

# **WOMEN'S LAND RIGHTS AND VILLAGE COUNCILS IN TANZANIA**

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## ABSTRACT

This paper studies the land property rights of married women using a diagnostic survey on women's land property rights and Village Councils in rural Tanzania (VILART). Women own little property independently of their husbands. This puts them at particular risk of property deprivation in the events of divorce or widowhood. Our paper provides evidence that, despite statutory laws providing for gender neutral rights, customary patrilineal practices still play a large role in rural Tanzania. We find that the presence of children and their genders matter for inheritance expectations and that women's inheritance rights remain fragile against claims from male members of the deceased husband's clan. We show that village leaders of both genders have non-gender neutral views, and are therefore likely to reinforce traditional patrilineal practices.

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# 1 Introduction

Land is often considered the most important asset in rural areas, as it is the foundation for agricultural production. A society's ability to define and, within a broad system of the rule of law, establish institutions that can enforce property rights to land, as well as to other assets, has been deemed a critical precondition for social and economic development (Deininger (2003) p.7). Improved access to markets and increased population density have only raised the value of private property rights for land. It is within this context that recent studies have looked at women's access to land, and the effect of improved property rights for women. A number of studies argue that there are benefits, not just in terms of equity, but potential efficiency gains from strengthening property rights for women.

Land ownership is associated with higher bargaining power (Agarwal (1997), Fafchamps and Quisumbing (2002), Meinzen-Dick et al. (2017), Allendorf (2007), Menon, van der Meulen Rodgers, and Nguyen (2014)), less poverty, and better nutrition among widows (Milazzo and van de Walle (forthcoming)). Strengthening women's inheritance rights improved educational attainment of daughters and female health outcomes in India (Deininger, Goyal, and Nagarajan (2013), Calvi (2019)) and in Kenya (Harari (2019)), though in India it may also have strengthened son preference (Bhalotra, Brul, and Roy (2018)), and led to higher suicide rates (Anderson and Genicot (2015)). More investment in land has been found in areas of Zambia where widows have the right to inherit (Dillon and Voena (2018)). Evidence from randomized-controlled trials show land demarcation in Benin allowed women to reduce land-guarding practices (Goldstein et al. (2018)), and that providing land titles increased investments and soil conservation measures, especially among female headed households, in Rwanda (Ali, Deininger, and Goldstein (2014)).

In Tanzania, like in most of Sub-Saharan Africa, women are heavily involved in agricultural production but seem to own little of the land (Doss et al. (2015a)) and to be concerned about tenure security (Prindex (2019)). However, ensuring strong

property rights for women is not an easy task, and both formal and informal institutions play important roles. In particular, the interplay between customary practices and statutory law is key in understanding women's land rights in Tanzania. The legal reforms of the late 1990s aimed at both establishing strong property rights for occupiers of customary land, and improving gender equity. The tension, however, lies in the dual recognition of customary laws, that often discriminates against women, and the stated will to establish equal rights to men and women. In addition, Village Councils were given tremendous power to influence women's land rights, as they were made responsible for adjudicating, registering and titling all local holdings. Therefore, studying their role and views is essential to our understanding of women's *de facto* land rights.

This paper describes findings from the VILART dataset: a diagnostic survey on women's land property rights that we conducted in three regions of rural Tanzania (Katavi, Kigoma and Mwanza). The first important fact deriving from our survey is that married women own very few acres of land without their husbands as co-owners (4% of total household acreage). Women's access to land is mostly limited to joint ownership, and commonly purchased after marriage. Their capacity to bring land to the marriage is limited by their inheritance rights as daughters. Strikingly, even when they jointly own the land, women do not always have say regarding its sale, to whom to give it out as inheritance, and whose names would be listed on a hypothetical land title.

In terms of inheritance rights as widows, childless women are particularly unlikely to inherit land, but even in the presence of children, we find that the gender of children matters. Women with a female first born, a random event, are more likely to inherit. But this effect seems driven by households without an adult son where women seem to be acting as guardians of the land. These results suggest that the customary patrilineal practices still play a large role in rural Tanzania. Widows' access to land is tied to the presence of male children, and the results provide evidence that women find it much harder to inherit land from their fathers than men do.

Our survey also show that women's inheritance rights are fragile against claims from male members of the deceased husband's clan. This low tenure security also highlight the prevalence of *partial* property rights, such as the right to keep the land only until remarriage; or the right to cultivate it while alive, but not to sell it. In the event of divorce, the expectations of the distribution of joint land also fall short of an equal share. About 35% of the household respondents expect that the wife would get less than 50% of the joint land in case of a mutually agreed divorce. And, these expectations are very similar to what they think would have happened under their traditional clan laws. Women seem to be more pessimistic than men about the strength of women's inheritance rights but more optimistic than men about their rights in case of divorce.

Village Councils have a key role in the interplay between customary and statutory laws. The question is whether their views on land property rights are gender neutral. Our survey shows that members of the Village Councils hold more progressive views on women's land rights than household members. However, using *vignettes* about women's inheritance rights where we randomized the gender of the child, we find that the recommendations from Village Councils members, of both genders, still fall short of the gender egalitarian standards promoted by the statutory law.

Our findings are consistent with the literature on legal dualism in Africa (Aldashev et al. (2012a,b); Platteau (2000)), growing evidence that unmarried women, divorcees and widows are particularly vulnerable (see van de Walle (2013); Milazzo and van de Walle (2017); Lambert, van de Walle, and Villar (2017); Fafchamps and Quisumbing (2002)), and a number of recent papers showing that traditional norms have long lasting effects (among others Nunn (2009), Dillon and Voena (2018), or Milazzo and van de Walle (forthcoming), or Nunn (2009)).

## 2 Background

### 2.1 Customary Law

Tanzania is a highly diverse country inhabited by more than 120 ethnic groups and tribes. Prior to colonization, land rights were based on customary laws that differed from tribe to tribe, but shared some commonalities. Ownership of land was communal— owned by family, clan or tribe—, and customary laws tended to discriminate against women in terms of access, control and inheritance of land (see Government Notice 436 of 1963).

The majority of the ethnic groups in Tanzania are of Bantu origin who have customary patrilineal and primogeniture land inheritance practices.<sup>1</sup> In societies with patrilineal inheritance rules, property is traditionally inherited through the male clan line. The primogeniture distribution rule gives preference in inheritance to the eldest son. Widows generally do not have direct inheritance rights under the Tanzanian Bantu tribes customs (Knight (2010)). Their traditional practice was that a widow's (male) children inherit both land and property, and adopt the responsibility for taking care of her. She may remain in the family home as long as she does not remarry. In addition, levirate marriages (in which a widow agrees to be “inherited” by a male relative of her deceased husband) were commonly practiced.

In patrilineal societies, women's access to land is traditionally tied to their relationships to a male member of their household, and they are likely to face difficulties holding on to land in the event of the spouse's death or separation (Deininger and Castagnini (2006), Lambert, van de Walle, and Villar (2017)). In addition, the prevalence of patrilocality, whereby married couples reside near the husband's family, and polygyny can further fragilize women's access to land in both their roles as daughters and wives.

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<sup>1</sup>Source: University of Zurich's Atlas of Pre-colonial Societies.

## 2.2 Towards a Non-Discriminatory Statutory Law

During the colonial era, all land was declared crown land by the German (in 1885) then public land by the British (in 1923), though chiefs, headmen and elders retained substantial land administration power. The British introduced a land tenure system called the Right of Occupancy which was either a granted or deemed right.<sup>2</sup> The granted right of occupancy was statutory, while the deemed right was customary (it was the title of a native or a native community lawfully using or occupying land in accordance with native law and custom). The basic principle of customary land tenure is that land is held for use and, as long as it is used, the occupier maintains control over it. After independence in 1961, formal ownership of the land was transferred from the governor to the President, but the Tanzania Government maintained for a while similar land policy and practices (MLHHS (1997)).

In the 1990s, issues of land tenure insecurity and frequent land disputes made clear the need for a new approach to land and natural resource management, and for the strengthening of individual rights. Although all land in Tanzania was, and is still to this day, considered public land held by the President of Tanzania in trust for the people, this new approach involved a gradual transition to a legal framework that supported private property rights. This approach was embodied in the National Land Policy of 1995, and later codified in the Land Act and the Village Land Act of 1999 (and the Land Regulations issued in 2001) (see Bourguignon (2018), Rwegasira (2012)). The Land Acts provided the legal framework for land rights while recognizing customary tenure. It set up the institutional infrastructure for the issuance of land titles called *Certificates of Customary Rights of Occupancy* (CCROs). CCROs are permanent, and are governed by local/village customary law. Despite being rights of “occupancy,” customary rights of occupancy are like ownership in that they include the full bundle of rights of freehold title: citizens may freely sell, gift, bequeath, rent and mortgage their right of occupancy to others

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<sup>2</sup>See the Land Tenure Ordinance Number 3 of 1923 (also called Land Ordinance Chapter 113).

(Knight (2010)).

In addition, the Village Land Act of 1999 decentralized major parts of the administration of land to the village level, and devolved substantial authority to existing village governance bodies: The Village Council and the Village Assembly. Under the Act, the Village Council (VC hereafter) has the responsibility and authority to manage village land as a trustee managing property on behalf of the beneficiaries, the villagers. VCs are responsible for adjudicating, registering and issuing CCROs within their area. However, VCs are not allowed to allocate land or grant a customary right of occupancy without prior approval of the Village Assembly (VA hereafter), a supreme village organ whose members are all adult villagers (men and women) over 18 years of age.

These legal reforms were designed to transition Tanzania to a legal framework that integrates aspects of customary tenure and recognizes private property rights. Importantly, provisions were made to support equal property rights for women. The Constitution, ratified in 1977, recognizes equal rights and contains non-discrimination provisions (Giovarelli, Richardson, and Scalise (2016)). The Village Land Act of 1999 upholds customary rules for land, but requires that customary law be consistent with the non-discrimination clause in the Constitution. Customary rule, or any action dependent on the rule, shall be deemed void to the extent to which it denies women, children or persons with disabilities lawful access to ownership, occupation or use of any customary land (Hallward-Driemeier and Hasan (2012)). The Land Act recognized women's rights and introduced provisions on the ownership rights of women who co-reside with their husbands (Sundet (2005)). The Act also established affirmative action requirements in relevant local government bodies (e.g. quotas for female membership in VCs), potentially helping to alter land allocation practices by the Village Councils, which have frequently favored male-headed households.



## 2.3 Tensions between Statutory and Customary Law

Despite the legal efforts towards a gender-neutral rule of law, there are important tensions remaining between the recognition of customary law and the promotion of equal rights. These tensions are particularly acute when it comes to protecting the property rights of widows and divorcees. The Constitution of Tanzania states that all are equal before the law. However, it also states clearly that in matters concerning family situations and marriages, the court must consider the customs of the parties involved.

In terms of inheritance, Tanzania recognizes three parallel systems of intestate succession: the customary law (referring to traditional tribal law), the Islamic law, and the Indian Succession Act. Though the Indian Succession Act is gender neutral, the Tanzanian choice of law provisions favor the application of the discriminatory customary or Islamic laws to most Tanzanians of African origin. The (codified) customary law was largely based upon the practices of the Bantu tribes which were heavily discriminatory in terms of women's inheritance rights. Even when customary law provides certain limited inheritance rights to widows, women usually forfeit these limited rights upon remarriage.

The application of discriminatory inheritance law is clearly an important source of vulnerability for women and has been fought against by some lawyers. Some go as far as to argue that depriving widows, or divorcees, of a right to their husband's land violates the Constitution.<sup>3</sup> They also argue that the Village Land Act provides that, in the case of any inconsistency or conflict between the provisions of the Act and any other law on a matter of land law, the Land Act prevails (Duncan (2014)). However, the Land Act never explicitly addressed the question of inheritance. This vacuum leaves enormous room for interpretation to local judges and village institutions.

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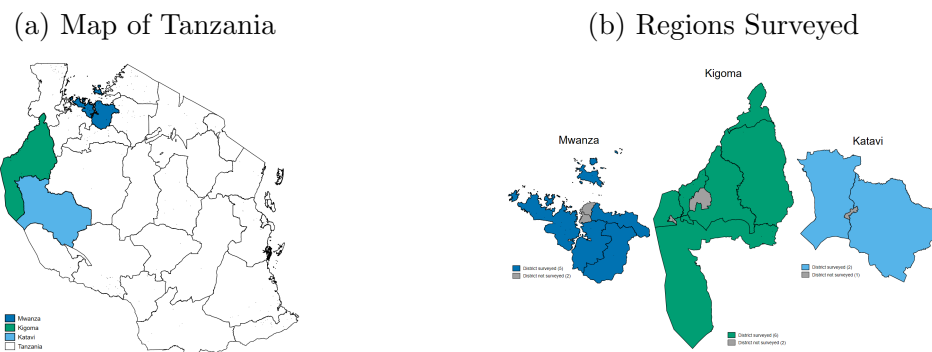
<sup>3</sup>See *Ephraim v Pastory* (2001) AHRLR 236 (TzHC 1990) Civil Appeal no 70 of 198. [https://www.uio.no/studier/emner/jus/jus/JUS5910/v13/undervisningsmateriale/ephraim-v-pastory-case\\_tanzania1990-1.pdf](https://www.uio.no/studier/emner/jus/jus/JUS5910/v13/undervisningsmateriale/ephraim-v-pastory-case_tanzania1990-1.pdf).

