



5th International Conference of AAAE

23 - 26 September 2016, United Nations Conference Centre,
Addis Ababa - Ethiopia

Transforming Smallholder Agriculture in Africa:
The Role of Policy and Governance



Land access and outmigration in densely populated areas of rural Kenya

Milu Muyanga, Dennis Otieno, T.S. Jayne

*Invited paper presented at the 5th International Conference of the African Association of
Agricultural Economists, September 23-26, 2016, Addis Ababa, Ethiopia*

*Copyright 2016 by [authors]. All rights reserved. Readers may make verbatim copies of this
document for non-commercial purposes by any means, provided that this copyright notice
appears on all such copies.*

Land access and outmigration in densely populated areas of rural Kenya

Milu Muyanga, Dennis Otieno, T.S. Jayne

Abstract.

One of the key drivers of youth migration of inequitable distribution of land which denies them access to work environment. Youths hold limited small land sizes even when they migrate and this limits their involvement in agriculture. Majority of the rural youths have low education levels and professional skills which hindered their ability to access decent jobs. The results of the hypothesis test revealed that there is relationship between the ages of migrants and their reasons for migration to the cities while migrant's marital status was not significantly related to their reasons for migrating motives. This study recommends that the government and non-governmental organizations should endeavour to establish skill acquisition in the devolved counties in Kenya centres in the rural areas to stem the rate of rural-urban migration.

Key words: *Youths, Migration, land, agriculture and Employment.*

Introduction

Agriculture is the primary source of livelihoods for roughly 70% of sub-Saharan Africa's population. Expansion of area under cultivation, *agricultural extensification*, has been the major source of growth in agricultural production for many decades in this region. However, the scope for continued agricultural extensification to drive agricultural production growth is increasingly limited in light of growing land scarcity for many rural people. *Agricultural intensification, or raising productivity* on existing farmland will be crucial to meet the Africa Union's recent goal of doubling agricultural productivity over the next decade. However, there is mounting evidence that at very high levels of rural population density, the well accepted positive relationship between population density and land productivity may break down (Muyanga & Jayne, 2014; Ricker-Gilbert et al., 2014; Josephson, et al., 2014). In a number of recent applied studies, agricultural intensification is found to rise with population density up to a point; beyond this threshold, rising population density is associated with sharp declines in agricultural intensification. Unsustainable forms of agricultural intensification, in the context of limited access to additional land and non-farm income earning opportunities, are likely to retard progress toward eliminating hunger and poverty in Africa.

Access to land to enable the expansion of small-scale agriculture will largely determine whether millions of rural Africans will make a decent livelihood and be able to feed themselves. Hence, even as Africa becomes progressively urbanized, smallholder agriculture will have to play an important role in providing employment for the increasing labor force especially for the youth. Increasingly, the non-farm sector must provide gainful employment for Africa's young labor force residing in the densely populated areas. However, for non-farm urban sector to successfully provide gainful employment, the young people will be required to possess education and skill sets that are well matched for salaried jobs – to earn decent livelihoods.

Land allocation priorities and public expenditure patterns will influence the rate of migration from farming to non-farm and from rural to urban areas, and will determine the extent to which Africa's rural youth seek employment as farmers. In fact, African leaders may soon perceive that political stability will depend on exploiting the potential for profitable family farming to shrink the numbers of disillusioned and unemployed youth that are already rising in much of the region as the labor force rapidly expands.

This study has two major objectives:

1. Youth access to agricultural land in Kenya. The study will examine whether formal and informal institutions are making it possible for the youth starting families to access agricultural land and to settle into farming either in or outside the regions where they were born.
2. To determine the factors influencing youth decisions regarding whether and where to migrate.
3. We will also seek to determine whether the relative importance of these factors differs depending on *where* the individual chooses to migrate. The factors associated with rural-to-urban migration may differ greatly from those associated with rural-to-rural migration.

The study investigates migration rates out of the densely populated regions, the extent to which households are investing in education and non-farm job skill sets to enable their children to smoothly transition from unsustainable agriculture to non-farm employment. Are these households preparing their children to move from agriculture altogether in the future given that there are no possibilities of obtaining additional farm land? Are the households members migrating to urban centers for non-farm jobs being *pulled* (have the requisite skills needed in the job market) or being *pushed* (migrate due to lack of land to earn livelihoods) from agriculture?

