

Youth Engagement in Agriculture in Kenya: Challenges and Prospects

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ABSTRACT
The Kenyan population is to a large extent comprised of a high and increasing cohort of young people, close to 78 percent of the population is below the age of thirty. Evidence reveals that youth engagement in agriculture is declining amidst rising youth unemployment yet the services and industrial sectors, despite growing at considerably faster rates have not created enough jobs for the burgeoning youthful labor force. This may have implications on food security, unemployment, and underemployment and may undermine the government efforts to drive economic growth through agriculture. Using data from the Kenya National Panel Survey data of 2005/6 and 2009/10, we examine youth employment dynamics across the different sectors and further provide insights into the determinants of youth participation in agriculture. Using the Kenya Census of 2009, we further document the challenges and constraints inherent to the youth in agricultural production relative to adults. The findings reveal that youthful farmers are concentrated more in agricultural production. Furthermore, a relatively lower percentage of youth use improved inputs (such as improved seeds, fertilizers, agricultural chemicals and veterinary drugs). With this poor rate of adoption of appropriate inputs, productivity is likely to remain low and constrain the youth to subsistence farming. The youth are also disenfranchised in the ownership and management of critical assets in agricultural production, especially land. Land tenure issues continue to impede many youths from engaging in agriculture, with the majority of youth using land without exclusive ownership rights. In addition, the results point to the fact that the youth are less likely to access credit, extension services and social capital (farmer group membership), all key factors in agricultural transformation. The in-depth analysis results seem to suggest that the youth with at least secondary education, males (both married and unmarried) and those youth residing in households with a large share of adults are less likely to engage in agriculture. It was recommended that a robust relationship between agencies interested in encouraging youth involvement in agriculture should be evolved through legislation and implementation of policies to guarantee training programmes, credit facilities and land accessibility to youths at the identified rural youth organizations. This will enhance youth involvement and catalyze agricultural development.
Key words: Youth, Agriculture, Agricultural development, Employment, Occupation choice.

1.0 INTRODUCTION

1.1 Background of the Study

Africa has an exceptional population profile: 200 million people living in Africa are between the ages 15 to 24, constituting over 20% of the African population; 70% of African youth resides in rural areas and account for 65% of labor in agriculture. Young people make up 36% of the working population, and account for 60% of the total unemployed (International Labor Organization (ILO, 2012)). The large youth population in Africa should be seen as an asset for the continent's development if appropriate human capital investment measures are taken. Youth inclusivity in agriculture is thus an imperative with its many direct and indirect benefits. It will provide under- and un-employed young people with employment and income, this in turn will provide the food we need via increased production, and ensures farming is passed from one generation to the next. Indirectly, it will drastically reduce the criminal and illegal activities youths may indulge in due to lack of gainful employment.

Agriculture remains fundamental to poverty reduction and economic growth in the 21st Century (World Bank, 2008). The report further posits that 75% of the world's poor are from rural areas and most are involved in farming, an activity which requires sustenance especially by the youth who are the leaders of tomorrow. Youths aged 10 to 24 years, are 27% of the world's population and 33% of the population in Africa according to Nugent (2006). African agriculture is beset by a host of challenges. Experts identify lack of market access, low productivity on-adoption of modern farming systems, climate change, low fertilizer usage, inadequate storage and processing facilities as being the most crucial.

However, daunting as these challenges may seem, they pale into insignificance when juxtaposed against these two intertwined issues: - Non-engagement of African youths in agriculture. - The ageing population

of African farmers As Dr.Namanga Ngongi, President, Alliance for Green Revolution in Africa succinctly stated:

"With nearly 60 percent of Africa's population residing in rural areas and the large majority made up of youth, half of them being young women and girls, the poor participation of young people in farming and the agricultural economy must be seen as a matter of grave concern to all; indeed it directly threatens the future of agriculture and rural economic transformation on the continent." (Alliance for Green Revolution in Africa Update, 2012 p. 2).

African farmers are ageing and the implications are negatively staggering; not only for food security but also for transfer of necessary knowledge, skills, expertise and techniques and for employment and economic development. According to average age of a farmer are 52 in Brazil, 57 in the USA and 60 in Africa (World Bank, 2008). The case for Africa is worsened by the non-attractiveness of agriculture to the youths who should replace the old farmers. Akpan (2010), asserts that there is no conscious succession planning, thus the old farmers may literally work themselves into their graves. This trend is not limited to small-holder farmers. Many agricultural research institutions have a disproportionately large number of staff close to retirement age. This short-sightedness is presently impacting the agricultural sector, with increasingly fewer qualified mentors to pass on knowledge and skills to the new generation (Ashford, 2007).

According to Bertow & Schultheis (2007), people as the central players amongst the factors of production occupy a critical position. They possess the entrepreneurship to combine and utilize the other factors- land, labor, machineries, inputs- in an efficient and effective manner to achieve sustainable food production. Their levels of agricultural knowledge, skills, innovation, technological and technical know-how therefore determine how well they do this. Youths by their very education, talent, innovation, energy, openness to new agricultural techniques and technology are better poised to be more effective and efficient agricultural producers. They are thus able to combat the scourge of food insecurity ravaging Africa.

A precedent global commitment towards the tackling of major world challenges produced the eight millennium development goals, of which eradicating poverty is top on the list. In a similar vein, Kenyan agricultural educational policies and its attendant objectives point towards self- sufficiency in food production for consumption and provision of raw materials for agro-based industries (Food Agricultural Organization (FAO, 2012)). These contention points to increasing global and regional inclination towards welfarism. However, sustainable agriculture development, which is potent against poverty and hunger, requires involvedness with entrepreneurship and youth participation.

Although Kenya has enjoyed relatively high economic growth rates over the past decade, formal job creation has been lower than the rate at which the labor force is growing. Challenges still remain on bridging the gap between economic growth and jobs creation and in turn address the growing unemployment[1] especially among the youth (Page, 2012). Levels of underemployment, vulnerable employment are even higher than the levels of unemployment since only a few youth can afford to remain unemployed – they often engage in part time work even for a few hours just to make ends meet. It is thus not surprising that there are high levels of working poor i.e. those who are employed but they live below the poverty line. Creating decent employment opportunities for this rapidly increasing youthful labor force as MDG 1 target 1B[2] stipulates is a challenge that has reached a level of priority for Kenya's development agenda.

While many still view formal job creation in the formal wage sector as the solution to youth unemployment, prospects of finding this kind of employment is limited as the number of people entering the labor force far outweighs the number of jobs available in the formal wage sector. Brooks *et al.,* (2012) and Kararach *et al.,* (2011) reveal that creation of non-agricultural jobs may not happen in the short run; as such agriculture is likely to continue being a source of employment and livelihood in the medium to long term especially for countries that heavily depend on agriculture. The 2008 World Bank "Agriculture for development report" further points out the enormous potential of agriculture in offering employment (World Bank 2008). Despite the recognition of employment creation within the sector, youth participation in agriculture especially as farmers is declining not only in Kenya, but in other African countries alike (FAC, 2011).