## 3 Data

### 3.1 The VILART survey

This paper uses data from the *Village Institutions and Land Rights in Tanzania* (VILART) survey, a diagnostic survey that we conducted in 45 villages distributed evenly across 3 regions in Tanzania (Katavi, Kigoma and Mwanza).<sup>4</sup> Figures 1a and 1b plot the geographical location of the surveyed regions and districts. These three regions were selected based on their low levels of distribution of CCROs (according to the records from the National Land Use Planning Commission (NLUPC)). In each region, we randomly selected 15 villages from the 2012 Tanzanian census list of villages. The specific villages are listed in the Appendix Table A1. They span 13 districts distributed evenly across the 3 regions.

Figure 1: VILART Survey



The primary units of analysis are members of households and members of the village institutions (VI hereafter).

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<sup>4</sup>For more information see <http://faculty.georgetown.edu/gg58/VILART.html>.

## 3.2 Household Interviews

Qualifying household respondents had to be married,<sup>5</sup> either the man or the woman must have lived in the village for at least 10 years, must own and use land, be age 18 or higher, be fluent in Swahili, and be non-refugees. Both the household head and (one of) his/her spouses were interviewed. In each village, around 10 households were selected resulting in a sample size of 912 respondents interviewed. Table A2 provides basic descriptive statistics on the households. Given our sampling design, exactly 50% of respondents are female. On average, the men are 48 years old and have completed 6 years of schooling. The women are 40 years old and have completed an average of 5 years of education. About 10% of the sample belongs to a polygamous household, and men and women have 6 and 5 children on average. They have very limited access to electricity (10%), bank accounts (10%) or internet (2%).

Beyond sociodemographic characteristics, the survey collected households' perceptions on women's land rights and village institutions through multiple hypothetical scenarios (*vignettes*). Appendix A1 describes the household *vignettes*. The survey also collected an extensive amount of land ownership data, through interviews with the husband and the wife separately, including expectations of women's ownership upon divorce or the husband's death.

**Land Data.** We first asked the husband how many plots (*shambas* and *kiwanjas*)<sup>6</sup> he owned both independently and jointly with the interviewed spouse. The husband was allowed to list up to 5 *shambas* and 2 *kiwanjas*, as long as the total number of *shambas* was less than 6.<sup>7</sup> We collected data on land characteristics for each individual plot (e.g., size, quality, use); ownership, selling, inheritance and divorce rights; and existence and demand for land titles. We also asked the husband if the

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<sup>5</sup>Couples that had been living together as a married couple for at least two years also qualified.

<sup>6</sup>Shambas are cultivated plots and kiwanjas are plots with a dwelling

<sup>7</sup>Only 39 respondents (8.5% of the sample) reported more than 5 *shambas*, in which case they were asked a series of questions about their land holdings characteristics in general.

wife knew about the existence of each plot to avoid disclosing to her any confidential information (only 1.08% of the plots are not known). Then, we first showed the wife the list of land parcels listed by the husband and asked her if there were any other plots that she owned with or without her husband which were missing from the husband's list. Again, if the number of *shambas* was less than 6, we allowed her to list 5 extra *shambas* and 2 *kiwanjas*.<sup>8</sup> The same information was collected on these additional plots. For those already listed by the husband, the wife only answered questions on ownership and other land rights. In total, we collected data on 692 *shambas* and 517 *kiwanjas* listed by husbands and 68 *shambas* and 49 *kiwanjas* additionally listed by wives.

### **3.3 Members of the Village Institutions Interviews**

In each village, 10 members of the VIs were interviewed individually for a total of 450 interviews. The 10 respondents were randomly selected based on the full roster of individuals belonging to the following councils: Village Council, Village Land Council, Village Adjudication Committee and VLUM. The randomization procedure aimed to have a representative sample in terms of both council membership and gender. The interviews included questions about their knowledge of the law and their perceptions on women's land rights. Table A5 presents summary statistics on the VI members and it compares them with the average household members. Both, men and women of the VIs are more educated than the household members. The VI women are also older and more likely to have been born in the village than the household women.

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<sup>8</sup>None of the female respondents listed more than 5 new *shambas*.

### 3.4 Village Institutions Community Survey.

We conducted a community survey through group interviews with VI members collecting data on the socioeconomic and demographic characteristics of the village, VIs composition and functioning, and village land rules. Table A3 provides basic descriptive statistics of the village characteristics. On average, the villages have 631 households and 4,000 residents. Agriculture is the main economic activity for the majority of the villages. It represents, on average, the main source of income for almost 90% of households in a given village. Pastoralism is the second most important income generating activity, but considerably less important than agriculture. The villages are also far from economic markets. The average distance to the nearest market outside the village is almost 6 hours walking. In 75% of the villages, the most common mode of transport to this market is either walking or biking, and only half of the villages have some sort of financial access located in the village.

**Customary Practices.** More than 30 ethnicities are present in the villages surveyed in the VILART survey. But the Sukuma, Ha and Hutu constitute about three quarters of our villages' population (see Table A4). During the group VI interviews, the VI members were asked to identify the 5 largest ethnic groups in their village (in population size) and to provide information about their population, main economic activity, historic presence in the village, and customary practices in terms of land rights and divorce.

Table 1 shows that customary practices in non-gendered concepts of land ownership are very similar across the main ethnicities in our sample, while there is much more variation in terms of women's property rights. The average share of the population of ethnic groups where traditional clan law would permit women to inherit land from husbands with full rights is 50%; where daughters could inherit land is 79%; and where wives could make the decision to divorce their husbands is only 23%.

Table 1: Traditional Customary Law Practices

Practice	Mean	SD
Individuals to own land	0.98	0.14
Women to own land	0.81	0.39
Individuals to rent out land	1.00	0.02
Individuals to sell land to other members of the tribe	1.00	0.02
Individuals to sell land to non tribe members	1.00	0.06
Sons to inherit land	1.00	0.02
Daughters to inherit land	0.79	0.41
Women to inherit land from their husbands with full rights	0.51	0.50
Women to inherit land from husbands until remarriage	0.38	0.49
Husbands make a decision to divorce his wives	0.82	0.39
Wives make a decision to divorce her husband	0.23	0.42

Summary statistics based on 157 ethnic-village observations

The customary practices reported are consistent with the available information on ancestral cultural practices in Tanzania. In Table A4, we combine the list of ethnic groups in the VILART data with Murdock’s 1967 Ethnographic Atlas.<sup>9</sup> Most of these ethnic groups traditionally had customary patrilineal and primogeniture land inheritance practices, and patrilocal and polygamous marital practices.

## 4 Women’s Rights to Land

### 4.1 Women’s Land Ownership

The first important fact deriving from the VILART survey is that married women own very few acres of land without their husbands as co-owners. Women’s access to land ownership is mostly through joint ownership with their spouses. We define as

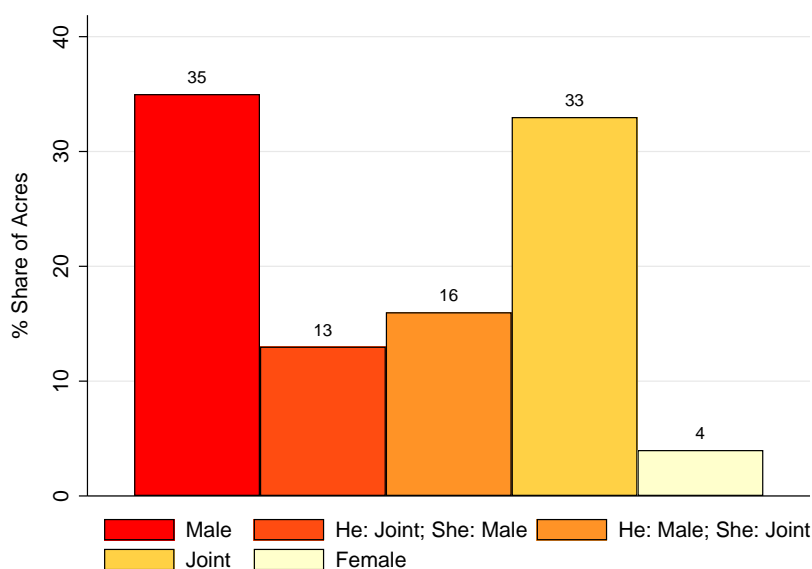
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<sup>9</sup>J. Patrick Gray. 1999. A Corrected Ethnographic Atlas. *World Cultures* 10(1):24-85.

“joint ownership” any land for which there is no disagreement between the partners that both the husband and wife own it.

Figure 2 shows the distribution of acreage across types of ownership.<sup>10</sup> “Male” (“female”) land is defined as plots for which the husband (wife) has ownership and the partner does not. In all the categories, there may be other owners of the land too (e.g. sons, extended family).

Figure 2: Distribution of Acreage Ownership



“Male” (“female”) indicates only the husband (wife) has been reported to own the land. “Joint” indicates both the husband and the wife have reported to both own the land. “He:Joint; she: Male” indicates the husband has reported the land joint, but the wife has not reported herself as the owner. “She:Joint; he: Male” indicates the wife has reported the land joint, but the husband has not reported her as the owner.

It is striking how little land is owned by women without their husband. Only 4% of the acreage belongs to women but not to the husband. The share of acres in our sample that is considered jointly owned by both the husband and the wife is 33%. Another 29% of acres, however, considered jointly owned by either the husband (13%) or the wife (16%). Moreover, more than half of the land that women own

<sup>10</sup>The distribution based on number of plots provides a very similar picture, except for a more equal distribution of male and joint plots: male plots tend to be larger.

without their partners is co-owned with either her sons (23%), daughters (8%), or her extended family (28%).

Women's access to land not only differs from their husbands' in terms of quantity, but also the type of land that they own. Table 2 summarizes the average characteristics of the plots by type of ownership. The second set of columns present the average difference of each type with respect to the plots solely owned by the husband. Women appear to be more likely to own cultivated land than land that is used for other purposes, such as residential. Not surprisingly, women also work substantially more on the land they own. On average, their plots are smaller and further away from the homestead, although the difference is not strongly statistically significant. In terms of acquisition, the jointly owned plots are more likely to be acquired after marriage and to be purchased. As a consequence, these joint plots are also more likely to have some sort of ownership document and to be perceived as valid to be used as collateral to borrow money. Overall, 70% of the plots do not have any type of ownership document, but there are substantial differences depending on how the land was acquired. Among purchased plots, 49% have no document, as compared to 89% of the inherited ones.



Table 2: Household Plots. Summary Statistics

						Difference with Male plots			
	Male	He Joint, She Male	He Male, She Joint	Joint	Female	He Joint, She Male	He Male, She Joint	Joint	Female
<b>Land Characteristics</b>									
Area	3.57	2.44	2.60	3.15	1.87	-1.14	-0.97	-0.43	-1.70
Cultivated	0.45	0.44	0.59	0.51	0.61	-0.01	0.14***	0.06*	0.16**
Residential	0.41	0.48	0.31	0.30	0.16	0.06	-0.11***	-0.11***	-0.25***
Distance	28.12	43.22	28.20	41.91	70.35	15.10	0.08	13.79	42.24***
Post-marriage	0.50	0.65	0.65	0.73	0.63	0.15***	0.15***	0.23***	0.13*
Purchased	0.40	0.46	0.43	0.58	0.31	0.06	0.04	0.18***	-0.09
Inherited	0.41	0.30	0.27	0.19	0.55	-0.11**	-0.14***	-0.22***	0.14*
Collateral	0.40	0.47	0.50	0.55	0.45	0.07	0.10**	0.15***	0.05
No title	0.73	0.70	0.68	0.65	0.69	-0.03	-0.06	-0.08**	-0.04
CCRO	0.01	0.01	0.02	0.02	0.00	0.00	0.01	0.01	-0.01
Wife works	0.57	0.84	0.59	0.88	0.80	0.27***	0.02	0.31***	0.23**
Husband works	0.86	0.88	0.75	0.94	0.27	0.02	-0.10**	0.08***	-0.59***
<b>Wife Land Rights</b>									
Right to sell	0.07	0.64	0.22	0.75	-	0.57***	0.14***	0.68***	-
Give out as inheritance	0.08	0.54	0.25	0.64	-	0.46***	0.17***	0.57***	-
Decide title names	0.04	0.30	0.18	0.33	-	0.25***	0.13***	0.28***	-

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Wife/husband works includes only cultivated land plots.

## 4.2 Women's Land Decision Rights

One might wonder what is the meaning of “ownership” of land in a household.<sup>11</sup> In general, ownership is thought of as a collection of rights: the right to the product of the land, the right to use and the right to dispose of the land. Within a household, owning land may come with a variety of rights such as selling, deciding on inheritance, or deciding whose names would be registered during a land titling process (Doss et al. (2015b)). The bottom panel of Table 2 presents the husband's answers

<sup>11</sup>Especially in a country where, technically, all the land belongs to the president, though it is not clear that state expropriation is more of a risk in Tanzania than elsewhere.

with respect to their spouses' rights in regards to both his and their joint plots.

