

# Land Access and Youth Livelihood Opportunities in Southern Ethiopia

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# Introduction-1

- Ethiopia's population is predominantly young and rural
  - 73% younger than 30 years
  - 84% live in rural areas
- Do youth in rural areas have access to land?
- What kind of land access do they have?
- Are there gender differences in land access?
- How does their land access affect their livelihood opportunities and choices?



## Introduction -2

- This study examine these issues in detail using field survey from Southern Ethiopia
- The study also explore whether youth in rural areas cooperate, trust each other and share their resources?
  - Implication for policies involving land co-management, organizing youth cooperatives; predict private and group responses
  - We use social experiment to study these behaviors
- Southern Ethiopia: land scarcity critical
  - Densely populated
  - Already small farm size, particularly SNNP
  - High population growth



## Background-The Law

*Any citizen of the country who is 18 years of age or above and wants to engage in agriculture for a living shall have the right to use rural land...(Section 5, No. 1-A)*

*Women who want to engage in agriculture shall have the right to get and use rural land (Section 5, No. 1-C)*

*Any person who is member of a peasant farmer, Semi pastoralist and pastoralist family having the right to use rural land may get rural land from his family by donation, inheritance or from the competent authority (Section 5, NO. 2)*

### *How from authorities*

- Redistribution of farmlands whose holders are deceased with no heirs or left locality on own wish(Section 9,No.1)*
- Redistribution of existing farm land upon wish and resolution of residents (Section 9, No. 3)*



## Background-Basic statistics

### Population trend 1984-2007 based on census data

	Census year		
	1984	1994	2007
Population (millions)	42.6	53.5	73.8
Growth rate	3.1	2.9	2.6
Density (population/km <sup>2</sup> )	34	48.6	67.1
Percent urban	11.4	13.7	16.1

Population projection for 2013 is 86.6million





# Data

- Data source
  - Youth and parent survey in February-March 2013 (additional survey data from 2007 and 2012)
  - Field experiment with youth subjects Feb.-March 2013
  - Focus group discussion with youth and those working with youth in March-April 2012
- Survey sites and sample
  - 17 villages in two regions in Southern Ethiopia
  - West Arsi, Sidama, Wollaita
  - 610 households selected through stratified random sampling , 598 youth (from 266 of the households)

# Agricultural land holding in Ethiopia

## 1. National statistics

### Household land holding and household size from national level survey

	Average land holdings per household	Household size	Proportion of households with land holdings <1 hectare
Ethiopia	1.22	N.A	0.57
Oromia	1.6	5.49	0.46
SNNP	0.7	5.33	0.78

Source: Compiled from the 2011/2012 Agricultural Sample Survey report (CSA, 2012)

### Proportion of young land holders in 2012

	Male	Female	All
Ethiopia	0.18	0.03	0.21
Oromia	0.22	0.03	0.24
SNNP	0.16	0.03	0.19

Source: Compiled from the 2011/2012 Agricultural Sample Survey report (CSA, 2012)



# Agricultural land holding in Ethiopia

## 2. Sample statistics

### Household land holding and demographic character in the sample

	Mean	Median	N
Household land holding (in hectares)	0.86	0.50	609
Household size (current members)	7.05	7.00	610
Number of own children (of all age) currently living with the household	4.88	5.00	610
Number of own children ( age 15-29 years) living with the household	1.72	2.00	610
Number of own children alive (including currently non-resident)	6.70	6.00	597





# Agricultural land holding in Ethiopia

## 2. Sample statistics

### **Proportion young holders in the sample (in 2007)**

Zone	mean
Oromia	0.25
Sidama	0.07
Wolaita	0.05
Total	0.15



## Land Access options for the youth

- Land ***cannot*** be bought or sold in Ethiopia
- The only long-term access
  - Authorities allocating land to landless
  - Inheritance from parents or other relatives

### Land allocation from authorities

- Historically
  - Land allocated from surplus land
  - When no more surplus land, reallocation from relatively land abundant to landless (periodic redistribution)
- Now redistribution abolished
- Only 9 youth in our sample obtained land from authorities