Herein, I build the research on the premise that land scarcity and labor opportunities motivate youth migration and families often expect remittances and relatively quick returns on their investment (Massey et al. 1993; Stark and Bloom 1985).

1.2 Hypotheses

Based on the different factors that drive education and labor migration, several hypotheses are tested. It is hypothesized that the decision to move is influenced by environmental and individual factors. In the environment, there are push and pull factors that determine whether an individual will move or not depending on one's perception on the value associated with moving. Personal factor in education and labor areas makes migration to become more common at older ages. It is expected that, because of the investment required, education migration will be positively associated with living in better circumstances, as indicated by timely school enrollment and by having living parents, whereas youth labor migration will be positively associated with delayed school enrollment and loss of parents. With regard to current characteristics, education migration will be associated with current urban residence, wealthier households, and higher educational attainment. In contrast, labor migration will be positively associated with living in an urban area, currently living in wealthier households, current labor force participation, and lower educational attainment.

2.1 Data source

Selected households were identified from the list of households in regions with a population density of above and below 500 persons per square kilometer for the 2007, 2010 and 2014 data sets. The individuals were followed up for interviews with information sought on Their migration status, educational and professional qualification before and after migration, their motivation to migrate, support during migration, intention to retire as an emigrant or immigrant, remittances to their parents and land ownership status.

Each household survey information included migration decision in relation to year, reason, support, , education and skills the youth had at the time of migration and after, land ownership status in terms of land size, number of parcels, location of land, mode of acquisition, land use practices, and reasons for use, retirement plans in terms of land ownership, plans for retirement, area owned and where it is owned and remittances were also covered in terms of work status, years at work, amount remitted and frequency of remittance.

Youth migrants were identified through CAPI interview where youth migrants were identified as households of origin and their migration histories obtained through in-depth interviews. We used migration histories from 500 youth to compare migration motives between the ages of 10 and 35, calculate the proportion of youth who have ever migrated for education or labor reasons, and model the log-odds of being an education or labor migrant in any particular year using discrete-time event-history analysis. We then examined the provision of support for 500 youth migrants identified by their household of origin and 300 youth migrants identified at the destination. Respondents also reported the start and end dates of each migration episode. The dates were used to calculate age and duration of each period. Episodes that last at least three months and occurred after age 10 are included in the analysis.

The socio-demographic characteristics of household members were reported by the primary household respondent. Information included gender, age, per-capita income, current activities (i.e., work, school) Remittances, retirement plan and educational attainment. To allow maximum flexibility in describing the relationship between age and migration, we treated age as categorical, and to avoid issues of

sparseness, then create seven equally spaced age groups (i.e., 10–15, 16–20, 21–25, 26–39, 31–35, 35–40, >40). According to projected age- 10–12 corresponds roughly with the end of primary school. Most 10–12 year olds would have their respective certificates available locally. Likewise, age 13–18 corresponds to lower secondary school, and age 19 and older corresponds to college level study.

3.0 Results

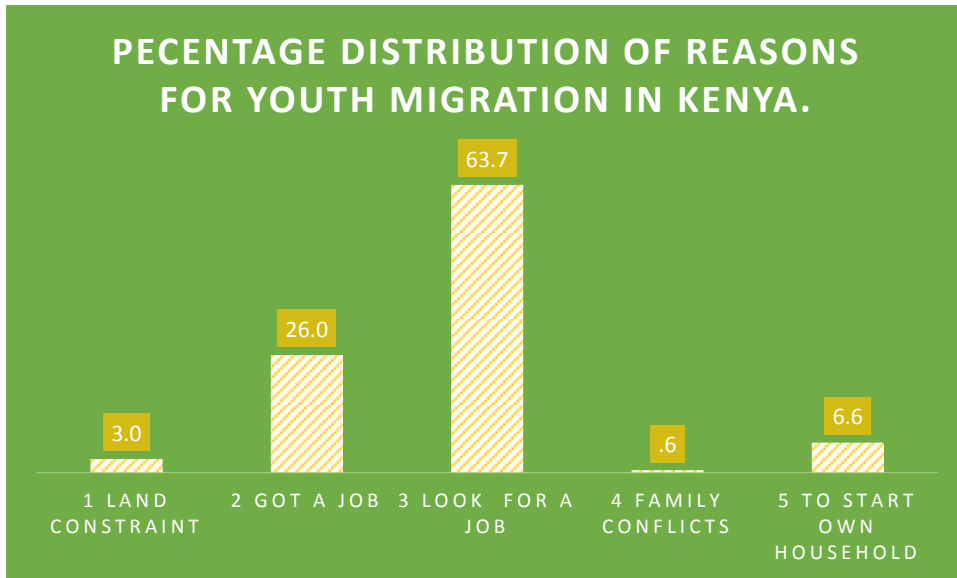


Figure 1 Source field data, 2016.