Strikingly, even when they jointly own the land, women do not always have decision power regarding its sale or to whom to give it to as inheritance (either decision power by themselves or jointly with their husbands). However, they have substantially more rights on the joint plots than on the plots that he owns without them ( $\approx$  70% vs. 8%). Finally, men grant women very little decision making power in terms of having a say in whose names would be registered as claimant/owners in case a CCRO<sup>12</sup> was granted, averaging only 33% of the joint plots.

Overall, we see that most of the land owned by women is joint with their husbands and that women have some, but limited, decision power regarding these jointly owned plots. This raises the question of what would happen to the land in case of divorce or death of the husband.

### **4.3 Women's Land Rights upon Divorce**

Divorce is a first source of vulnerability for women. Women's limited access to land within marriage can be exacerbated upon divorce if they lack the means to secure a fair share of the assets for themselves. The 1971 Law of Marriage Act grants the court the power to order the division between the parties of any assets acquired by them jointly during the marriage. But in practice, the capacity of the statutory law to actually influence the division of assets upon divorce is likely to remain curtailed, at least in rural areas. Marriages are predominantly customary to begin with, and have not officially been registered (only 26% of the marriages in the sample are registered).

We collected information from both husbands and wives about their expectations regarding the distribution of jointly owned land under two hypothetical scenarios:

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<sup>12</sup>CCROs are land titles. In particular, certificates of right of occupancy. See further explanation in Section 2.

what would the wife own if the couple mutually agreed to get a divorce; and what would the wife own if she were at fault in the divorce. In addition, household members were also asked to imagine what would have happened under their clan law if a husband and a wife who jointly own and cultivate a *shamba* mutually agree to divorce<sup>13</sup>). Table 3 summarizes the answers.

Table 3: Expectations of Wife’s Access to Joint Land upon Divorce

	Female			Men		
	Mutual	Her fault	Custom	Mutual	Her fault	Custom
0-50%	26.29	34.56	32.01	35.19	43.68	38.27
50%	42.70	38.48	65.78	34.92	30.22	59.29
If children/remarriage	26.29	23.04	NA	23.81	20.88	NA
+50%	4.72	3.92	2.21	6.08	5.22	2.43

The numbers reflect the percentage of respondents per answer choice. The number of valid answers per column from left to right are: 445, 434, 453, 378, 364, and 452. Only men currently holding joint land were asked about their own divorce expectations. The answer “if children/answer” includes respondents who answered “Yes, she would be the owner if we have children living at home” and “She would be the only owner until she remarries. The children/remarriage options were not provided in the custom questions.”

Three interesting facts emerge from the answers. First, about 30% of women and 40% of the men believe the woman would get less than an equal share over the joint land in case of divorce. In fact, the majority of the 0–50% answers are “she would not be the owner.” Notice that there is a substantial amount of agreement between men and women’s expectations but women are more optimistic. The difference between their answers is statistically significant at the 5% level in the three divorce scenarios.

Second, both men and women are about 8% more likely to think the woman would get nothing if she were at fault as opposed to a mutually agreed divorce. The difference in means is also statistically significant at the 5% level, and it is mainly driven by the “she will never be the owner” answer choice. In order to understand better what would qualify as “fault” in a divorce, we asked the wife and husband

<sup>13</sup>The description of all the vignettes are in the Appendix.

separately what they considered a fault of the husband or the wife to justify a change in land ownership. In Figures A1 and A2, we plot the answers. The respondents are more likely to believe a change in ownership is justified when the wife is at fault in the divorce. Among women(men), 18%(34%) of them believe there is nothing a husband could do to justify the change in ownership, in contrast with the 13% (24%) who believe so with respect to wives' faults.

Finally, both men and women provide remarkably similar answers to the expectations about their own divorce and what they believe would have happened under their clan law. Approximately 30% of female and 40% of male respondents believe the wife would not get an equal share of the joint land post-divorce. This evidence suggests that the clans' customary laws are still largely at play when it comes to post-divorce property arrangements. Among the Sukuma, the largest ethnic group in our sample, the wife is customarily allowed to retain possession of whatever property she brought to the marriage. But our data shows that women own very little land acquired before the marriage and therefore bring little land into the marriage as compared to their husbands. The Sukuma's practices also state that any property jointly purchased by the husband and wife must go to the husband, unless there were any agreements before witnesses (Cory (2018)). Among the Ha, the second largest ethnic group in the sample, divorce has traditionally been treated as a private affair between parties and their families, not a matter to be discussed in court (Scherer (1959)).

#### **4.4 Women's Inheritance Rights**

The extent and security of inheritance rights is of primary importance for married women. The assets that women bring to and control during marriage tend to improve their intra-household bargaining power and welfare (Fafchamps and Quisumbing (2002)). In the VILART survey, inherited land represents about 30% of the total

household land,<sup>14</sup> but only 4.70% of the acres were inherited by the wife compared to 87.11% by the husband. This descriptive evidence is in line with the traditional patrilineal practices to which the household members' ethnic groups subscribe. Hence, a first barrier to women's ownership comes from the weak claim they have as daughters to their family clan's land.

In addition to affecting them as daughters, the discrimination of women in inheritance practices affects them in their role as wives. Patrilineal customs imply that widows have either none or very limited access to land after the death of the husband. In our survey, we collected information regarding inheritance expectations from both husbands and wives, though the questions slightly differ. For the jointly owned land, we asked the husband to estimate the share of land that he would expect to go to each of the current household members in the hypothetical case that he died intestate. We asked the wife about the share that she would expect to get if he died intestate, and, if she expected to own it alone or jointly with others.

It is encouraging that the majority of husbands, 91.2%, expect some share of the joint land to go to the wife. Most women also expect to inherit some of the land (92.6% report a positive share), but only 8% of them say they would be the only owner of that land. The rest expect to own it jointly with her children.<sup>15</sup> The next Section will show further evidence that women's inheritance rights are still heavily linked to their role as mothers, especially to the existence of sons, and that these rights remain fragile.

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<sup>14</sup>Among those whose husband reported less than 6 *shambas*.

<sup>15</sup>After reporting the share of land they expected to get, we asked them: "Do you expect to own that share of land alone or jointly?" The answer options were: only owner; jointly with sons and/or daughters; jointly with spouse extended family; other.

## 5 The Persistence of Customary Practices

The adherence to customary practices can be one of the most important barriers to women’s access to land. In this section, we first provide empirical evidence on the persistence of patrilineality in inheritance expectations. Second, we document the fragility of the tenure security of women’s land holdings.

### 5.1 Patrilineality and Women’s Inheritance Expectations

Given the favorable customary inheritance rights of boys versus girls, we may expect the distribution of inheritable land between the wife and her offspring not to be gender neutral. Women might perceive a lower “threat” from daughters as compared to sons. Unfortunately, we cannot test directly how the overall sex composition of children affects the mother’s inheritance rights. That is, we cannot treat the fraction of sons within a household as an exogenous variable. There is a large amount of empirical evidence showing how fertility decisions depend on the sex of previous children. This is true even in high fertility countries, such as Tanzania, where birth intervals respond to the offspring’s sex composition (Milazzo (2014), Rossi and Rouanet (2015)).

In rural Tanzania, sex-selective abortion is not a concern. Therefore, the sex of the first born qualifies as a random event, after controlling for the decision to be a parent. There is a growing literature demonstrating the sex of the first child has consequences on family structure and fertility (Dahl and Moretti (2008), Jayachandran and Kuziemko (2011), Milazzo (2014), Ichino, Lindstrom, and Viviano (2014)), on crime (Dustmann and Landers (2018)) and on individuals views on gender issues (Oswald and Powdthavee (2010), Washington (2008)).

We test whether having a female first born—irrespective of whether this child is currently alive, living inside or outside of the household—makes a difference in terms

of women’s inheritance expectation. Equation (1) presents our main specification:

$$Y_{hv} = \alpha + \beta FFB_{hv} + \gamma X_{hv} + \delta_v + \epsilon_{hv} \quad (1)$$

where  $FFB_{hv}$  is an indicator variable equal to 1 if the first born child of a husband from household  $h$  living in village  $v$  is female. The coefficient of interest  $\beta$  tests the effect of having a female first born on inheritance expectations. We consider three different outcome variables  $Y_{hv}$ : the share of joint land the husband expects to go to their interviewed spouse; the share of land that her husband owns without her that she expects to inherit; and the share of joint land the wife expects to inherit. The three questions were hypothetical scenarios in case the husband happened to die intestate. The vector  $X_{hv}$  is a set of household controls: wife’s and husband’s age and education; wife’s ethnicity and religion dummies; and total acreage of household’s land. Finally,  $\delta_v$  are village fixed effects, and  $\epsilon_{hv}$  is a conditionally mean-zero error term which we cluster at the enumerating area level. The results are robust to wild boot-strapping the standard errors to address that there are 52 clusters.

Before discussing the results, note that we first checked that the gender of the first born has no noticeable effect on the total household acreage acquired either before or after the current marriage.

The first column of Table 4 presents a regression where the outcome variable is the share of joint land that husbands would expect to go to their interviewed spouse. The second and third columns’ outcome variables are the equivalent wives’ expectations on the land their spouses own without and with them. The results from having a female first born are both economically and statistically significant: an 8.4% and 9.2% increase for males and females, respectively, on the share of joint land they would expect to go to the hypothetical widow. In Appendix A.5, we provide evidence that the increase in the wife’s land expectation comes at the expense of the shares of land going to sons if their father dies. This is at least partially a mechanical

effect from having less sons given that the first child is a daughter.<sup>16</sup> Hence, we also provide evidence that it is indeed the first born child who is expected to obtain a lower share of the husband's joint land when she is a woman.<sup>17</sup>

Table 4: Effect of Female First Born on Inheritance Expectations

	Male Expectations	Female Expectations	
	Joint	Husband	Joint
<b>Female FB</b>	8.36* (4.62)	2.57 (5.24)	9.17** (3.91)
N	192	244	243
Adj. R2	0.21	0.16	0.05
Y mean	58.65	59.53	76.67
Y sd	37.73	44.10	33.10
<i>Robustness checks</i>			
Children	9.01* (4.94)	2.89 (5.11)	9.16** (4.04)
Prev children	8.60* (4.77)	2.54 (5.06)	9.64** (3.92)
Polygamy	8.84* (4.85)	2.74 (5.17)	9.28** (3.93)
Young women	12.96** (6.33)	6.05 (6.53)	7.68 (4.65)

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors, in parentheses, are clustered at the enumerating area level. All regressions include wife controls: education, age, ethnicity, and religion affiliation; husband controls: education and age; and total household acreage. The robustness checks present the coefficients of interest for the same specification but controlling for the number of children, an indicator variable equal to 1 if there are children prior to the marriage, indicator variable for polygamous variable, and the results dropping women above 45 years old.

A possible explanation for the female first born results is that wives would only inherit more land if there are no sons born to their husbands. But this is not supported by our data since 90% of the men in our sample have at least one son, and the results are robust to restricting the sample to these households (see Table A13). But the effect can still come from women acting as guardians of the land if the sons are too young to claim their share. In Table A14, we present results restricting the sample to households where the husband has at least one son aged

<sup>16</sup>These results are based on the husband answers. The caveat is that these shares were only asked to be assigned for current household members. Table A10 only includes households where the first born child is still living in the household.

<sup>17</sup>Table A11 drops households with: unknown year of birth data for at least one of the husband's children, and households where the first born does not live in the household anymore.



12 years or above. Indeed, the female first born effect on husbands' inheritance expectations disappears. Once they have an adult son to inherit the land, they do not seem to expect their wives to inherit a larger share of the land if their first child was a daughter.

These results suggest that customary patrilineal practices still play a large role in rural Tanzania: widows' access to land is still very tied to the presence of male children, and daughters are less likely to inherit land from their fathers than sons. The first-born daughters with younger brothers do not inherit more, instead the land seems to go to their mothers to guard it for the future adult sons. Interestingly, the wives' inheritance expectations coefficient is, if anything, higher among those with an adult son in the household. This could simply reflect a greater sense of tenure security provided by the "adult" son against for example a claim from her husband's family clan. The inheritance expectations of the wives though should be interpreted cautiously given the difference in the framing of the question<sup>18</sup> and that only 8% of them report the share of land to be owned solely.

