



Evans School Policy Analysis and Research (EPAR)

LSMS-ISA Land Tenure Summary Statistics: Tanzania and Ethiopia
EPAR Technical Report #357

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This brief includes summary statistics on indicators of land tenure from the World Bank’s Living Standards Measurement Study - Integrated Surveys on Agriculture (LSMS-ISA) for three survey waves for Tanzania (2008-09, 2010-11, and 2012-13) and the two most recent waves for Ethiopia (2013-14 and 2015-16). The sample size for Tanzania increases with each subsequent wave as individuals from survey households who split off to form their own separate households between survey waves were tracked and surveyed separately in subsequent survey waves. The sample size in Ethiopia decreases due to survey attrition (refusal to participate or inability to locate)

We present data at the plot, household, and community level. We construct plot-level weights for plot-level estimates by multiplying the household survey weight by the plot area, following the convention of the World Bank LSMS-ISA team. We use the provided household weights for household-level analyses. The community level estimates are not weighted.

1. Tanzania Wave 3 (2012-13)

1.1. Plot-Level Summary Statistics

The sample includes 7,474 plots (excluding 31 plots with missing plot area), of which 6,319 are owned by the household of the respondent (either owned and used alone or owned and shared). 308 plots are rented in by the household, and the remaining 845 are used free of charge by the household. The majority of questions are asked only of the sample of owned plots. The sample of plots for each table is noted in the table notes.

All estimates are weighted using plot-level weights calculated by multiplying the household survey weight by the plot area, following the convention of the World Bank LSMS-ISA team.

Table 1. Plot tenure status by sex of head of household (2012)

	(1) All Plots	(2) Plots in Female- Headed Households	(3) Plots in Male- Headed Households
HH owns plot and has a title	0.166 (0.020)	0.102 (0.020)	0.180 (0.023)
HH owns plot but has no title	0.759 (0.021)	0.806 (0.030)	0.750 (0.024)
HH does not own the plot	0.075 (0.006)	0.092 (0.016)	0.071 (0.007)
HH has right to sell plot or use as collateral	0.829 (0.014)	0.710 (0.043)	0.855 (0.013)
Observations	7474	1595	5879

Respondents were only asked about whether they had the right to sell or use plots as collateral for owned plots, so not owned plots are coded as not having the right to sell or use as collateral. Plot-level ownership and decision-making by gender was only recorded for owned plots, so we instead disaggregate by sex of the head of household. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as 16.6% of plots owned with title among all households, compared to 10.2% of plots among female-headed households.

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Please direct comments or questions about this research to Principal Investigators Leigh Anderson and Travis Reynolds at eparinfo@uw.edu.

Table 2. Proportion of owned plots, by sex of owner and title type (2012)

	(1) All Owned Plots	(2) Owned plots with a Legal Title	(3) Owned plots with No Legal Title
Plot owned or co-owned by a female	0.534 (0.025)	0.502 (0.058)	0.541 (0.027)
Female-only owned plot	0.164 (0.016)	0.106 (0.021)	0.177 (0.018)
Male-only owned plot	0.466 (0.025)	0.498 (0.058)	0.459 (0.027)
Plot with mixed gender ownership	0.370 (0.019)	0.395 (0.049)	0.364 (0.020)
Observations	6315	1068	5247

Respondents were asked to specify up to two household members as plot owners, typically with the head of household listed first. The sample excludes plots rented in or used free of charge, and four owned plots with missing data on gender of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses.

Table 3. Proportion of owned plots, by ownership status and sex of owner (2012)

	(1) All Owned Plots	(2) Plots with Only Female Owner(s)	(3) Plots with Only Male Owner(s)	(4) Plots with Mixed Gender Owner(s)
HH has any kind of title documentation	0.179 (0.022)	0.116 (0.023)	0.192 (0.036)	0.192 (0.024)
HH granted right of occupancy for plot	0.028 (0.015)	0.005 (0.002)	0.040 (0.028)	0.023 (0.012)
HH has certificate of customary right of occupancy for plot	0.044 (0.009)	0.033 (0.014)	0.050 (0.016)	0.041 (0.012)
HH has residential license for plot	0.001 (0.001)	0.000 (0.000)	0.000 (0.000)	0.003 (0.003)
HH has village govt-witnessed purchase agreement for plot	0.029 (0.006)	0.012 (0.005)	0.030 (0.010)	0.036 (0.009)
HH has local court-certified purchase agreement for plot	0.005 (0.002)	0.002 (0.001)	0.005 (0.003)	0.006 (0.003)
HH has inheritance letter for plot	0.018 (0.004)	0.022 (0.011)	0.019 (0.006)	0.015 (0.006)
HH has village govt letter of allocation for plot	0.051 (0.007)	0.038 (0.010)	0.047 (0.010)	0.063 (0.012)
HH has other govt document for plot	0.000 (0.000)	0.001 (0.001)	0.000 (.)	0.000 (0.000)
HH has official correspondence for plot	0.000 (0.000)	0.001 (0.001)	0.000 (0.000)	0.000 (0.000)
HH has utility or other bill for plot	0.002 (0.001)	0.000 (0.000)	0.001 (0.000)	0.005 (0.002)
HH has no title for plot	0.821 (0.022)	0.884 (0.023)	0.808 (0.036)	0.808 (0.024)
HH has right to sell plot or use as collateral	0.895 (0.013)	0.768 (0.045)	0.907 (0.017)	0.936 (0.013)
Observations	6319	1387	2627	2301

Plots with a female owner had a female listed as either the first or second plot owner, and may also have a male owner. The sample excludes plots rented in or used free of charge. Four plots are missing information on the gender of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in. The table should be read as households having a title for 17.9% of all owned plots, but 11.6% of plots with only female owners.

Table 4. Average age of plot owners, by owner listing and sex (2012)

	(1) Plot Owner	(2) First Listed Female Owner, if any	(3) First Listed Male Owner, if any
Age of first listed plot owner	52.106 (0.808)		
Age of first listed female owner, if any		47.262 (0.846)	
Age of first listed male owner, if any			51.274 (0.855)
Observations	6315	3692	4933

The first listed female or male owner may be the second listed plot owner, if the first listed owner is male/female. The average age of the second listed owner is 43.1. The sample excludes plots rented in or used free of charge, and four owned plots with missing data on age of the plot owner. 2301 plots have both a male and female owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses.

Table 5. Proportion of plots with any owner, by age range and sex of owner (2012)

	(1) All Owned Plots	(2) Plots with A Female Owner	(3) Plots with No Female Owner
Plot owners between the ages of 10 and 24, 2012	0.034 (0.005)	0.049 (0.008)	0.016 (0.004)
Plot owners between the ages of 25 and 34, 2012	0.169 (0.014)	0.196 (0.020)	0.139 (0.016)
Plot owners between the ages of 35 and 44, 2012	0.279 (0.019)	0.341 (0.027)	0.207 (0.023)
Plot owners between the ages of 45 and 54, 2012	0.293 (0.021)	0.325 (0.030)	0.257 (0.028)
Plot owners aged 55 and above, 2012	0.414 (0.027)	0.440 (0.036)	0.384 (0.031)
Observations	6317	3688	2627

The age range variables are dummies taking a value of 1 if any listed plot owner is within the age range. Some plots with 2 listed owners may have owners in different age ranges. The sample excludes plots rented in or used free of charge, and four owned plots with missing data on age of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as 3.4% of all owned plots have an owner between the ages of 10 and 24, compared to 4.9% of all plots with a female owner.

Table 6. Proportion of plots the respondent feels comfortable leaving uncultivated, by ownership status and sex of owner (2012)

	(1) All Plots	(2) Owned Plots	(3) Not Owned Plots	(4) Owned Plots with A Female Owner	(5) Owned Plots with No Female Owner
Respondent comfortable leaving plot uncultivated several months	0.923 (0.006)	0.961 (0.005)	0.445 (0.041)	0.960 (0.007)	0.963 (0.008)
Observations	7472	6319	1152	3689	2627

Full sample includes both owned, rented in, and used free of charge plots ('not owned' plots). Four plots are missing information on the gender of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as households are comfortable leaving 92.3% of all plots uncultivated for several months, but 44.5% of not owned plots (rented in or used free of charge).

1.2. Household-Level Summary Statistics

The sample includes 5,010 households, of which 3,331 completed the agriculture module of the survey and own, rent, or use for free at least one plot. Households without any plots are assigned a value of 0 for the plot count and area indicators. We separately analyze the subset of households with any plots (at least one plot) and of smallholder households (with total landholding between 0 and 4 ha).

All estimates are weighted using household survey weights.

Table 7. Number of plots by tenure type and household type (2012)

	(1) All HHs	(2) HHs with Female Head of Household	(3) HHs With Any Plots	(4) HHs With Any Plots and Female Head of Household	(5) Smallholder HHs (0<Total Landholding, ha<=4)
Total number of plots for the household	1.652 (0.045)	1.376 (0.057)	2.285 (0.048)	2.028 (0.055)	2.151 (0.047)
Number of plots owned or owned and shared	1.431 (0.043)	1.175 (0.054)	1.980 (0.049)	1.733 (0.058)	1.820 (0.048)
Number of plots used free of charge	0.138 (0.009)	0.127 (0.015)	0.191 (0.013)	0.187 (0.021)	0.212 (0.014)
Number of plots rented in or rented in and shared	0.076 (0.007)	0.065 (0.010)	0.106 (0.009)	0.096 (0.015)	0.116 (0.010)
Number of plots rented out	0.013 (0.002)	0.016 (0.004)	0.018 (0.003)	0.024 (0.006)	0.015 (0.003)
Number of all plots the HH is comfortable leaving uncultivated	1.457 (0.044)	1.207 (0.055)	2.016 (0.048)	1.780 (0.059)	1.867 (0.048)
Number of owned plots the HH has right to sell or use as collateral	1.258 (0.042)	0.936 (0.051)	1.740 (0.049)	1.381 (0.061)	1.579 (0.047)
Observations	5010	1232	3331	788	2753

Respondents were given the option to specify whether they shared plots that they owned or rented in; these are counted together with owned and rented in plots that were not shared. The number of plots rented out is a subset of the number of owned plots. The full sample includes all survey households, with households with no plots assigned a value of 0 for each indicator. Estimates are household-level cluster-weighted means, with standard errors in parentheses.

