

Young Weekend Farmers in Lusaka, Zambia: Motivation and Their Role in Agriculture

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Abstract

When it comes to describing the activities of urban youth in Lusaka agriculture is not likely to be a word that will come up so often. This is changing with observable increment in numbers of urban youths trying to venture into agriculture through weekend farming. This is a group of youths who are rarely considered when the debate of how to attract youths into agriculture is discussed because the focus of agriculture policy is biased towards rural youths. Driven by the desire for extra income, passion, desire to grow their own food and hoping to retire early from formal employment they travel dozens of kilometres from Lusaka to surrounding districts to farm. With the help of hired local or family labour they farm on their personally acquired, family or rented land growing various crops and keeping livestock. Their role in agriculture development includes that of creating employment, promoting local food security, enhancing technology adoption, building the image of agriculture and as investors in small scale agriculture.

Keywords: Weekend Farming, Lusaka Urban Youth, Small Scale Farming, Youth Employment, Motivation

1. Introduction

Can we talk about the future of small farms without talking about the youth issue? Obviously not and neither can we talk about solving the problem of high youth unemployment without talking about agriculture. Small scale farming is currently the biggest employer and has the potential to remain as such (White 2012). It is crucial that youths get interested in agriculture because it is hard to imagine a small scale agriculture future without young people. Van der Ploeg refuses suggestions that the category of peasant farmer (or small scale farmer in this case) is a disappearing category of agriculture (Van der Ploeg 2009). Perhaps Van der Ploeg is right but surely a future where young people are not involved in agriculture might be short of a category (no small scale farmer). Hence there is a need to devise means to attract young people into agriculture. In developing countries like Zambia the youth and agriculture remains a field that is still under researched and going forward it will be important that more research is done in order to understand the role youths can play in agriculture development. One key group of youths missing in a lot of literature are urban youths who have found themselves with agriculture livelihoods either through urban agriculture or weekend farming which is the area of interest for this research. Even though research has been done about hobby or weekend farming in developed countries little has been done with regards to developing countries because of the use of dichotomies where if it is a rural area then it is agrarian while if it is urban then it is considered industrial.

Growing evidence suggests that the youths are uninterested in driving the agriculture machine (Muhammad-Lawal et al 2009). We need to understand this phenomenon both from the entrants (interested) and exitants (uninterested) from agriculture in order to fully understand the future of agriculture as we know it. In the context of this study a review of the literature reveals a limited amount of documentation with regards to youth in Agriculture activities in Africa. This is echoed by Aphunu and Atoma (2010) who found a similar challenge in the review of youth and agriculture documentation. One key factor that contributes to the lack of interest in agriculture by young people is the education system among other things (White 2011). The education system has bias against farming occupations and a future in farming is regarded as a failure by children taught in this education system. White gives an example of a 14 year old who when asked who should take up farming replied "*Maybe those children that don't do well in their studies must become farmers*". The other risk from the story given by White is that the best and brightest graduates from schools are not likely to have a future in agriculture and this is a negative score against agriculture because in order to have innovation of technologies it is important to have these bright students in agriculture. Over the past three decades enrolment in agriculture colleges and

universities in the UK has dropped significantly (Lobley et al 2010). This poses a challenge of framing agriculture as an attractive career choice and Lobley further suggests that more needs to be done by the government, education institutions and farming organisations in order to attract enthusiastic and well trained young farmers who will lead the farming renaissance in the era of sustainable agriculture. There is need to help young farmers with start-up capital in order to make agriculture more attractive as the set up costs are usually too high for most young people (Sotte 2003). Traditional gender roles in agriculture can also play a part in the growing perceived disinterest in agriculture of young people particularly young women. It was found that young women's lack of interest in agriculture was not based on economic grounds (low incomes) but that the negative attitudes towards a career in farming was for the most part due to patriarchal structures that placed women on the margins of agriculture production making them as an invisible workforce whose efforts are not as appreciated as their male counterparts (Gidarakou 1999).