Finally, for each regression, we test whether the presence or lack of a first-born effect is partially explained by posterior fertility decisions (total number of children) or a change in the probability of polygamy. At the bottom of Table 4, we present the coefficients of interest from robustness checks: controlling for the number of children and an indicator variable for polygamy. We already discussed how the sex of the born child can affect the probability of the husband getting a second wife (Milazzo (2014)). The mechanical effect from having to divide the inheritance among more family members could by itself bias the results. There could also be secondary effects deriving from the inheritance rules on assets distribution among the different wives. For example, first wives tend to inherit more than lower ranked wives in many ethnic customs. The female first born effect could be partially driven by interviewing first wives whose husband's main heir (first born son) is from another

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<sup>18</sup>Wives were asked to report which share of the land they would expect to get, and if they expect to own the share alone or jointly.

wife, and they expect to get a greater share of the land within their dwelling allocation. Unfortunately, we do not know the rank of the wife we interviewed. But the inheritance results are robust to controlling for being in a polygamous marriage, and the results also survive restricting the sample to non-polygamous marriages, although the estimates are more imprecise in the last one (see TableA12).

**Robustness checks** We run several checks on the exogeneity assumption of the sex of the first child ever born. Selection at birth is not a concern given the lack of sex selective abortion in rural Tanzania. But sample selection could still be a source of bias. Over the entire sample, the sex ratio of the first born is not statistically different from the natural ratio, but, women above 45 are more likely to have a ratio biased towards first born boys. This is consistent with the findings of Milazzo (2014) for Nigeria. We find no correlation between the gender of the first born and being born outside the village, family size, ethnicity or religious affiliation. The source of selection in our sample seems to come from the likelihood of remarriage. Women over 45 with a girl are less likely to have been married before. We do not find any sign of selection among males. To address the selection issue among older women, we test if results are robust to controlling for having children prior to the current marriage and to dropping women over 45 (see the coefficients of interest at the bottom of Table 4).

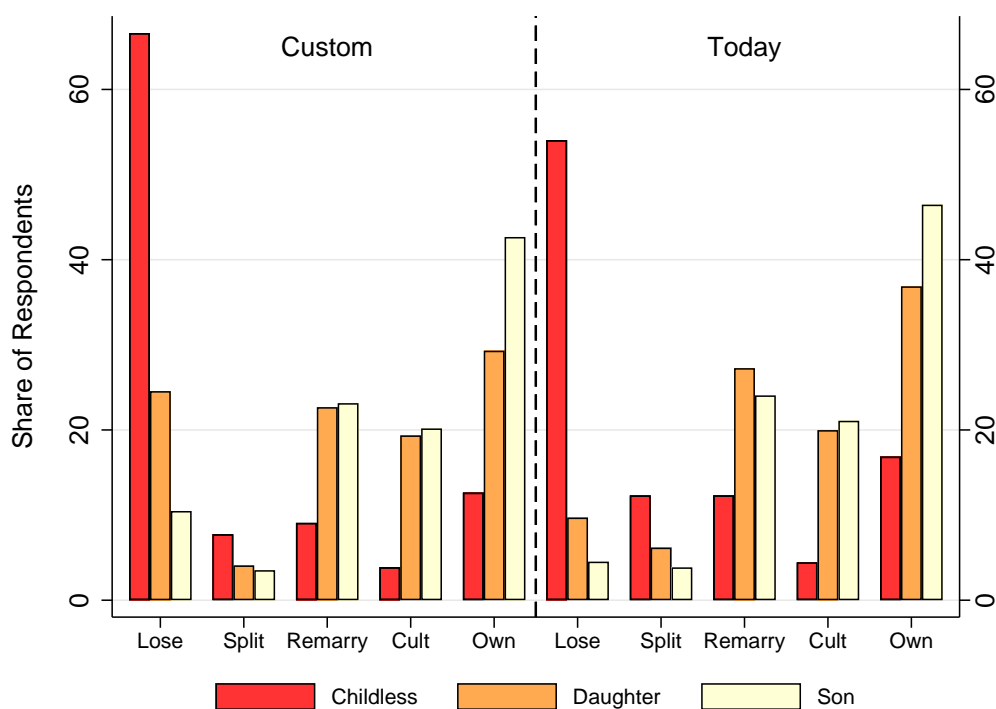
## 5.2 Women’s inheritance rights are fragile

Understanding the extent of women’s land rights also means assessing the strength and security of these property rights. A global report on perceptions of tenure security in 33 Countries (including Tanzania) reports that widowed and divorced female respondents show much lower rates of tenure security than their male counterparts do (Prindex (2019)). Unfortunately, this is also what is observed in our survey.

We presented to household members different hypothetical scenarios – called *vi-*

*gnettes*, described in detail in the Appendix— and asked them to predict what they expect to happen (today) and what would have happened under their own clan customs. Respondents were first asked to imagine a woman who inherited a plot (*shamba*) from her husband, which she was cultivating and there was no land title, and a male member of his clan claimed the land. We then asked them what they thought would happen under three potential scenarios: the wife had no children, the wife had a daughter from the husband, and the wife had a son from the husband. Village institution (VI) members were also asked, during private interviews, the childless version under their own clan customs. Figure 3 reports both the “today” and the “clan custom” household answers to the three different vignettes.

Figure 3: Household’s Inheritance Views



The premise for all the *vignettes* is “Imagine that a woman inherited from her husband a *shamba* (without any land title/ownership document) that she was cultivating, and that a male member of his clan claims the land.” The “Today” and “Custom” versions posed the question in terms of “what do you think would happen if...”, and “what do you think would have happened under your clan customs if...”, respectively. The “childless”, “daughter”, and “son” versions completed the question with “if she had no children”, “if she had a daughter from him”, and “if she had a son from him”, respectively. Figure 3 summarizes the following answers: “Lose” (She would lose the *shamba*); “Split” (They would split the *shamba*); “Remarry” (She could keep it but would lose it if she remarries); “Cult” (She could cultivate it all her life—even if she remarries—but she could not sell it); and “Own” (She would be the owner—cultivate, sell, decide who inherits).

Overall, evidence suggests that women inheritance rights have strengthened over time, but are still greatly influenced by customary laws that strongly favor men. About half of respondents still believe the wife would lose the land plot if she had no children (down from 67%). The non-childless vignettes portray a more optimistic evolution with only 10% and 5% of respondents thinking she would lose the *shamba* if she had a daughter or a son from him, respectively—as compared to 25% and 10% under their traditional customary law. Even under the most favorable scenario (with a son), less than half of respondents expect the wife to be able to fully keep the plot.

Land rights are often more complex than just insecure or secure. It is useful to think of the level of security of land rights in terms of a continuum moving from weak/insecure to strong/secure. In our survey, we let respondents choose from a range of intermediate ownership choices, in addition to the two extreme options of losing or fully keeping the land. Specifically, the possible answers were: “*they would split the land;*” “*she could keep it but would lose it if she remarries;*” and “*she could cultivate it all her life (even if she remarries) but she could not sell it.*”<sup>19</sup> First, it is noticeable that, both in the “today” and under the “clan custom” vignettes, a large proportion believe the woman would obtain some partial rights to the land. These range from 20% to 46% in both the without and with children vignettes. Second, and most importantly, a large part of the progress made from the strict customary law application to today’s household expectations are in the form of partial rights—rather than expecting the hypothetical widow to get full ownership over the land. Approximately a quarter of the respondents believes the woman could keep the land as long as she does not remarry if she has children, 20% expects she could continue cultivating the plot all her life even if she marries again, and 4-6% believes she could own a portion of the land. In total, half of the individuals think the hypothetical widow would obtain partial rights if she had children. The proportion goes down in

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<sup>19</sup>Levirate marriage was an additional possible answer for the clan custom practice: “She could keep it only if she marries the brother of the husband.” In Figure 3, the levirate option was added to “Lose the *shamba*”. The share of respondents that chose this answer in the 3 vignettes were 3.10% (childless), 2.7% (daughter) and 2.32% (son).

the childless *vignette* but still represents almost a third of the sample.

## Difference across gender

In the previous section, we pooled husbands' and wives' answers. It is worth noting though that there are systematic differences across genders in perceived inheritance rights. The results from estimating Equation (2) reveal clear intra-household differences in opinion:

$$V_{ih} = \alpha + \beta W_{ih} + \delta_h + \epsilon_{ih} \quad (2)$$

where  $V_{ih}$  is the answer to the vignette by individual  $i$  from household  $h$ ,<sup>20</sup>  $\delta_h$  are household fixed effects;  $W_{ih}$  is a wife dummy; and standard errors are clustered at the enumerating area level. The results are robust to wild boot-strapping the standard errors. The coefficient of interest,  $\beta$ , captures the average difference in expectations of widows' inheritance rights between a wife and her husband.

Figure 4 plots the estimated  $\beta$ s for each of the inheritance vignettes survey questions. The *Custom* and *Today* panels refer to the inheritance vignettes previously described. We see that wives report less pro-women outcomes under their clan customary laws than husbands. However, the difference between wives and husbands opinions is even more pronounced when it comes to imagining what would happen today. We find strong evidence of women having more pessimistic expectations on widows' capacity to protect the inherited land. A greater share of female respondents think that the woman would lose the shamba as compared to the males, irrespective of children presence. In fact, in the childless scenario, women provide a remarkably similar answer to both vignettes indicating a large share of the respondents expect traditional customary law to be applied, see Appendix A3, which highlights the strong attachment of women's land rights to male descendanty ex-

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<sup>20</sup>The outcome is discrete: 1 "She would lose the shamba", 2 "They would split the shamba", 3 "She could keep it but would lose it if she remarries", 4 "She could cultivate it all her life (even if she remarries) but she could not sell it", 5 "She would be the owner (cultivate, sell, decide who inherits)."

Figure 4: Wife-husband coefficient on Inheritance Vignettes

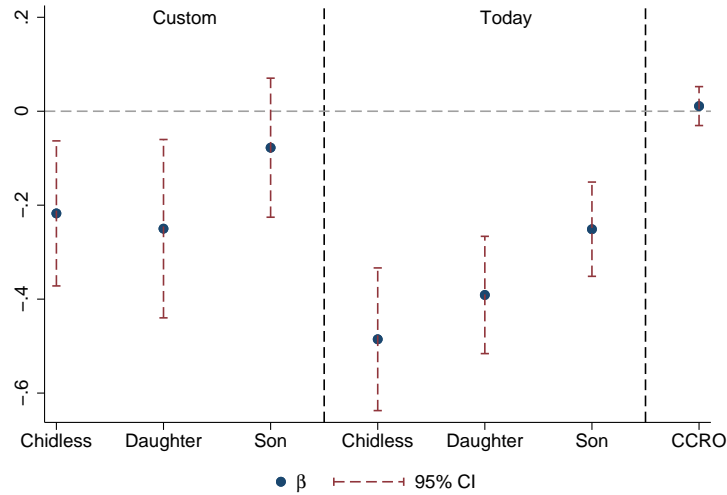


Figure 4 plots the  $\beta$  estimates and 95% confidence intervals of equation 2. All regressions include household fixed effects and standard errors are clustered at the enumerating area level. Each  $\beta$  comes from a different regression where the outcome variables is the answer to a household inheritance *vignette*. The first 6 are the estimates from the “childless”, “daughter”, and “son” versions of the “custom” and “today” *vignettes*, respectively. The last regression corresponds to the following *vignette*: “Suppose a husband and a wife own a shamba. Their names are the only ones on the CCRO. The husband dies. Could his brothers claim ownership of the land?”, where the answer is either “yes” or “no”.

pected in patrilineal societies. Further evidence of the importance of having children for women’s inheritance rights is presented in Table 5. We estimate equation (2) for three different binary outcome variables: lose the plot, partial rights, and keep the plot. The negative wife coefficient on the childless vignette seems to be driven by women assigning a lower probability to the wife keeping the plot rather than losing it completely. In the children vignettes, the tradeoff comes from women assigning a higher probability to partial rights rather than ensuring full ownership.

## 6 The Role of Village Institutions

We have seen that though norms are evolving, practices are still far from being gender neutral. Village institutions have been given an important role to play with this matter. As mentioned earlier, the Village Land Act of 1999 devolved substantial authority to the village institutions, especially the Village Council (VC) and the

Table 5: Current Inheritance Views. Wife Coefficient

Outcome	Childless	Daughter	Son
Lose the plot	0.14*** (0.03)	0.03* (0.02)	0.02** (0.01)
Partial rights	-0.04 (0.03)	0.09*** (0.02)	0.07*** (0.02)
Keep the plot	-0.10*** (0.02)	-0.12*** (0.02)	-0.09*** (0.02)
N	890	900	900

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors, in parentheses, are clustered at the enumerating area level. The results are robust to wild boot-strapping the standard errors. All regressions include household fixed effects.

Village Assembly (VA). Under the Act, the VC is legally responsible for the management of village land as a trustee managing property on behalf of the beneficiaries, the villagers. Moreover, the Village Land Act not only upholds customary rules on land, but also provides that a customary rule, or any action dependent on a rule, shall be deemed void to the extent to which it denies women, children or persons with disability lawful access to ownership, occupation or use of any customary land.

In this section, we are interested in exploring whether village institutions can help in enforcing gender neutrality.

## 6.1 The Village Institutions

### The Composition of Village Councils

Once a village registration has taken place, the Village Assembly (VA) must meet to elect every 5 years a Village Council (VC) composed of 15 to 25 members. All members must be above 21 years old, be residents of the village and be able to write. 25% of the seats must be reserved for women (at the national level, the electoral law of Tanzania requires women to hold not less than 30% of the seats). We see in Table 6 that both the average and the median share of women in the VCs is 30%, but 25% of the villages do not meet the one quarter threshold.