Table 8. Proportion of households who own plots and proportion of plots the household feels secure leaving uncultivated, by household type (2012)

	(1) HHs With Any Plots	(2) HHs With Any Plots and Female HoH	(3) Smallholder HHs (0<Total Landholding, ha<=4)
HH owns at least 1 plot	0.893 (0.007)	0.888 (0.012)	0.883 (0.008)
Proportion of plots the HH is comfortable leaving uncultivated several months	0.862 (0.007)	0.862 (0.013)	0.852 (0.008)
Observations	3331	788	2753

The question on plot security is asked for all plots (owned and not owned). The sample includes only households with at least one plot. Estimates are household-level cluster-weighted means, with standard errors in parentheses.

Table 9. Average plot area (ha) held by tenure type / average plot value / rental income, by household type (2012)

	(1) All HHs	(2) HHs with Female HoH	(3) HHs With Any Plots	(4) HHs With Any Plots and Female HoH	(5) Smallholder HHs (0<Total Landholding, ha<=4)
Plot area, all plots, ha	1.856 (0.103)	1.210 (0.144)	2.567 (0.138)	1.784 (0.206)	1.338 (0.032)
Plot area, owned plots, ha	1.719 (0.099)	1.100 (0.142)	2.378 (0.133)	1.622 (0.205)	1.166 (0.030)
Plot area, not owned plots, ha	0.137 (0.011)	0.110 (0.016)	0.189 (0.015)	0.163 (0.023)	0.172 (0.013)
Plot area, rented in plots, ha	0.049 (0.006)	0.042 (0.010)	0.068 (0.008)	0.062 (0.015)	0.066 (0.007)
Plot area, used free of charge plots, ha	0.087 (0.010)	0.068 (0.014)	0.120 (0.013)	0.101 (0.020)	0.105 (0.010)
Plot area, rented out, ha	0.034 (0.012)	0.060 (0.038)	0.047 (0.017)	0.088 (0.055)	0.011 (0.003)
Estimated value of owned plots if sold today, TSH (1000s)	5415.909 (1537.844)	2982.099 (1015.222)	7491.950 (2127.621)	4396.636 (1476.780)	3951.105 (437.285)
Income from renting out plots in last year, TSH (1000s)	1.358 (0.316)	2.326 (0.934)	1.879 (0.439)	3.429 (1.373)	1.153 (0.340)
Observations	5010	1232	3331	788	2753

Full sample includes all survey households. Households without plots are given a value of 0. The area of rented out plots is a subset of the area of owned plots. Estimates are household-level cluster-weighted means, with standard errors in parentheses. The table should be read as the average total plot area for all HHs in the sample is 1.856 ha, compared to 2.567 ha for HHs with at least one plot (i.e., dropping households with no plot area). The average HH has 1.719 ha of owned plots, compared to 0.137 ha of non-owned plots. The average estimated value of owned plots is 5,415,909 TSH for all HHs, compared to 7,491,950 TSH for HHs with at least one plot.

1.3. Community-Level Summary Statistics

The sample includes 400 communities included in the survey community module. For the purposes of this survey a “community” is defined as the village in rural areas and the mtaa in which the cluster is located in urban areas. The community questionnaire was administered to a group of local leaders determined by the field supervisors.

No community-level weights are included in the survey, so these estimates are unweighted.

Table 10. Community-level descriptive statistics (2012)

	(1) Mean b/se
Village has Certificate of Village Lands, 2012	0.228 (0.021)
# of HHs affected by appropriation for direct foreign investment, 2012	0.003 (0.003)
# of HHs affected by appropriation for land reserves, 2012	0.838 (0.500)
# of HHs affected by appropriation for public use, 2012	0.877 (0.463)
Observations	400

Full sample includes all communities included in community survey. Communities with no appropriation of land for different purposes are given a value of 0 for the number of HHs affected. 3 communities reported land appropriated for direct foreign investment, 5 reported appropriation for land reserves, and 12 reported appropriations for public use. Estimates are unweighted means (there are no community-level weights), with standard errors in parentheses.

Table 11. Area (ha) and percentage of community land allocated to particular uses (2012)

	(1) Mean b/se
Land use for cultivation, ha, 2012	1735.552 (465.165)
Land used for agro-business, ha, 2012	55.224 (18.782)
Land used for forests, ha, 2012	346.831 (90.507)
Land used for grazing, ha, 2012	276.640 (47.804)
Land used for wetlands, ha, 2012	54.118 (20.289)
Land used for residential purposes, ha, 2012	229.130 (21.287)
Land used for businesses, ha, 2012	4.930 (1.328)
Land used for other purposes, ha, 2012	68.096 (36.783)
Percentage of land used cultivated, 2012	32.390 (1.762)
Percentage of land used for agro-business, 2012	5.415 (1.026)
Percentage of land used for forests, 2012	8.756 (1.093)
Percentage of land used for grazing, 2012	8.364 (1.111)
Percentage of land used for wetlands, 2012	4.598 (0.963)
Percentage of land used for residential purposes, 2012	31.502 (1.801)
Percentage of land used for businesses, 2012	5.539 (0.963)
Percentage of land used for other purposes, 2012	6.934 (0.998)
Observations	400

All survey land use categories included. Full sample includes all communities included in community survey. Estimates are unweighted means (there are no community-level weights), with standard errors in parentheses.

2. Tanzania Wave 2 (2010-11)

2.1. Plot-Level Summary Statistics

The sample includes 6,066 plots (excluding 135 plots with missing plot area), of which 5,140 are owned by the household of the respondent (either owned and used alone or owned and shared). 221 plots are rented in by the household, and the remaining 705 are used free of charge by the household. The majority of questions are asked only of the sample of owned plots. The sample of plots for each table is noted in the table notes.

All estimates are weighted using plot-level weights calculated by multiplying the household survey weight by the plot area, following the convention of the World Bank LSMS-ISA team.

Table 1. Plot tenure status by sex of head of household (2010)

	(1) All Plots	(2) Plots in Female- Headed Households	(3) Plots in Male- Headed Households
HH owns plot and has a title	0.132 (0.016)	0.158 (0.048)	0.127 (0.017)
HH owns plot but has no title	0.800 (0.017)	0.766 (0.047)	0.806 (0.018)
HH does not own the plot	0.068 (0.006)	0.076 (0.011)	0.067 (0.006)
HH has right to sell plot or use as collateral	0.815 (0.014)	0.671 (0.047)	0.842 (0.012)
Observations	6066	1288	5778

Respondents were only asked about whether they had the right to sell or use plots as collateral for owned plots, so not owned plots are coded as not having the right to sell or use as collateral. Plot-level ownership and decision-making by gender was only recorded for owned plots, so we instead disaggregate by sex of the head of household. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as 13.2% of plots owned with title among all households, compared to 15.8% of plots among female-headed households.

Table 2. Proportion of owned plots, by sex of owner and title type (2010)

	(1) All Owned Plots	(2) Owned plots with a Legal Title	(3) Owned plots with No Legal Title
Plot owned or co-owned by females	0.527 (0.021)	0.641 (0.050)	0.508 (0.022)
Female-only owned plot	0.145 (0.012)	0.113 (0.023)	0.151 (0.014)
Male-only owned plot	0.473 (0.021)	0.359 (0.050)	0.492 (0.022)
Plots with mixed gender ownership	0.381 (0.021)	0.527 (0.059)	0.357 (0.021)
Observations	5139	640	4499

Respondents were asked to specify up to two household members as plot owners, typically with the head of household listed first. The sample excludes plots rented in or used free of charge, and one owned plots with missing data on gender of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses.