Apparently, the agriculture sector is not looked at as a viable sector of employment and remains highly unattractive to the youth due to the risks, intensive nature and low profitability (FAO, 2012). Most of the youth engaged in agriculture are vulnerably employed as own account workers and contributing family workers with little or no income accruing to them. While the exodus of the youth from the agriculture sector might seem to be higher than that of the prime age group, the majority of the youth continue to derive their livelihood from agriculture. Some would argue that this movement away from agriculture is a sign of structural

[1] The standard method of collecting employment and unemployment data uses a reference period of one week. According to the 1982 ILO Resolution, a person who worked for at least one hour in the reference week is regarded as employed, while a person who was "without work", "available for work", and "actively seeking work" is counted as unemployed.

[2] Millennium Development Goals MDGs): Target 1B 'to achieve full and productive employment and decent work for all including women and young people'.

transformation of the economy; but the pattern has not brought with it the required job growth needed to absorb the increasing young labor force and as such high levels of underemployment are being experienced in the services and industrial sectors (FAO, 2010).

Despite its low growth rates and declining share in terms of contribution to Gross Domestic Product (GDP), agriculture remains the mainstay for both skilled and unskilled labor, at least in the short- and medium-term and could be a viable solution to tackling Kenya's rising youth unemployment as the industrial sector picks pace. Thus attracting and maintaining the youth in agriculture does not only mean improvements in the on-going unemployment levels but will enhance exploiting their capabilities for national development in terms of increased agricultural outputs and productivity. Achieving this would require critical understanding of the challenges faced by the youth at the production node of the agricultural vale chain and the prospects of youth engagement in agriculture which this paper attempts to do.

Youth defined

Youth[3] is often understood to be the period of adolescence during which young people make the transition from childhood to adulthood, become sexually mature and experience increasing social and economic autonomy. It can also be seen as a social category that is historically and culturally constructed (Thorsen, 2007). As such there may be social or cultural 'events' that are understood to define the transition from childhood to 'youth hood' to adulthood. In policy, youth is usually defined with reference to age brackets, although as depicted in table 1.1 below, there is little agreement as to either the upper and lower limits.

Table 1.1: Definitions of youth

Country	Definition
Ethiopia	15 – 29 years (Federal Democratic Republic of Ethiopia (FDRE) Ministry of Youth, Sports and Culture 2004) 15 – 24 years (FDRE Ministry of Labor and Social Affairs 1996)
Ghana	15 – 35 years, with the upper limit of 35 years seen as the age where people assume "full adult responsibility" (National Youth Council of Ghana (NYCG), National Youth Policy 2010).
Kenya	15 – 35 years (Government of Kenya, National Youth Policy 2002) 18 – 35 years (The Youth Enterprise Development Fund (YEDF) 2011)
Malawi	14 – 25 yeas (Government of Malawi (GoM), draft National Youth Policy 2010); however, this is in practice kept "flexible to accommodate young people under 14 years and over 25 years depending on their social and economic circumstances" (The Youth Policy 1996:2). 18 – 35 years (The Youth Enterprise Development Fund (YEDF) 2010 and Malawi Rural Development Fund MARDEF) 2010)
Senegal	15 – 35 YEARS (The Youth Development Sector Policy Letter (LPDSJ) 2004) 15 – 19 YEARS (teens); 20 – 24 years (young people of advanced age) (The National Agency of Statistics and Demography 2004)

Source: Anyidoho *et al,* 2012

The difference in national age brackets for African youths has implication for continent-wide and regional youth development programs such as the Comprehensive African Agricultural Development Programme (CAADP) and also for the magnitude of the youth population and by extension its demographics. For the purpose of this paper, the age bracket of 15-35 years will be used. Given this huge population of young people, their predominantly rural location and the fact that most are unemployed or under-employed, the imperative for sustainably engaging them in Agriculture becomes easy to comprehend. However, one must emphasize that the vision is not that young people return to the farming methods of their parents and grandparents; rather the new emphasis is on value chains, entrepreneurship and 'farming as a business'. This new emphasis has multi-dimensions which cover the whole plethora of agri-business from farm inputs to production and finally consumption. This has given rise to a new term *"agropreneurship"* which is a hybrid word coined from agriculture and entrepreneurship with full recognition of the innovation, creativity, resilience and market-orientation implicit in the concept of entrepreneurship.

Agriculture

Agriculture is an essential industry for many nations. In the western world, the share of agriculture in total Gross Domestic Product (GDP) is less than 4% but nearly 50% of the worldwide agricultural trade is conducted by these (developed) countries. This is amplified in the European Union's (EU's) low dependence on agriculture but with a large budget to subsidize agricultural products (Bertow & Schultheis, 2007). The reverse is true in developing countries where there is mostly high dependence on agriculture and a marginal budget that does not allow large spending. In the world, agriculture's share of contribution to employment is 35% compared to 86.8% in Africa according International Labor Organization (2010 cited in Wobst, 2011) and this makes agriculture the

[3] While the UN and ILO define youth as those aged 15-24, the study adopts the national definition of youth as those aged 18 - 35 years.

basic sector of Africa's economy on which majority of the people depends for their livelihood.

In Sub-Saharan Africa, the population is predominantly rural and agriculture remains the main occupation. Unfortunately, agricultural growth in sub-Saharan Africa still lags behind that of the population culminating in the continuous food importation. Thus, poverty and food insecurity remain widespread in Sub-Saharan Africa. Domestic food markets are not given the needed attention as a potential engine of agricultural growth. This is demonstrated in high national import dependence which is the major cause of food insecurity among farmers especially in Kenya and a low budget allocation (Djurfeldt & Larsson, 2004). This high or total dependence on food import is very risky considering the increasingly volatile and uncertain global market.

Youth engagement in agriculture

Youth engagement: According to The Centre of Excellence for Youth Engagement, is defined as "a meaningful and sustained participation in an activity with a focus outside the self" (as cited in Leonard, 2004, p.3). This definition of youth engagement has been widely used by many research studies and other literature as the main definition of youth engagement. Other words associated with youth engagement are inclusion, involvement, community youth development, volunteerism, and civic youth engagement (Ministry of Agriculture Animal Industry and Fisheries, 2010).

