



# Influence of gender differences on youth participation in agriculture in Kajiado North Sub County, Kenya

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## Abstract

Agriculture in Kenya can develop gainful employment opportunities for youth that would enable them exploit their economic innovation and enhance equal opportunity for male and female youth in agricultural value chain development for national economic growth. Thus, improving youth participation in the agricultural sector pertinent for the nation to develop. Youth's interest in agriculture is however likely to be positively related to their gender differences in terms of acquisition of resources, support and encouragement necessary for enhanced participation. The difference between male and female youth in their level of participation in agriculture in Kajiado North Sub-County was poorly understood and hence the need for this study, which used a cross-sectional design to collect data from 397 randomly, selected youth and 22 youth and agricultural officers. Content validity of the youth and agricultural officers' questionnaires was ascertained by extension experts while reliability was determined through a pilot test involving 30 respondents. The reliability coefficient were  $0.86\alpha$  and  $0.80\alpha$  respectively, which were above the 0.70 threshold for acceptable reliability. The study showed that there is statistically significant difference between the male and female youth in their level of participation in agriculture in the study area ( $t=3.425$ ,  $df$  395,  $p=.001$ ). The study indicated that female youth who took part in agriculture were more than male youth. However, the level of participation by the male youth in terms of number of agricultural activities they undertook was higher than that of the female youth and the difference was significant. It also showed that gender difference influenced their participation in agriculture with since male youth indicated higher level of participation with 23.7% female youth having inadequate access to land , 22.2% had inadequate collaterals while 23.9% had limited access to markets for agricultural produce.

**Keywords:** Agriculture; Employment; Gender; Value Chain; Youth

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## 1. Introduction

The agricultural sector contributes about 30% of Kenya's total Gross Domestic Product (GDP), accounts for 65% of national export earnings and caters for over 80% of employment opportunities and provides a livelihood to about 80% of the population (CIA, 2014). Rural households rely on agriculture for most of their income mainly from smallholder farming, which produces the majority of Kenya's agricultural output.

Kenya government identified agriculture as a key sector of focus in its 2008 blueprint for economic and social development, followed by a revision of the Strategy for Revitalizing Agriculture (SRA) which was adopted to create improved agricultural legislation (GoK, 2013; Kangai et al., 2011). In 2010 the SRA, originally intended to run from 2004-2014, was superseded by the Agricultural Sector Development Strategy 2010-2020 (ASDS) that foresees a food secure and prosperous nation by 2020 and aims to achieve a paradigm shift from subsistence to commercial agriculture. Emphasizing agricultural growth and smallholder productivity however as a pathway out of poverty raises a major concern, especially given the ageing farmer population that is averaged at 60 years; on whether Kenyan youth sufficiently participate in agriculture and the differences in the level of participation among the male and female youth. Youth with dynamism and flexibility have the potential as agents of positive change and this should be ensured by enhancing their participation in agricultural development programs. In the most adverse and risky situations, youth have an extraordinary resilience and ability to cope (AGRA, 2015). Youth are the driving force behind economic prosperity in future decades, only if policies and programs are in place to enhance their opportunities (Brooks et al., 2013). However, their interest in farming is likely to be positively influenced by gender differences related to their ability to gain access to the resources needed to farm.

Access to land is important for young people trying to earn a livelihood in agriculture. It serves as security and collateral for accessing credit, marks youth's identity, upgrades their status and often enables participation in community decision making organs and producer's organizations (MIJARC, IFAD and FAO, 2012). However, In many parts of the world, traditions prescribes that one can only own land once they have established a family of their own, while in many parts of Africa, it is taboo for young people to access the family land while the parents are still alive (UN-HABITAT, 2011). While waiting for their inheritance, many youth enjoy subsidiary land rights and work on the family land for little or no remuneration, a situation that is very dominant in Kenya particularly in Kajiado North sub-County (FAO, 2013; MoA, 2013).

Accessing land for agriculture is even more difficult for female youth. Munang and Mwaura (2015) reported that women in many developing countries do not inherit land and only obtain user rights via a male relative. Several countries have reformed their formal law system so that women are granted equal property and inheritance rights, but the enforcement of these formal laws are challenging because parallel customary law systems might exist denying equal land access for women (White 2012; FAO, 2013). It is difficult for young women to request enforcement of formal laws because they often lack the required knowledge, financial resources and confidence to protest against social norms and traditions (FAO, 2013; World Bank, 2014).

In developing countries like Kenya, it is greater challenge for young women to obtain capital to buy land as they often do unremunerated household work or subsist on low wages (Mwaura, 2015). In addition, loans

to buy land are not easily accessible for them and they are not involved in the drafting of policies and laws related to land; and often they find these frameworks unresponsive to their needs. In Kajiado North Sub-County, many young women face additional constraints in accessing financial services due to their higher rates of illiteracy, restricted liberty of action and lack of consent of family members, much of which can be traced to gender discrimination embedded in societal norms (Dalla Valle, 2012).