In spite of a variety of activities targeted at getting youths to cultivate interest into agriculture the trend of lack of interest cannot be reversed in an automatic manner hence it will be a slow process (Kazakopoulos and Gidarakou, 2003). Young people in any given society are the most innovative demographic group and are likely to be the ones to find solutions to their community's challenges (Kazakopoulos and Gidarakou 2003). Hence it is no surprise when the need for young people to get involved in farming is emphasized because they are the ones who can lead in new agriculture technologies. While growing evidence suggests a youth lack of interest in agricultural there is a glimpse of hope in some cases with youth leading the way in innovation and re-invention of the way agriculture is done. There is progress in some areas such as in Nigeria where young people in some cases have shown a business and entrepreneurial orientation of agriculture or in Bolivia where some young farmers see agriculture as a secondary source of income (Proctor and Lucchesi 2012). They also note an increase in the usage of Information Communication Technologies by young people through their use of the internet and mobile phones to link to buyers. Even In the case of some youths who want to leave farming for other sectors they are still willing to hold on to their land hence in a lot of cases they are ending up as part-time farmers (Sharma 2007). However, there is need to invest more in ICT infrastructure as the current status especially in rural areas of Africa seriously minimises the potential positive impact ICTs can have on development of small scale farming (Munyua et al. 2009). Most young people in urban areas face challenges adapting to life in rural areas due to lack of infrastructure such as electricity or schools for children (Lehmann et al. 2008). So this attraction to urban life inevitably draws the youth away from agricultural areas.

This study is important because it gives an insight into an alternative way of attracting urban youth into agriculture in developing countries. Research on such an important issue has a potential to influence the way urban youths should be engaged with regards to agriculture. The significance of Youth to Agriculture is without doubt, it is for this reason that the objective of this paper seeks to shade light on the weekend farming activities of Lusaka urban youth with particular emphasis on motivation and their role in agriculture development.

2. Concept of Weekend Farming

In this research Weekend farming refers to those who are in formal employment or run businesses from where they get their main income but on weekends or holidays these individuals take part in farming outside the urban areas where they live. Gasson talks about spare time farmers or occupiers whom she states have some farm earnings from their spare time but their main income is from another source (Gasson 1986). Another term usually used interchangeably by a lot of researchers with weekend farming is hobby farming which is defined as a farming activity where the farm operator works "full-time" off the farm and he is the main farm operator at the same time because he does not employ any year round labour to work the farm when he is away (Boyd 1998). The purpose of hobby farming according to Boyd is predominantly for pleasure and not profit. Most research has focused on rural population's ability to have several sources of incomes which has led to an evolution of terminologies associated with this such as part-time farming, multiple job holding and more recently pluriactivity. Pluriactivity describes those multidimensional land holding units which are involved in other activities apart from farming but which does not necessarily bring in remuneration but the returns may be in kind such as labour exchanges (Fuller 1990).

3. Methodology

In terms of design and research methods, the research adopted an inductive and interpretive qualitative approach which involved collecting field data and analysing existing secondary data.

3.1. Study Area

The study was undertaken in Lusaka city of Zambia located in Lusaka Province. Lusaka is the capital city of Zambia and it is situated in Lusaka District which has an approximated population of 1.74 million people

(Central Statistics Office 2012). It was chosen as a location for this study because it has the second largest number of people above 15 years in formal employment just behind the Copperbelt province according to the Central Statistics Office 2008 labour survey report. Further to that Lusaka district is virtually surrounded by districts which are predominantly rural and whose economic activity is essentially agriculture such as Chibombo and Chisamba district to its north, Chongwe to the east, Kafue and Chilanga districts to the south with Mumbwa and Shibuyunji districts to the west. These districts are on average about an hour or two hours' drive from Lusaka town centre. This geographical location provides the opportunity for these young weekend farmers to venture into agriculture during their spare time while keeping hold of their day jobs or businesses in the city.

3.2. *The respondents*

22 young weekend farmers of Lusaka were purposefully selected to take part in this research. They are of various ages but they fall under the description of Youth according to the Zambian government which defines youth as those individuals between the age of 18 and 35 years (GRZ National Youth Policy 2006). It must be stated that at least three of the respondents were above the youth age but had however started farming as youths. The study also gathered information from five selected key informants who included a village leader, officers from the District Agricultural and Youth Offices in Lusaka, one from the Zambia National Farmers Union and a special interview with International Labour Organization officer in charge of Rural Youth enterprises

3.3. *Sampling procedure*

A multistage Snowballing sampling was used in selecting the respondents to the study. The researcher approached potential participants, invited their interest and informed them of the objectives and purpose of the research who after agreeing usually suggested a friend or two who are involved in similar activities. The respondents were all literate (attained tertiary education) hence self-administered questionnaires with closed and open ended questions were given to them in hard copy or electronic soft copy depending on their wish, location in the district and the probability of them having time because those who were busy to meet the researcher in person requested the questionnaire be emailed to them. This is a relevant method because there are no lists of these young weekend farmers which would enable a random sampling technique. The questionnaire was modified after carrying out a test with five respondents based on the way the respondents answered certain questions. For example the question of how average income the respondents made per month was removed as most respondents were not comfortable revealing such information.