The poor state of youth participation in agricultural activities in Kenya has been a matter of great concern among agriculturists, agricultural researchers as well as administrators. This is because the present poor state of decline in agricultural production has dimmed the hope of raising the level of agricultural production to ensure sustainable food security for the ever increasing population of Kenya. One of the major setbacks of agricultural development programmes is attributed to the inability of the federal government to integrate youths into the mainstream of the numerous agricultural development programmes implemented over the years (Bertow & Schultheis. 2007). For a country to attain economic stability the agricultural sector must be vibrant and the youths encouraged imbibing farming as a noble profession (Ojediran, 1997).

Youths have the potential to overcome some of the major constraints to expanding animal production in developing countries such as pest control, feeding, genetic improvement and protection against predators because they are often more open to new ideas and practices than adult farmers. They play an important role in awareness rising on different subjects (Ijere, 1992). Mobilizing the youths for national development is a common phenomenon amongst the western and developing countries. In such countries as Great Britain, Netherlands, Denmark, Germany, the United States of America and Tanzania, the involvement of youths in agricultural production through youth programmes had contributed significantly to agricultural development and empowering the citizenry and youths to always meet the full needs and deep seated aspiration to be self sufficient in food production (FAO, 1990). Indeed, since the youths are the future of any country, it is useful to develop them into patriotic citizens, future progressive farmers and better citizens.

The youth clubs are the nurseries for them (Ajayi, 2006). The poor state of agricultural productivity and low esteem of agriculture as manifested in rural-urban migration, youths' low interest in farming, lack of industrial firms to process agricultural products and skilled labor among others has led to worsening food deficit in Africa (Djurfeldt & Larsson, 2004.). The realization of this situation led the federal government to embark on ways to revitalize the poor food situation by constructively involving youth in agriculture at secondary school level. In order to involve youth in agriculture to reap the benefit of the constructive engagement of youth in agriculture, the question relates to the following questions: What is the role of youths in agricultural development in the study area? In which community based non-formal youth agricultural educational programmes do youths participate? Which problems inhibit youth participation in agricultural activities?

1.2 Statement of the Problem

Kararach *et al*. (2011) point out that Africa is going through a youth bulge (with more people under 25 years than above 50 years of age in all its countries). Countries that depend heavily on agriculture may not readily create sufficient jobs for the youth in non-agricultural sectors in the medium term (Brooks *et al.,* (2012); Kararach *et al.,* (2011)). The rural youth in agriculture are migrating to cities/towns with little success of finding remunerative/gainful and decent employment but instead to add on the already serious unemployment. While the non-engagement of youth in agriculture is well documented, plausible and workable strategies, schemes and programs for addressing the issue are not. Youth engagement, while recognized as important tends to become a 'side issue', with experts preferring to look at mainstreaming options instead of tackling the issue directly. Yet we must perceive it with due gravity: a critical threat to future food security that must be addressed now. And in addressing it, we must ensure that youth, the key stakeholders in this process, are fully involved.

Although issues of youth employment are not new on both the international and national policy agendas, most agendas have focused on formal and non-agricultural sectors as avenues of job creation. Studies on youth employment in agriculture on the Kenyan front are scanty and most literature is basically opinion based and not empirically ascertained. Generally, studies on Kenya's agriculture do reveal that the sector is left to the

less educated; and that farmers have low access to technologies, credit and extension services (FAO, 2009. Yet this analysis is done at aggregate level and conceals policy relevant information. For instance, with such analysis, it is difficult to understand whether the youth engaged in agricultural related activities are at a disadvantage relative to their adult counterparts; and where exactly they are concentrated along the agricultural value chain. In order to address this gap, the main emphasis of this paper is on youth engagement/employment in agriculture which to a great extent is informal.

It is against this background that this study sought to analyze the underlying constraints faced by the youth in agricultural production. The paper explores whether these constraints are similar to those faced by the prime age group (aged between 31 to 59 years) and elderly (above 60 years). The postulated causes of youth employment instability in the agricultural sector are analyzed to inform the formulation of sound youth employment policies and programs. The paper further analyses a set of individual and household characteristics that determine the likelihood of youth engagement in agriculture. The findings in the paper would contribute to the current government efforts of finding more innovative ways of creating decent youth employment in particular informing the design of targeted interventions for more effective involvement of the youth in the agricultural sector.

1.3 Objectives of the Study

The study was guided by the following specific objectives:

(i) To evaluate the nature and extent of youth engagement in agriculture
(ii) To investigate the constraints to active youth engagement in the agricultural sector
(iii) To explore the strategies to improve youth involvement in agriculture

1.4 Justification for the Study

Generally, studies on Africa's agriculture do reveal that the sector is left to the less educated; and that farmers have low access to technologies, credit and extension services (Okoboi & Barungi, 2014). Yet this analysis is done at aggregate level and conceals policy relevant information. For instance, with such analysis, it is difficult to understand whether the youth engaged in agricultural related activities are at a disadvantage relative to their adult counterparts; and where exactly they are concentrated along the agricultural value chain. In order to address this gap, the main emphasis of this paper is on youth engagement/employment in agriculture which to a great extent is informal. It is against this background that this study sought to analyze the underlying constraints faced by the youth in agricultural production. The postulated causes of youth employment instability in the agricultural sector are analyzed to inform the formulation of sound youth employment policies and programs.

2.0 LITERATURE REVIEW

2.1 Introduction

Here, we dwelt on literature very relevant to the study focusing on agriculture, efforts on agricultural development and then youth and agriculture.

2.2 Youth engagement in agriculture in Africa

Available literature points to the fact that agriculture remains a key sector where the surplus unemployed youthful labor force can be employed in Africa. Agriculture currently plays a major role in the lives of the many young people and it is projected to remain so even in the next few decades (FAC, 2011). Indeed the World Bank agriculture for development report of 2008 stresses that employment creation in agriculture is likely to happen in countries with large agricultural sectors – Kenya fits this description. With improved agricultural productivity, more and better jobs are likely to be created (World Bank 2008). Not only does a modern and productive agricultural sector have the potential to overcome food insecurity, it can offer employment opportunities to young people (Vale, 2012). Decent livelihoods/employment in agriculture can be created through upgrading the existing jobs in agriculture or by creating new ones (FAO, 2010).

Most commentators tend to agree that given the high and volatile food prices that have been experienced since 2010, producing food locally by encouraging young people to join or remain in the sector could be a worthwhile investment (Brooks 2012, Vale 2012). The ever increasing demand for agricultural products both regionally and internationally creates yet another opportunity for the youth to actively engage themselves in agriculture and earn income from agricultural activities. Furthermore, most African countries are producing below the potential yields implying that more improvements are possible with increased labor and land productivity (Brooks 2012).

