Integrating Food and Nutrition Security into Economic Transformation and Industrialization Agenda: How can agriculture be the driver rather than follower of economic transformation in Tanzania?
Access to productive land and youth livelihoods: Factors Influencing Youth Decision to Exit From Farming and Implications for Industrial Development

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Introduction

• Youth migration as an alternative livelihood strategy induced by lack of access to productive land in sub-Saharan Africa - strategy - gap always forgotten in research

Factors influencing youth’s decision to exit (migrate) from farming:

• Probit regression model using the 2008/09 to 2012/13 national panel survey data

• Descriptive statistics based on 1,200 households in 8 districts of Tanzania Mainland
The probit regression model

Analysis done at individual household member level involving youth aged 15-35 years

Model Variables:
- Dependent variable: binary variable =1 if youth aged 15-25 years was faring in 2008 but decided to exit from farming (migrated) in subsequent years
- Independent (explanatory) variables:
  - individual youth characteristics
  - household level factors
  - community level factors or locational context
Household head characteristics
- Household age
- Household head sex
- Household education
- Number of year of household head in current residence

Other household characteristics
- Number of brothers and sisters to household head
- Number of male youth between 15-30 years
- Number of female youth between 15 to 30 years
- Land holding size
- Number of livestock
- Own tractor
- Own plough
- Own TV
- Own cell phone
- Land productivity
- Labour productivity

Community Level Factors or Locational Context
- Distance from homestead to motorable road
- Distance from homestead to market
- Annual mean temperature
- Annual precipitation
- Slope
- Population density
Access to land by youth aged 15 -35 years

- On average 20% of the sample households reported ownership of land by their children.

- Ownership varied, 8% in Kilombero district to 30% in Mkuranga district.

- Inheritance major method of land acquisition among youth, accounting for approximately 56% of the households.

- Male youth to be favored in land inheritance across all sample districts.

- Purchasing, community allocation and government allocation account for 25%, 8% and 11% of the sample households respectively.

Results of the descriptive analysis
Youth migration

- Youth aged 15-35 years account for approximately 71% of the migrants reported of which 57% were female and 43% were male

- Most (61.6%) migrated to rural areas within and outside their locality

- Migration to urban areas in the country and outside the country account for 37.8% and 0.6% respectively

- Reasons for migration
Results of the probit regression analysis

Factors that significantly influence youth’s decision to exit from farming summarized in Table 1.

Key results are:
- Exit from farming (outmigration) among youth is more prevalent in high densely population areas
- The probability of youth decision to exit from farming declines with increase in the land holding of parent
- The higher the net productivity per unit of land the less the probability of youth decision to exit from farming
- Male youth more likely to exit from farming than female youth if land productivity declines
- The longer the distance to motorable road as measure of remoteness the higher the probability of youth decision to exit from farming
Results of probit regression analysis for household level factor

Table 1: Factors influencing youth decision to exit from farming

<table>
<thead>
<tr>
<th>Explanatory Variable</th>
<th>All</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Characteristics of individual youth</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of the youth (years)</td>
<td>-0.01***</td>
<td>-0.01***</td>
<td>-0.01**</td>
</tr>
<tr>
<td>Post-secondary education</td>
<td>0.39***</td>
<td>0.24</td>
<td>0.47**</td>
</tr>
<tr>
<td><strong>Household head characteristic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of household head (years)</td>
<td>0.23***</td>
<td>0.22***</td>
<td>0.15**</td>
</tr>
<tr>
<td>Household head sex (1=male)</td>
<td>-0.75</td>
<td>0.03*</td>
<td>-0.03*</td>
</tr>
<tr>
<td>Secondary education of household head</td>
<td>-0.01</td>
<td>-0.04*</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Other household characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of brothers and sisters to household head</td>
<td>0.02**</td>
<td>0.03***</td>
<td>0.01</td>
</tr>
<tr>
<td>Land holding (ha)</td>
<td>-0.01**</td>
<td>-0.01**</td>
<td>-0.01**</td>
</tr>
<tr>
<td>Land productivity per ha harvested (‘million TZS’)</td>
<td>-0.04***</td>
<td>-0.06**</td>
<td>-0.03**</td>
</tr>
<tr>
<td>Labour productivity per resident adult (‘million TZS’)</td>
<td>-0.14**</td>
<td>-0.14*</td>
<td>-0.14</td>
</tr>
<tr>
<td>Number livestock (TLU)</td>
<td>0.35**</td>
<td>0.37**</td>
<td>0.43**</td>
</tr>
<tr>
<td>Own tractor (1=yes)</td>
<td>0.54**</td>
<td>0.81***</td>
<td>0.00***</td>
</tr>
</tbody>
</table>

Note: ***, **, *: significant at 1%, 5%, and 10% levels respectively.
Table 1 (Continued)

<table>
<thead>
<tr>
<th>Explanatory Variable</th>
<th>All</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community level factors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance from homestead to motorable road (km)</td>
<td>0.34**</td>
<td>-0.02</td>
<td>0.52**</td>
</tr>
<tr>
<td>Annual precipitation (mm)</td>
<td>-0.04*</td>
<td>-0.01</td>
<td>-0.05</td>
</tr>
<tr>
<td>Population density dummies (base: 0-50 persons/km²):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-100</td>
<td>-0.01</td>
<td>-0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>100-200</td>
<td>0.02</td>
<td>-0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>200-300</td>
<td>-0.01</td>
<td>-0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>300-500</td>
<td>0.01</td>
<td>0.05*</td>
<td>-0.04*</td>
</tr>
<tr>
<td>500-1000</td>
<td>0.02</td>
<td>0.07*</td>
<td>-0.02</td>
</tr>
<tr>
<td>&gt;1000</td>
<td>0.07**</td>
<td>0.08**</td>
<td>0.07*</td>
</tr>
</tbody>
</table>

Note: ***, **, *: significant at 1%, 5%, and 10% levels respectively.
Conclusions and Policy Implications

• Are you youth decision to exit from farming associated with disliking farming/rural life?

➢ They are fundamentally against being poor

➢ Their decision influenced by conditions that affect their ability to earn a decent livelihood from farming
Policy Implications

• Incentives to motivate youth to engage in productive farming

• Agricultural policy and strategies to improve productivity in farming and improving market access

  ➢ Improving productivity
    - increasing access and promoting use of improved technologies including improved seeds, fertilizer, irrigation and other inputs (intensification)
    - improved farm husbandry practices – extension advice is crucial

  ➢ Improving access to markets- up-scaling the current efforts made by the government to improve feeder roads.
Policy Implications (Cont’d)

• The above should go hand in hand with
  ➢ promotion of value addition to absorb surplus labor

➢ Value addition - is possible with the on-going investments under REA.

• The surplus labor released from farming - absorbed in industries other than agro-based industries
• Sunflower production and processing at Nyamongo village, Tarime District-Tanzania

THANK YOU