4. **Results and Discussions**

4.1. *Demographic and Social-Economic Characteristics of Respondents*

Starting with gender division, 13 of the 22 respondents were male and the mean age being 30years with the mode age standing at 25years. With regards to marital status 14 out of 22 respondents said they were not married while the rest were married. In terms of employment status 15 were in formal employment and the rest stated that they were running various businesses. While on main source of income formal employment was listed by 13 of them as the predominant source while the rest stated business as their main source of income including two who were formally employed yet cited farming as their main source of income. All the respondents had reached a minimum of tertiary education. This makes them a distinct group of young farmers because usually the level of education is low for small scale farmers in developing countries like Zambia. Education is highly regarded as an important factor for new technology adoption among farmers so this presents a welcome opportunity for technology propagation into small scale agriculture.

Example profile of a young weekend farmer

At a young age of 29 years he has recently transitioned into full time farming after having started weekend farming about three years ago after quitting his job as a logistical officer for a Lusaka based company from which he made enough money to buy the land he is farming on now. He is married and with one child and two other young dependants. His parents are farmers but like most youths in urban Zambia when they start schooling they get less and less involved in farming.

His motivation is to be self-employed and the fact that he finds his income from the farm surpasses that of the formal job he had made the decision to become full time farmer much easier. He currently cultivates nearly 30hectares of land mostly with maize and groundnuts complimented by livestock in particular goats, sheep and chickens. Before going into full time farming 50km from Lusaka town he had managed to buy a diesel powered generator, solar panels and a water pump for his farm using mostly his income from his salary. Currently employing three workers he has successfully transitioned himself from being an employee

into an employer. The workers are given a portion of land to grow their own food and can sale the surplus for extra income. With the help of small micro finance loans he is expanding his activities on the farm and now he expects to harvest his first fish from his two fish ponds each with the capacity to hold as much as 5000 tilapia fish. The next plan is now for him to expand into daily production as his farm grows.

This farmer has even joined the local small scale farming cooperatives through which he is able to access farming inputs such as fertilisers. The young farmer is a member of the small scale farming (farming as business) Facebook group where he shares his experiences with other new farmers.

4.2. Motivation for Weekend Farming

There are various reasons usually advanced as to why these young urban farmers are involved in what perhaps can be regarded as a non-traditional activity for urban youths in Lusaka. The major ones highlighted being extra income, desire to grow their own food and that of passion for farming.

4.2.1. Extra Income as a Motivation Factor

Each respondent gave at least two to three reasons why they are involved in weekend farming but the predominant one and which received a lot of emphasis was the income motivation factor. So this is a transition from youths seeing agriculture as merely a source of food but as a source of income which to some youths once they start making higher income from the farm it would make sense for them to become full time farmers. In terms of main source of income formal employment was listed by 13 of them as the predominant source while the rest stated business as their main source of income including two who were formally employed yet cited farming as their main source of income. One young farmer had this to say;

“I am a 27 years old single banker living in Lusaka and I have been farming from Chongwe district for the past 2years. The motivation for farming is so that I can make extra income like my friends are doing. I am glad that my yields of soya beans are going up the more experience I gain. I get agriculture related information from a variety of sources such as neighbours, friends, online social media (facebook), local NGOs and agriculture extension workers. My plan is to become a full time farmer as the farm becomes fully operational.”

This desire for extra income is of course supported by the rising cost of living as figure 1 demonstrates. In the case of Zambia, formal employment no longer offers job security which only strengthens the desire for the urban residents to find alternative incomes such as in urban agriculture (Simatele, 2008). In previous research insufficient income was the primary reason for the practice of urban agriculture in Lusaka (sanyal, 1985).

