

Access to agricultural land, youth migration and livelihoods in Tanzania

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Introduction

- Majority of the poor in sub-Saharan Africa (SSA) engaged in agriculture
- Source of livelihood to over 80 percent of the population in SSA
- Youth account for a significant proportion of the rural population which depend on agriculture
- Access to land is fundamental for youths in SSA to engage in agriculture

Introduction (cont'd)

- High population growth in SSA countries is increasingly reducing access to land for youths
- A large proportion of the population is young people, suggesting that the number of youths will continue to grow in the next decade
- Out migration is one way of coping with increasing land constraints
- This study investigates the effects of land constraints among rural youths on youth migration in Tanzania
- **Study hypothesis:** Inadequate access to agricultural land induces young people to migrate out for alternative livelihood opportunities

Youth Access to Agricultural Land in Tanzania

- With 44 million ha classified as arable land suitable for agriculture, Tanzania is considered to be a land abundant country – the rural households that face land access difficulties
- Youth land access is shaped by population pressure, land tenure system and improvement in life expectancy
- High population growth – from 11 million in 1963 to over 45 million in 2012
- Population density from 11 persons per square kilometer in 1963 to 62 persons per square kilometer in 2016
- Declining land holdings as population density increases, reducing access to land for youth who depend on land inheritance
- More than 50% of in highly populated area such as Kilimanjaro, Uluguru and the Usambara mountains own less than one hectare of land – uneconomical to continue with sub-division

Youth Access to Agricultural Land in Tanzania (Cont'd)

- Legal framework (1999 Village Land Act) provides an opportunity to access land in the village through allocation by village council and/or inheritance under customary right of occupancy
- Land to be allocated by village council is limited in areas with severe land constraints (highly populated areas)
- Youth access to land through inheritance is shaped by some customary norms, traditions and practices that lead unequal access among youth
- Increase in life expectancy (About 51 years in 1980 to 65 years in 2014) – youth have to wait for many years before inheriting their share of parent's land

Youth Migration in Tanzania

- Recent census based analysis provides evidence that most of migration is from rural to urban areas, either within the same region or to another region in the country
- There is also evidence of migration to the rural areas of in the same region or other regions
- Factors that compel youth to migrate from rural areas are categorized into pull and push factors
- Factors that pull youth to urban are include *the chances to find an employment and the many ways to earn money, chances to make have own business, good social services, water supply, electricity supply and good communication, roads, telecommunication system*
- Factors that push youth out of rural areas include *poor earnings from farming, limited income earning activities, limited opportunities of higher education, land scarcity and family an relatives related movements*

Conceptual Framework

- In literature, the push factors are divided into root causes of out-migration (context-linked factors), household level factors and individual level factors
- The root causes of out-migration include but not limited to *rural poverty, food insecurity, increased competition for natural resources and environmental degradation, limited income generating activities, poor infrastructure and social services*
- Household level factors: *characteristics of household head, household size, household composition, asset base of the household and family and community networks*
- Individual level factors: *age, gender, education, ethnicity, employment status, aspirations of the potential migrant*
- Most of the studies have considered household and individual level factors
- Our study considers household level, individual level and some context linked factors

The Model

- $E_i^* = \alpha + \beta C_i + \gamma H_i + \delta Y_i + \mu_i$
- Where E_i^* denotes the prospective utility from out-migration accruing to youth i who was at his/her resident rural area in 2008/09.
- However, the variable E_i^* is a latent variable which is not observable in the data - what is observed is the decision to migrate in subsequent years with the following rule:

$$E_i = 1 \text{ if } E_i^* \geq 0 \text{ and } E_i = 0 \text{ if } E_i^* < 0$$

Where E_i is a binary variable that equals one if the youth was at his/her resident rural area in 2008/09 but unavailable (migrated) in subsequent years and zero otherwise, C_i is a vector of context-linked factors, H_i is a vector of household level factors where the youth resided in 2008/09, Y_i is a vector of variables representing individual youth characteristics and μ_i is the error term.

