and $35^{\circ}5 - 35^{\circ}8$ longitudes Southern Equator (URT, 2013a).

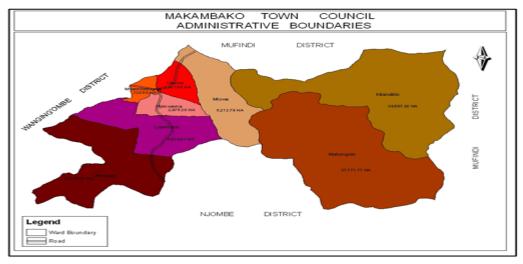


Figure 2. Makambako Town Council

Population of the study area

Basing on 2012 national census, Makambako Town Council has a total population of 93 827 with a growth rate of 2.9%, where by 41 314 are males 52 513 are females (URT, 2013). According to demographic data of Makambako Town Council, youth of 18 – 35 years old occupy 37% of 93 827 people (Fig. 3).

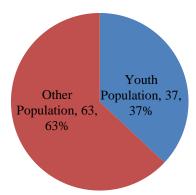


Figure 3. Proportion of Youth to the total Population in Makambako Town Council, Source MTC Profile

The study employed a cross-sectional research design. A cross-sectional research design allowed gathering data at a single point promptly, involving relatively a larger number of subjects which exhibit the validity of information and is economically in terms of resources (Alvi, 2016). The target population for this study was all youth aged between 18 – 35 years old in the study area. According to ILO (2013) this age variety is entitled for decent employment.

The sampling frame for the study was the list of youth aged 18 to 35 years old from the selected wards and villages in the study area. A multistage sampling technique was employed; initially, wards and villages potential in agricultural activities were selected. Four wards and four villages (one village from each ward) were selected. Using Simple Random Sampling technique, in each village, 30 respondents were selected to constitute a sample size of 120. According to Amugane (2014), a sample size of 30 respondents is enough for a meaningful analysis of any quantitative study. As suggested by Kumar (2011), a lottery method was used, whereby each element was numbered using separate slips of paper, then the slips were put into a box, thoroughly mixed and picked out one by one blindly, until the number of slips selected equals the sample size decided.

Primary data were collected from respondents using interview schedules, focused group discussions, key informant interviews. The collected data included types of agricultural and non-agricultural activities and perception of youth on engagement agricultural activities. Also data included challenges facing youth on engagement in agricultural activities, such as, availability of agricultural extension services, land availability, capital possession, financial

services, and accessibility of agricultural loans, agricultural infrastructures such as market places, transport facilities and social services which are road, electricity and health. Secondary data were collected from documentary reviews in offices of the council, wards and villages and collected data like the number of youth groups, their activities and allocated funds for various activities to youths.

Quantitative data were analyzed using the SPSS computer software - to establish frequencies, percentages and other important statistics. A binary logistic regression model was used to estimate the association of some key factors influencing youth engagement in agricultural activities including land availability, capital possession, giving help to youth, access to extension services, input supply, agricultural infrastructures and marketing conditions. Based on qualitative data, the researcher examined all forms of data sets to clarify concepts and constructs as well as the deconstruction of the textual data into manageable categories, patterns, themes and relationships "content analysis" according to the research aims. Technically, the researcher used content analysis to identify and transcribe the identified thematic patterns.

3. Results and Discussion

Based on Gender, the results indicate that of the 120 respondents, over three quarters (84.2%) were males. This entails that, very few young females were engaged in agricultural activities. The trend seems similar to the idea by YLRA (2011) which pointed out that young females are more victims of unemployment as they go to towns out of their respective rural areas and get employed as house maids.

Similar argument were raised during FGDs that, most of girls move to towns searching for house-girl employment rather than engaging in agricultural activities.