4.2.2. The Desire to Grow their Own Food

There is a strong desire among these youths to grow their own food which is often coupled with a desire for green living spaces away from the noise and pollution of urban areas. This desire for growing their own food is basically down to two factors. One is that of having their own grown healthy foods which are organic especially with the growing amount of what is considered unhealthy foods like broiler chickens hence driving up the demand for organic or what is commonly referred to as village chickens. A 30year old farmer had this to say; “I decided to go into farming because I enjoy eating fresh food such as vegetables so I thought of using my free time on weekends to grow my own food”

The other factor which is perhaps even more apparent is the rising cost of living in urban areas such as Lusaka.

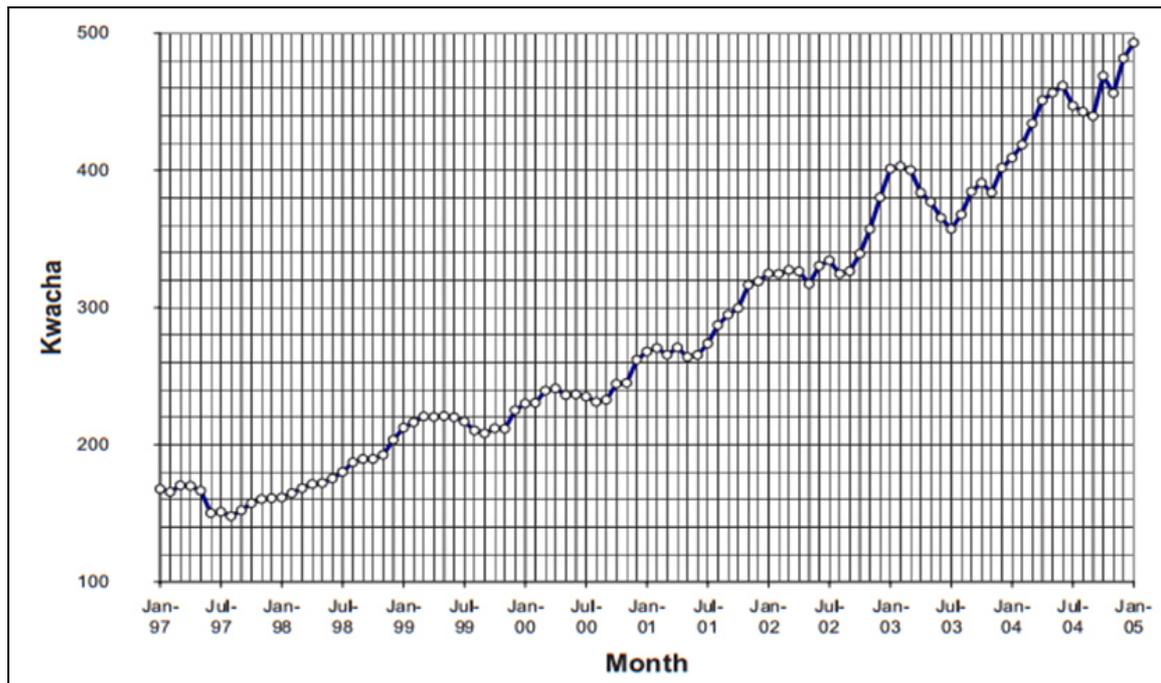


Figure 1: JCTR Basic Food Basket Cost in Kwacha for a family of 6 in Lusaka (1997-2005)

Source: JCTR Basic Food basket report, 2005

As figure 1 shows the trend for the cost of the basic food basket in Lusaka has been on the rise (As of 1st May, 2015 the conversion rate was \$1 - ZMW 7.4). This has been a big factor in the desire for urban households to grow their own food. The challenge of course is that of finding farming land for urban agriculture within Lusaka hence this movement towards the outskirts of Lusaka via weekend farming.

4.2.3. Passion for Farming

Passion was a common response among the respondents though it was predominantly secondary to income and desire to make a living out of farming. The education system challenges the ability of youths to having a passion or a desire for a future in agriculture (White 2011). There is deskilling via the education system which has bias against farming occupations and a future in farming is regarded as a failure by children taught in this education system. White gives an example of a 14 year old who when asked who should take up farming replied '*Maybe those children that don't do well in their studies must become farmers*'. So the youths who come through such an education system show a lot of resolve by being passionate about farming. A 28year old respondent had this to say; "I developed a liking for animal farms and particularly poultry birds. So I decided to try my hand at keeping free range chickens. I am motivated by my love for farm animals and how watching the animals grow is an immense pleasure."