Empirical Model

- We applied a probit regression model using 2008/09, 2010/11 and 2012/13 national panel data to investigate whether limited access to agricultural induce youths to migrate out of rural areas
- Analysis covered 2038 households and 10,964 members of households
- Model Variables:
 - Dependent variable: binary variable =1 if household member aged 15-25 years was available in 2008 but unavailable (migrated) in subsequent years

Empirical Model (Cont'd)

- Explanatory variables:
 - Population density
 - Distance to motorable road
 - Land holding size of parent
 - Assets other than land(livestock, tractor, ox-plough, cell phone)
 - Land productivity
 - Head of the household characteristics
 - Number of male and female children aged 15-25 years
 - Number of spouses of the household head
 - Number of brothers and sisters to the household head
 - Characteristics of household members aged 15-25 years (age, gender, education level)

Results of the Probit model of migration decisions of household members aged 15 -25 years

Explanatory Variable	Marginal Effect
Gender of the member (1=male)	0.0027
Age of the member (years)	0.0528***
Square of age of the member (years)	-0.0013***
<i>Member's education attainment (base: no education:)</i>	
_primary education	-0.0098**
_secondary education	-0.0078
_post secondary	0.0556*
Net productivity per ha harvested ('millionTSh)	-0.0020*
Land holding (ha)	-0.0001**
Matrilineal districts dummy	0.0197
Landholding*matrilineal districts	-0.0002
<i>Age of the household head (base: under 45yrs)</i>	
_45-55 years	0.0060
_55-65 years	0.0193***
_over 65 years	0.0246***

Explanatory Variable	Marginal Effect
Head of hh sex (1=male)	-0.0008
Head of hh education attainment (years)	-0.0004
# male between age of 15-20	-0.0007
# female between age of 15-20	-0.0016
# brothers and sisters to hh head	0.0047**
# spouses to the hh head	0.0019
Km from land to motorable road	0.0007***
# livestock	0.0001**
own tractor (1=yes)	0.0219
own plough (1=yes)	-0.0093**
own cell phone (1=yes)	0.0010
<i>Population density dummies (base: 0-50 persons/km2):</i>	
_50-100	-0.0008
_100-200	0.0027
_200-300	0.0028
_300-500	0.0072
_500-1000	0.0121*
_>1000	0.0294***

Key results

- **Population density:** Out migration of young household members is more prevalent in high densely population areas
- **Land holding of parents:** Out migration of young household members declines with increase in land holding of parent
- **Crop land productivity:** The higher the net productivity per unit of land the less the probability of young household members to migrate
- **Distance to motarable road:** Distance to motorable road as measure of market access and remoteness increases out migration of young people

Other results

- Members' education attainment increases probability of a member to migrate
- Age of the household head increases out migration young members of the household
- Number of brothers and sisters to household head induce young members of the household to migrate
- Ownership of livestock in a household increases out migration of young members of the household
- Ownership of a plough in a household reduces out migration of young members of the household

Conclusions and Policy Recommendations

- While some people associate migration of youth out of rural areas with the behavior of disliking rural life or engaged in farming, the results of this study suggest that they are fundamentally against being poor
- The youth's decision to migrate or not are affected by conditions that affect their ability to earn a decent livelihood in their home areas.
- Incentives to motivate youths to engage in profitable agriculture will change their migration behavior

Conclusion and Policy Recommendations (Cont'd)

- Agricultural policy and strategies should strive to improve agricultural productivity and access to markets.
- Productivity can be improved through promoting use of improved technologies including improved seeds, fertilizer, irrigation and other inputs (intensification).
- Access to markets can be improved through up-scaling the current efforts made by the government to improve rural feeder roads in rural areas to ease transportation of agricultural produce to markets outside the rural areas.
- The above should go hand in hand with promotion of value addition to agricultural produce through partnership with the private sector. Value addition in the rural areas is possible with the on-going investments in rural electrification.

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