## Inheritance from parents

District	Bequeathed to children in the past (%)	Will bequeath to children in the future while household head still alive(%)	How much (Median share)	Current average farm size (hectares)	Total
Shashemene	46	90	0.50	1.15	102
Arsi Negelle	47	82	0.45	1.38	145
Wondo Genet	33	87	0.50	0.55	122
Wollaita	24	90	0.50	0.52	197
Wondo Oromia	30	93	0.50	0.84	40
All	35	88	0.5	0.86	603



## When to inherit?

### Appropriate time to transfer land from parents to youth

	Parents' opinion		Youth's opinion	
	Freq.	Percent	Freq.	Percent
At marriage	340	55.9	277	46.3
When both parents die	60	9.9	24	4.0
When the father dies	6	1.0	6	1.0
When either parent die	17	2.8	11	1.8
When son/daughter become an adult	153	25.2	210	35.1
After son/daughter finish high school and is unemployed	23	3.8	64	10.7
Other	9	1.5	6	1.0
Sample	608	100	598	100



## Is there enough land to inherit ?

	SNNP		Oromia		Total	
	Mean (hectares)	N	Mean (hectares)	N	Mean (hectares)	N
Farm size/household size	0.09	322	0.20	287	0.14	609
Farm size/Own children living with the household	0.14	298	0.30	278	0.22	576
Landholding/Male offspring living with the household	0.25	280	0.53	266	0.39	546

*“Where rural land is transferred by succession, it shall be made in such a way that the size of the land to be transferred is not less than the minimum size holding”* (Proclamation No. 456/2005. Section 11-2)

- 0.5 hectares for rain-fed agriculture
- 0.25 for irrigated land



## How to share small land among children -Options

- Land bequeathed to all children and co-managed as a unit
  - Solves minimum size problem but not food security issue
- Parents bequeath only to some of the children (of their choice)
  - Possibility for conflict among siblings or with parents
- Some of the inheritors give up their entitlement and look for other livelihood or land access options



## Proportion of youth that expect to inherit land

District	male youth	Female youth	All	land value EB '000
Shashemene	0.86	0.47	0.70	1344
Arsi Negelle	0.78	0.52	0.68	448
Wondo Genet	0.86	0.56	0.71	848
Wollaita	0.47	0.11	0.31	269
Wondo Oromia	0.75	0.29	0.50	246
All households	<b>0.74</b>	<b>0.41</b>	<b>0.60</b>	<b>448</b>



## Do parents intend to bequeath land to daughters?

District	Yes, %	N
Shashemene	34.7	101
Arsi Negelle	43.8	144
Wondo Genet	30.9	123
Wollaita	6.1	198
Wondo Oromia	42.5	40
All households	<b>27.2</b>	606





## Youth Land Access summary

- Cannot buy land
- Authorities
  - Do not have much surplus land to allocate
  - Re-distribution halted because it increase tenure insecurity and undermine investment on land
- Inheritance from parents possible but size of land that can be inherited by youth often not enough for sustainable livelihood (average size 0.22 hectares)
  - Radical change in production system may make a difference
- Possible to obtain short-term access through land rent



## Youth livelihood choices and existing opportunities

Livelihood Choice	Freq.	Percent
Farming	56	9.4
Non-farm wage employment	17	2.9
Non-farm self-employment and business	177	29.9
Urban salaried employment	343	57.8
Total	593	100



# Factors associated with livelihood choice

Base outcome (reference livelihood) farming	Off-farm wage	Off-farm self	Urban salaried
	employment	employment	employment
	Coeff.	and business	Coeff.
		Coeff.	Coeff.
Female youth	0.087	0.491	<b>0.950**</b>
Age	-0.144	-0.031	-0.1
Education (years)	<b>0.362*</b>	<b>0.116*</b>	<b>0.274****</b>
Currently student	1.303	0.131	<b>2.298****</b>
First born	<b>-15.475****</b>	-0.283	-0.087
Married	-0.65	-0.459	<b>-1.159**</b>
Farm size	<b>-7.559*</b>	<b>-2.616***</b>	<b>-2.703***</b>
Age of household head	-0.005	0.007	0.013
Education of household head(years)	0.072	<b>-0.112*</b>	-0.054
Number of brother and sisters	0.028	0.037	0.051
Livestock holding (tlu)	-0.069	-0.012	0.002
Value of asset owned	<b>-1.018**</b>	0.311	0.119
Number of sibling migrated	-0.362	-0.112	-0.175
Number of siblings in business	-0.173	<b>0.739**</b>	0.568
Number of sibling in nonfarm employment	0.436	0.054	-0.088
Arsi Negelle	1.825	<b>1.088**</b>	<b>1.654***</b>
Wondo Genet	<b>-14.682****</b>	0.448	0.349
Wollaita	<b>2.408**</b>	<b>1.701***</b>	<b>2.030***</b>
Wondo-Oromia	<b>3.618*</b>	0.527	<b>1.598**</b>
Constant	6.141	-1.929	-1.884
Number of Obs.		535	