Table 3. Proportion of owned plots, by ownership status and sex of owner (2010)

	(1) All Owned Plots	(2) Plots with Only Female Owner(s)	(3) Plots with Only Male Owner(s)	(4) Plots with Mixed Gender Owner(s)
HH has any kind of title documentation	0.141 (0.018)	0.110 (0.023)	0.107 (0.016)	0.195 (0.036)
HH granted right of occupancy for plot	0.008 (0.003)	0.018 (0.015)	0.005 (0.002)	0.009 (0.003)
HH has certificate of customary right of occupancy for plot	0.027 (0.006)	0.022 (0.008)	0.030 (0.009)	0.026 (0.008)
HH has residential license for plot	0.001 (0.001)	0.003 (0.003)	0.001 (0.001)	0.000 (0.000)
HH has village govt-witnessed purchase agreement for plot	0.029 (0.012)	0.005 (0.003)	0.008 (0.003)	0.063 (0.030)
HH has local court-certified purchase agreement for plot	0.001 (0.001)	0.000 (0.000)	0.001 (0.001)	0.001 (0.001)
HH has inheritance letter for plot	0.032 (0.010)	0.023 (0.007)	0.016 (0.004)	0.056 (0.025)
HH has village govt letter of allocation for plot	0.035 (0.007)	0.023 (0.007)	0.042 (0.011)	0.029 (0.008)
HH has other govt document for plot	0.003 (0.003)	0.000 (.)	0.001 (0.000)	0.007 (0.007)
HH has official correspondence for plot	0.001 (0.001)	0.001 (0.001)	0.000 (0.000)	0.002 (0.002)
HH has utility or other bill for plot	0.004 (0.002)	0.014 (0.011)	0.002 (0.001)	0.002 (0.002)
HH has no title for plot	0.859 (0.018)	0.890 (0.023)	0.893 (0.016)	0.805 (0.036)
HH has right to sell plot or use as collateral	0.874 (0.013)	0.754 (0.038)	0.889 (0.014)	0.903 (0.026)
Observations	5140	1111	2170	1858

Plots with a female owner had a female listed as either the first or second plot owner, and may also have a male owner. The sample excludes plots rented in or used free of charge. One plot is missing information on the gender of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as households having a title for 14.1% of all owned plots, but 11.0% of plots with only female owners.

Table 4. Average age of plot owners, by owner listing and sex (2010)

	(1) Plot Owner	(2) First Listed Female Owner, if any	(3) First Listed Male Owner, if any
Age of first listed plot owner	50.723 (0.579)		
Age of first listed female owner, if any		45.889 (0.743)	
Age of first listed male owner, if any			49.735 (0.622)
Observations	5139	2969	4028

The first listed female or male owner may be the second listed plot owner, if the first listed owner is male/female. The average age of the second listed owner is 43.1. The sample excludes plots rented in or used free of charge, and one owned plot with missing data on age of the plot owner. 1858 plots have both a male and female owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses.

Table 5. Proportion of plots with any owner, by age range and sex of owner (2010)

	(1) All Owned Plots	(2) Plots with A Female Owner	(3) Plots with No Female Owner
Plot owners between the ages of 10 and 24, 2010	0.034 (0.005)	0.052 (0.009)	0.014 (0.004)
Plot owners between the ages of 25 and 34, 2010	0.188 (0.015)	0.243 (0.020)	0.127 (0.018)
Plot owners between the ages of 35 and 44, 2010	0.298 (0.019)	0.359 (0.027)	0.229 (0.023)
Plot owners between the ages of 45 and 54, 2010	0.287 (0.019)	0.326 (0.029)	0.244 (0.023)
Plot owners aged 55 and above, 2010	0.393 (0.024)	0.395 (0.027)	0.392 (0.035)
Observations	5139	2969	2170

The age range variables are dummies taking a value of 1 if any listed plot owner is within the age range. Some plots with 2 listed owners may have owners in different age ranges. The sample excludes plots rented in or used free of charge, and one owned plot with missing data on age of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as 3.4% of all owned plots have an owner between the ages of 10 and 24, compared to 5.2% of all plots with a female owner.

Table 6. Proportion of plots the respondent feels comfortable leaving uncultivated, by ownership status and sex of owner (2010)

	(1) All Plots	(2) Owned Plots	(3) Not Owned Plots	(4) Owned Plots with A Female Owner	(5) Owned Plots with No Female Owner
Respondent comfortable leaving plot uncultivated several months	0.909 (0.008)	0.948 (0.008)	0.372 (0.033)	0.958 (0.007)	0.937 (0.015)
Observations	6066	5140	926	2969	2170

Full sample includes both owned, rented in, and used free of charge plots ('not owned' plots). One plot is missing information on the gender of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as households are comfortable leaving 90.9% of all plots uncultivated for several months, but 37.2% of not owned plots (rented in or used free of charge).

2.2. Household-Level Summary Statistics

The sample includes 3,924 households, of which 2,770 completed the agriculture module of the survey and own, rent, or use for free at least one plot. Households without any plots are assigned a value of 0 for the plot count and area indicators. We separately analyze the subset of households with any plots (at least one plot) and of smallholder households (with total landholding between 0 and 4 ha).

All estimates are weighted using household survey weights.

Table 7. Number of plots by tenure type and household type (2010)

	(1) All HHs	(2) HHs with Female Head of Household	(3) HHs With Any Plots	(4) HHs With Any Plots and Female Head of Household	(5) Smallholder HHs (0<Total Landholding, ha<=4)
Total number of plots for the household	1.759 (0.044)	1.493 (0.057)	2.260 (0.044)	2.035 (0.056)	2.175 (0.045)
Number of plots owned or owned and shared	1.517 (0.044)	1.268 (0.057)	1.949 (0.046)	1.728 (0.063)	1.870 (0.046)
Number of plots used free of charge	0.130 (0.008)	0.131 (0.017)	0.167 (0.010)	0.179 (0.022)	0.192 (0.012)
Number of plots rented in or rented in and shared	0.078 (0.008)	0.059 (0.011)	0.101 (0.010)	0.080 (0.014)	0.111 (0.012)
Number of plots rented out	0.010 (0.002)	0.009 (0.003)	0.013 (0.003)	0.012 (0.004)	0.013 (0.003)
Number of plots the respondent is comfortable leaving uncultivated several months	1.518 (0.044)	1.288 (0.059)	1.950 (0.046)	1.756 (0.063)	1.883 (0.047)
Number of plots HH has right to sell or use as collateral	1.279 (0.039)	0.982 (0.056)	1.643 (0.044)	1.339 (0.068)	1.541 (0.045)
Observations	3924	968	2770	650	2211

Respondents were given the option to specify whether they shared plots that they owned or rented in; these are counted together with owned and rented in plots that were not shared. The number of plots rented out is a subset of the number of owned plots. The full sample includes all survey households, with households with no plots assigned a value of 0 for each indicator. Estimates are household-level cluster-weighted means, with standard errors in parentheses.

Table 8. Proportion of households who own plots and proportion of plots the household feels secure leaving uncultivated, by household type (2010)

	(1) HHs With Any Plots	(2) HHs With Any Plots and Female Head of Household	(3) Smallholder HHs (0<Total Landholding, ha<=4)
HH owns at least 1 plot	0.876 (0.008)	0.851 (0.018)	0.899 (0.008)
Proportion of plots the HH is comfortable leaving uncultivated several months	0.829 (0.009)	0.828 (0.018)	0.854 (0.009)
Observations	2770	650	2211

The question on plot security is asked for all plots (owned and not owned). The sample includes only households with at least one plot. Estimates are household-level cluster-weighted means, with standard errors in parentheses.

Table 9. Average plot area (ha) held by tenure type / average plot value / rental income, by household type (2010)

	(1) All HHs	(2) HHs with Female HoH	(3) HHs With Any Plots	(4) HHs With Any Plots and Female HoH	(5) Smallholder HHs (0<Total Landholding, ha<=4)
Plot area measure, all plots, ha	1.903 (0.095)	1.137 (0.103)	2.444 (0.118)	1.550 (0.134)	1.343 (0.032)
Plot area, owned plots, ha	1.773 (0.092)	1.051 (0.102)	2.277 (0.114)	1.432 (0.133)	1.183 (0.032)
Plot area, not owned plots, ha	0.130 (0.011)	0.086 (0.011)	0.167 (0.014)	0.118 (0.014)	0.160 (0.013)
Plot area, rented in plots, ha	0.051 (0.007)	0.030 (0.006)	0.066 (0.008)	0.041 (0.008)	0.062 (0.009)
Plot area, used free of charge plots, ha	0.076 (0.008)	0.055 (0.010)	0.098 (0.010)	0.075 (0.013)	0.096 (0.009)
Plot area, rented out, ha	0.023 (0.014)	0.058 (0.053)	0.029 (0.018)	0.079 (0.072)	0.008 (0.002)
Estimated value of owned plots if sold today, TSH (1000s)	2985.676 (340.231)	1542.354 (285.678)	3835.552 (435.743)	2102.314 (387.421)	3050.940 (368.270)
Income from renting out plots in last year, TSH (1000s)	0.586 (0.191)	0.879 (0.550)	0.752 (0.245)	1.198 (0.749)	0.555 (0.188)
Observations	3924	968	2770	650	2211

Full sample includes all survey households. Households without plots are given a value of 0. The area of rented out plots is a subset of the area of owned plots. Estimates are household-level cluster-weighted means, with standard errors in parentheses. The table should be read as the average total plot area for all HHs in the sample is 1.903 ha, compared to 2.444 ha for HHs with at least one plot (i.e., dropping households with no plot area). The average HH has 1.773 ha of owned plots, compared to 0.130 ha of non-owned plots. The average estimated value of owned plots is 2,985,676 TSH for all HHs, compared to 3,835,552 TSH for HHs with at least one plot.

2.3. Community-Level Summary Statistics

The sample includes 392 communities included in the survey community module. For the purposes of this survey a “community” is defined as the village in rural areas and the mtaa in which the cluster is located in urban areas. The community questionnaire was administered to a group of local leaders determined by the field supervisors.

No community-level weights are included in the survey, so these estimates are unweighted.