Table 6: Village Institutions

Village Institution	#	Number of Members				Share of Women			
		Mean	SD	Min	Max	Mean	SD	Min	Max
Village Council	45	18.98	3.47	12	26	29.29	7.26	8.33	41.18
Village Land Council	26	6.81	1.23	4	10	34.9	10.19	16.67	57.14
Village Adj. Comm./VLUM	19	7.79	2.78	4	16	38.24	21.2	0	71.43

The Village Land Act mandates that every village must establish a dispute settlement body named the Village Land Council (VLC). Its goal is to mediate and assist parties to find an agreement in land related disputes. Under the 1999 Act, the VLC should consist of 4 to 7 members, of which at least 2 should be women. The most recent 2002 Land Disputes Settlements Act required the VLC to consist of 7 members and a minimum of 3 women. Table 6 shows that in practice not every village has established a VLC. Only 57% of our sampled villages ever had one, and 54% of them have only 1 or 2 women in the council.

The Village Land Act also demands that the VC establishes a Village Adjudication Committee (VAC) with 6 to 9 members, and at least 3 women. Additionally, it recommends that the VCs create a Village Land Use Management (VLUM) committee, ideally gender balanced. Table 6 shows that, when a village has VLUM, it does average 7 to 8 members, but is still far from equal gender representation.

## 6.2 The Representativeness of Village Institutions

Elected members of the village councils are more educated and have a greater number of children than non elected villagers. The female members of these councils also tend to be older than their household counterparts and more likely to have been born in the village (see Table A5). Village Institutions (VIs) are encouraged to be representative of the different socioeconomic groups in the village. To see whether



this is true for ethnic groups, let  $s_{jv}$  and  $v_{jv}$  be the population share of ethnic group  $j$  respectively in the population and in the VIs in village  $v$ . We denote as  $R_{jv} = s_{jv} - v_{jv}$  the degree of under/over representation of ethnic group  $j$  in the VI. In terms of ethnicity, VIs are overall quite representative, though some of the smallest minorities may not make it on the VAC. Moreover, Appendix A.6 present evidence that relatively more “pro-women” ethnic groups are neither systematically less likely nor more likely to be represented in the VIs.

### 6.3 The Importance of Village Institutions

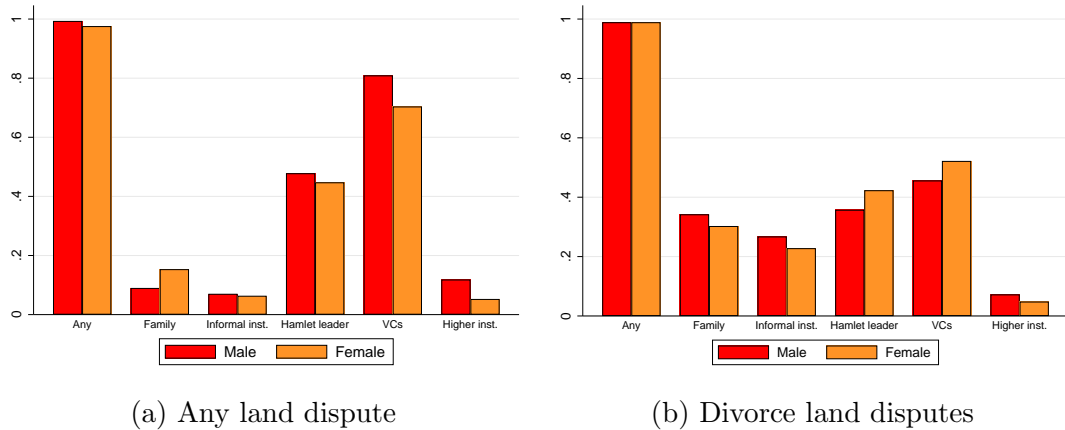
Our interest in the views of the village councils on women’s land rights presumes that they are in a position of influence. Are village institutions key arbitrators of the tension between customary law and statutory law? The Village Land Act formalizes their importance in the context of the adjudication and titling of the land (the CCROs mentioned in Section 2). But beyond this function, the survey provides more evidence that confirm their key role. We asked household members whose help they would seek in case of both potential land disputes, and potential disagreements with their partner about land ownership if they happened to divorce.<sup>21</sup> Figure 5 plots the proportion of individuals in the sample by the type of help they would seek; they were allowed to mention several options. Panels 5a and 5b show that almost 100% of men and women reported they would seek help from someone else in the event of non-divorce and divorce land disputes. Importantly, village institutions are mentioned in larger proportions than family and informal institutions (religious leaders and village elders).<sup>22</sup> Remarkably, 80% of men and 70% of women say they would ask for help to the village councils (VC, VLC, VLUM) in case of land disputes.

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<sup>21</sup>The exact wording of the questions were: “*If you had any land disputes in the future, whose help would you seek?*?” “*If you and your spouse had disagreements on the ownership of the land upon divorce (god forbid), who would you go to help resolve?*”

<sup>22</sup>Hamlet *Kitongoji* leaders, typically members of the Village Council, are reported by around 40% of the sample as someone to whom they would ask for help, and *Kitongoji* leaders are members of at least one village council in 87% of the villages in our sample.

Figure 5: Whose help would households seek in case of land disputes?



Panels (a) and (b) summarize households' answers to "If you had any land disputes in the future, whose help would you seek?", and "If you and your spouse had disagreements on the ownership of the land upon divorce (god forbid), who would you go to help resolve?", respectively. Respondents were allowed to select multiple choices. In the Figure, the answers are pooled in the following way: "Any" if they mentioned anyone at all; "Family" includes own and extended family, children, and friends; "Informal institutions" include religious leaders and village elders; "Hamlet leader" stands for the leader of their hamlet (Kitongoji Leader/Chair); "VCs" include Village Council/chairman, Village Land Council, and VLUM; "Higher institutions" include Ward Tribunal, District Tribunal, High Court.

The number is lower for divorce disputes, but still represent about half the sample. Finally, the share of our sample who would seek help from higher institutions (Ward tribunal, District Tribunal, High Court) is extremely low. These statistics indicate that the knowledge and interpretation of the law by the VI members is of primary importance for our households, and for progress towards a less discriminatory legal system for women.

### The Village Assembly

Finally, the Village Assembly (VA) may also have a role to play in women's land rights. VCs are not allowed to allocate land or grant a customary right of occupancy without prior approval of the VAs. The VA is composed of all adult villagers, men and women, above 18 years. Given this inclusiveness, the relevant question is whether men and women participate to the same extent in the VA meetings. When asked, VI members claimed that men and women are equally represented at the

VA meetings. However, household interviews painted a different picture. Table 7 shows that male and female household members are strongly statistically different in terms of attendance, participation and beliefs that their opinion matters. The share of household males who attended the last meeting were 53% as compared to 26% of females.<sup>23</sup> We measured both participation and self-valuation of individual’s opinions being heard by asking “Do you actively participate in the VA?” and “Do you believe your opinion is heard in the VA?” We provided 3 possible answers ranging from low to high participation/opinion and assign values from 1 to 3 to value the answers numerically.<sup>24</sup> In both measures, men average above 2.1 and women below 1.7, suggesting men still dominate the issues discussed in the meetings and the resolutions ruled by the VA.

Table 7: Village Assembly Participation

	Men	Women	Diff	p-value
# Times last 12 months	2.85	1.60	1.26***	0.00
Attended last meeting	0.53	0.26	0.27***	0.00
Participation	2.15	1.43	0.72***	0.00
Opinion heard	2.12	1.66	0.46***	0.00
Observations	912			

## 6.4 Village Institutions’ Views on Property Rights

Now that we have confirmed that VIs are influential, we are interested in whether VI members hold gender neutral views in terms of property rights.

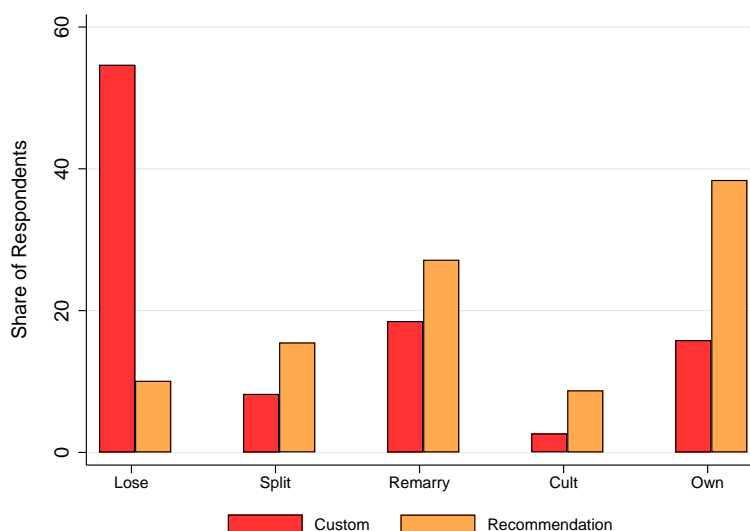
Individual VI members were asked a vignette question very similar to the household

<sup>23</sup>These numbers could only match the 50%-50% male-female attendance reported by the VIs if the number of eligible females were approximately 4 times as large as the number of men which is extraordinarily unlikely and not supported by the Tanzanian 2012 Census population data <https://www.nbs.go.tz/>.

<sup>24</sup>The participation options were: 1) No, I attend but usually remain silent; 2) Yes, I attend and raise my opinion in the matters that affect me directly; 3) Yes, I attend and I raise my opinion with respect to most issues that affect my village. The opinion options were: 1) No, I don’t think it is heard; 2) Sometimes; 3) Always.

childless inheritance *vignette*, except that VI members were asked *What do you think that the VLC would recommend?* while household members were asked *What do you think would happen?* Both individual VI and household members were asked *What do you think would have happened under your own clan customs?* and the same CCRO divorce vignettes. See the Appendix for the detailed questions.

Figure 6: VI's Inheritance Views



The premise for the two *vignettes* is “imagine that a childless woman inherited from her husband a *shamba* (without CCRO) that she was cultivating, and that a male member of his clan claims the land.” The “Recommendation” and “Custom” versions posed the question in terms of “what do you think would happen if the Village Land Council made a recommendation?”, and “what do you think would have happened under your clan customs”. Figure 6 summarizes the following answers: “Lose” (She would lose the *shamba*); “Split” (They would split the *shamba*); “Remarry” (She could keep it but would lose it if she remarries); “Cult” (She could cultivate it all her life—even if she remarries—but she could not sell it); and “Own” (She would be the owner—cultivate, sell, decide who inherits).

Figure 6 summarizes the VI members’ answers to the childless inheritance *vignettes*. Only 10% think the childless woman would lose the *shamba* today if the VLC made a recommendation, and 38% think she would fully own it. Importantly, there is no difference of opinion between male and female VI members. This contrasts with their much more conservative views on their customs. Under their clan customs, 55% think she would lose the land and only 16% believe she would be the full owner.

Though not perfectly comparable, Table 8 contrasts the answers by VI and household members to the “today” inheritance *vignettes*. Only 10% of the VI members say

Table 8: Vignettes. Household vs. VI members

Vignette	Male				Female			
	VI	HH	Diff	p-value	VI	HH	Diff	p-value
Inheritance, today	4.74	3.24	1.50***	0.00	4.56	2.37	2.19***	0.00
Inheritance, custom	3.37	2.92	0.46**	0.03	2.88	2.44	0.44**	0.05
Divorce, joint title	3.73	3.05	0.68***	0.00	3.51	2.89	0.62***	0.00
Divorce, male title	2.12	1.94	0.18**	0.04	1.99	1.73	0.26***	0.00

the childless woman would lose the shamba today if the VLC made a recommendation as compared to 46% of the male and 62% of the female household respondents. In contrast, 38% think the VLC would recommend the wife to be a full owner as compared to the 22.5% and 11.41% of male and female household answers. These numbers suggest that local councils directly involved in inheritance land disputes resolution could reduce discrimination. We see in Table A5 that VI answers to the childless inheritance and the CCRO divorce vignettes are more optimistic about women’s land rights than households, both in contemporary views and in customary practices. Recall from Section 6.1 that this could stem from the higher level of education of VI members, but not because of any over-representation of relatively more pro-women ethnic groups among them.

Although members of the VIs seem to provide more egalitarian answers than households, we also explicitly tested if they are subject to gender bias when it comes to their judgment as elected members. Each of the 10 individuals interviewed in a village were asked two inheritance vignettes. A first vignette (V1) concerns an hypothetical inheritance dispute between the brother of the deceased and an adult *child* living in the capital. The second vignette (V2) concerns an hypothetical inheritance dispute between the brother of the deceased and the widow with a *child*. See the Appendix for the exact wording. In both these vignettes, the gender of the *child* was randomized. Respondents who randomly got the “daughter” version for the V1 were asked the “son” version for V2 (45.11% of the respondents), and vice versa.