Access to market for agricultural produce influence youth participation in agriculture (IFAD, 2014). Markets provide the opportunity to generate income, contributing to a reduction in poverty and hunger for societies. Markets drive production to meet consumer demand in terms of quantity and quality (Njeru and Mwangi, 2015). Sustainable access to markets is required to guarantee smallholders an increase in income and to lift them out of poverty. Since rural youth are the future of the sector, MIJARC, IFAD and FAO (2012) indicated that their access to markets is vital for boosting productivity, increasing incomes and reducing poverty and hunger for the years to come. Nevertheless, AGRA (2015) observed that young people face a number of challenges while trying to access markets particularly in developing countries. Leavy and Hossain (2014) showed that many young people lack experience and knowledge of how markets work; they often lack business, management and entrepreneurial skills, and like many other smallholder farmers, they lack information about prices.

Rural markets have typically large numbers of producers and consumers and a few market intermediaries' often rich businessmen, who influence the government while drafting market policies (Leavy and Hossain, 2014). Youth are not sufficiently organized and lack experience to counter these strong market actors (Munang and Mwaura, 2015). Young rural women face additional difficulties in accessing markets since in many communities their freedom of movement is restricted because of social and cultural prescriptions (FAO, 2013). Access to information and education is poorer in rural than in urban areas. ICT literacy which is of paramount importance in marketing of agricultural produce is also lower, particularly among poor young women.

High-value agricultural products and niche markets offer opportunities to young farmers all over the world and can be beneficial for young women since they play an important role in many of the high-value agricultural market chains Kenya (FAO, 2014). Young women can be facilitated to participate in organizations thereby enhancing their leadership skills. This can be achieved by reducing women's workloads; building their capacities; setting young women quotas in membership and leadership of the organization; and sensitizing local leaders about the importance of young women's participation (World Bank, 2014). Young rural women are often even more disadvantaged: cultural practices may mean that their freedom of movement is restricted and they are often expected to help with domestic chores, thus have fewer opportunities to attend learning activities, participate in the activities of organizations and access markets (Njeru and Mwangi, 2015).

Access to financial services such as savings and loans is fundamental in starting any agricultural activity (Leavy and Hossain, 2014). Grouping in informal saving clubs can help rural youth improve their means for generating savings and increasing their borrowing power. According to Njeru and Gichimu (2014), support can be offered to young women and men to access finance through group savings and interest, and the

scheme that can help youth build self-confidence and trust in the group. Young women can also play an important role in natural resource management, and green jobs will be of particular interest and concern to them. Furthermore, In Africa, in the green tourism sector, 60-70% of the workforce is female and half of them are youth (ILO, 2013).

For youth to successfully participate in the agricultural sector, access to both information and education are crucial (UNESCO, 2010). In addition to knowledge of agricultural production and processing techniques and the relative know-how, young farmers need access to information about finance, land and markets (FAO, 2014). However, the World Bank (2015) reported that the situation is particularly dire in many developing countries, where access to appropriate education and training remains quite limited in rural areas. In Kenya, young rural women tend to have particularly poor access to both general education and education that integrates agriculture sector knowledge (Njeru et al., 2015). To meet this challenge, AGRA (2015) contends that various strategies can be implemented for instance introduction of a quota system like the gender quotas for training programmes in Brazil that target women as participants, provision of take-home food rations by various organizations and introduction of flexible school calendars as incentives for families to let young women participate in training programmes.

Agricultural education and training in Kenya and especially in Kajiado North Sub-County must reflect the needs of the agricultural labour market and enhance the familiarity of young women and men with the world of work, including its practical challenges and rewards (UNESCO, 2012). Internships and exposure trips could be offered to trainees. Young women and men could be offered with apprenticeships and support to set up their own businesses or become paid workers after completion of the programme. Youth could receive customized advice and should be linked up with business partners and farmers so that their ICT-based agricultural solutions can fit the needs of the users. The study therefore investigated the influence of gender difference on youth participation in agriculture in Kajiado North Sub-County.