Despite the recognition of the potential of the agriculture sector internationally and nationally, literature points to the decline of youth interest and engagement in farming. Yet, most point out that the young people should be at the forefront of revitalizing agriculture since they tend to be more innovative (Vale 2012, FAC 2011). Indeed, if their contribution is matched with the right skills and capital, the much needed youth

dividend might be realized (Brooks, 2012). Lack of incentives and drudgery are some of the reasons why the youth are disinterested in agriculture (IFAD, 2011). FAC (2011) underscores the current limited effort by most governments to engage the youth in agriculture and target the youth specifically with a view to understanding the constraints they face and devise plausible solutions to overcome them. The specific factors affecting youth employment in agriculture have received little research attention nationally. Empirical studies to explain the relative exodus of Kenyan youth from the agricultural sector are scanty.

The current trend however is that so many youth are leaving agriculture even with the increased government support due to various reasons: Young people perceive agriculture as a profession of intense labor, not profitable and unable to support their livelihood compared to what white collar jobs offer (Youth in Farming 2011). Therefore, the decline in participation of the youth in agricultural production is linked to the rural-urban migration phenomenon. The decision to migrate involves both "push" and "pull" factors (Lewis 1954; Harris & Todaro 1970). The 'push factors' include among others - declining national resources; increasing cost of social amenities; loss of employment; and lack of opportunities for personal development. Among the listed 'pull factors' is the likelihood of better employment opportunities (Bogue 1969). However, Akpan (2010) points out that some empirical studies found that economic push factors (such as, the lack of rural credit, unemployment, and rural poverty among others) are most important; while economic pull factors (such as, perception of high wages from urban employment) are dominant. This predisposition is used to help explain why there is a declining involvement of the youth in agriculture in Kenya.

Among the farm specific characteristics, it is found that an increase in average farm-size significantly reduces the tendency to close down farms or leave agriculture (Glauben *et al.* 2003; Goetz & Debertin 2001). The justification being that large farm sizes make farming much more economically viable for the farmers by enabling them to reap economies of scale and use of better and cost-effective technologies (Sharma 2009). Adekunle *et al.* (2006) point out inadequate credit facility, lack of agricultural insurance, poor returns to agricultural investment, lack of basic farming knowledge and lack of access to tractors and other farm inputs as the major constraints hindering youth participation in agriculture.

Considering the individual characteristics, some of the authors e.g. Sharma (2007) have found higher education and greater number of skills to lead to greater probability to leave agriculture with exceptions such as Zhao (1999) and (Nnadi *et al.,* 2008). Sharma (2009) found that possession of non-farm skills seems to be an important factor in determining out-migration of Indian youth from agriculture with the odds of a farmer moving out of farming increasing with skill attainment. On the other hand, Weiss (1999) reveals several other farmer associated and significant characteristics such as gender, age, family size, succession information and attitude towards risk that explain the withdrawal of the youth out of agriculture. Indeed, a number of policy makers and academicians have expressed serious concerns over the "graying of farm sector" because of increased exit and dropping rates of entry into farming by the rural youth (Gale, 2002).

The youth with a rural background cope easily with professional and technical work in agriculture (Aphunu & Atoma, 2010). The majority (80 percent) of Ugandans live in rural areas where agriculture forms the main source of livelihood. This type of setting exposes the majority of Ugandan youths to agricultural activities. However, Adebayo *et al.* (2006) notes that despite their (youths) rich rural life, farming background and experience, rural youth's effective participation in agriculture can be curtailed in the absence of viable institutional framework for mobilizing, developing and channeling the unique abilities, experiences and aspirations of rural youths towards agriculture. In the same vein, because traditional agriculture is based on the hand hoe and other rudimentary tools, subsistence agriculture holds no interest or appeal for young people. Unimproved conditions in Ugandan agricultural have rendered agriculture unattractive to the youth (Youth in Farming, 2011). In circumstances where willingness to contribute is matched with opportunity, the youth have made a big contribution to economic growth and social development (Brooks *et al.,* 2012). Suriname (2011) further points out that the poor image of persons involved in agriculture needs to be changed and the young people are the ideal catalysts for such change given their greater propensity and willingness to adopt new ideas, concepts and technology which are all critical to changing the way agriculture is practiced and perceived. To further attract the youth into agriculture, deliberate efforts by agri-support agencies to make inputs such as good seed, fertilizers, basic mechanization and agricultural market information available and affordable should be undertaken (Mbeine, 2012).

Jong-Dae (2012) argues that the very high population growth and growing percentage of the youth in the population need not be seen as liabilities but rather as assets for transforming Ugandan agriculture. The youth possess unique capabilities (dynamism, strength, adventure, ambition), and these are assets for agriculture (Nnadi & Akwiwu 2008). Youths represent the most active segment of the population and the engine that do most productive work of the society (Adesope 1996). The youth have also been identified as constituting the major resource base for any country which wishes to embark on any meaningful agricultural and rural development projects (Onuekwusi, 2005). Youths are a formidable force in the agricultural production process, constituting a sizeable proportion of future progressive farmers and better citizens, especially in rural areas

(Aphunu & Atoma 2010). Therefore the youth present an opportunity for a sustained effort to participate in Kenya's development process because they possess greater energy, workforce and potential and have the capacity to drive positive change. Stimulating growth of employment in the agricultural sector remains paramount in countries with a large agricultural sector, and improvements in agricultural productivity can generate more and better jobs in most developing countries (World Bank, 2008).

2.3 Nature and extent of youth engagement in agriculture

Youths are very important resources for every nation especially for sustaining agricultural productivity, an important sector for the development. The youth is a stakeholder in the development process especially in view of the great assets of youth, resilience, resourcefulness and perseverance. Unfortunately, this category of people is virtually left out in policies and programmes considerations (FAO *et al.,* 2009) even though this is a critical stage for this group of people since this is a period of transition into adulthood. For instance, the unemployment rate of this group globally ranked 12.6% compared with 4.8% as the rate of the adults in 2010 according to United Nation (UN) (2011) and this has the potential of tempting most youth to embark on migration especially to urban centers and beyond since this act creates room for accessing job opportunities. This group of people is over 1.8 billion in the world today, 90% of whom live in developing countries, where they tend to make up a large proportion of the population and needs to be empowered since this is an important means of improving food security, youth livelihoods and employment.

There is insufficient youth participation in the agricultural sector (Mangal, 2009) even though this class of people is the most productive of any society as it contains people in the prime of their lives physically and mentally. Agriculture being one of the foundation pillars of any society can only function as such if this insufficient youth participation is reversed. For instance improving youth productivity in the agricultural sector and exploring effective livelihood diversification is imperative. Also, investing in the youth by promoting good habit is crucial if they are to realize their full potential. This is in view of the fact that the number and proportion of the older persons is growing faster than any other age group (UNFPA and HelpAge International, 2012).