According to Tanzanian statutory law, there should not be any difference between

the two versions (daughter vs. son) of the vignettes. Table A17 presents our main findings. For the second vignette, we find that on average the gender of the child does not affect the widow inheritance right that they would recommend.<sup>2526</sup> Approximately 88% answer they would recommend the wife to keep the land. In the first vignette, however, VI members are 10% more likely to recommend the child to own the land when the child is a son as opposed to a daughter.

Table 9: VI Daughter Bias and Customary Law

	Vignette 1		Vignette 2	
Daughter Q	-0.10*** (0.002)	-0.16** (0.024)	-0.01 (0.717)	-0.16* (0.093)
Daughter Q × Inheritance Custom		0.11 (0.152)		0.15 (0.109)
Intercept	0.91*** (0.000)	0.91*** (0.000)	0.88*** (0.000)	0.90*** (0.000)
$N$	450	412	450	412
$R^2$	0.022	0.022	0.000	0.013

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . p-values in parentheses. Standard Errors are robust to heteroskedasticity.

Table A17 also reveals an interesting source of heterogeneity. For both vignettes, we interact “daughter” version with whether the ethnic group to whom the VI member belongs to is pro-women in the dimension relevant to the vignette. That is, we interact “daughter” with  $C_{jvp}$  where  $p$  refers, for V1, to ethnic group  $j$  in village  $v$  traditionally allowing “Daughters to inherit land”; and, for V2, to ethnic group  $j$  in village  $v$  traditionally allowing “Women to inherit land from their husbands.” We report the p-values in parenthesis and show there is statistical evidence suggesting

<sup>25</sup>One caveat of the question is that own/lose were the only options: there was no intermediate answers (e.g. split the *shamba*). There are reasons to believe this might undermine the capacity to capture a gender bias since approximately 50% of the household answers lied somewhere in between the two ownership extremes in Tables A8 and A9. In fact, the results for the first vignette suggest the presence of a bias at least when it comes to daughters inheritance rights.

<sup>26</sup>A second caveat that might rise concern is social desirability bias, as we did not randomize the order of the questions. Respondents were asked either daughter-V1 and then son-V2; or daughter-V2 and then son-V1. We might worry that respondents could adjust their answers to the second vignette according to their answer to their first. The fact that the two vignettes differ in whose inheritance rights are concerned, widows vs. daughters, should alleviate part of the concern. However, in the presence of behavioral effects, our results can be interpreted as a lower bound.

that VI members from ethnic groups holding more conservative views on the relevant practice are more likely to recommend that the brother-in law gets the land when the *child* in the scenario is a girl. Table A17 reports the effect of the randomized version of the vignette, an individual treatment, within our sample.<sup>27</sup>

The biased “daughter” effect is found among all village institutions, but for the VEO who is appointed by the district to the village, see Figure A4. In Appendix A.7, we also show that the “daughter” effect is as pronounced among female VI members as among male VI members. This suggests that the strong gender quota on village institutions put in place by the Tanzanian Law would not suffice to enforce gender egalitarian views. This is consistent with the beliefs expressed in Yngstrom (2002) that VIs, despite their key role, are unlikely to demonstrate particular support for women’s land claims. In a case study, Yngstrom (2002) provides an insightful discussion in the context of two villages in Dodoma (Tanzania) that have experienced a village-wide titling intervention (involving adjudication, demarcation and registration of individual plots for the distribution of CCROs). She concludes that women have not fared well in the adjudication of titles, not because the titling process per se would prevent their rights to be recognized, but because they lack institutional support at the local level.

Overall, we find clear evidence that, though VI members hold more progressive views on female property rights than household members do, they fall short of the gender egalitarian standard held by the statutory law.

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<sup>27</sup>The standard errors are robust to heteroscedasticity and we assume independence among units. If we wanted to infer the effect of our treatment within the 3 regions that our sample is representative of, we would cluster the standard errors at the village level (Abadie et al. (2017)). The results are similar.

## 7 Conclusion and Policy Implications

In conclusion, we find that views in terms of women's property rights have evolved, but only up to a point. Patrilineal customary land practices continue to predominate.

In the VILART survey, women own little land on their own. Most of the land over which women have rights is jointly owned with their husband. Both wives and husbands expect the wife to have inheritance rights over a substantial share of the joint land if she became a widow. However, our paper provides evidence that patrilineal practices still matter in terms of inheritance expectations and the fragility of land rights. We find that inheritance rights are often partial and that the number and gender of her children matters. Wives inherit the land jointly with their children, primarily male children until the children get older. In addition, their rights are fragile and they may not be able to hold on to the land in case of dispute with a male member of the husband's clan, especially if she is childless or only has daughters.

Moreover, our findings suggest that these traditional views may retain a significant role and influence in part due to the functioning and views of the village institutions. Leaders of both genders seem to hold more progressive views on women's land rights than household members do. But they still fall short of the gender neutral standard held by the statutory law, and are likely to reinforce customary practices.

As Tanzania is promoting the issuance of land titles (CCROs), it is an open question whether land titling would strengthen or weaken the rights of women's who would have otherwise benefited from partial rights. Recent interventions incentivizing co-titling of joint land and educating household on the benefits of co-titling are very promising. Ayalew et al. (2016) in urban Tanzania and Cherchi et al. (2018) in Uganda for instance find that such interventions raise demand for joint titles without dampening overall demand.



A direct policy implication of our paper, however, is that the education of *both* households and VI members about women rights is essential to the *de facto* strength of these rights. This suggests that a lot of attention should be paid to the educational component of village land use planning and systemic adjudication policies.

In view of the tension between customary and statutory law in terms of land rights and the strength of customary inheritance patterns that we observed in our sample, we believe that any revision of the National Land Policy should explicitly address widows' inheritance rights and the rights of divorcees. Dancer (2017) outlines several approaches for the law to improve women inheritance rights: statutory law reform, a constitutionally enshrined equal right to inherit, and a progressive interpretation of current customary law.

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# Appendix

Table A1: List of Villages

Region	District	Ward	Village
Katavi	Mlele	Itenka	Dirifu
Katavi	Mlele	Kasansa	Iziwasungu
Katavi	Mlele	Kibaoni	Mirumba
Katavi	Mlele	Litapunga	Kaburonge B
Katavi	Mlele	Litapunga	Kambuzi A
Katavi	Mlele	Litapunga	Mnyaki A
Katavi	Mlele	Litapunga	Msaginya A
Katavi	Mlele	Litapunga	Nzaga
Katavi	Mlele	Mamba	Kanindi
Katavi	Mlele	Nsimbo	Isanjandugu
Katavi	Mlele	Sitalike	Igongwe
Katavi	Mlele	Urwila	Usense
Katavi	Mlele	Usevya	Msadya
Katavi	Mpanda	Mpandandogo	Ifukutwa
Katavi	Mpanda	Mwese	Lugonesi
Kigoma	Buhigwe	Kilelema	Kilelema
Kigoma	Kakonko	Kiziguzigu	Kiyobera
Kigoma	Kakonko	Nyamtukuza	Kinyinya
Kigoma	Kasulu	Asantenyerere	Asante Nyerere
Kigoma	Kasulu	Kurugongo	Kurugongo
Kigoma	Kasulu	Nyakitonto	Nyakitonto
Kigoma	Kibondo	Bitare	Kumhama
Kigoma	Kibondo	Bunyanbo	Samvura
Kigoma	Kibondo	Itaba	Mukabuye
Kigoma	Kibondo	Mabamba	Mukarazi
Kigoma	Kigoma	Kagongo	Kagongo
Kigoma	Kigoma	Kagongo	Mgaraganza
Kigoma	Kigoma	Kagunga	Zashe
Kigoma	Uvinza	Kalya	Kalya
Kigoma	Uvinza	Sunuka	Karago
Mwanza	Kwimba	Ilula	Ilula
Mwanza	Kwimba	Nyamilama	Mwashigi
Mwanza	Magu	Jinjimili	Jinjimili
Mwanza	Magu	Nyigogo	Sagani
Mwanza	Misungwi	Ilujamate	Nyagh'Omando
Mwanza	Misungwi	Lubili	Lubili
Mwanza	Misungwi	Mabuki	Mwanangwa
Mwanza	Sengerema	Kagunga	Nyanzumula
Mwanza	Sengerema	Kalebezo	Kalebezo
Mwanza	Sengerema	Kasungamile	Ilekanilo
Mwanza	Sengerema	Nyanzenda	Luchili
Mwanza	Ukerewe	Bukanda	Busanda
Mwanza	Ukerewe	Bukiko	Bukiko
Mwanza	Ukerewe	Namagondo	Mukasika
Mwanza	Ukerewe	Namilembe	Bukonyo

Table A2: Household Summary Statistics

	Mean	SD	Min	Max	Obs
<b><u>Husband</u></b>					
Age	47.6	15	19	96	439
Education	6.1	3.6	0	18	456
Polygamous	.1	.3	0	1	456
Number of spouses	1.2	.5	1	4	456
Children	6	3.5	0	21	456
<b><u>Wife</u></b>					
Age	39.6	12.8	17	86	402
Education	5	3.9	0	16	456
Children	5.1	2.9	0	14	456
<b><u>Household</u></b>					
Animals	17.3	40.2	0	510	456
Electricity	.1	.3	0	1	456
Radio	.5	.5	0	1	456
Television	.1	.3	0	1	456
Mobile	.8	.4	0	1	456
Bank Account	.1	.3	0	1	456
Internet	0	.1	0	1	456



Table A3: Village Summary Statistics

	Mean	SD	Min	Max	Obs
Number of people	4,048	2,610	605	12,864	45
Number of households	631	293	230	1,506	45
% Agriculture	86	21	11	100	45
% Pastoralism	8	19	0	83	45
% Wage employment	2.8	2	0	9.6	45
Walking hours to nearest market	5.8	5.7	.3	20	45
Bus per day to district capital	1.5	1.7	0	6	45
Financial access	51	51	0	100	45

The % agriculture/pastoralism/wage employment statistics represent the share of households that derive their primary source of income from each economic activity. A village has financial access if any of the following organizations were located inside the village: SACCOS, Village Community Bank (VICOBA), Faith Based Organizations (FBO), Community Based Organizations (CBO), and other financial institutions such empowerment council, microcredit, etc.

Table A4: Ethnic Groups

Ethnicity	Population	Pop. share	+3 Villages	+1 Majority	Share VCs	Inheritance		Marital	
						Rule	Distribution	Residence	Composition
Sukuma	9029	32.2	1	1	29.3	Patrilineal	Primogeniture	Patrilocal	Polygynous
Ha	8983	32.0	1	1	34.8	Patrilineal	Primogeniture	Patrilocal	Polygynous
Hutu*	2295	8.2	1	1	8.6	Patrilineal	Equal/relatively equal	Patrilocal	Polygynous
Bembe	1207	4.3	1	0	1.3				
Kara	1100	3.9	1	0	2.6	Patrilineal	Equal/relatively equal	Patrilocal	Polygynous
Fipa	737	2.6	1	0	4.3			Patrilocal	Polygynous
Bende	708	2.5	1	0	2.3	Matrilineal	Equal/relatively equal	Patrilocal	Polygynous
Tongwe	589	2.1	1	0	2.4				
Jita	593	2.1	1	0	2.7				
Manyema	559	2.0	0	0	0.5				
Pimbwe	483	1.7	1	0	2.1			Patrilocal	Polygynous
Zinza	476	1.7	1	0	1.1	Patrilineal	Primogeniture	Patrilocal	Polygynous
Kerewe	391	1.4	1	0	2.5			Patrilocal	Polygynous
Rwila	292	1.0	1	0	0.4				
Konongo	150	0.5	1	0	0.2				
Sumbwa	49	0.2	0	0	0.2	Patrilineal	Equal/relatively equal	Patrilocal	Polygynous
Nyamwezi	48	0.2	1	0	1.4	Patrilineal	Equal/relatively equal	Patrilocal	Polygynous
Lamba	58	0.2	0	0	0.1			Matrilocal	Polygynous
Bwali	56	0.2	0	0	.				
Baruuli	35	0.1	0	0	0.1				
Nyakyusa	38	0.1	1	0	0.1	Patrilineal	Primogeniture	Neolocal	Polygynous
Rungwa	40	0.1	0	0	0.2				
Kuria	22	0.1	0	0	.				
Kwaya	30	0.1	0	0	0.3				
Tutsi	40	0.1	0	0	0.5				
Chagga	32	0.1	0	0	0.5	Patrilineal	Primogeniture	Patrilocal	Polygynous
Kinga	2	0.0	0	0	.				
Haya	9	0.0	0	0	0.1	Patrilineal	Primogeniture	Patrilocal	Polygynous
Hehe	10	0.0	1	0	.			Patrilocal	Polygynous
Gogo	1	0.0	0	0	0.1	N/A	N/A	Patrilocal	Polygynous
Ngoni	1	0.0	0	0	0.2	Patrilineal		Patrilocal	Polygynous
Luguru	1	0.0	0	0	.	Matrilineal	Equal/relatively equal	Matrilocal	Polygynous
Bena	4	0.0	0	0	0.1	Patrilineal	Equal/relatively equal	Neolocal	Polygynous

Source: Ethnographic Atlas by George P. Murdock. \*Assigned the customary practices of the Ruandan ethnic group.