## Non-farm livelihood opportunities in rural areas

- We haven't seen much non-farm wage employment in these rural areas
- Some youth engage in self-employment activities such as transportation, *chat* trade ...
- We have met college graduates who came back home to depend on their parents
- Our focus group discussion reveal that the observed unemployment/lack of livelihood among highschool and college graduate impacted motivation of current students

### *Repeated statements*

- “what would I say to my parents if I don't get a job after all these years of sacrifices to send me to school”
- “Is it worth going to school even when these college graduates could not find job?”



# Non-farm employment opportunities



## Youth migration

- Previous statistics show livelihood choice of youth currently staying in the villages
- Some of the youth have already left
- 2007 and 2013 gives information on who left
- 15% of adolescents and youth in 2007 (10-30 years old) migrated by 2013
- Highest migration observed for Wollaita -31%
- Most of the migration rural-urban



## Factors associated with adolescents and youth migration: Probit model estimates

	All migration		Migration to urban areas		Migrate abroad	
	Model1	Model 2	Model1	Model 2	Model1	Model 2
<b>Female youth</b>	-0.024	0.01	-0.053	-0.037	<b>0.536***</b>	<b>0.611***</b>
Age	-0.016	-0.037	0.024	0.012	-0.049	-0.045
Age, squared	0.001	0.001	0	0	0	-0.001
<b>Education level</b>	<b>0.103****</b>	<b>0.110****</b>	<b>0.104****</b>	<b>0.109****</b>	<b>0.110****</b>	<b>0.126****</b>
<b>Ln(Farm size), ha</b>	<b>-0.165***</b>	-0.03	<b>-0.230****</b>	-0.063	<b>0.205**</b>	-0.04
Female headed	-0.256	-0.243	-0.212	-0.194	0.149	0.035
Age of Household head	-0.007	-0.003	-0.009	-0.005	0.012	0.018*
Education household head	-0.008	-0.005	-0.009	-0.007	0.006	0.011
Male work force	-0.016	0.011	0.008	0.039	-0.023	-0.018
Female work force	-0.033	-0.022	-0.049	-0.03	0.027	-0.031
Household size	0.039*	0.017	0.039	0.01	0.027	0.065
District dummies: Baseline=Sashemene						
<b>Arsi Negelle</b>		<b>0.365**</b>		<b>0.805**</b>		0.33
Wondo Genet		-0.073		0.493		-0.745*
<b>Wollaita</b>		<b>1.102****</b>		<b>1.620****</b>		<b>-0.945**</b>
Wondo Oromia		-0.428		0.283		
Constant	-1.206*	-1.731**	-1.688**	-2.726****	-3.086*	-3.623**
Prob > chi2	0	0	0	0	0	0
Loglikelihood	-541.32	-486.03	-448.72	-395.69	-75.02	-68.63
Number of observations	1393	1393	1393	1393	1393	1324



## Generosity, trust and cooperation among youth

- Data source: ““Lab-in-the-Field” experiments
- The experiments
  - Two rooms prepared. Pair of siblings who come for the game are invited to playroom one. Coin toss determines player one and loser of coin toss taken to play room 2.
  - **Dictator game experiment:** 30EB allocated to each youth and then asked whether and how much s/he will share with 1) sibling, 2) father, 3) anonymous youth in the village. Randomly paired and share only with one of the three
    - Players don’t see or hear each other
    - They do not know what game the brother/sister in the other room is playing or if they get any money





## Trust game experiment:

Player one is given 30EB.