The youth with the dynamism and flexibility has the potential as an agent of positive change and this should be ensured by development programmes. In the most adverse and risky situations, young people have an extraordinary resilience and ability to cope (UNFPA. 2006). As stakeholders, rural-based youth are actively engaged in family livelihood activities and play key support roles within their families and usually desire to be acknowledged, emotionally and financially, for such contributions and for the supporting role they played within their families, in addition to controlling the financial returns from their activities (PAFNET, 2010). Exposures of youths to modern cash economy and technologies that give them access to information from around the world are changing the perceived needs of young people, and this must be recognized especially by leaders, thus harnessing the opportunities and challenges thereof.

In Africa, 20% of the population aged between 15 and 24 years, comprising more than 20% of the population and a large majority lives in rural areas. Being 37% of the working-age population, rural youths who are attached to agriculture are disadvantaged and this is because consideration of the youths as future farmers in Africa has not received adequate attention. This category of people is the driving force behind economic prosperity in future decades, only if policies and programmes are in place to enhance their opportunities (Ashford, 2007). According to Dr Namanga Ngogi, President of Alliance for a Green Revolution in Africa (AGRA), 60% of Africa's population resides in rural areas and the large majority of this population is made up of youths, and the poor participation of this group of young people in farming is a threat to the future of agriculture and rural economic transformation on the continent (Ghana News Agency, 2012).

Involvement of youth in agricultural activities has the potential of reducing the problems of the ageing farm population and increasing youth unemployment and this calls for securing the interest and participation of young people in agriculture in the form of deliberate shift in policy, training and promotion that specially targets the youth. This category of people are not only the productive backbone of every society, the major source of ideas and innovation, but also the main market for food consumption and very often the leaders and drivers of public opinion, public policy and action (Akpan, 2010).

2.4 Constraints to youth engagement with agriculture

The theory of change behind "agropreneurship" is enticingly simple – with training in entrepreneurship, access to financial services and land millions of young people throughout rural Africa will be able to create their own jobs in agriculture. However, the factors militating against this are multi-faceted and can be grouped into two major sub-headings namely: - Exogenous – Endogenous. Endogenous factors are factors that emanate from the youths themselves as being reasons for their non-engagement with Agriculture. Strong messages emerging from primary research with young people in rural areas under the project – a four-year study across ten developing countries - and from the Future Agricultures Consortium youth theme, focusing on young people and agricultural policy processes in sub-Saharan Africa, shed light on young people's attitudes towards agriculture and the

likelihood of being able to address food security concerns via engagement of young people with the sector. These factors include:

Disinterest: Agriculture is not considered to be delivering the types of lifestyles and status that young people desire and expect. These are important dimensions of the attractiveness, or otherwise, of agriculture (invariably farming) as an occupation. Agriculture is not considered able to deliver via incomes and working conditions the kinds of lifestyles young people need, expect and desire in the 21st century, lifestyles that are ever more visible thanks to revolutionary advances in communications technology that is accessible to (almost) all, even people living in the most remote rural areas. In this respect, agriculture is regarded as a poor person's activity, going beyond living standards to people's sense of pride and self-respect. These are important dimensions of wellbeing and take us beyond narrow, one-dimensional conceptions of what it means to be poor, marginalized and disadvantaged.(ILO 2012b) If agriculture is not able to deliver either the desired living standards or the prospects for upward mobility, then the likelihood of attracting young people into or retaining them in the sector is low.

Doubt: youths do not have strong conviction that agriculture can be a lifelong career choice able to provide their needs and wants. Thus, they stay aloof and un-involved even when they are well-poised by education or experience to make a living out of it. Most young people have no interest in agriculture, not within their own visions for their future. This is often echoed by their parents. By agriculture, people invariably think of farming: backbreaking work, low input, 365 days a year for little or low return. Those who do see a future for themselves in farming believe it needs to be 'smarter', more productive and more reliable.

Negative Perception: youths perceive agriculture negatively. As something you do if you fail in school, as migrants in town or abroad, or by the side with other non-farm businesses. Or may not even be an option at all – pressure on resources, especially land scarcity, pose serious barriers to entry for young people. An apparent sense of insecurity around farming, related to unpredictable climate variability, volatile food prices, rising costs, further acts as a deterrent. Exogenous factors refer to factors that are outside the control of the youths which affect their ability and capacity to engage with Agriculture. They include the following: (i) Dearth of infrastructure Very thin body of relevant research; (b) Generalizing the youth demographic; (c) land tenure system; (d) finance/capital; (e) lack of information on agribusiness opportunities; (f) poor marketing and media relations; (g) ineffective career guidance; (h) exclusion of youth from policy-making processes; (i) disconnect between agricultural education and practice; and (j) absence of workable schemes/programmes.

Dearth of infrastructure: Rural areas are notably more deficient in physical and social infrastructure than urban areas leading to rural-urban migration with the attendant removal of youths from the rural areas where agriculture is mostly practiced. Young people are aware of lifestyles in other regions within their countries and globally. As long as urban areas offer a more attractive destination for young people desired lifestyles, more youths will continue to leave the rural areas. Availability of good roads, constant electricity, recreational facilities, internet, potable water, affordable housing and qualitative healthcare in rural areas will go a long way in retaining youths in rural areas and improve their engagement with agriculture.

Lack of research base: The first hurdle to be faced is the marked lack of evidence base on which to build policies and programmes. There is frighteningly thin research about situations in which particular groups of young people engage or do not engage in agriculture. What are the effects of gender, educational levels, household characteristics, proximity to markets, quality of natural resources, land availability, tenure regimes, and access to finance and so on?

Generalizing the youth demographic: One of the key obstacles to sustainable youths' engagement with agriculture is the generalization of the "youth" demographic by policymakers. Attitudes of young people towards agriculture vary extensively and some of the distinguishing factors are largely geographic location and land ownership. Even with campaigns to stimulate interest or raise awareness to the positive prospects of agriculture, there is a crucial need to segment the "youth" so the right message can be communicated to the right audience. The reality of the matter is youth who have been exposed to agriculture e.g. those from rural settings where subsistence farming is largely dominant will probably understand the value of agriculture and its role as a key component of food security but might feel that it is not very progressive as most people in their communities might still be subsistence farmers who are struggling to not only carry their financial needs but also progress from subsistence farming to commercial farming. On the other hand youth in urban settings might have little or no exposure to agriculture which requires a different marketing approach.

Land tenure and access: The land tenure system in most African countries makes access to land for agricultural purposes a herculean task. Agricultural is a land-based activity and youths are excluded from easy access to adequate and suitable land. This effectively dissuades them from engaging with the sector.