This study establishes that 90% of the youths migrating are motivated by looking for and getting a job, Figure 1. Looking for a job gives the struggling migrants an opportunity to survive, to prosper, to escape insecurity and poverty, and to move in response to availability of opportunity. Other reasons given for migration are starting a family especially for women and land constraints. A small number moves due to land conflicts

3.1 urban rural migration.

A person is considered as migrant by place of last residence, if the place in which he she is enumerated during the census is other than his/her place of immediate last residence. By capturing the latest of the migrations in cases where persons have migrated more than once, this concept would give a better picture of current migration scenario (Census, 2001). The distribution of migrants shows that Western has the highest number and Rift valley the least. In the sample, the migrant’s population are 33% from Western, 30% from Eastern 20% from Nyanza 14% from Central and 2 percent from Rift valley. Usually place of last residence is more widely used to distinguish migrants from non-migrants as it is a better indicator than place of birth. In addition to showing changing socio-economic and political conditions, as well as a sign of wide disparities in economic and social conditions between the origin and destination places (UNFPA, 1993).

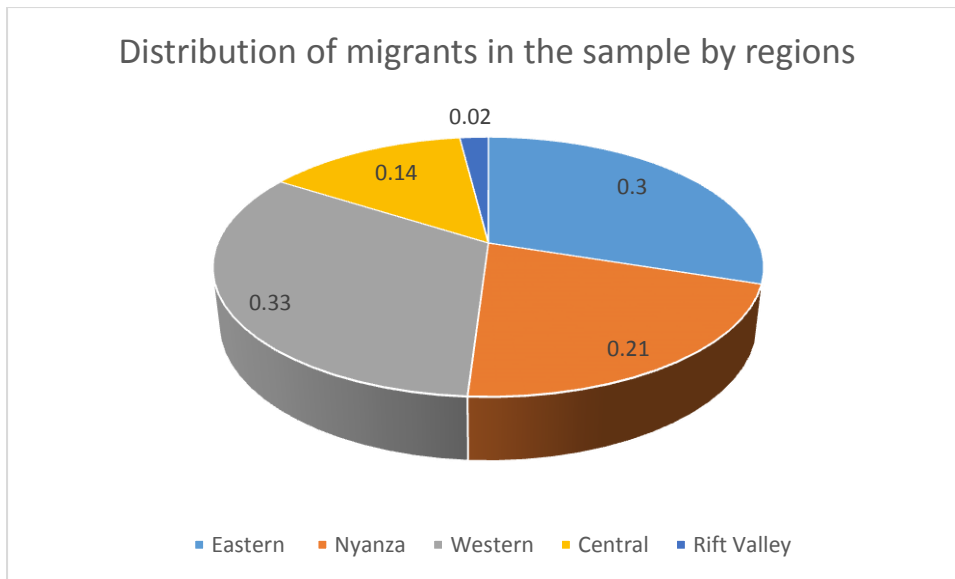


Figure 2 Distribution of migrants in the sample by regions

Nyanza has the highest number of migrants moving to the urban areas followed by Central Kenya. Rift Valley has the least number of migrants to the urban areas. The distribution could be due to the fact that these regions have limited industries that can offer employment. Proximity of central region to the industrial city of Nairobi and Machakos makes it come second overall. Migration from these two regions do not necessarily follow the pattern of population density. However, it can be explained by the fact that migration is not solely due to land but other factors as well. Figure 3 below.