### 1.1. Statement of the Problem

About 60% of Kenya's 45 million people are youth aged 15-35 years old who constitute 45% of the labour force. Some of these youth work mainly in agriculture, which supports over 75% of the population and contributes 30% to the GDP. Young people were expected to comprise 75% of the Kenyan population by 2015. This tremendous youth population increase, rising unemployment and therefore high dependence ratio poses a great danger to Kenya's economy. Despite Government's efforts to make agriculture more attractive and profitable to the youth, their participation in the sector is declining as they increasingly migrate to cities in search of remunerative and decent employment. Furthermore, although the youth hold Kenya's future due to their enormous energy and aspirations, most of them in the study area considered agriculture to be less attractive compared to other professions. Reducing youth unemployment through participation in agriculture is a challenge in Kenya since the average age of a farmer is about 60 years and at this age bracket, farmers are less venturesome, averse to risks and hesitant to adapt innovations making it difficult to transform agriculture from subsistence to income generating activities. Although youth engagement in agriculture could greatly reduce youth unemployment in the country, 70% youth in the study

area were unemployed. A gender difference among the youth is a factor that influences their participation in agriculture in Kenya as a whole. This is a challenge in Kajiado North Sub-County since its influence in agricultural activities and development were poorly understood and documented. This therefore made it difficult for Kenyan leaders and their development partners to formulate innovative strategies for enhancing gender equality in access of resources and other requirements for agriculture. This study has provided information that the Government and other leaders can use to make informed decision on how to mainstream gender to ensure enhanced and inclusive youth participation in agriculture.

## 1.2. Purpose and objective of the study

The study sought to determine the influence of youth gender difference on youth participation in agriculture in Kajiado North Sub-County. The researchers assumed that there was a statistically significant difference between male and female youth in their level of participation in agriculture in the Sub-County.

## 2. Research methodology

A cross-sectional design was used to collect data from 397 randomly selected youth and 22 youth and agricultural officers. This design provides self-reported facts about respondents, their feelings, attitudes, opinions and habits and is excellent for collecting original data (Kombo and Tromp, 2007; Kothari, 2008). It enables the researcher to study a large population with only a portion of it being used to provide the required data (Kothari, 2008).

### 2.1. Instrumentation and data collection procedures

A self-administered questionnaire with information on the influence of the differences between male and female youth in their level of participation in agriculture, developed by the researcher with open and closed-ended items, was used for the youth and agricultural extension officers. The questionnaires' content validity was ascertained by five extension experts while a pilot test involving 30 youth was conducted to determine its reliability, which was  $0.83\alpha$ . This was above the 0.70 minimum acceptable for educational research at a significance level of 0.05 set *a priori*.

### 2.2. Data analysis

Data analysis involved qualitative and quantitative methods. In the qualitative data analysis, emerging trends were categorized based on research objectives. The data on gender difference was summarized into categories (males and females) and analyzed using a t-test at  $0.001\alpha$  significance level. It found out if the mean difference between the level of participation in agriculture between the male and female youth was significant. Frequency tables and percentages were used to summarize and present quantitative data.

### 3. Results

#### 3.1. Demographic characteristics of the respondents

The characteristics of the respondents have been organized in four categories namely gender, age, marital status and level of education. Composition of the respondents by gender showed more female youth 52% while male youth were 48%. However, these differences were not statistically significant (chi-square .428, df 1,  $p > .05$ ) as indicated in Table 1.

**Table 1.** Composition of Respondents by Gender

Gender	Frequency	Per cent
Male	192	48.4
Female	205	51.6
<b>Total</b>	<b>397</b>	<b>100.0</b>

A respondent's age was important too in determining the average age of youth involved agricultural production in the Sub-County. Most of the youth (63.4%) were 26-35 years while the rest (36.6%) were 18-25 years implying that agriculture in the Sub-County had only attracted very few young people between 18 and 20 years. In terms of formal education, 60.2% had secondary (Form 4) to college (certificate or diploma) education. Of the remaining 39.8%, 7.3% had no formal education, 20.4% had primary education (standard 1-8) and only 12.1% had university education. These characteristics are outlined in the table 2 below.

**Table 2.** Age, Academic Level and Marital Status of the Youth (n=397)

Age (years)	Academic level		Marital status					
	F	%	F	%				
18-20	53	13.4	No school	29	7.3	Married	217	54.7
21-25	92	23.2	Primary	81	20.4	Single	170	42.8
26-30	111	27.9	Secondary	132	33.2	Divorced	7	1.7
31-35	141	35.5	College	107	27.0	Widower	2	0.5
			University	48	12.1	Widow	1	0.3

### 3.2. Youth gender differences in agriculture

The respondents gave their take on gender issues and how they influence their level of participation in agriculture. Their responses are indicated in Table 3.