Based on age, respondents were categorized into two groups which are 18 - 30 years old who constituted 61% while the category above 30 years old formed 39%. Most of youth aged 18-30 years old just contributed their labour in agricultural activities to their respective parents' house holds whereas, youths in 31-35 years old category were engaged in agricultural activities, married and had their own land plots (Fig. 4).

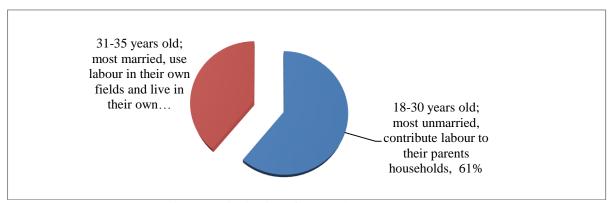


Figure 4. Distribution of Respondents Based on Age

Results in table 1 further indicate that of 120 respondents 57.5% were married. This could be a reason for poor youth engagement in agricultural activities simply because marriage has implication onto land ownership.

As revealed during FGDs most unmarried youth don't own land hence affecting their involvement in agricultural activities. As shown in table 1, of the 120 respondents interviewed, 51.7% said they completed standard 7 and next to it were form four leavers. This implies that majority of primary school leavers in the study area were not joining secondary education, we expected them to have join either agricultural and or non-agricultural activities in their respective rural areas. Equally, most of those completing form four. The results contradict a conclusion made by Lazaro (2012) and Kruijssen (2009) who established that most of youth in Sub-Saharan Africa after school completion dislike engagement in agricultural activities.

Results from FGDs revealed that in all the four villages most youth whose parents failed to send them for further education after attaining a certain level of they either decides to engage in their parents' dwelling activities or in their own agricultural business activities.

The potential of Agricultural Activities to youths' livelihoods

Results in Table 2 indicate that, of 120 respondents, majority (88.9%) engaged in agricultural activities, while 9.4% engaged with non-agricultural activities including salaried employment. The results are like that of Charles (2014) in Ghana, who concluded that youth in rural areas are more experienced and interested in agricultural activities in their purely domicile environment than in formal sectors found outside their natural habituated domicile. Similarly, URT (2013) affirmed that despite Makambako being a Town Council, its residents who have your homes depending on agricultural activities. However, the results are contrary to finding by FAO and IFAD (2014) which argued that Tanzania, like many other developing countries experiences an overwhelming numbers of rural-urban migrations of youth who engage themselves in petty trades and non-productive informal businesses.

The study further portray fact; despite agriculture being the largest economic sector where more than 75 per cent of the population is engaged, the sector has been experiencing a wide gap in youth involvement. During FGDs, the members agreed that apart from providing additional food agriculture also increases income generation by selling crops, live animals, products and by-products.

Table 1. Respondents distribution by their agricultural and non-agricultural activities (n=120)

Category	Frequency	Percentage
Agricultural activities	104	88.9
Non-agricultural activities	11	11.1
Total	120	100

Equally, during key informant interviews in Makambako Village, one TAICO explained that, agricultural is the main occupation in their area and that, other job alternative are just adding up.

Youth engagement in agricultural related business

Results in Table 6 indicate that of 120 respondents, 76.7% were producing and selling crops, 15.8% ware buying and selling crops, 0.8% ware processing and selling crops, but 6.7% were engaged in other activities. The results reveal that most youth produce and sell agricultural crops. The results are in line with URT (2008) policy which states that the development of efficient, effective, flexible, accessible and equitable agricultural marketing system is a prerequisite in fostering market oriented agriculture. Similarly agriculture contribution should be in income generation, jobs creation, and foreign exchange generation, providing balance between rural and urban areas, supplying food at affordable prices and strengthening linkages to industrial areas. Results are further illustrated in Figure 5. In addition, FGDs members in the four villages added that, on producing and selling crops, youth were producing crops in their fields, harvested and sold them to traders reached in their fields and sometimes respondents themselves were sending their crops to markets within Makambako Town Council. Furthermore, FGDs members said that youth were buying crops from farmers and sell them to markets within Makambako Town Council, Njombe, Mbeya, Dodoma and Dares-Salaam regions.