Table A5: Summary Statistics. Household vs. Village Institutions members

Variable	Male					Female				
	VI	HH	Diff	p-value	N	VI	HH	Diff	p-value	N
Age	48.92	47.22	1.69	0.12	655	46.29	39.45	6.84***	0.00	552
Education	7.92	5.97	1.95***	0.00	672	7.63	5.01	2.61***	0.00	611
Born in the Village	0.65	0.62	0.03	0.50	672	0.54	0.45	0.09**	0.05	611
Number of children	7.81	5.91	1.90***	0.00	672	6.63	5.13	1.50***	0.00	611
Female First Born	0.48	0.48	0.00	0.98	660	0.49	0.48	0.02	0.69	589
Pastor	0.71	0.61	0.09**	0.01	672	0.69	0.67	0.02	0.65	611
Imam	0.11	0.11	0.00	0.98	672	0.11	0.10	0.01	0.66	611

## A1. Variables

### Ethnic Characteristics

During the group VI interview, we asked: *What are the 5 most common ethnicity by population size in this village?* Then for each ethnicity we asked them whether the ethnic group traditionally allows for some practices. Here are the gender related such questions.

*Do the traditional clan law of the XX permit*

1. Women to own land ?
2. Sons to inherit land?
3. Daughters to inherit land ?
4. Women to inherit land from their husbands?
  - (a) Yes, inherit full rights
  - (b) She can use land until remarries
  - (c) No
5. Husbands make a decision to divorce his wives?

6. Wives make a decision to divorce his wives?

## Vignettes for Individual VI members

### Randomized Gender

In the following 2 vignettes, whether the scenario involved a “daughter” or a “son” was randomized:

The first vignette (V1) says: *Imagine that a father dies without a will. The mother died a few years ago. The father intended to leave a shamba in the village to his only daughter/son. The daughter/son, an adult, lives in Dar Es Salam. The brother of the father who lives in the village is claiming the land. Who would you recommend to be the owner?* The possible answers were:

1. The daughter/son;
2. The brother of the husband.

The second vignette (V2) says: *Imagine that a wife has cultivated for 15 years a shamba that her husband had inherited from his dead father prior to marriage. She has one daughter/son from him. Her husband dies. The brother of the husband is claiming the land. Would you recommend that she keeps the shamba?*

The possible answers were:

1. Yes;
2. No.

If respondents randomly got the “daughter” version for the first vignette, then they were asked the “son” version for the second one, and vice versa.

**Inheritance** *For the following questions 5-7 imagine that a childless woman inherited from her husband a shamba (without CCRO) that she was cultivating, and that a male member of his clan claims the land.*

*What do you think would happen if the village land council made a recommendation? and What do you think would have happened under your own clan customs?*

The possible answers were:

1. She would lose the shamba
2. She could keep it but would lose it if she remarries
3. She could cultivate it all her life (even if she remarries) but could not sell it
4. She would be the owner (cultivate, sell, decide who inherits)
5. They would split the shamba (followed up by *What share would the woman own?* Less than half (< 50%); Half (50%); More than half (> 50%))

### **Divorce**

CCRO joint title: *Imagine a household where the wife and the husband own a shamba jointly. Imagine they have a CCRO with both husband and wife names written in the title. How likely do you think it is that the wife will be able to own their land if they divorce?*

and

CCRO husband title : *Imagine a household where the wife and the husband own a shamba jointly. Imagine they have a CCRO where only the husbands name is written on the title. How likely do you think it is that the wife will be able to own their land if they divorce?*

The possible answers were:

1. Impossible

2. Unlikely
3. Likely
4. Very likely
5. Extremely likely

## **Household Vignettes**

**Selling** *Assume that a husband and a wife jointly own a shamba/kiwanja of the household. Suppose that the wife is temporarily away. Could the husband sell the land without the written consent of his wife?*

## **Wife inheritance**

*For the following questions 2-7, imagine that a woman inherited from her husband a shamba (without any land title/ownership document) that she was cultivating, and that a male member of his clan claims the land.*

Today: *What do you think would happen if*

1. she had no children?
2. she had a daughter from him?
3. if she had a son from him?

Custom: *What do you think would have happened under your clan customs? under these three scenarios.*

The possible answers to the “Today” and “Custom” inheritance vignettes were:

1. She would lose the shamba
2. She could keep it but would lose it if she remarries

3. She could cultivate it all her life (even if she remarries) but could not sell it
4. She would be the owner (cultivate, sell, decide who inherits)
5. They would split the shamba (followed up by *What share would the woman own?* Less than half (< 50%); Half (50%); More than half (> 50%))

with one additional option “She could keep it only if she marries the brother of the husband” for the “clan custom” questions.<sup>28</sup>

CCRO: *Suppose a husband and a wife own a shamba. Their names are the only ones on the CCRO. The husband dies. Could his brothers claim ownership of the land?*

1. No;
2. Yes.

### **Divorce**

Custom: *Imagine a husband and a wife own a shamba jointly and they both cultivate it. Suppose they mutually agree to divorce. What would have happened under your clan customary law to the ownership of the shamba?*

1. He would be the owner
2. She would be the owner
3. Split the shamba (followed up by *What share would the woman own?* Less than half (< 50%); Half (50%); More than half (> 50%))
4. Sell the shamba

In addition, the same “CCRO joint title” and “CCRO husband title” vignettes as to the individual VI members were asked to household members.

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<sup>28</sup>During focus group discussion, we were discouraged to put levirate as a possible contemporaneous option.

## Expectations for household members

### Wife Inheritance Expectation

*If you did not have a will and (god forbid) you die, what share of the land you own without spouseID would you expect to go to the following household members?*

1. share to the wife >50%
2. share to the wife >50%
3. share to the wife 50%

### Divorce Expectation

*Would she be the owner over the shambas you own without spouseID if she made improvements?*

*Would she be the owner over the shambas you and spouseID own jointly?*

*Would she be the owner over the shambas your spouseID owns without you?*

1. No, she will never be owner
2. Yes, she would be the owner if we have children living at home
3. Split the shamba (followed up by *What share would the woman own?* Less than half (< 50%); Half (50%); More than half (> 50%))
4. She would be the only owner until she remarries
5. She would be the only owner

*Would “the interviewed spouse” be the owner over the kiwanja where she currently resides?*

1. Yes, she will be the owner;
2. No, but she could continue living even if she remarries;



3. No, but she could continue living until she remarries
4. No, she will have to leave

Fault: *Would the ownership of the shambas be different in the case your spouse were at fault?*

### **Plots ownership rights questions**

1. Who is the owner? (for joint ownership: check all that apply)
2. Who has the right to sell it? (check all that apply)
3. Who has the right to give it out as inheritance? (check all that apply)

with the following options

1. Myself
2. My spouse
3. Me and spouse jointly
4. Sons
5. Daughters
6. Whole family
7. My extended family
8. Spouse extended family
9. Nobody
10. Other

Who would decide on who would be registered as claimant/owner for this shamba?s CCRO? [Select one]

1. Myself alone
2. Spouse alone
3. Jointly me and spouse
4. Sons alone
5. Daughters alone
6. Jointly me and Sons
7. Jointly me and daughters
8. Jointly with sons/daughters and spouse
9. Jointly with my extended family
10. Spouse extended family
11. Jointly with sons & daughters

## A2. Variation in Customary Law

Table A6 shows the proportion of total variation in the clan customs vignettes that is explained by the individual's village, her ethnicity and/or her religion affiliation.<sup>29</sup>

For households, we see that the ethnicity and religion explains as much of the variation in answers to these questions than village affiliation: between 6 and 9% for the household. For the village institutions members, the ethnic/religious affiliations explains 13% of the variations while the village affiliation captures 17% of the variation. This suggests substantial variations from one village to the next in customary law within the same ethnic and religious groups.

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<sup>29</sup>Note that we only have a proxy for the religious affiliation. First we asked the individual to consider a situation where there are no formal local institutions (e.g. no VCs or VAs), except for religious leaders, for them to resort to in case of disputes in her family. Then we asked her whose individual help would she seek for in sorting a land dispute in this sort of scenario. The available answers were: i) a priest/pastor; ii) an imam; iii) other religious leader ; iv) refused to answer.

Table A6: Customary Law Vignettes. ANOVA.

Vignette	Village	Ethnic/Religion
HH: No children	8.66	7.08
HH: Daughter	7.97	6.48
HH: Son	6.35	9.55
HH: Divorce	9.03	9.33
VI: Custom	16.63	12.71

Table A7: Household and VI Vignettes. ANOVA.

Vignette	Village	Ethnic	Village	Ethnic	Religion	Village	Ethnic/Religion
Custom HH: No children	9.02	3.83	8.95	3.77	.17	8.66	7.08
Today HH: No children	7.52	3.54	7.31	3.68	.4	7.23	5.84
Custom HH: Daughter	7.89	4.2	7.87	4.2	.15	7.97	6.48
Today HH: Daughter	5.49	3.9	5.43	3.89	.05	5.46	7.08
Custom HH: Son	6.63	5.46	6.6	5.52	.52	6.35	9.55
Today HH: Son	6.83	4.98	6.63	5	.16	6.54	8.25
Custom HH: Divorce	8.79	6.17	8.85	6.15	.11	9.03	9.33
Custom VI: No children	16.46	7.47	17.08	8.13	.1	16.63	12.71
Today VI: No children	14.12	4.3	14.64	4.85	.59	13.39	8.22

### A3. Inheritance Vignette: difference across gender

Table A8: Male Household Inheritance Vignettes

Woman ownership	No children		Daughter		Son	
	Today	Custom	Today	Custom	Today	Custom
Lose the shamba	46.7	62.61	8.13	23.12	3.51	10.55
Less than 50%	2.42	1.77	.44	.22		.22
Keep until remarried	12.11	9.73	26.15	21.15	22.81	21.76
50%	10.13	6.86	1.76	2.2	1.75	2.2
More than 50%	.44	.44	.22	0	.44	.66
Cultivate, not sell	5.95	3.1	20.44	20.48	20.61	20
Owner	22.25	15.49	42.86	32.82	50.88	44.62

Table A9: Female Household Inheritance Vignettes

Woman ownership	No children		Daughter		Son	
	Today	Custom	Today	Custom	Today	Custom
Lose the shamba	61.52	70.66	11.31	26	5.56	10.4
Less than 50%	2.46	1.78	2	.89	.44	0
Keep until remarried	12.53	8.44	28.38	24.22	25.33	24.56
50%	8.72	4.67	7.32	4.89	4.22	3.32
More than 50%	.45	0	.67	0	.89	.66
Cultivate, not sell	2.91	4.67	19.51	18.22	21.56	20.35
Owner	11.41	9.78	30.82	25.78	42	40.71

## A4. Cause for divorce

Figure A1: Divorce. What would constitute “a fault” of the husband that would justify a change in the ownership?