Table 10. Community-level descriptive statistics (2010)

	(1) Mean b/se
Village has Certificate of Village Lands, 2010	0.194 (0.020)
# of HHs affected by appropriation for direct foreign investment, 2010	0.115 (0.069)
# of HHs affected by appropriation for land reserves, 2010	2.487 (1.832)
# of HHs affected by appropriation for public use, 2010	0.082 (0.044)
Observations	392

Full sample includes all communities included in community survey. Communities with no appropriation of land for different purposes are given a value of 0 for the number of HHs affected. 4 communities reported land appropriated for direct foreign investment, 5 reported appropriation for land reserves, and 7 reported appropriations for public use. Estimates are unweighted means (there are no community-level weights), with standard errors in parentheses.

Table 11. Area (ha) and percentage of community land allocated to particular uses (2010)

	(1) Mean b/se
Land used for cultivating, ha, 2010	839.707 (135.810)
Land used for agrobusiness, ha, 2010	47.085 (22.933)
Land used for forests, ha, 2010	342.325 (105.080)
Land used for grazing, ha, 2010	443.434 (138.132)
Land used for wetlands, ha, 2010	116.127 (52.928)
Land used for residential purposes, ha, 2010	223.065 (81.739)
Land used for businesses, ha, 2010	25.382 (18.816)
Land used for other purposes, ha, 2010	69.411 (40.275)
Percentage of land used for cultivating, 2010	25.764 (1.771)
Percentage of land used for agrobusiness, 2010	0.913 (0.295)
Percentage of land used for forests, 2010	6.266 (1.391)
Percentage of land used for grazing, 2010	4.631 (0.880)
Percentage of land used for wetlands, 2010	1.199 (0.311)
Percentage of land used for residential purposes, 2010	23.716 (1.818)
Percentage of land used for businesses, 2010	1.979 (0.299)
Percentage of land used for other purposes, 2010	2.629 (0.360)
Observations	392

All survey land use categories included. Full sample includes all communities included in community survey. Estimates are unweighted means (there are no community-level weights), with standard errors in parentheses.

3. Tanzania Wave 1 (2008-09)

3.1. Plot-Level Summary Statistics

The sample includes 5,204 plots (excluding 132 plots with missing plot area), of which 4,315 are owned by the household of the respondent (either owned and used alone or owned and shared). 304 plots are rented in by the household, and the remaining 585 are used free of charge by the household. The majority of questions are asked only of the sample of owned plots. The sample of plots for each table is noted in the table notes.

All estimates are weighted using plot-level weights calculated by multiplying the household survey weight by the plot area, following the convention of the World Bank LSMS-ISA team.

Table 1. Plot tenure status by sex of head of household (2008)

	(1) All Plots	(2) Plots in Female- Headed Households	(3) Plots in Male- Headed Households
HH owns plot and has a title	0.118 (0.054)	0.048 (0.011)	0.131 (0.062)
HH owns plot but has no title	0.798 (0.049)	0.832 (0.023)	0.792 (0.058)
HH does not own the plot	0.084 (0.009)	0.120 (0.017)	0.077 (0.009)
HH has right to sell plot or use as collateral	0.676 (0.045)	0.674 (0.036)	0.676 (0.052)
Observations	5204	1131	4073

Respondents were only asked about whether they had the right to sell or use plots as collateral for owned plots, so not owned plots are coded as not having the right to sell or use as collateral. Plot-level ownership and decision-making by gender was only recorded for owned plots, so we instead disaggregate by sex of the head of household. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as 11.8% of plots owned with title among all households, compared to 4.8% of plots among female-headed households.

Table 2. Proportion of owned plots, by sex of owner and title type (2008)

	(1) All Owned Plots	(2) Owned plots with a Legal Title	(3) Owned plots with No Legal Title
Plot owned or co-owned by females	0.422 (0.037)	0.214 (0.107)	0.452 (0.027)
Female-only owned plot	0.139 (0.015)	0.058 (0.026)	0.151 (0.014)
Male-only owned plot	0.578 (0.037)	0.786 (0.107)	0.548 (0.027)
Plot with mixed gender ownership	0.283 (0.030)	0.156 (0.083)	0.302 (0.026)
Observations	4313	380	3933

Respondents were asked to specify up to two household members as plot owners, typically with the head of household listed first. The sample excludes plots rented in or used free of charge, and two owned plots with missing data on gender of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses.

Table 3. Proportion of owned plots, by ownership status and sex of owner (2008)

	(1) All Owned Plots	(2) Plots with Only Female Owner(s)	(3) Plots with Only Male Owner(s)	(4) Plots with Mixed Gender Owner(s)
HH has any kind of title documentation	0.129 (0.058)	0.054 (0.013)	0.175 (0.094)	0.071 (0.015)
HH was granted right of occupancy for plot	0.009 (0.003)	0.013 (0.006)	0.006 (0.002)	0.014 (0.008)
HH has certificate of customary right of occupancy for plot	0.011 (0.003)	0.004 (0.003)	0.016 (0.005)	0.002 (0.001)
HH has residential license for plot	0.001 (0.001)	0.000 (0.000)	0.001 (0.001)	0.000 (.)
HH has village govt-witnessed purchase agreement for plot	0.070 (0.056)	0.007 (0.004)	0.117 (0.092)	0.006 (0.003)
HH has local court-certified purchase agreement for plot	0.001 (0.000)	0.002 (0.002)	0.001 (0.000)	0.001 (0.001)
HH has inheritance letter for plot	0.006 (0.002)	0.015 (0.006)	0.007 (0.003)	0.000 (.)
HH has village govt letter of allocation for plot	0.026 (0.006)	0.012 (0.006)	0.026 (0.008)	0.034 (0.010)
HH has other govt document for plot	0.001 (0.001)	0.000 (.)	0.000 (.)	0.005 (0.003)
HH has official correspondence for plot	0.000 (0.000)	0.000 (.)	0.000 (0.000)	0.000 (.)
HH has utility or other bill for plot	0.003 (0.001)	0.000 (.)	0.001 (0.001)	0.009 (0.004)
HH has no title for plot	0.871 (0.058)	0.946 (0.013)	0.825 (0.094)	0.929 (0.015)
HH has right to sell plot or use as collateral	0.738 (0.053)	0.764 (0.034)	0.680 (0.084)	0.842 (0.032)
Observations	4315	928	2121	1260

Plots with a female owner had a female listed as either the first or second plot owner, and may also have a male owner. The sample excludes plots rented in or used free of charge. Two plots are missing information on the gender of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as households having a title for 12.9% of all owned plots, but 5.4% of plots with only female owners.

Table 4. Average age of plot owners, by owner listing and sex (2008)

	(1) Plot Owner	(2) First Listed Female Owner, if any	(3) First Listed Male Owner, if any
Age of first listed plot owner	50.131 (0.987)		
Age of first listed female owner, if any		46.228 (0.706)	
Age of first listed male owner, if any			49.271 (1.065)
Observations	4313	2193	3382

The first listed female or male owner may be the second listed plot owner, if the first listed owner is male/female. The average age of the second listed owner is 41.5. The sample excludes plots rented in or used free of charge, and two owned plots with missing data on age of the plot owner. 1260 plots have both a male and female owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses.

Table 5. Proportion of plots with any owner, by age range and sex of owner (2008)

	(1) All Owned Plots	(2) Plots with A Female Owner	(3) Plots with No Female Owner
Plot owners between the ages of 10 and 24	0.031 (0.005)	0.045 (0.009)	0.022 (0.006)
Plot owners between the ages of 25 and 34	0.182 (0.020)	0.216 (0.022)	0.157 (0.026)
Plot owners between the ages of 35 and 44	0.320 (0.043)	0.344 (0.023)	0.302 (0.076)
Plot owners between the ages of 45 and 54	0.240 (0.025)	0.343 (0.027)	0.165 (0.028)
Plot owners aged 55 and above	0.388 (0.038)	0.437 (0.030)	0.352 (0.058)
Observations	4313	2191	2121

The age range variables are dummies taking a value of 1 if any listed plot owner is within the age range. Some plots with 2 listed owners may have owners in different age ranges. The sample excludes plots rented in or used free of charge, and two owned plots with missing data on age of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as 3.1% of all owned plots have an owner between the ages of 10 and 24, compared to 4.5% of all plots with a female owner.

Table 6. Proportion of plots the respondent feels comfortable leaving uncultivated, by ownership status and sex of owner (2008)

	(1) All Plots	(2) Owned Plots	(3) Not Owned Plots	(4) Owned Plots with A Female Owner	(5) Owned Plots with No Female Owner
Respondent comfortable leaving plot uncultivated several months	0.916 (0.009)	0.957 (0.008)	0.473 (0.035)	0.965 (0.009)	0.951 (0.012)
Observations	5204	4298	906	2191	2122

Full sample includes both owned, rented in, and used free of charge plots ('not owned' plots). Two plots are missing information on the gender of the plot owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as households are comfortable leaving 91.6% of all plots uncultivated for several months, but 47.3% of not owned plots (rented in or used free of charge).

3.2. Household-Level Summary Statistics

The sample includes 3,265 households, of which 2,429 completed the agriculture module of the survey and own, rent, or use for free at least one plot. Households without any plots are assigned a value of 0 for the plot count and area indicators. We separately analyze the subset of households with any plots (at least one plot) and of smallholder households (with total landholding between 0 and 4 ha).

All estimates are weighted using household survey weights.