4.3. Their Role in local Agriculture

This section seeks to analyze the role of these young weekend farmers in the agriculture development of their areas of operations.

4.3.1. Young Weekend Farmers as Employers

Due to the relative close proximity of the farms from their places of residences most of these young weekend farmers visit their farms at least once a week during the peak seasons such as during planting or harvesting but as would be expected they visit less when there is little activity on the farm. All the 22 respondents indicated they used hired labour to do the work on the farm which in most cases was seasonal though they would still maintain a caretaker during the off peak season. Even in the case where some relatives worked on the farm they were paid wages. The interaction is not hostile and the weekend farmers are well received because they are seen as employers. A lot of local people who cannot manage their own land would prefer to sale their land to these weekend farmers and in exchange they get employed on the farm as caretakers or labourers should they decide to stay there after selling their land. A key informant explained on one of the farms that a lot of rural youths would prefer to work as farm labourers than manage their own land because it was safer in terms of a regular income. They got a monthly salary instead of waiting the sale of their crop at the end of the farming season.

4.3.2. Promoting Local Food Security

Some weekend farmers allocate a portion of the land to the locals for them to grow their own food at the same time as they work on the main farming land. This helps to promote food security for benefiting households especially in the dry season which allows the locals to grow vegetables during the dry season using water from boreholes drilled by the weekend farmers or pumps that bring water from the rivers. One farmer had this to say; “During the dry season I let my employees use some of the irrigation facilities like the pump to help them irrigate their gardens where they grow vegetables.” On occasion they are a few farmers who practice shared cropping with the farm workers where they give them a portion of the farm to grow their own produce as a mode of payment.

4.3.3. Young weekend Farmers as Agents of Technology Transfers

There is also a good amount of interaction between the weekend farmers and the other local farmers as they exchange farming skills and knowledge such as one farmer who cited a preference for local traditional weeding methods to the use of chemical weed killers. The weekend farmers since they are in a learning process have obviously a lot to learn from the locals as well so this interaction is not one direction. One farmer highlighted; “The local farmers teach me more than I can teach them with regards to growing tobacco because they have more experience as it is their traditional crop. The only thing I can say they are learning from me is how to grow for the market and move from subsistence production to much larger scale market oriented production.” This type of interaction is enhanced further for those farmers who belong to the same local agriculture cooperatives through which they train each other.

Some weekend farmers with professional agriculture backgrounds also help in the spread of modern farming techniques such as those utilising conservation farming methods. There is also a technological spill over with regards to farming systems as one case demonstrated where a weekend farmer introduced a farming practice which led to higher cotton yields. This was through dry farming where land is tilled and cotton seeds are planted in advance especially during droughts or late onset of rains. Cotton planted like was reported to give higher yields compared to the one planted during the onset of the late rains. They were also introduced to using cow dung for cotton which in the past they only used it for growing maize. This in general has led to reported improved yields.

The locals in most areas have keen observation abilities and the new practices are likely to be adopted if they find production is higher. It is harder for complete technological spill over due to the lack of capital by the local small scale farmers to buy some of the farm equipment that might be found with weekend farmers such as electric pumps or small mobile tractors. Activities such as fish farming are not easy to spill over due to the financial difficulties rural farmers face. Activities such as Fish farming are important now due to the depletion of fishes in rivers and lakes hence most locals would like to give it a try if they can find the financial resources. Access to finances for mechanisation or modernization for most small scale farmers in rural areas is quiet difficult which is a limitation for technological spill over from the weekend farmers to the local farmers.

Another limitation of course is due to the low levels of literacy among the local farmers compared to the weekend farmers who have at least tertiary education so ideas such as online marketing or using social media to sale products will still remain a challenge for locals to adopt. The adoption of technology or modern methods of farming such as that of intercropping cotton is influenced by the level of education of the farmer (chijikwa, 2012). The rate of adoption was very low for those who were illiterate. This has a telling impact on how much the young weekend farmers can influence local people in using technologies they may introduce to these farming areas.