Lack of information on agribusiness opportunities: A lot of young people struggle to access information on agriculture and agribusiness. They are not even aware of the enormous range of opportunities obtainable in the sector. Most perceive agriculture from the production part only. Massive emphasis need to be invested in making information easily accessible in schools, libraries and local municipalities. There is also equal

demand for the information to be in languages and grammar the youth understands and to span the full range of areas where youths can engage with agribusiness.

Exclusion of youth from policy-making processes: The youth need to be part of dialogues focusing on agricultural policies. If we acknowledge their vast population dynamics surely we need to include them in the formulation and implementation of policies affecting their future. In addition whilst there is also a need to look into new policies that best reflect the current economic, social and political climate equal focus needs to be invested in the implement of these policies as in some instances a lot of policies have not seen the light of the day.

Capital, finance and collateral: Most young people do not have access to funding for agricultural purposes. They usually are not able to access finance from financial institutions because they do not possess collateral acceptable to banks and other financial institutions.

Poor marketing and media relations: Another challenge is the poor promotion of agriculture. There is a need for more coverage in print and electronic media, radio and television, local and national stations. Programming needs to be shown during prime time, if expensive at least when young people are watching. There is a need to make programming that makes agriculture look "COOL", the lifestyle that is. We also need testimonials of successful young farmers. The internet particularly social media can also be good tools to promote agriculture if used effectively. With the surge of internet access among the youths, institutions promoting agriculture need to acknowledge the youth's shift from traditional mediums especially newspapers. Nowadays most young people get their information from the internet so the internet would be one of the best platforms to market and promote agriculture to reach the youth demographic.

Ineffective career guidance: The absence of effective career guidance in schools is one huge component that derails youth participation in Agriculture. The poor promotion of agriculture in schools as a tertiary study unit is another key component that adds to the poor interest. How can this be addressed? Institutions that promote agriculture need to hold career expos in rural and urban settings to promote agriculture as a study unit, they need to make electronic and print media available to the youth.

Disconnect between agricultural education and practice: Higher education levels overall mean that young people are being educated on the agricultural systems in use locally and globally. With higher levels of education they seek jobs with higher skill levels than those of the smallholder farming activities that are available locally. But higher unemployment levels, especially among the youth, suggest that work and education are failing as key routes by which people move out of poverty, and as crucial mechanisms linking economic growth to poverty reduction. More children than ever go to school, but what they learn appears to be far removed from the skills needed in the 21st Century. This is true for agriculture sector skills as any other. African agricultural graduates often lack practical skills and competences required for successful agropreneurship.

Absence of workable and feasible schemes and programmes: All the factors identified above can perhaps be mitigated with well-conceived, inclusive and well-implemented schemes. Such schemes will be targeted at a specific segment of the youth population and thus likely to be more effective and efficient. The absence of such schemes is a major challenge (Future Agricultures Consortium, 2009).

Further, East Africa Farmers Federation (2009) observed that youth who aspire to farming as a livelihood face many obstacles – some common to all small-scale farmers, others particularly pertinent to their age group. In an East Africa regional youth consultative workshop held in Uganda (East Africa Farmers Federation, 2009) a number of issues were identified that make it difficult to attract young people into agriculture. Shortage of production resources – land, finance; Negative attitude about agriculture; Limited agricultural knowledge and skills as well as leadership and managerial skills; Limited youth groups and associations/cooperatives; Youth involvement in decision-making still low; Attraction of quick gains especially from white collar jobs; Lack of youth policies; Lack of support from elders for youth in agriculture; Lack of experience and skill sharing; Lack of market accessibility; Lack of supportive social services and infrastructure; Unwillingness of educated youth to engage in agriculture; and Absence of youth departments in national farmer federations

Wong (2009) identified the following as being the barriers to youth engagement in agriculture: Farmers clubs lack coordination, harmonization and adequate funding for these initiatives was reported; Negative perceptions, limited access to production resources and lack of institutional support and incentives towards farming; Lack of political will, accountability and support mechanisms to youth concerns in the sector was noted; Many youths perceive farmers as uneducated, unskilled and as physical laborers who receive low returns from farming when compared to other formal and informal forms of employment; Institutional issues were also identified to include; lack of a sector youth policy, failure to include agriculture among the thematic areas in the National Youth policy, as well as lack of emphasis on agriculture in the current education system; and There are also no role models in the sector and majority of the out of school youth interested in agriculture face numerous constraints in regard to access and control over the resources needed to engage in viable

agribusiness.

2.5 Strategies to improve youth involvement in agriculture

Agriculture has an image problem and its image must be made over. According to the Young Professionals Platform on Agricultural Research for Development (www.ypard.net), bringing the voice of the youth to the table, disseminating information on opportunities in agricultural development, sharing success stories of young role models in agriculture and advocating for greater youth representation and inclusion in policy development are steps in the right direction. It is also critical to establish media partnerships to provide more interesting and glamorous portrayals of agricultural careers. In addition, youths must be made aware that ICT, social media and agriculture are not mutually exclusive and can seamlessly integrate.

The second strategy is investing in education at all levels from primary to tertiary levels. School curricula should be linked to on-going policy debates and developments in the agriculture field. Reform of the agricultural curriculum must include the youths and other relevant stakeholders. More opportunities for on farm training for the youth and enterprise development training particularly in value added activities such as food processing, packaging and trade should be identified and utilized. Training in soft skills development such as communication, leadership and business skills beyond technical agricultural skills are also necessary.

Thirdly, investments should also be made in improving access to technology and information for Africa's young people. Data bases of organizations that can provide youth with information, skills and opportunities in agriculture should be developed and disseminated widely. Targeted marketing opportunities for primary and value-added agricultural products produced by young entrepreneurs should be identified and encouraged.

Fourthly, there is need to invest in collateral free micro-credit systems that can offer incentives tailored to the financial needs of young farmers. Financial institutions should develop agricultural financing packages and loan products that target the youth who are often seen as high risk clients because they have little or no collateral. Youths must be encouraged and trained in collective action processes to access finance. In addition, there is a critical need for a body of research that is cross-disciplinary and cross-functional to fill the knowledge gap. Policymakers must encourage broad studies into why and how youths can engage fully and sustainably with agriculture.

Finally, policy makers must develop and encourage the development of feasible schemes and programs which involve multi-partners, take cognizance of and address the peculiar challenges of each country and most importantly seek inputs from the very youths they are meant to assist. Drawing on my extensive experience, I have provided concept parameters of a feasible program that is certain to initiate and sustain youth engagement with agriculture in Kenya.