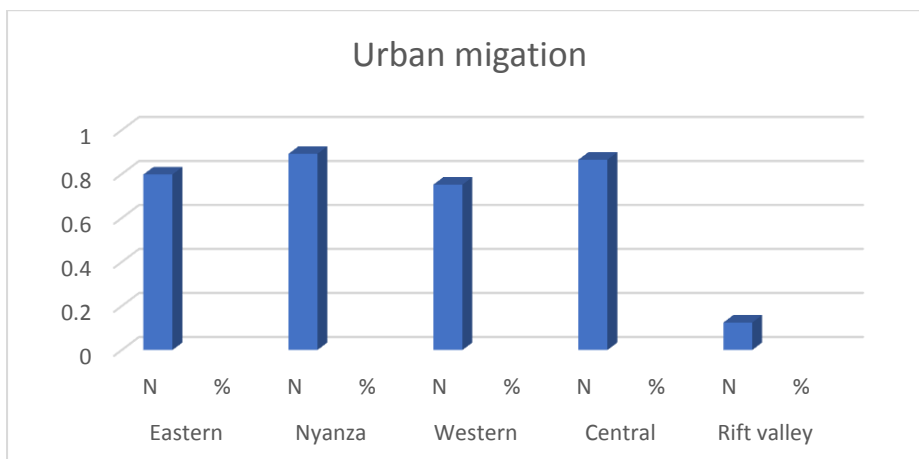


Figure 3. Urban Migration

3.2 Age and gender

Migration is age and sex selective and labor migration is highly selective. Most of the workers are in young age group and in working age group. Migration is a selective process which involves some population sub-groups more than the other.

Figure 2 shows the age distribution of the migration youths. Migration among the youths increase with increase in age. This could be in response for the need to secure some independence and prosperity. As age advances, most people seek alternative land for settling

away from their parents. The graph clearly shows this shows the need to be independent. Youths aged between 16 -25 makes up 13% of the migrating population. This age group is composed largely of those who have just completed school and are still dependants. Age group 26-. Age group 26-30 and 31-35 forms the bulk of migrating youths. The migration by age group 36-40 is a little less than the mobile age groups of and 26 -30 31-35 and >41. Migration among the youths seem to increase significantly from age 26 and above. This is the group that has completed schooling and could be busy looking for mean of livelihood.

Table 1 Age distribution by regions.

Age group	Eastern	Nyanza	Western	Central	Rift valley	Overall	
	N	N	N	N	N	N	%
16 to 20 years	1	1	4	1	0	7	2.0
21 to 25 years	11	9	12	5	2	39	11.0
26 to 30 years	27	21	29	10	0	87	24.4
31 to 35 years	24	18	24	13	3	82	23.0
36 to 40 years	20	11	22	9	1	63	17.7
41 years and older	26	12	24	14	2	78	21.9

Average migration rate is 13% with a range of 11%-14 %. Rift valley is omitted due to small number of migrants. In terms of numbers, Western has more migrants followed by Eastern and Nyanza.

The small number of migrants from Rift valley could be attribute to availability of large tracts of land unlike the densely populated Eastern and Nyanza. Eastern on the other hand shows high migration due to its proximity to the fast growing industrial towns in Mlolongo and Nairobi. The distribution also showed variation between male and females. While males could move to either towns or rural areas, majority of women moved to urban centres. The main areas of interest were Nairobi, Bungoma, Kisii, Meru and Machakos. Most female migrants with primary and secondary level education levels moved to Nairobi and Mombasa.

3.3 Household size

Migration by household size shows that housesholds with 6-10 members contributes the highest number of migrants followed by households of size 1-5 members. Large household with 16 or more members contributes the smallest number of migrants.