4.3.4. Young Weekend Farmers as Image Builders of Agriculture

By virtue of these being young people they are helping change the image of agriculture. For example in a research carried out in Greece 80% of young women reported that the image they have of agriculture is that of marginalised women who were an invisible workforce with men taking the lead in management of production (Gidakou 1999). However with 9 out of 22 respondents being young women what this research shows is that even young urban women are actively getting involved in weekend farming and this will have a positive impact on how young women will see agriculture. Another important image being dispelled is that of perception of agriculture as an occupation for the old and seldom for the modern young people. These weekend farmers are helping to attract others to join the sector hence changing the way agriculture is viewed especially when young doctors, engineers or economists are getting involved. One young farmer had this to say; “I got my motivation to venture into farming after I saw how successful other young people have been through small scale farming.” This in turn helps to build the image of agriculture as a business and not just a tool for day to day survival.

4.3.5. Young Weekend Farmers as Small Scale Local Direct Investors

Of course the very fact that the young weekend farmers are investing in these rural communities means that they are helping in the much needed flow of financial capital in the rural areas. This is more so for those weekend farmers investing in their family land. With 13 out of 22 respondents' reporting that formal employment was their main source of income it stands to reason that some of that money is invested in their weekend farming activities. Whereas these young weekend farmers are motivated to make extra income they have the advantage of start-up capital that the rural youths lack. This has the potential to create a natural urban to rural migration of young people who bring with them local investments to rural areas. This corresponds with the findings that indicated that 70% of emergent farmers in Zambia had attained their status via off-farm Income sources and used this as capital for purchasing of land and acquisition of farm assets (Sitko and Jayne 2012). The advantage of such small scale local direct investment would be that the profits made by these young urban weekend farmers are reinvested in the local economy which is contrary to huge foreign direct investments that externalise a lot of their profits.

5. Conclusion

It is clear that weekend farming is a possible entry point into agriculture for Lusaka urban youths. Even though passion is a highly regarded motivation factor the primary motivation factor for weekend farming in Lusaka is the opportunity for a good income. Young people are logical, if it makes economic sense they will get involved regardless of location being urban or rural. The increasing numbers of urban youths trying to venture into agribusiness is a good opportunity for Zambia to explore a new means to attract youths into agriculture. It cannot be claimed that weekend farming is the only entry point into agriculture for urban youths but it is clearly one opportunity that youths are taking up. These farmers provide a unique opportunity for government to formulate a local direct investment policy for small scale agriculture. Whereas these young weekend farmers are motivated to make extra income they have the advantage of start-up capital that the rural youths lack. This has the potential to create a natural urban to rural migration of young people who bring with them local investments to rural areas. The advantage of such a local direct investment policy would be that the profits made by these young urban weekend farmers are reinvested in the local economy which is contrary to huge foreign direct investments that externalise a lot of their profits. This is also likely to increase the number of people in formal employment seeking early retirement from formal employment as they move into agricultural livelihoods which in turn can increase employment chances for university graduates. It also provides an opportunity for the youths who have little experience in agriculture to learn the ropes and acquire the skills needed before they transition into full time farming. The other advantage weekend farming provides is that it allows a chance for a new class of youths who are educated into agriculture such as economists, accountants and engineers who of course can help improve the business side of agriculture and help the innovation process with their engineering skills.

6. Future Research Directions

This research is limited to the study of a few cases in Lusaka but it would be of great interest to do further studies by expanding the scope of the studies on a national scale. This might help to quantify the financial contribution weekend farming is making to the agriculture sector in Zambia. A systematic analysis of the impact of weekend farming in Zambia's agriculture development will be helpful in enriching the literature.

Table 1: Summary of Specific Objectives and Findings

Specific Objective	Findings
1. To identify, describe and analyse the socio-economic situation of the urban youths in the study area.	<ul style="list-style-type: none"> • Urban youth with a desire to venture into weekend agriculture. • Fairly equal gender distribution • High levels of education (tertiary level)
2. To find out why the urban youth are getting involved in weekend farming.	<ul style="list-style-type: none"> • Extra Income • Desire to grow own food • Passion for farming • Motivated by self-employment status

3. To find out the role urban youth are playing in rural agriculture development through weekend farming.
 - They create employment
 - Help in promoting local food security
 - Help in the spread of agriculture technology to rural areas through knowledge transfers
 - Building the image of agriculture
 - Inject financial capital into rural economy as local direct investors

The table above summarises the key findings against the specific objectives of the research.