**Table 3.** Gender Issues in Agriculture

<b>Gender Issues</b>	<b>Frequency</b>	<b>Per cent</b>
Inadequate access to land by female youth	94	23.7
Young motherhood	60	15.1
Inadequate collaterals for female youth	88	22.2
Limited schooling for many female youth	60	15.1
Limited access to markets	95	23.9
<b>Total</b>	<b>397</b>	<b>100.0</b>

There were several cross-cutting factors on gender touching mainly on female youth whereby 23.9% female youth indicated having limitations when accessing markets, 23.7% were not able to access adequate land for agriculture while 22.2% had inadequate collaterals that could be used to obtain credit for agriculture. Other factors were young motherhood 15.1% that limited their participation as well as limited schooling 15.1% that led to limited skills and lack of use of innovations in agriculture.

Hypothesis four: - *There is no statistically significant difference between male and female youth in their level of participation in agriculture in Kajiado North Sub-County.* The level of male and female youth participation in agriculture measured in terms of the number of agricultural activities they undertook, their mean, standard deviation as well as standard error was summarized in Table 4.

A t-test was done to find out whether the mean difference between the male and female youth in their level of participation in agriculture was significant. The results were summarized in Table 5.

The male youth had higher levels of participation than the female youth. The mean difference was found to be significant ( $t=3.425$ ,  $df\ 395$ ,  $p=.001$ ). The study showed that female youth who took part in agriculture were more than male youth. However, the level of participation by the male youth in terms of number of agricultural activities they undertook was higher than that of the female youth and the difference was significant. The study thus rejects the null hypothesis and indicates that there is statistically significant difference between the male and female youth in their level of participation in agriculture in the study area.

This could have been attributed to factors for instance; FAO (2013) revealed that challenges faced by young men in accessing land are multiplied for young women.

**Table 4.** Group Statistics for the Level of Participation in Agriculture

Variable	Gender	n	Mean	Std. Deviation	Std. Error Mean
Agricultural participation	Male	207	2.8732	2.02036	.14111
	Female	190	2.2292	1.69989	.12268

**Table 5.** The Mean Difference for Level of Participation between Male and Female Youth

T	Df	Sig. (2-tailed)	Mean difference
3.425	395	.001	.64400

A report by Proctor and Lucchesi (2012) showed that women typically hold smaller plots of land than men and in many developing countries they do not inherit land but only obtain user rights via a male relative. Several countries have reformed their formal law system so that women are granted equal property and inheritance rights, but the enforcement of these formal laws is challenging (White, 2012; FAO, 2013). Many times young women face difficulties to request enforcement of formal laws because of inadequacies in the required knowledge, financial resources and confidence to protest against social norms and traditions. Young rural women face additional difficulties in accessing markets since in many communities their freedom of movement is restricted because of social and cultural prescriptions (FAO, 2013; Njeru and Mwangi, 2015).

This study found that 23.9% of the female youth faced limitation while accessing markets for their products. The study findings support findings by Dalla Valle (2012) which revealed that young rural women in developing countries face additional constraints in accessing financial services due to their higher rates of illiteracy, restricted liberty of action and lack of consent of family members, much of which can be traced to gender discrimination embedded in societal norms. Paisley (2012) and UNESCO (2012) observed that training programs for vocational courses mostly reaching young men do not cater to the needs of young women and that the root factors limiting young women's access to training include restricted mobility, young motherhood and limited schooling levels which agree with the study findings.



## 4. Conclusions

There were several cross-cutting factors on gender touching mainly on female youth whereby 23.9% female youth indicated having limitations when accessing markets, 23.7% were not able to access adequate land for agriculture while 22.2% had inadequate collaterals that could be used to obtain credit for agriculture all of which contributed to their limited participation in agriculture. Other factors were young motherhood 15.1% that limited their participation as well as limited schooling 15.1% that led to limited skills and lack of use of innovations in agriculture compared with their male counterparts.

## 5. Recommendations

Based on the conclusions of the study, the researchers recommend as follows:

- 1- In order to address the issue of gender equity that has implication on youth participation in agriculture, leaders in Kajiado North Sub-County together with their development partners and other stakeholders should promote land reforms, enhance financial and market accessibility that ensure equal agricultural opportunities for both males and females.
- 2- Agricultural education and training in Kajiado North Sub-County should reflect the needs of the agricultural labour market and enhance the familiarity of young women and men with the world of work, including its practical challenges and rewards.
- 3- The government should come up with a coherent and integrated response to address the core challenges faced by youth especially female youth when entering agriculture and other sectors in order to enhance their livelihood base. The government partner with a transparent multi-stakeholder mechanism ensuring coherence, coordination and cooperation across different national government institutions and agencies, at central and local level, private sector organizations, youth organizations and development partners in promoting youth in not only in agriculture but in other sectors of development targeting both male and female youth.

## 6. Recommendation for further research

In order to determine whether the situation is different in other areas, other researchers should replicate the study in order to come up with a more comprehensive program for enhancing improved participation of agriculture for both male and female youth in Kenya.

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