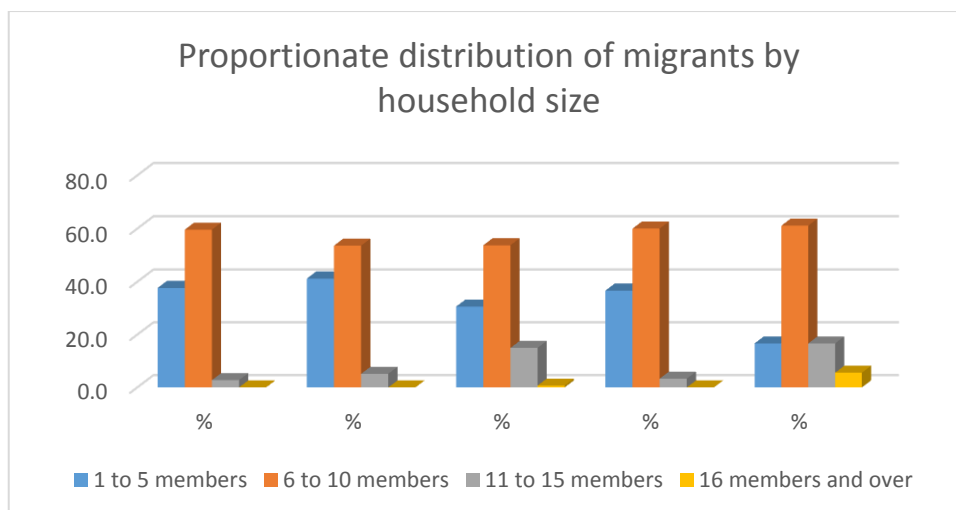


Figure 4 Proportionate distribution of migrants by household size

Nyanza lead in household's category having 1-5 members followed by Eastern with 41.2% and 37.7% respectively. Rift valley has the least number of households 16.7% in this category. In the large household category with membership numbers of 11-15 and above 16 are Rift Valley leads with 16.7% followed by western 15.7%. In the large household category Easter, Central and Nyanza have 2.7%. 3% and 5.2% respectively.

Household size distribution by region

Household size	Eastern	Nyanza	Western	Central	Rift valley
	%	%	%	%	%
1 to 5 members	37.7	41.2	30.6	36.7	16.7
6 to 10 members	59.6	53.6	53.7	60.0	61.1
11 to 15 members	2.7	5.2	15.0	3.3	16.7
16 members and over	0.0	0.0	.7	0.0	5.6

Source: MSU data, 2016.

3.4 Education

The study shows that about 60% of household heads have no college level education. The most affected areas with low level education are central and rift valley. The two areas have 3.2% and 6.2% respectively of the migration population with above secondary school level education. Eastern has the most learned people followed by Nyanza and Western with 8.4 % and 6.6% respectively of the migrants having more than secondary. The alienation of young people from agricultural knowledge and rural life skills is leaves them without any experience that might attract them to farming activities.

The Marxian theory had earlier recognized that while child labour had become an 'abomination' under capitalism, it was still considered 'progressive, sound and legitimate tendency... in any rational state of society' for 'children and juvenile persons of both sexes [to] co-operate in the great work of social production', for limited hours and while also going to school – in his vision, from the age of nine to 17. There are many cogent arguments for the importance of work (alongside education) as a part of growing up, and

various studies have found that young people who combine school and part-time work have much better chances in labour markets after leaving school.

3.5 Income

Majority of the households 90%, in the study sample earned incomes not exceeding KES 40,000. About 99% of the people in Rift valley earn <KES 40,000 compared with about 81% in Eastern. Households in Nyanza, Western and Central earning this amount are 93%, 95% and 92% respectively.

Central region has the highest number of households earning over KES 60,000 followed by Eastern with 8.6%. While Nyanza has 3.2% of households earning over KES 60,000, Rift Valley has none.

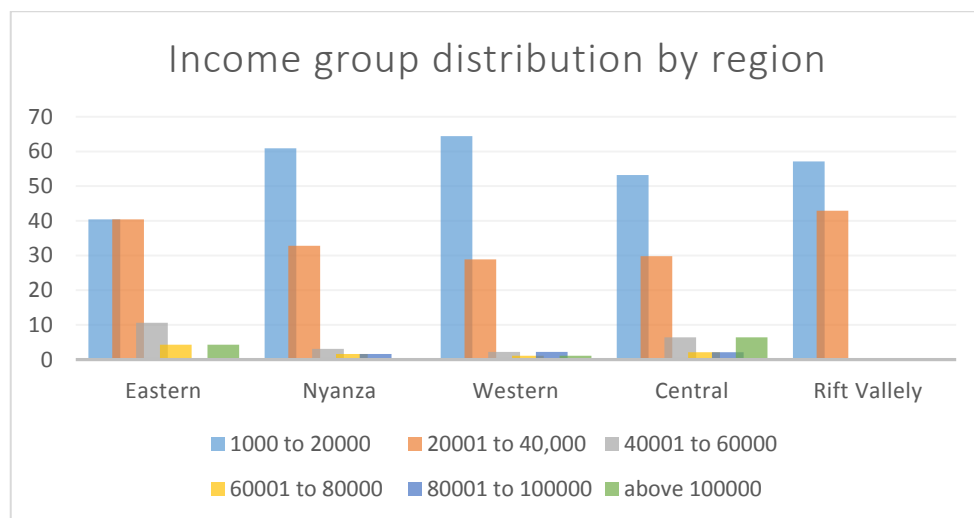


Figure 5 Income distribution by region

Source; MSU data 2016.

All the remittances for Nyanza and Rift Valley are less than KES 100,000. Remittances over KES 100,000 to households in Central, Eastern and Western regions are about 13%, 7% and 6% respectively.