References

- Aphunu, A., & Atoma, C. N. (2010). Rural Youths' Involvement in Agricultural Production In Delta Central Agricultural Zone: Challenge To Agricultural Extension Development In Delta State. *Journal of Agricultural Extension*, 14(2)
- Boyd, Stephen. (1998). *Hobby Farming: For Pleasure Or Profit?*. Statistics Canada, Agriculture Division.
- Central Statistics Office. (2012). *National Census of Housing and Population Summary Report 2010*, Lusaka.
- Central Statistics Office. (2011). *National Labour Force Survey 2008*, Lusaka.
- Chijikwa, M. (2012). *Effects Of Intercropping Systems On Incidence And Damage To Cotton By Diaparopsis Castanea Hampson (Lepidoptera: Arctiidae) In Magoye, Mazabuka District Of Zambia*, Doctoral Dissertation, University Of Zambia.
- Fuller, Anthony M. (1990). From part-time farming to pluriactivity: a decade of change in rural Europe. *Journal of rural studies*, 6(4), 361-373
- Gasson, Ruth. (1986). Part Time Farming Strategy for Survival?. *Sociologia ruralis*, 26(3-4), 364-376
- Gidakakou, Isabella. (1999). Young women's attitudes towards agriculture and women's new roles in the Greek countryside: A first approach. *Journal of Rural Studies*, 15(2), 147-158
- Government of the Republic of Zambia. (2006). *National Youth Policy*. Ministry of Youth, Sport and Child Development, Lusaka.
- Jesuit Centre for Theological Reflection. (2005). *Social Conditions Research Project: The JCTR Basic Needs Basket*, Lusaka.
- Kazakopoulos, L. & Gidakakou, I. (2003). Young women farm heads in Greek agriculture: entering farming through policy incentives. *Journal of Rural Studies*, 19(4), 397-410
- Lehmann, U., Dieleman, M. & Martineau, T. (2008). Staffing remote rural areas in middle-and low-income countries: a literature review of attraction and retention. *BMC health services research*, 8(1), 19
- Lobley, M., Baker, J.R. & Whitehead, I. (2010). Farm succession and retirement: some international comparisons. *Journal of Agriculture, Food Systems, and Community Development*, 1(1), 49-64
- Muhammad-Lawal, A., Omotosho, O.A. & Falola, A. (2009). Technical efficiency of youth participation in agriculture: A case study of the youth in agriculture programme in Ondo state, south western Nigeria. *Nigerian Journal of Agriculture, Food and Environment*, 5(1), 20-26
- Munyua, H., Adera, E. & Jensen, M. (2009). Emerging ICTs and Their Potential in Revitalizing Small-Scale Agriculture in Africa. *Agricultural information worldwide*, 2(1)
- Proctor, F. & Lucchesi, V. (2012). *Small-scale farming and youth in an era of rapid rural change*. Knowledge Programme Small Producer Agency in the Globalised Market.
- Sanyal, Bishwapriya. (1985). *Urban agriculture: who cultivates and why? A case study of Lusaka Zambia*. Food

and Nutrition Bulletin, 7(3), 15-24

Sharma, Amrita. (2007). The Changing Agricultural Demography of India Evidence from a Rural Youth Perception Survey. *International Journal of Rural Management*, 3(1), 27-41

Simatele, D.M & Binns, T. (2008). Motivation and Marginalization in African Urban Agriculture: The Case of Lusaka, Zambia. In *Urban Forum*, Springer Netherlands, 19(1), 1-21

Sitko, N.J & Jayne, T.S. (2012). The Rising Class of Emergent Farmers: An Effective Model for Achieving Agricultural Growth and Poverty Reduction in Africa?. IAPRI Working Paper No. 69, Lusaka.

Sotte, Franco. (2003). Young People, Agriculture, and Entrepreneurship: Key-Points for a Long-term Strategy. *The future of young farmers*, 24-25

Van der Ploeg, Jan Douwe. (2009). *The new peasantries: struggles for autonomy and sustainability in an era of empire and globalization*. Routledge.

White, Ben. (2012). Agriculture and the Generation Problem: Rural Youth, Employment and the Future of Farming. *IDS Bulletin*. 43, 9-19. doi: 10.1111/j.1759 5436.2012.00375.x

White, Ben. (2011). Who will own the countryside?. Valedictory Lecture 13.

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