Equally one key informant pointed that, youth were buying cereal crops; mainly maize and wheat and processed for selling to markets within Makambako Town Council, Njombe, Mbeya, Dodoma and Dar-es-salaam regions.

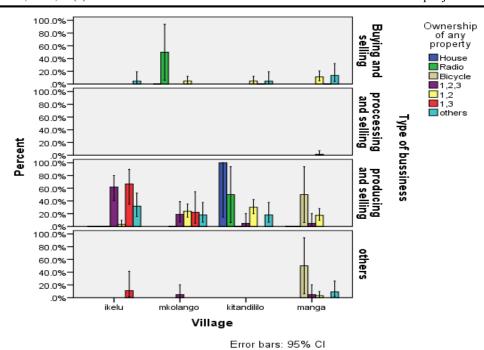


Figure 5. Youth engagement in agricultural related business

Factors Influencing Youth Engagement in Agricultural Activities

Results in Table 3 indicate that, four aspects are critical when considering factors influencing youth from getting involved in farming activities. Such factors includes; lack of capital 100%, lack support, lack of mobilization and lack of knowledge) For instance, of the 120 respondents, 87% claimed to be not getting help towards engaging in agricultural activities. On the other hand, 84.2% and 80.8% were suffering from lack mobilization and agricultural knowledge, respectively. Clearly such factors are described hereunder;

Lack of help for youth to engagement in agricultural activities

Results in Table 3 revealed that majority of youth in the study area were not getting help for engagement in agricultural activities. The results are in line with the findings of FAO and IFAD (2014) and URT (2016), all found that most youth are not yet helped on getting new agricultural technologies. IFAD and FAO stipulate that if youth shall be assisted on engagement in agricultural activities they will be encouraged and happy to remain in the sector. According to ILO, 2016 and URT (2016) youth ought to be engaged in agricultural activities and must be trained and provided with new modern agricultural technologies. URT (2016) comments MALF that at initial level youth must be organized, trained and provided with any assistance including giving them loans of money as capital or giving them by loans the implements, planting materials and other related infrastructures for engaging in agricultural activities.

Mobilization of youth on engagement in agricultural activities

Results in Table 3 revealed that majority of youth in the study area were not mobilized for engagement in agricultural activities. These results are in line with the findings of Kising'u (2016) that unemployed youth were left themselves, not mobilized, to decide whether to participate in agricultural and livestock herding activities or in non-agricultural activities such as trading with industrial made commodities, the case which increased the unemployed youth in streets of Mombasa and Nairobi. Kising'u (2016) commended that Kenyan government was supposed to mobilize youth and give them the assistance by facilitating to access agricultural information on knowledge and modern material technologies such as inputs and agro-mechanization.

Provision of agricultural knowledge youths

Results in Table 3 revealed that majority of youth in the study area were not getting agricultural knowledge from agricultural extension services and other sources for engagement in agricultural activities. Results on offering agricultural extension services for youth in the study area are bit contrary to findings of Kimaro et al. (2015) which stated that 100% of youth had agricultural knowledge. Kimaro et al. (2015) portrayed, it is well known that most of rural families in developing countries especially Tanzania are small scale farmers, therefore most of their children

have life experience in agricultural activities as they take part in family farms since their childhood. Kimaro et al. (2015) further stated that, other youth acquired agricultural knowledge through learning in schools while there are few who just learn through seminars and workshops. The situation stated by Kimaro et al. (2015) is not the same to most youth of Makambako Town Council as found in the study area that most had agricultural knowledge as they acquired it only through their life since childhood but not from agricultural extension service program or seminars.

Other factors they mentioned are; poor agricultural infrastructures, lack of crop selling units, undefined crops market conditions, poor agricultural tools, poor input supply, undefined crops market's conditions, and many more others as seen in Table 3.