Comparative percentage annual remittances (KSh)

	Eastern	Nyanza	Western	Central	Rift valley
	%	%	%	%	%
Ksh 50000	73.86	86.44	82.80	68.42	60.00
50001 to 100000	19.32	13.56	10.75	18.42	40.00
100001 to 150000	3.41	0.00	2.15	5.26	0.00
> 150000	3.41	0.00	4.30	7.89	0.00
<Ksh 100,000	93.18	100.00	93.55	86.84	100.00
>Ksh 100,000	6.82	0.00	6.45	13.16	0.00

Source: MSU data 2016.

It can be observed that regions receiving large number of migrants have higher income levels compared with others.

Correlation analysis showed that availability of networks in the settlement areas, land for cultivation employment and business ventures have a positive association with remittance. Those having no land and practical skills showed a negative association with remittances. The study further shows a negative correlation between those already with land and higher salaries. This implies that migration occurs only when one has limited land and low salary and are educated.

4.0 Discussion

One of the major resources of these migrants is the ability to access land and work to realize incomes. This can be achieved through working on the farms. With increasing population, the youths have to struggle to obtain land where they can work on. This study shows that 71% of the youths inherit land while only 29% buy. Those who migrated did not earn higher incomes. Infact on average, their incomes shows that they live below the international poverty line of US\$ 1.25. With majority of the youths earning low incomes, only about 30% can be able to buy land. The most common land size that's accessible to them is 2 acres. About 80% of the youth's farm on land not more than 2 acres and 95% of these lands are found in the same county as their home areas. Access to farming land could be through renting 5% and the rest who did not own land could only farm by accessing family land. Most of the youths 70% had not been involved in farming and 25% were reported to be away from their land in business or studies. This shows lack of involvement by the youths in farming. In terms of land use, 54% operated land not more than 1 acre, 80% operated farms not more than 2 acres and 16% operated land whose size was between 2-3 acres. Those operating over 5 acres were only 2.6%. Through renting the proportion of youths having access to land was reported as 48%. This leads to inequitable distribution particularly for those youths having no access to land. This study establishes that the only way to engage the youths in farming is to encourage the development of land markets which can be hired for use in farming by the youths. The farms are generally too small to generate sizeable incomes.

5.0 Conclusion

Youth rural urban migration was found to have a direct bearing with the socio-economics of the migrants due to number of reasons. These included migration of the energetic group of the rural residents to urban centres because of push factors like lack of job opportunities, social amenities and infrastructures in rural areas and also to make better livelihood more than that of their original place of residence. The findings of the study indicated that all the migrants were males of 18 years and above, mostly single. The rural youth relocated to urban centres to search for jobs not for better livelihood alone but also to make remittance back home in rural areas to support family members financially in order to meet the cost of food and other necessities for the welfare and to improve the socio- economic status of the household. The results of the hypothesis test revealed that there is relationship between the ages of migrants and their reasons for migration to the cities while migrant's marital status was not significantly related to their reasons for migrating to the urban centres. This study recommends that the government and nongovernmental organizations should endeavour to establish skill acquisition in the devolved counties in Kenya centres in the rural areas purposely to stem the rate of rural-urban migration.

Douglas S. Massey, Joaquin Arango, Graeme Hugo, Ali Kouaouci, Adela Pellegrino and J. Edward Taylor (1994). An Evaluation of International Migration Theory: The North American Case Population *and Development Review* Vol. 20, No. 4 (Dec., 1994), pp. 699-751

Jayne T.S. , Chamberlin J. and Headey D.D. (2014). Land pressures, the evolution of farming systems, and development strategies in Africa: A synthesis Elsevier pg 1-17.

Headey, D. and Jayne T.S (2014). Adaptation to land constraints: Is Africa different? Food Policy, 48 (2014) <http://dx.doi.org/10.1016/j.foodpol.2014.05.005>

Muyanga and Jayne, 2014 M. Muyanga, T.S. Jayne (2014). Effects of rising rural population density on smallholder agriculture in Kenya Food Policy, 48 (2014) <http://dx.doi.org/10.1016/j.foodpol.2014.03.001>

Ricker-Gilbert, Jacob, Jumbe, Charles, Chamberlin, Jordan.,(2014). The impact of increasing population density on African agriculture and livelihoods: the case of Malawi. Food Policy 48.

Stark O. and Bloom D.E (2001) New Economics of labour migration. Frontiers of demographic economics pg 1-6