Table 7. Number of plots by tenure type, by household type (2008)

	(1) All HHs	(2) HHs with Female Head of Household	(3) HHs With Any Plots	(4) HHs With Any Plots and Female Head of Household	(5) Smallholder HHs (0<Total Landholding, ha<=4)
Total number of plots for the household	1.885 (0.043)	1.658 (0.058)	2.214 (0.044)	1.988 (0.059)	2.169 (0.045)
Number of plots owned or owned and shared	1.559 (0.044)	1.315 (0.059)	1.831 (0.047)	1.577 (0.065)	1.802 (0.047)
Number of plots used free of charge	0.143 (0.010)	0.156 (0.017)	0.168 (0.012)	0.187 (0.020)	0.188 (0.014)
Number of plots rented in or rented in and shared	0.132 (0.012)	0.129 (0.018)	0.155 (0.014)	0.154 (0.021)	0.166 (0.015)
Number of plots rented out	0.012 (0.003)	0.010 (0.005)	0.014 (0.003)	0.013 (0.006)	0.015 (0.003)
Number of plots the respondent is comfortable leaving uncultivated several months	1.605 (0.043)	1.338 (0.058)	1.886 (0.046)	1.604 (0.063)	1.871 (0.044)
Number of plots HH has right to sell or use as collateral	1.219 (0.042)	0.908 (0.057)	1.433 (0.047)	1.089 (0.065)	1.375 (0.047)
Observations	3265	820	2429	593	2014

Respondents were given the option to specify whether they shared plots that they owned or rented in; these are counted together with owned and rented in plots that were not shared. The number of plots rented out is a subset of the number of owned plots. The full sample includes all survey households, with households with no plots assigned a value of 0 for each indicator. Estimates are household-level cluster-weighted means, with standard errors in parentheses.

Table 8. Proportion of households who own plots and proportion of plots the household feels secure leaving uncultivated, by household type (2008)

	(1) HHs With Any Plots	(2) HHs With Any Plots and Female HoH	(3) Smallholder HHs (0<Total Landholding, ha<=4)
HH owns at least 1 plot	0.865 (0.010)	0.827 (0.019)	0.898 (0.009)
Proportion of plots the HH is comfortable leaving uncultivated several months	0.825 (0.009)	0.775 (0.019)	0.861 (0.008)
Observations	2429	593	2014

The question on plot security is asked for all plots (owned and not owned). The sample includes only households with at least one plot. Estimates are household-level cluster-weighted means, with standard errors in parentheses.

Table 9. Average plot area (ha) held by tenure type / average plot value / rental income, by household type (2008)

	(1) All HHs	(2) HHs with Female HoH	(3) HHs With Any Plots	(4) HHs With Any Plots and Female HoH	(5) Smallholder HHs (0<Total Landholding, ha<=4)
Plot area, all plots, ha	1.877 (0.156)	1.131 (0.128)	2.205 (0.182)	1.357 (0.152)	1.337 (0.030)
Plot area, owned plots, ha	1.719 (0.154)	0.992 (0.125)	2.020 (0.180)	1.190 (0.149)	1.158 (0.030)
Plot area, not owned plots, ha	0.158 (0.013)	0.139 (0.016)	0.185 (0.015)	0.166 (0.019)	0.179 (0.014)
Plot area, rented in plots, ha	0.079 (0.010)	0.079 (0.014)	0.093 (0.012)	0.095 (0.017)	0.087 (0.009)
Plot area, used free of charge plots, ha	0.074 (0.008)	0.057 (0.008)	0.087 (0.010)	0.069 (0.010)	0.086 (0.010)
Plot area, rented out, ha	0.014 (0.005)	0.006 (0.003)	0.017 (0.006)	0.007 (0.004)	0.011 (0.003)
Estimated value of owned plots if sold today, TSH (1000s)	2615.992 (593.430)	1497.171 (610.514)	3073.595 (695.626)	1795.345 (729.765)	2022.634 (310.455)
Income from renting out plots in last year, TSH (1000s)	0.360 (0.125)	0.305 (0.175)	0.424 (0.146)	0.366 (0.209)	0.304 (0.096)
Observations	3265	820	2429	593	2014

Full sample includes all survey households. Households without plots are given a value of 0. The area of rented out plots is a subset of the area of owned plots. Estimates are household-level cluster-weighted means, with standard errors in parentheses. The table should be read as the average total plot area for all HHs in the sample is 1.877 ha, compared to 2.205 ha for HHs with at least one plot (i.e., dropping households with no plot area). The average HH has 1.719 ha of owned plots, compared to 0.158 ha of non-owned plots. The average estimated value of owned plots is 2,615,992 TSH for all HHs, compared to 3,073,595 TSH for HHs with at least one plot.

3.3. Community-Level Summary Statistics

The sample includes 407 communities included in the survey community module. For the purposes of this survey a “community” is defined as the village in rural areas and the mtaa in which the cluster is located in urban areas. The community questionnaire was administered to a group of local leaders determined by the field supervisors.

No community-level weights are included in the survey, so these estimates are unweighted.

Table 10. Community-level descriptive statistics (2008)

	(1) Mean b/se
Village has Certificate of Village Lands, 2008	0.142 (0.017)
# of HHs affected by appropriation for direct foreign investment, 2008	1.192 (0.684)
# of HHs affected by appropriation for land reserves, 2008	0.532 (0.442)
# of HHs affected by appropriation for public use, 2008	1.209 (0.816)
Observations	407

Full sample includes all communities included in community survey. Communities with no appropriation of land for different purposes are given a value of 0 for the number of HHs affected. 16 communities reported land appropriated for direct foreign investment, 10 reported appropriation for land reserves, and 22 reported appropriations for public use. Estimates are unweighted means (there are no community-level weights), with standard errors in parentheses.

Table 10. Area (ha) and percentage of community land allocated to particular uses (2008)

	(1) Mean b/se
Land use for cultivation, ha, 2008	2155.023 (1012.519)
Land used for agrobusiness, ha, 2008	59.603 (17.475)
Land used for forests, ha, 2008	1316.005 (812.939)
Land used for grazing, ha, 2008	945.116 (353.604)
Land used for wetlands, ha, 2008	156.758 (77.004)
Land used for residential purposes, ha, 2008	1238.346 (598.699)
Land used for businesses, ha, 2008	37.448 (12.681)
Land used for other purposes, ha, 2008	374.222 (216.244)

Percentage of land used cultivated, 2008	37.231 (1.973)
Percentage of land used for agrobusiness, 2008	13.142 (1.620)
Percentage of land used for forests, 2008	19.110 (1.739)
Percentage of land used for grazing, 2008	16.752 (1.699)
Percentage of land used for wetlands, 2008	14.728 (1.665)
Percentage of land used for residential purposes, 2008	39.623 (2.076)
Percentage of land used for businesses, 2008	17.069 (1.808)
Percentage of land used for other purposes, 2008	18.163 (1.820)
Observations	407

All survey land use categories included. Full sample includes all communities included in community survey. Estimates are unweighted means (there are no community-level weights), with standard errors in parentheses.

Table 10. Area (ha) and percentage of community land allocated to particular uses (2008)

	(1) Mean b/se
Land use for cultivation, ha, 2008	2155.023 (1012.519)
Land used for agrobusiness, ha, 2008	59.603 (17.475)
Land used for forests, ha, 2008	1316.005 (812.939)
Land used for grazing, ha, 2008	945.116 (353.604)
Land used for wetlands, ha, 2008	156.758 (77.004)
Land used for residential purposes, ha, 2008	1238.346 (598.699)
Land used for businesses, ha, 2008	37.448 (12.681)
Land used for other purposes, ha, 2008	374.222 (216.244)
Percentage of land used cultivated, 2008	37.231 (1.973)
Percentage of land used for agrobusiness, 2008	13.142 (1.620)
Percentage of land used for forests, 2008	19.110 (1.739)
Percentage of land used for grazing, 2008	16.752 (1.699)
Percentage of land used for wetlands, 2008	14.728 (1.665)
Percentage of land used for residential purposes, 2008	39.623 (2.076)
Percentage of land used for businesses, 2008	17.069 (1.808)
Percentage of land used for other purposes, 2008	18.163 (1.820)
Observations	407

All survey land use categories included. Full sample includes all communities included in community survey. Estimates are unweighted means (there are no community-level weights), with standard errors in parentheses. The percentages of land allocated to different uses are reported by community leaders, and appear to double-count some land in this survey wave.

4. Ethiopia Wave 3 (2015-16)

4.1. Plot-Level Summary Statistics

The sample includes 12,902 plots (called fields in the Ethiopia LSMS-ISA questionnaires), which are sub-divisions of larger parcels. Ownership information is collected at the parcel level, but area is collected at the field level, so we conducted our analysis at the field level to avoid potentially losing any detail aggregating to the parcel level. Parcel characteristics are assigned to all fields in the parcel. The survey does not ask whether plots (parcels/fields) are owned. Instead they specify how the HH acquired the plot. We use plots that the household has the right to sell or use as collateral as a proxy for ‘owned’ plots, and as approximately equivalent in terms of land rights. This represents 10,229 plots, including most plots granted by local leaders (4636 of 4897 plots) and inherited (4789 of 5336 plots) and excludes all plots that are rented in (772 plots) or used for free (165 plots). Similarly, for sex of the plot ‘owner’ we use the sex of the household members who can decide whether to sell or use plots.

The majority of questions are asked only of the sample of ‘owned’ plots. The sample of plots for each table is noted in the table notes, though in many cases observations are missing information.

All estimates are weighted using plot-level weights calculated by multiplying the household survey weight by the plot area, following the convention of the World Bank LSMS-ISA team.