3.0 METHODOLOGY

3.1 Research Design

Research methodology is an important component of any study and provides the framework on which the whole process is based (Brown, 1996). Here, we describe how the study was conducted. It first and foremost gives the description of the study areas and then the key elements of the research methodology employed which are the research design, data collection strategies and instruments employed and data analysis and the techniques employed. For any investigation, the selection of an appropriate research design is crucial so as to ensure that the evidence obtained enables one to answer the initial research question. Hence, the research design that was adopted for the study is the Descriptive and Quantitative Survey Research Design (Yin, 1993; Brown, 1996). This Survey Research Design looks at small populations (samples) to discover the relative incidence, distribution, and interrelations of variables. It relied upon the questioning of a selective group (sample) of a population and analyzing data in order to answer or describe set characteristics (Saunders *et al.,* 1997).

3.2 Target Population

The study area is Busia County in Kenya. The county covers the following four sub-counties: Butula, Budalangi, Nambale and Amagoro. The people in the county are primarily of agrarian rural economy. The population of the study consisted of youths in the county. Fifty youths were selected from each of four sub-counties. A total of 200 respondents were selected through random sampling technique.

3.3 Data Collection

Questionnaires were used to collect the data. In order to determine the nature of youth role in agricultural activities, a three point Likert-type scale with responses ranging from not at all, moderate and high and scaled 1 – 3 respectively were utilize to rate statements on nature of role in agricultural activities obtained from relevant literature.

3.4 Data analysis and presentation

Karma (1999) referred to data analysis as the computation of certain measures along with searching for patterns of relationship that exist among data-groups. In analyzing data in general, Yin (1993) also states that a number of closely related operations are performed with the purpose of summarizing the data collected and organizing them in such a manner that they answer the research question. The data analysis for this study entailed the employment of both qualitative (descriptive) and quantitative methods. The analysis, however, was heavily skewed towards qualitative descriptive analysis. The data was analyzed using the Statistical Package and Service Solutions (SPSS) and adequately presented in frequency tables. This afforded the identification of trends and patterns in the interrelated variables of interest.

In the light of the above, qualitative data analysis was made during the data collection process and after the overall data was collected. This goes to support Yin's (1993) view that data analysis should not be a separate step coming after data collection but a continuous and simultaneous process. The analysis involved the employment of the constant comparative method, content analysis, sorting and tabulating, simple percentages and table's techniques. The mean responses greater or equal to 2 were regarded as important while mean responses lower than 2 were regarded as not important. Also, in order to determine the problems inhibiting youth participation in agricultural activities, a list of possible constraints to youth's participation from literature were presented to respondents. This was measured on a 3- point Likert type scale with: not at all, moderate and high and with scores of 1, 2, 3 respectively. This was analyzed by use of factor analysis technique Kaisser criterion of using factor loadings of 0.30 and above were used in naming the major problems.

4.0 RESULTS AND DISCUSSIONS

4.1 Introduction

This study was undertaken to evaluate the nature and extent of youth engagement in agriculture, to investigate the constraints to active youth engagement in the agricultural sector, and to explore the strategies to improve youth involvement in agriculture. The study focused on Busia County in Kenya. The county covers the following four sub-counties: Butula, Budalangi, Nambale and Amagoro. The people in the county are primarily of agrarian rural economy. The population of the study consisted of youths in the county. Fifty youths were selected from each of four sub-counties. A total of 200 respondents were selected through random sampling technique.

4.2 Nature and extent of engagement in agriculture

The study sought to evaluate the nature and extent of youth engagement in agriculture. The respondents were provided with various possible activities that are involved in agriculture and asked to indicate the extent to which they agreed/disagreed that the youths were engaged in the listed activities on a five-point Likert scale. Where: Strongly agree = 5; Agree = 4; Somehow agree = 3; Disagree = 2; and Strongly disagree = 1. The findings are summarized and presented in the form of mean scores as depicted in table 4.1 below.

Table 4.1: Nature and extent of engagement in agriculture

Nature and extent of engagement	Mean score	Remark
Supply of labor	2.68	*
Donation of materials	2.28	*
Initial agricultural projects	2.43	*
Giving financial support	1.52	
Being punctual at meetings	2.65	*
Use of initiative to gain outside help	2.89	*

**Important*

Source: Field Survey 2014.

Result of analysis in table 4.1 indicate that the use of initiative to gain outside help (mean score = 2.89); supply of labor (mean score = 2.68); being punctual at meetings (mean score = 2.65); initiating agricultural projects (mean score = 2.43); and donation of materials (mean score = 2.28) were important ways youths are involved in agricultural activities. This implies that most of the youths were involved in these aforementioned ways in promoting involvement in agricultural development. According to Lloyd (1965) youths get involved in agricultural activities by cooperation with extension service through attending meetings, conducting of agricultural demonstration and assisting at local agricultural farms

4.3 Constraints to youth engagement in agriculture

The respondents were provided with a listing of possible problems that may inhibit youth engagement in agriculture and asked to rank them on a three point Likert scale, where: Lack of commitment = 1; Lack of logistic support = 2; and Lack of land ownership = 3. Factor analysis was undertaken and the findings are summarized and presented in the form of rotated component matrix as depicted in table 4.2 below.

Table 4.2: Rotated component matrix of problems inhibiting

Constraint	Major problem		
	1	2	3
Inadequate publicity	0.171	0.318	0.658
Poor organization	0.358	0.562	0.339
Inadequate finance	-3.024E-02	0.744	4.049E-02
Unavailability of labor	0.690	-0.212	0.159
Many commitments	0.710	3.727E-02	-2.264E-02
Lack of cooperation	0.810	6.567E-02	-7.601E-02
Inadequate government commitment	-0.139	0.495	-4.361E-02
Lack of land ownership	-7.788E-02	-0.475	0.859
Lack of technical skills	3.575E-02	0.626	2.965E-02

Findings in table 4.1 show that the major factor that inhibit youth participation in agricultural activities as perceived by respondents. Based on the item loadings, factors 1, 2 and 3 were named lack of commitment, lack of logistic support and land insecurity respectively. The specific issues that define lack of commitment (factor 1) include poor organization (0.358), unavailability of labor (0.690), many commitments (0.710) and lack of cooperation (0.810).

On the other hand, lack of logistics was dominated by inadequate publicity (0.318), inadequate finance (0.744), poor government commitment (0.475), and lack of technical skills (0.626) while lack of land ownership was defined by lack of land ownership (0.859). A further consideration of the major problems enables us to appreciate the synergy of the items resulting in the naming of the major problem. Lack of commitment defined as organizational or individual lapses. Under this major problem, poor organization, unavailability of labor, many commitments and lack of cooperation are inherently built in the organization or individual and could be ameliorated through training of management or individuals. Lack of commitment is an endemic issue in management of project/programmes. According to Ayoola (2001), one of the problems of agricultural development projects is lack of sustained commitment by stakeholders in term of funding, support and supervision which may result into the project not been fiscally empowered, resulting in project failure.