- S/he is then asked the same question as in dictator game. But in this case we triple the money sent by player one before we give to player 2.
- Player 2 is then asked whether and how much of this tripled money s/he will return to player 1
- If eg. Player one sends 15EB, player 2 receives 45EB. Then s/he can decide to share part of 45 with player 1.
- Game explained for both players in the two rooms
- The more they trust each other the more they both can benefit



## Results from the field experiments Generosity and dictator game

- Probability of non-zero allocation is 0.5
- Average rate of allocation 21% of endowment
- Variation by receiver of allocation
  - Brother/sister- probability of sharing 0.56 (share rate 24%)
  - Father- probability of sharing 0.63 (share rate 30%)
  - anonymous youth- probability 0.30 (share rate 9%)
- Some Variation by gender of player
  - Young men - probability of sharing 0.52
  - Young women- probability of sharing 0.48



# Results from the field experiments

## Trust game

### Trustfulness

- Probability of sending money-0.57
- Variation by receiver of money
  - Brother/sister – Probability 0.67 (34%)
  - Father -0.69 (share 36%)
  - Anonymous youth-0.34 (share 12%)
- Proportionately more people allocated positive amount and allocated higher share of their endowment in trust game than dictator game
  - Shows trustfulness
  - Youth are more generous to their parents but trust their brothers/sisters more to return back some of the money



## Trustworthiness

1. From hypothetical question for player 2 (receivers)
  - how much of a 45EB (=15x3) allocation will they return if transfer come 1) Brother/sister, 2) father, 3) anonymous youth

Proportion of transfer returned by player 2 (Hypothetical if received=45EB)

Returned for:	Male	Female	All youth		
	youth	youth	Mean	St.err.	N
Brother/sister	0.24	0.21	0.23	0.012	305
Father	0.28	0.24	0.26	0.014	305
Anonymous youth	0.14	0.08	0.11	0.01	305
Total	0.22	0.18	0.2	0.007	915



2. From real game. Receivers are sibling or anonymous youth. After looking at how much is sent by player 1, player 2 decides whether or not to send some back and how much to send back

Proportion of transfer returned by player 2: real game

Return to:	Male	Female	All youth		
	youth	youth	Mean	St.err.	N
Brother/sister	0.30	0.28	0.29	0.009	139
Anonymous youth	0.18	0.14	0.16	0.013	99
Total	0.25	0.22	0.24	0.008	238



# Factors associated with trustfulness and trustworthiness among youth

	Amount sent in trust game	Amount Returned in trust game
<b>Baseline: Allocation for brother/sister</b>		
<b>Allocation for father</b>	-2.064***	
<b>Allocation for anonymous youth</b>	-7.623****	
<b>Amount allocated in dictator game</b>	0.888****	0.093****
<b>Amount sent by player 1</b>		0.690****
<b>Age</b>	-0.249	-1.037****
<b>Sex, 1=Female,0=Male</b>	-1.014	12.699****
<b>Height</b>	-0.033	0.720****
<b>Male work force</b>	0.554	1.600*
<b>Average education</b>	1.229***	1.032*
<b>Age of household head</b>	-0.078	-0.110*
<b>Years of certificate ownership</b>	-0.748**	0.071
<b>Number of male youth</b>	-0.064	1.046***
<b>Number of female youth</b>	1.131**	-0.893
<b>Farm size, temad</b>	-0.087	0.193
<b>Youth work on land, dummy</b>	3.794**	-1.012
<b>Daughters inherit land, dummy</b>	2.934**	-0.273
<b>Number of trusted friends</b>	-0.006	-0.662***
<b>Trust only some of the relatives</b>	-0.961	-2.235***
<b>Number of observations</b>	711	732



## Summary

### ***Facts on the ground***

- Inheritance is primary source of land access to youth in rural areas.
  - No significant allocation from authorities
  - Not much activity of youth organized to access land
- Parents land holding that is to be shared is too small to provide meaningful livelihood for the majority
- Landlessness is the inevitable outcome for most of rural youth regardless of the constitutional guarantee
- Nonfarm employment opportunities are limited in rural areas



## ***Youth response***

- Significant youth migration observed particularly for Wollaita where land scarcity is the worst
- Transition of livelihood strategies
  - Only a minority of the remaining youth (9%) intend to engage in agriculture as a livelihood

## ***Policy concerns***

- Rural youth need sustainable livelihood that is based on their existing endowment including their education
- Large spontaneous migration of youth to urban areas is a challenge. It puts pressure on the infrastructure of the urban areas and may create tension
- A large unemployed youth population is a threat to political stability