Table 1. Plot tenure status by sex of head of household (2015)

	(1) All Plots	(2) Plots in Female- Headed Households	(3) Plots in Male- Headed Households
HH was granted the plot by local leaders	0.399 (0.055)	0.502 (0.055)	0.383 (0.059)
HH inherited the plot	0.326 (0.042)	0.435 (0.055)	0.309 (0.044)
HH purchased the plot	0.029 (0.008)	0.008 (0.003)	0.032 (0.010)
HH does not own the plot	0.246 (0.086)	0.055 (0.013)	0.276 (0.095)
HH has a certificate for this plot	0.511 (0.065)	0.679 (0.048)	0.485 (0.071)
HH has right to sell plot or use as collateral	0.730 (0.083)	0.926 (0.013)	0.698 (0.092)
Observations	12901	12902	12901

Respondents were not asked about plot title, so we instead report on whether plots were granted by local leaders, inherited, purchased, or not owned (all other forms of plots acquisition). Respondents were asked if they had a certificate for plots inherited, granted, or purchased. Plots where this question was not asked are given a value of 0. Plot-level decision-making by gender was only recorded for a subset of plots, so we instead disaggregate by sex of the head of household. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as 39.9% of plots granted by local leaders among all households, compared to 50.2% of plots among female-headed households.

Table 2. Proportion of owned plots, by sex of owner and certificate type (2015)

	(1) Owned Plots HH Has Right to Sell or Use as Collateral	(2) Owned plots with a Certificate	(3) Owned plots with No Certificate
Plot owned or co-owned by female	0.848 (0.023)	0.874 (0.016)	0.792 (0.056)
Female-only owned plot	0.193 (0.017)	0.210 (0.019)	0.157 (0.033)
Male-only owned plot	0.152 (0.023)	0.126 (0.016)	0.208 (0.056)
Plot with mixed gender ownership	0.655 (0.028)	0.664 (0.027)	0.635 (0.053)
Observations	10143	6082	4050

Respondents were asked to specify up to two household members as deciding whether to sell or use the plot as collateral, typically with the head of household listed first, and we designate these as plot owners. Plots with a female owner had a female listed as either the first or second plot owner, and may also have a male owner. The sample is plots the HH has the right to sell or use as collateral. Estimates are plot-level cluster-weighted means, with standard errors in parentheses.

Table 3. Proportion of plots by type of acquisition and sex of owner (2015)

	(1) All Plots	(2) All Owned Plots	(3) Plots with Only Female Owner(s)	(4) Plots with Only Male Owner(s)	(5) Plots with Mixed Gender Owner(s)
HH was granted the plot by local leaders	0.399 (0.055)	0.525 (0.035)	0.606 (0.049)	0.386 (0.064)	0.533 (0.040)
HH inherited the plot	0.326 (0.042)	0.415 (0.032)	0.370 (0.050)	0.510 (0.051)	0.406 (0.038)
HH rented in the plot	0.169 (0.094)	0.001 (0.000)	0.000 (0.000)	0.000 (---)	0.001 (0.001)
HH used the plot for free	0.006 (0.002)	0.000 (0.000)	0.000 (0.000)	0.000 (---)	0.001 (0.000)
HH moved into the plot without permission	0.017 (0.005)	0.020 (0.006)	0.010 (0.006)	0.033 (0.016)	0.021 (0.007)
HH shared crop in parcel	0.050 (0.008)	0.001 (0.000)	0.000 (---)	0.002 (0.002)	0.000 (0.000)
HH purchased parcel	0.029 (0.008)	0.038 (0.010)	0.011 (0.003)	0.069 (0.041)	0.038 (0.010)
HH acquired the plot in other unspecified way	0.004 (0.002)	0.001 (0.001)	0.002 (0.002)	0.000 (---)	0.001 (0.001)
Observations	12898	10147	1818	1615	6710

The survey does not clearly ask whether plots are owned. Instead they specify how the HH acquired the plot. We first look at how all plots were acquired, and then at how plots were acquired among plots with information on who in the HH has the right to sell/use it as collateral (who we label plot 'owners'). Plots may list 1 or 2 female owners, 1 or 2 male owners, or 1 male and 1 female owner. The sample of 'owned' plots excludes all but 12 plots rented in or used free of charge. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as households being granted the plot by local leaders for 39.9% of all plots, 52.5% of 'owned' plots, but 60.6% of plots with only female owners. The missing standard errors in columns (3) and (4) are because there are no plots in those subsample in the respective rows.

Table 4. Average age of plot owners, by owner listing and sex (2015)

	(1) Plot Owner	(2) First Listed Female Owner, if any	(3) First Listed Male Owner, if any
Age of first listed plot owner	50.202 (0.669)		
Age of first listed female owner, if any		44.647 (0.805)	
Age of first listed male owner, if any			48.423 (0.731)
Observations	10221	8622	8404

The first listed female or male owner may be the second listed plot owner, if the first listed owner is male/female. The average age of the second listed owner is 40.8. 6,743 plots have both a male and female owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses.

Table 5. Proportion of plots with any owner in age range, by age range and sex of owner (2015)

	(1) All Owned Plots	(2) Plots with A Female Owner	(3) Plots with No Female Owner
All statistics from 2012			
Plot owners between the ages of 10 and 24	0.056 (0.008)	0.055 (0.009)	0.061 (0.020)
Plot owners between the ages of 25 and 34	0.256 (0.020)	0.273 (0.023)	0.161 (0.029)
Plot owners between the ages of 35 and 44	0.396 (0.020)	0.413 (0.020)	0.297 (0.087)
Plot owners between the ages of 45 and 54	0.314 (0.020)	0.338 (0.021)	0.176 (0.035)
Plot owners aged 55 and above	0.385 (0.023)	0.389 (0.023)	0.360 (0.060)
Observations	10221	8520	1615

The age range variables are dummies taking a value of 1 if any listed plot owner is within the age range. Some plots with 2 listed owners may have owners in different age ranges. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as 5.6% of all 'owned' plots have an owner between the ages of 10 and 24, compared to 5.5% of all 'owned' plots with a female owner.

Table 6. Proportion of plots the HH has a certificate for and has the right to sell or use as collateral, by ownership status and sex of owner (2015)

	(1) All Plots	(2) Plots Granted or Inherited	(3) Plots Acquired in Other Way	(4) Owned Plots with A Female Owner	(5) Owned Plots with No Female Owner
HH has a certificate for this plot	0.659 (0.031)	0.686 (0.029)	0.269 (0.065)	0.702 (0.032)	0.567 (0.086)
HH has right to sell plot or use as collateral	0.941 (0.008)	0.946 (0.007)	0.865 (0.043)		
Observations	11170	10170	917	8531	1616

The sample excludes most plots rented in or used free of charge, since by definition these households cannot own the plot and these households were not asked about certificates or selling rights. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as households have a certificate for 65.09% of all plots, but 68.6% of plots granted or inherited and 70.2% of plots with a female owner.

4.2. Household-Level Summary Statistics

The sample includes 4,954 households, of which 3,619 completed the agriculture module of the survey and own, rent, or use for free at least one plot. Households without any plots are assigned a value of 0 for the plot count and area indicators. We separately analyze the subset of households with any plots (at least one plot) and of smallholder households (with total landholding between 0 and 4 ha).

All estimates are weighted using household survey weights.

Table 7. Number of plots by tenure type, by household type (2015)

	(1) All HHs	(2) HHs with Female Head of Household	(3) HHs With Any Plots	(4) HHs With Any Plots and Female Head of Household	(5) Smallholder HHs (0<Total Landholding, ha<=4)
Total number of plots for the household	3.272 (0.149)	2.073 (0.134)	4.171 (0.177)	3.139 (0.170)	4.027 (0.166)
Number of plots granted by local leaders	1.279 (0.087)	1.033 (0.093)	1.631 (0.108)	1.564 (0.133)	1.564 (0.105)
Number of plots inherited	1.333 (0.093)	0.791 (0.096)	1.700 (0.115)	1.198 (0.137)	1.680 (0.109)
Number of plots rented in	0.203 (0.029)	0.078 (0.014)	0.259 (0.037)	0.118 (0.020)	0.228 (0.027)
Number of plots used for free	0.035 (0.009)	0.026 (0.008)	0.045 (0.011)	0.039 (0.012)	0.047 (0.011)
Number of plots used without permission	0.050 (0.012)	0.039 (0.012)	0.063 (0.015)	0.059 (0.019)	0.060 (0.015)
Number of plots shared crop	0.230 (0.028)	0.049 (0.012)	0.294 (0.035)	0.074 (0.018)	0.295 (0.037)
Number of plots purchased	0.130 (0.028)	0.048 (0.010)	0.165 (0.036)	0.073 (0.014)	0.143 (0.023)
Number of plots acquired in other unspecified way	0.011 (0.003)	0.010 (0.006)	0.014 (0.004)	0.015 (0.008)	0.009 (0.003)
Number of plots owned (purchased, inherited, or granted by local leaders)	2.742 (0.130)	1.872 (0.127)	3.496 (0.156)	2.835 (0.164)	3.387 (0.144)
Number of plots with fields rented out	5.467 (0.257)	3.487 (0.229)	6.971 (0.307)	5.280 (0.297)	6.733 (0.282)
Plots for which HH has a certificate	1.817 (0.121)	1.299 (0.129)	2.317 (0.151)	1.968 (0.181)	2.246 (0.150)
Number of plots the HH has right to sell or use as collateral	2.611 (0.129)	1.783 (0.127)	3.329 (0.156)	2.700 (0.168)	3.207 (0.143)
Observations	4954	1517	3619	949	3404

The survey does not clearly ask whether plots are owned. Instead they specify how the HH acquired the plot. We group together granted and inherited plots as a proxy for 'owned' plots, though other plots may also be owned. Plots the HH has the right to sell or use as collateral are another proxy for 'owned' plots. The number of plots rented out, that the HH has a certificate for, and that the HH has the right to sell or use as collateral is a subset of the number of owned plots. The full sample includes all survey households, with households with no plots assigned a value of 0 for each indicator. Estimates are household-level cluster-weighted means, with standard errors in parentheses.