On the other hand, lack of logistic support is closely linked to lack of commitment; lack of logistic support is defined as inability of the stakeholder to avail the project of the necessary resources to accomplish the project. Under this major problem, inadequate publicity, inadequate finance, poor government and lack of technical skills are issues that could hinder youth participation in agricultural activities.

Lack of land ownership (factor 3) was amplified by lack of land ownership (0.859).Lack of land ownership refers to lack of land to be used on a sustainable level owing to lack of ability to own it on a permanent basis. Land ownership is a deleterious problem in agricultural production and is not limited to age or gender. According to Onucheyo (1998) in order to drastically improve food production, we need to put some policies in place immediately to among others facilitate or liberalize land ownership by those interested in agricultural production.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The key conclusions arising out of the study are:

1. The youth withdrawal from agriculture is higher than that of the older cohorts although a significant proportion of the youth still derive their livelihood from agriculture. The shift from agriculture is biased towards the services sector and more prominent among the educated youth.
2. The study findings reveal that for the youth to be gainfully employed in the agriculture sector, they should be targeted depending on their aspirations and resource accessibility. A large number of young people are likely to remain on the family land holdings. Such a category have access to land, but need skills and capital to invest in high-valued agricultural enterprises
3. The youth are disenfranchised in the ownership and management of critical assets in agricultural production, especially land. Majority of the youth are using land without exclusive ownership rights. This might not only limit their investment on the land but also the access to loans secured against land title deeds. Indeed, the percentage of the youth who reported to have accessed credit in the last five years before the survey was significantly lower than their prime age counterparts. The inability by the youth to strengthen their investment position in the agricultural production processes could be a catalyst to the push factors of the youth out of agriculture. The farmer group membership is significantly lower among the youths compared to their prime age counterparts.
4. Despite the importance of agriculture in developing and emerging economy countries, agricultural statistics systems in many countries, particularly those in Africa, are among the weakest components

of national statistical systems. Specifically, most data sets are production orientated and there is a general lack of information and data on numbers of and types of farms, on agricultural and rural households and their characteristics, and a weak capacity to link the welfare and income of the different types of rural and agricultural households with agricultural production. The World Bank (2011) notes the need for coverage of agricultural statistics to be as comprehensive as possible, and calls for a more comprehensive inclusion of, for example, farm units based on size, importance, location or other criteria. This is particularly relevant to the smallholder sector where smaller plots may be under-represented in agricultural statistics.

5. While acknowledging that issues of youth and youth employment are raising up the international policy agenda, there remains a low level of policy and investment intervention that focuses explicitly on rural youth and on youth employment opportunities in the agriculture and agribusiness sectors. This needs to be rectified.

5.2 Recommendations

Based on the findings of the study, the ensuing discussions and drawing from the conclusions, the following recommendations are made:

1. Placing agriculture and youth at the centre of policy and investment. A clear message is needed that nations must feed themselves and ensure employment for their populations, including the youth. They are the future and they need to be part of agriculture. There is need to invest in youth in agriculture, with more young people having access to resources, skills, land and capital for a decent livelihood in agriculture. With increasing costs of living and high unemployment there is a risk that disenfranchised and disillusioned youths will take to the streets.
2. Youth will walk away from the drudgery of agriculture unless and until farming can become more attractive – with the associated implications on unemployment and under-employment. The imperative to develop new approaches, including new investments in agriculture that can contribute to absorption of such levels of rural and indeed urban youth and provide a decent livelihood, cannot be under-estimated. Prerequisite is that alternative visions should evolve through inclusive and informed national debate and that long-term choices be set within wider rural and national economic development and transformation. Given the short - and long-term impacts – in particular societal – associated with choices, clear elaboration of the issues in an informed public debate about the development paths open within a given country, is needed.
3. Projections of future population growth and the scope for employment generation in the nonagricultural economy, including the pace and nature of urbanization and rural-to-urban migration, will be essential elements in helping to inform stakeholders and to map out future scenarios for the evolution of farm sizes and associated farm investment. The voice of the farming and rural communities including that of the youth must be at the centre of the debate on rural transformation and the scale and nature of future farming.
4. The challenge now is to initiate action and strengthen collaborative efforts that bring together the disparate lines of thinking and policy discourse and to enhance the knowledge base on youth and farming in an era of rapid change. This must include the need to develop clear evidence based country-specific strategies for the future of small-scale farming built on inclusive debate on agricultural pathways and long-term choices. Such strategies and their associated investments must meet the wider societal aims of effective rural transformation including providing a decent livelihood and food security for this generation of youth and for future generations.
5. Given the present and anticipated future role of agriculture in employment and the sheer number of youth in rural areas today and anticipated into the future, new models to enhance decent employment and livelihood in the agriculture sector must be developed, including support to employment opportunities along the entire agri-food market chain and the associated service sectors. These models will require supportive policy and new investments including through public–private sector partnerships. The voices of farmers including the small-scale farmer, of rural youth and of the private sector must remain central to any dialogue and policy process.
6. It is clear that sustainable youth engagement with agriculture will result in positive results not limited to food security. It will also have positive impacts on unemployment, economic development, rural-urban migration, peace and national security for African countries. However, to harness these potentials, stakeholders must think beyond conceiving youths as units of labor to be placed in jobs. Effective empowerment and engagement of young people in agriculture requires the ability of the sector to address youths 'aspirations, expectations and desire for social mobility. Agriculture needs to be 'decent work' 2012) and address broader conceptions of human well-being. The image of agriculture as dirty, laborious work at low skill levels for little returns must be changed.

The strategies and the scheme highlighted in this paper can be a starting point towards recasting agriculture as an inspirational career choice for African youths.

7. There is need for collaborative efforts among all the sector players towards enhancing youth participation in agricultural. These efforts include: the use appropriate strategies to support creative and exciting agribusiness opportunities for the youth, attitude change and enhancing youths' access to resources, review of the National Youth Policy and its implementation strategy, to be followed by dissemination of these documents to all development partners. National level youth specific strategies need to be initiated to enhance youths' access to arable land and other inputs to support professional commercial farming. The success of such efforts will not only create employment opportunities for the youth, but also contribute highly towards changing agricultural production from its subsistence form to professional, agribusiness and value chain oriented systems

5.3 Suggested areas for further study

The following areas are suggested for further study:

1. Davis *et al*. (2010) suggested that younger household heads who are engaged in farming tend to derive a higher income from their agricultural activities than older household heads. This was possibly attributed to the younger generation being more open to new crops and technologies that produce higher yields and possibly being more involved in post-harvest value addition (storage, processing) or more profitable ways of marketing their produce. Further study is required to substantiate this.
2. The current study focused on responses from the youth, future studies should focus on responses from the government and other stakeholders

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