Table 3. Respondents distribution by prominent factors influencing youth engagement in agricultural activities (n=120)

Problem	N	Percentage
Provision of support to youth	104	87
The need for mobilization	102	84
Provision of agricultural knowledge	97	80
Lack of capital	120	100
Poor input supply	71	59
Expensive input prices	78	65
Undefined crops market's conditions	77	64
Undefined crops' selling units	83	69
Low crops' prices	60	50
Lack of agricultural infrastructures	84	70
Lack of land	75	62
Poor agricultural tools	69	57

Respondents' opinions on Ways to Make Agriculture Attractive for Youths

Contrary to the hindrances facing youths' engagement in agriculture, respondents had some opinions on how can they be attracted to engage in agriculture. Results in Table 4 indicate that, of 120 respondents, 100% call for the government to solve all problems facing agriculture, that, the government has to solve all problems facing youth on engagement in agricultural activities, 62.5% call for the government to facilitate agricultural extension services for youth, 50% said that, students should be taught agricultural subjects in schools to prepare them for engagement in agricultural activities when they reach youth hood after school completion and 48% said specific policies should be established for youth engagement in agricultural activities. The results in Table 13 reveal that the government should take a serious measure to make and attract youth for engagement in agricultural activities. These results are in line with findings and recommendations stated by (Allen et al., 2016; Kimaro et al., 2015; FAO and IFAD 2014; FAO, 2013 and Rutta, 2012), which together propose that, societies, communities, governments and or states should create problem free environment for agricultural practices to attract farmers to engage in agricultural activities.

According to Allen et al. (2016) for example, the strategy could be attained through either of the following strategic objectives: facilitate land acquisition and accessibility for agricultural investment, facilitate acquisition and accessibility of financing resources for youth to invest in agriculture, facilitate acquisition of agricultural inputs, machinery and other necessary support services, facilitate development and use of irrigation infrastructure, enhance marketing of agricultural products, enhance mitigation and adaptation to climate change and variability, promote technical and entrepreneurship skills, facilitate linkage between youth and other youth agriculture support initiatives, mainstream cross cutting issues in youth involvement in the agriculture sector and promote decent work in the agricultural sector.

Also, FGD members of all four villages recommended creation problem free environment in agriculture by improving agricultural infrastructures which are irrigation, roads, processing and storage facilities, crop market infrastructures, release of improved agricultural technology, facilitation of agricultural extension services to youth, and land tenure should favour youth possession of land permanently and many more things attracting youth engagement in agricultural activities. FGD members further concluded that; youth should be mobilized into groups and involve them in discussion and decision making on engagement in agricultural activities as they perceived it is their first-rate employment opportunity.

Table 2. Distribution of Respondents by their opinions on ways to make agriculture attractive (n=120)

Opinion	N	Percentage
Government enhancing attractive environment for youth engagement in agricultural activities	120	100
Provision of knowledge that fosters youth for engaging in agricultural activities	60	50.0
Improve extension services provision	75	62.5
The government device policies favouring youth engagement in agricultural activities.	58	48.33

4. Conclusion and Recommendation

The agricultural sector development depends on the active man power, youths in particular. The findings from this study indicated that most of youth have far away engaged in agricultural activities compared to non-agricultural activities. However, youth participation in agricultural activities were found being constrained by a number of factors such as; lack of capital, lack of knowledge, poor inputs supply, expensive price of inputs, lack of crop markets, poor selling units and low price of crops, lacking of agricultural infrastructures, lack of land, and poor farm working tools. As such, youths had some suggestions towards making agricultural sector attractive for them to work in. They pointed out the need for the government to strive enhancing attractive favourable working environment, including; devising good policies and infrastructural arrangements such as facilitating the availability and supply of new modern agricultural technologies for land tilling, planting, irrigation, transportation, processing and or storage.

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