Table 8. Average plot area (ha) held by tenure type / average plot value / rental income, by household type (2015)

	(1) All HHs	(2) HHs with Female HoH	(3) HHs With Any Plots	(4) HHs With Any Plots and Female HoH	(5) Smallholder HHs (0<Total Landholding, ha<=4)
Plot area, all plots, ha	1.294 (0.186)	0.633 (0.085)	1.650 (0.236)	0.959 (0.119)	1.085 (0.042)
Plot area, owned plots (purchased/granted/ inherited), ha	0.936 (0.052)	0.587 (0.084)	1.194 (0.063)	0.889 (0.118)	0.901 (0.034)
Plot area, not owned plots, ha	0.395 (0.175)	0.050 (0.010)	0.504 (0.222)	0.076 (0.015)	0.215 (0.019)
Plot area, rented in plots, ha	0.250 (0.173)	0.016 (0.005)	0.319 (0.220)	0.024 (0.007)	0.066 (0.011)
Plot area, used free of charge plots, ha	0.007 (0.003)	0.001 (0.000)	0.009 (0.004)	0.001 (0.000)	0.009 (0.004)
Plot area, used without permission plot, ha	0.025 (0.008)	0.011 (0.005)	0.031 (0.010)	0.017 (0.008)	0.022 (0.008)
Plot area, shared crop plots, ha	0.070 (0.009)	0.011 (0.004)	0.089 (0.011)	0.017 (0.006)	0.084 (0.011)
Plot area, plot acquired in other unspecified way, ha	0.005 (0.002)	0.007 (0.006)	0.007 (0.003)	0.011 (0.008)	0.003 (0.001)
Plot area, rented out, ha	0.000 (---)	0.000 (---)	0.000 (---)	0.000 (---)	0.000 (---)
Estimated value of renting out plots for 12 months, birr	7363.609 (943.615)	3114.627 (252.183)	9389.165 (1176.531)	4716.577 (338.905)	9077.604 (1246.074)
Income for renting out plots, cash and in-kind value, birr	446.463 (249.888)	325.780 (111.038)	569.275 (318.569)	493.339 (163.921)	577.870 (344.009)
Observations	4954	1517	3619	949	3404

The survey does not clearly ask whether plots are owned. Instead they specify how the HH acquired the plot. We group together granted and inherited plots as a proxy for 'owned' plots, though other plots may also be owned. The area of rented out plots is a subset of the area of owned plots. HHs were not asked to estimate the value of their plots, but to value how much they could earn from renting each plot for 12 months. Full sample includes all survey households. Households without plots are given a value of 0. Estimates are household-level cluster-weighted means, with standard errors in parentheses. The table should be read as the average total plot area for all HHs in the sample is 1.294 ha, compared to 1.650 ha for HHs with at least one plot (i.e., dropping households with no plot area). The average HH has 0.899 ha of 'owned' plots, compared to 0.395 ha of non-owned plots. The average estimated value of owned plots is 7,132 birr for all HHs, compared to 9,095 birr for HHs with at least one plot. The missing standard errors for plot area rented out are because no households reported renting out any plots.

4.3. Community-Level Summary Statistics

The sample includes 432 communities included in the survey community module. For the purposes of this survey a "community" is defined as the village in rural areas and the mtaa in which the cluster is located in urban areas. The community questionnaire was administered to a group of local leaders determined by the field supervisors.

No community-level weights are included in the survey, so these estimates are unweighted.

Table 9. Community-level descriptive statistics (2015)

	(1) Mean b/se
Share of land in the community that is in bush	14.208 (0.912)
Share of land in the community that is in large scale farms	8.560 (1.057)
Share of land in the community that is in forest	8.917 (0.634)
Observations	432

Full sample includes all communities included in community survey. Communities with no use of land for different purposes are given a value of 0. Estimates are unweighted means (there are no community-level weights), with standard errors in parentheses.

5. Ethiopia Wave 2 (2013-14)

5.1. Plot-Level Summary Statistics

The sample includes 12,557 plots (called fields in the Ethiopia LSMS-ISA questionnaires), which are sub-divisions of larger parcels. Ownership information is collected at the parcel level, but area is collected at the field level, so we conducted our analysis at the field level to avoid potentially losing any detail aggregating to the parcel level. Parcel characteristics are assigned to all fields in the parcel. The survey does not ask whether plots (parcels/fields) are owned. Instead they specify how the HH acquired the plot. We use plots that the household has the right to sell or use as collateral as a proxy for ‘owned’ plots, and as approximately equivalent in terms of land rights. This represents 9,777 plots, including most plots granted by local leaders (4521 of 4916 plots) and inherited (4742 of 5202 plots) and excludes all but 12 plots that are rented in (1508 plots) or used for free (154 plots)¹. Similarly, for sex of the plot ‘owner’ we use the sex of the household members who can decide whether to sell or use plots.

The majority of questions are asked only of the sample of ‘owned’ plots. The sample of plots for each table is noted in the table notes, though in many cases observations are missing information.

All estimates are weighted using plot-level weights calculated by multiplying the household survey weight by the plot area, following the convention of the World Bank LSMS-ISA team.

Table 1. Plot tenure status by sex of head of household

	(1) All Plots	(2) Plots in Female- Headed Households	(3) Plots in Male- Headed Households
HH was granted the plot by local leaders	0.442 (0.034)	0.580 (0.060)	0.421 (0.034)
HH inherited the plot	0.356 (0.026)	0.346 (0.061)	0.358 (0.025)
HH does not own the plot	0.202 (0.029)	0.074 (0.014)	0.222 (0.033)
HH has a certificate for this plot	0.545 (0.050)	0.647 (0.055)	0.529 (0.055)
HH has right to sell plot or use as collateral	0.802 (0.027)	0.823 (0.045)	0.798 (0.029)
Observations	12557	2095	10462

Respondents were not asked about plot title, so we instead report on whether plots were granted by local leaders, inherited, or not owned (all other forms of plots acquisition). ‘Purchased’ was not an option for plot acquisition in this wave. Respondents were asked if they had a certificate for plots inherited or granted. Plots where this question was not asked are given a value of 0. Plot-level decision-making by gender was only recorded for a subset of plots, so we instead disaggregate by sex of the head of household. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as 44.2% of plots granted by local leaders among all households, compared to 58.0% of plots among female-headed households.

Table 2. Proportion of owned plots, by sex of owner and certificate type (2013)

	(1) Owned Plots HH Has Right to Sell or Use as Collateral	(2) Owned plots with a Certificate	(3) Owned plots with No Certificate
Plot owned or co-owned by female	0.756 (0.034)	0.802 (0.023)	0.660 (0.074)
Female-only owned plot	0.137 (0.017)	0.150 (0.024)	0.116 (0.020)
Male-only owned plot	0.244 (0.034)	0.198 (0.023)	0.340 (0.074)
Plot with mixed gender ownership	0.619 (0.036)	0.652 (0.031)	0.544 (0.067)
Observations	9656	5004	4460

Respondents were asked to specify up to two household members as deciding whether to sell or use the plot as collateral, typically with the head of household listed first, and we designate these as plot owners. Plots with a female owner had a female listed as either the first or second plot owner, and may also have a male owner. The sample is plots the HH has the right to sell or use as collateral. Estimates are plot-level cluster-weighted means, with standard errors in parentheses.

¹ In this survey wave, respondents were not given the opportunity to say they had purchased a plot when asked about plot acquisition.

Table 3. Proportion of plots by type of acquisition and sex of owner (2013)

	(1) All Plots	(2) All Owned Plots	(3) Plots with Only Female Owner(s)	(4) Plots with Only Male Owner(s)	(5) Plots with Mixed Gender Owner(s)
HH was granted the plot by local leaders	0.442 (0.034)	0.521 (0.035)	0.693 (0.056)	0.400 (0.089)	0.531 (0.029)
HH inherited the plot	0.356 (0.026)	0.400 (0.032)	0.284 (0.055)	0.412 (0.083)	0.421 (0.027)
HH rented in the plot	0.118 (0.017)	0.002 (0.002)	0.000 (---)	0.001 (0.001)	0.003 (0.003)
HH used the plot for free	0.006 (0.002)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
HH moved into the plot without permission	0.050 (0.025)	0.057 (0.032)	0.020 (0.010)	0.178 (0.110)	0.017 (0.008)
HH acquired the plot in other unspecified way	0.028 (0.006)	0.020 (0.006)	0.002 (0.001)	0.009 (0.004)	0.028 (0.010)
Observations	12545	9653	1731	2332	5590

The survey does not clearly ask whether plots are owned. Instead they specify how the HH acquired the plot. We first look at how all plots were acquired, and then at how plots were acquired among plots with information on who in the HH has the right to sell/use it as collateral (who we label plot 'owners'). Plots may list 1 or 2 female owners, 1 or 2 male owners, or 1 male and 1 female owner. The sample of 'owned' plots excludes all but 12 plots rented in or used free of charge. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as households being granted the plot by local leaders for 44.2% of all plots, 52.1% of 'owned' plots, but 69.3% of plots with only female owners. The missing standard error for "HH rented in the plot" in column (3) is because there are no rented-in plots with only female owners.

Table 4. Average age of plot owners, by owner listing and sex (2013)

	(1) Plot Owner	(2) First Listed Female Owner, if any	(3) First Listed Male Owner, if any
Age of first listed plot owner	47.707 (0.816)		
Age of first listed female owner, if any		41.963 (0.616)	
Age of first listed male owner, if any			46.419 (0.820)
Observations	9793	7468	8062

The first listed female or male owner may be the second listed plot owner, if the first listed owner is male/female. The average age of the second listed owner is 39.1. The sample of 'owned' plots excludes all but 12 plots rented in or used free of charge. 5,648 plots have both a male and female owner. Estimates are plot-level cluster-weighted means, with standard errors in parentheses.

Table 5. Proportion of plots with any owner, by age range and sex of owner (2013)

	(1) All Owned Plots	(2) Plots with A Female Owner	(3) Plots with No Female Owner
All statistics from 2012			
Plot owners between the ages of 10 and 24	0.066 (0.013)	0.068 (0.013)	0.060 (0.030)
Plot owners between the ages of 25 and 34	0.292 (0.041)	0.286 (0.036)	0.313 (0.095)
Plot owners between the ages of 35 and 44	0.377 (0.020)	0.442 (0.021)	0.176 (0.036)
Plot owners between the ages of 45 and 54	0.372 (0.069)	0.421 (0.064)	0.221 (0.085)
Plot owners aged 55 and above	0.280 (0.035)	0.287 (0.038)	0.259 (0.050)
Observations	9793	7323	2332

The age range variables are dummies taking a value of 1 if any listed plot owner is within the age range. Some plots with 2 listed owners may have owners in different age ranges. The sample of 'owned' plots excludes all but 12 plots rented in or used free of charge. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as 6.5% of all 'owned' plots have an owner between the ages of 10 and 24, compared to 6.7% of all 'owned' plots with a female owner.

Table 6. Proportion of plots the HH has a certificate for and has the right to sell or use as collateral, by ownership status and sex of owner (2013)

	(1) All Plots	(2) Plots Granted or Inherited	(3) Plots Acquired in Other Way	(4) Owned Plots with A Female Owner	(5) Owned Plots with No Female Owner
HH has a certificate for this plot	0.641 (0.054)	0.679 (0.049)	0.062 (0.035)	0.697 (0.051)	0.527 (0.096)
HH has right to sell plot or use as collateral	0.926 (0.015)	0.926 (0.016)	0.936 (0.038)		
Observations	10546	9860	544	7175	2296

The sample excludes most plots rented in or used free of charge, since by definition these households cannot own the plot and these households were not asked about certificates or selling rights. Estimates are plot-level cluster-weighted means, with standard errors in parentheses. The table should be read as households have a certificate for 64.0% of all plots, but 67.9% of plots granted or inherited, and 69.6% of plots with a female owner.

5.2. Household-Level Summary Statistics

The sample includes 5,262 households, of which 3,588 completed the agriculture module of the survey and own, rent, or use for free at least one plot. Households without any plots are assigned a value of 0 for the plot count and area indicators. We separately analyze the subset of households with any plots (at least one plot) and of smallholder households (with total landholding between 0 and 4 ha).

All estimates are weighted using household survey weights.

Table 7. Number of plots by tenure type, by household type (2013)

	(1) All HHs	(2) HHs with Female Head of Household	(3) HHs With Any Plots	(4) HHs With Any Plots and Female Head of Household	(5) Smallholder HHs (0<Total Landholding, ha<=4)
Total number of plots for the household	3.208 (0.138)	2.103 (0.146)	4.064 (0.168)	3.229 (0.197)	3.914 (0.164)
Number of plots granted by local leaders	1.345 (0.110)	1.132 (0.117)	1.704 (0.137)	1.739 (0.173)	1.637 (0.137)
Number of plots inherited	1.277 (0.078)	0.747 (0.093)	1.618 (0.096)	1.147 (0.135)	1.588 (0.095)
Number of plots rented in	0.414 (0.041)	0.122 (0.028)	0.525 (0.052)	0.188 (0.043)	0.490 (0.042)
Number of plots used for free	0.031 (0.005)	0.021 (0.006)	0.039 (0.006)	0.032 (0.010)	0.038 (0.006)
Number of plots used without permission	0.052 (0.012)	0.045 (0.015)	0.066 (0.016)	0.070 (0.022)	0.061 (0.015)
Number of plots acquired in other unspecified way	0.086 (0.012)	0.032 (0.008)	0.109 (0.016)	0.049 (0.013)	0.097 (0.014)
Number of plots owned (inherited or granted by local leaders)	2.623 (0.123)	1.879 (0.135)	3.322 (0.149)	2.885 (0.183)	3.225 (0.148)
Number of plots with fields rented out	0.179 (0.018)	0.277 (0.040)	0.226 (0.023)	0.425 (0.061)	0.225 (0.023)
Plots for which HH has a certificate	1.642 (0.112)	1.241 (0.117)	2.080 (0.140)	1.907 (0.169)	1.990 (0.138)
Number of plots the HH has right to sell or use as collateral	2.507 (0.119)	1.714 (0.134)	3.176 (0.145)	2.633 (0.189)	3.073 (0.144)
Observations	5262	1597	3588	870	3363

The survey does not clearly ask whether plots are owned. Instead they specify how the HH acquired the plot. We group together granted and inherited plots as a proxy for 'owned' plots, though other plots may also be owned. Plots the HH has the right to sell or use as collateral are another proxy for 'owned' plots. The number of plots rented out, that the HH has a certificate for, and that the HH has the right to sell or use as collateral is a subset of the number of owned plots. The full sample includes all survey households, with households with no plots assigned a value of 0 for each indicator. Estimates are household-level cluster-weighted means, with standard errors in parentheses.

Table 8. Average plot area (ha) held by tenure type / average plot value / rental income, by household type (2013)

	(1) All HHs	(2) HHs with Female HoH	(3) HHs With Any Plots	(4) HHs With Any Plots and Female HoH	(5) Smallholder HHs (0<Total Landholding, ha<=4)
Plot area, all plots, ha	1.411 (0.161)	0.788 (0.077)	1.787 (0.203)	1.211 (0.110)	1.175 (0.042)
Plot area, owned plots (granted/inherited), ha	1.128 (0.147)	0.731 (0.076)	1.430 (0.186)	1.123 (0.109)	0.969 (0.037)
Plot area, not owned plots, ha	0.282 (0.045)	0.057 (0.011)	0.357 (0.057)	0.088 (0.017)	0.205 (0.017)
Plot area, rented in plots, ha	0.161 (0.019)	0.032 (0.008)	0.204 (0.024)	0.049 (0.012)	0.145 (0.012)
Plot area, used free of charge plots, ha	0.008 (0.002)	0.004 (0.002)	0.011 (0.003)	0.006 (0.004)	0.008 (0.002)
Plot area, used without permission plot, ha	0.073 (0.038)	0.017 (0.007)	0.092 (0.049)	0.027 (0.010)	0.029 (0.009)
Plot area, plot acquired in other unspecified way, ha	0.040 (0.011)	0.004 (0.002)	0.051 (0.015)	0.006 (0.003)	0.024 (0.005)
Plot area, rented out, ha	0.043 (0.008)	0.078 (0.026)	0.055 (0.010)	0.120 (0.039)	0.041 (0.005)
Estimated value of renting out plots for 12 months, birr (1416.131)	7049.613 (1416.131)	3133.084 (343.828)	8930.617 (1772.093)	4812.281 (495.192)	8761.462 (1905.883)
Income for renting out plots, cash and in-kind value, birr	182.147 (22.009)	301.379 (55.562)	230.748 (28.172)	462.905 (84.980)	227.520 (28.911)
Observations	5262	1597	3588	870	3363

The survey does not clearly ask whether plots are owned. Instead they specify how the HH acquired the plot. We group together granted and inherited plots as a proxy for 'owned' plots, though other plots may also be owned. The area of rented out plots is a subset of the area of owned plots. HHs were not asked to estimate the value of their plots, but to value how much they could earn from renting each plot for 12 months. Full sample includes all survey households. Households without plots are given a value of 0. Estimates are household-level cluster-weighted means, with standard errors in parentheses. The table should be read as the average total plot area for all HHs in the sample is 1.410 ha, compared to 1.787 ha for HHs with at least one plot (i.e., dropping households with no plot area). The average HH has 1.128 ha of 'owned' plots, compared to 0.282 ha of non-owned plots. The average estimated value of owned plots is 7,049 birr for all HHs, compared to 8,930 birr for HHs with at least one plot.

5.3. Community-Level Summary Statistics

The sample includes 433 communities included in the survey community module. The community questionnaire was collected from focus groups of community informants and through direct observation. This questionnaire was administered by the field supervisors, rather than the enumerators at the enumeration area level.

No community-level weights are included in the survey, so these estimates are unweighted.

Table 9. Community-level descriptive statistics (2013)

	(1) Mean b/se
Share of land in the community that is in bush	14.208 (0.958)
Share of land in the community that is in large scale farms	6.815 (0.941)
Share of land in the community that is in forest	10.185 (0.700)
Observations	433

Full sample includes all communities included in community survey. Communities with no use of land for different purposes are given a value of 0. Estimates are unweighted means (there are no community-level weights), with standard errors in parentheses.