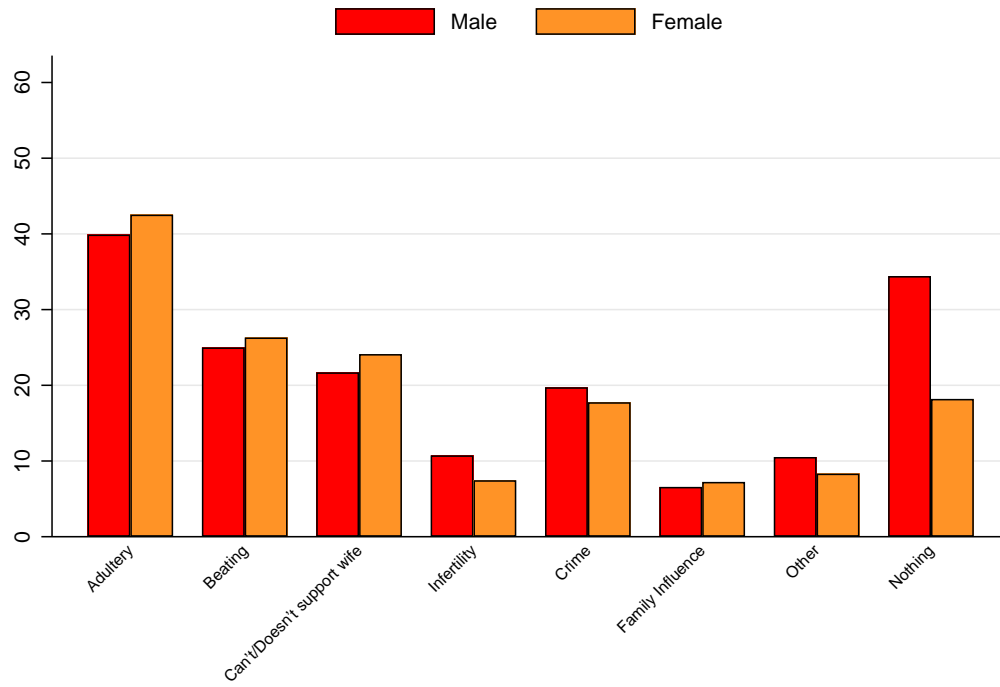
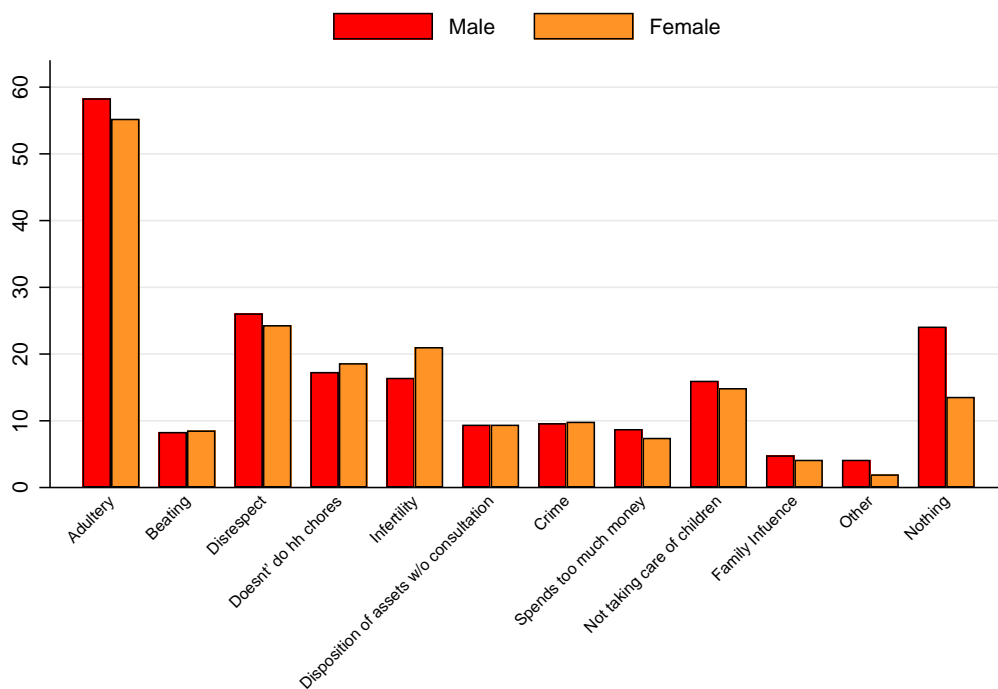


Figure A2: Divorce. What would constitute “a fault” of the wife that would justify a change in the ownership?

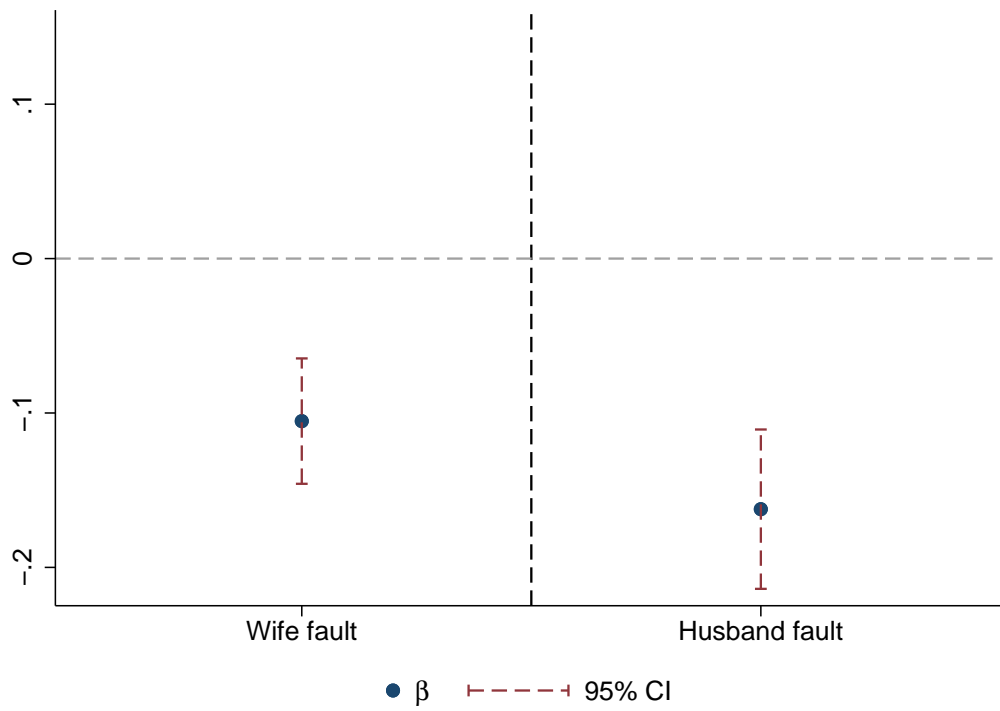


Wife coefficient on fault questions:

$$N_{ih} = \alpha + \beta W_{ih} + \delta_h + \epsilon_{ih} \quad (3)$$

where  $N_{ih}=1$  if individual  $i$  from household  $h$  says there is nothing that could be qualified as a fault from the husband(wife) that could be enough to change ownership.

Figure A3: Wife Coefficient. Nothing would constitute “a fault” of the wife/husband that would justify a change in the ownership



## A5. Inheritance Expectations

Table A10: Effect of Female First Born on Children Inheritance Expectations

	Sons			Daughters		
Female FB	-13.63**	-15.42**	-16.46*	6.55*	5.87	3.77
	(6.38)	(7.26)	(8.25)	(3.78)	(4.87)	(5.48)
# Husband's children			-2.44			-1.00
			(2.70)			(1.59)
Husband has prev. children			-13.20			-7.56
			(12.47)			(7.88)
Polygamous			-4.28			-0.59
			(12.04)			(8.62)
Village FE	Yes	Yes	Yes	Yes	Yes	Yes
Wife Ethnicity FE	No	Yes	Yes	No	Yes	Yes
Religion wife FE	Yes	Yes	Yes	Yes	Yes	Yes
<i>N</i>	122	116	116	125	119	119
adj. $R^2$	0.144	0.128	0.147	0.074	0.015	0.004

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors, in parentheses, are clustered at the enumerating area level. All regressions include wife controls: education, age, and religion; husband controls: education and age; and total household acreage.



Table A11: Effect of Female First Born on First Child Inheritance Expectations

	(1)	(2)	(3)
Female FB	-8.66*	-9.76*	-9.46*
	(4.39)	(5.48)	(5.47)
# Husband's children			-3.36
			(2.26)
Husband has prev. children			-2.86
			(10.64)
Polygamous			8.16*
			(4.42)
Village FE	Yes	Yes	Yes
Wife Ethnicity FE	No	Yes	Yes
Religion wife FE	Yes	Yes	Yes
<i>N</i>	117	112	112
adj. $R^2$	0.220	0.061	0.183

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors, in parentheses, are clustered at the enumerating area level. All regressions include wife controls: education, age, and religion; husband controls: education and age; and total household acreage.

Table A12: Effect of Female First Born on Inheritance Expectations. No Polygamous Households.

	Male Expectations		Female Expectations	
	Joint		Husband	Joint
<b>Female FB</b>	7.33		0.80	7.54*
	(5.15)		(6.00)	(4.37)
<i>Controls</i>				
Children	7.44		0.74	6.88
	(5.29)		(5.93)	(4.55)
Prev children	7.16		0.32	7.62*
	(5.27)		(5.86)	(4.34)
N	277		333	332
Adj. R2	0.18		0.08	0.14
Y mean	60.62		60.56	77.15
Y sd	37.21		43.77	32.95

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors, in parentheses, are clustered at the enumerating area level. Includes only households where the husband has at least one son. All regressions include wife controls: education, age, ethnicity, and religion affiliation; husband controls: education and age; and total household acreage.

Table A13: Effect of Female First Born on Inheritance Expectations with Sons' presence

	Male Expectations		Female Expectations	
	Joint		Husband	Joint
<b>Female FB</b>	8.55*		3.63	8.81**
	(4.86)		(5.69)	(4.37)
N	175		219	218
Adj. R2	0.21		0.14	0.08
Y mean	58.63		60.14	75.21
Y sd	37.72		44.10	34.05
<i>Robustness checks</i>				
Children	9.24*		3.57	8.49*
	(5.19)		(5.46)	(4.54)
Prev children	8.42*		3.45	9.08**
	(5.01)		(5.51)	(4.38)
Polygamy	8.93*		3.76	8.81**
	(5.10)		(5.62)	(4.37)
Young women	12.01*		6.68	6.25
	(6.86)		(7.14)	(5.59)

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors, in parentheses, are clustered at the enumerating area level. Includes only households where the husband has at least one son. All regressions include wife controls: education, age, ethnicity, and religion affiliation; husband controls: education and age; and total household acreage. The robustness checks present the coefficients of interest for the same specification but controlling for the number of children, an indicator variable equal to 1 if there are children prior to the marriage, indicator variable for polygamous variable, and the results dropping women above 45 years old

Table A14: Effect of Female First Born on Inheritance Expectations with Adult Sons' Presence

	Male Expectations		Female Expectations	
	Joint		Husband	Joint
<b>Female FB</b>	1.40		0.57	12.28**
	(6.96)		(7.83)	(5.66)
N	94		112	112
Adj. R2	0.14		0.04	-0.03
Y mean	58.53		58.96	74.53
Y sd	38.24		44.04	33.92
<i>Robustness checks</i>				
Children	2.29		0.27	11.52*
	(7.27)		(7.63)	(6.20)
Prev children	1.25		1.06	11.87*
	(6.90)		(7.80)	(6.04)
Polygamy	1.45		0.46	12.18**
	(7.15)		(7.77)	(5.67)
Young women	-7.40		16.54	6.67
	(13.85)		(13.10)	(9.90)

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard Errors, in parentheses, are clustered at the enumerating area level. Includes only households where the husband has at least one son aged 12 or above. All regressions include wife controls: education, age, ethnicity, and religion affiliation; husband controls: education and age; and total household acreage. The robustness checks present the coefficients of interest for the same specification but controlling for the number of children, an indicator variable equal to 1 if there are children prior to the marriage, indicator variable for polygamous variable, and the results dropping women above 45 years old.

## A6. Pro-women representativeness among VIs

We construct  $Prowomen_{jv}$ , a PCA index of "pro-women" pooling the 4 gendered clan custom practices (women own, wife inherit, daughters inherit, women decide

on divorce) and rank by index *within* the village.

We have 182 ethnicity-village observations, though there are 25 without population data because they were not listed during the group interview. This means they also do not have clan custom practices listed. In 58% of the villages, there is variation in the PCA index, i.e. there is at least one ethnic group with  $Prowomen_{jv} = 0$ .

Let  $s_{jv}$  and  $\nu_{jv}$  be the population share of ethnic group  $j$  respectively in the population and in the VIs in village  $v$ . We denote as  $R_{jv} = s_{jv} - \nu_{jv}$  the degree of under/over representation of ethnic group  $j$  in the VI.

To check whether relatively more “pro-women” ethnic groups are systematically less likely (or more likely) to be represented in the village institutions, we run:

$$R_{jv} = \beta * Prowomen_{jv} + \delta_j + \delta_v + \epsilon_{jv}.$$

Table A15: VI Pro-Women Representativeness

	(1)	(2)	(3)	(4)	(5)
<i>Prowomen<sub>jv</sub></i>	-0.71 (1.14)				
Women own land <sub>jv</sub>		-6.08 (5.50)			
Daughters inherit land <sub>jv</sub>			2.36 (6.53)		
Wives inherit land <sub>jv</sub>				-1.26 (3.06)	
Women decide to divorce <sub>jv</sub>					0.09 (4.11)
Intercept	-1.01*** (0.18)	3.66 (4.12)	-2.56 (4.61)	0.64 (3.75)	-0.93 (1.27)
Village FE	Yes	Yes	Yes	Yes	Yes
Ethnicity FE	Yes	Yes	Yes	Yes	Yes
<i>N</i>	136	136	136	136	136
<i>R</i> <sup>2</sup>	0.262	0.270	0.261	0.261	0.260

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ 

Under various specifications, we find no evidence of systematic under- or over-representation of relatively pro-women ethnic groups.

## A7. Daughter bias among VIs

### By Gender

Table A16: VI Men Daughter Bias and Customary Law

	Vignette 1		Vignette 2	
Daughter Q	-0.09**	-0.11	-0.03	-0.19
	(0.02)	(0.19)	(0.45)	(0.11)
Daughter Q $\times$ Inheritance Custom		0.05		0.15
		(0.56)		(0.20)
Intercept	0.91***	0.91***	0.90***	0.92***
	(0.00)	(0.00)	(0.00)	(0.00)
<i>N</i>	278	253	278	253
<i>R</i> <sup>2</sup>	0.019	0.013	0.002	0.020

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . p-values in parentheses. Standard Errors are robust to heteroscedasticity.

Table A17: VI Women Daughter Bias and Customary Law

	Vignette 1		Vignette 2	
Daughter Q	-0.12**	-0.26**	0.02	-0.11
	(0.04)	(0.05)	(0.68)	(0.51)
Daughter Q $\times$ Inheritance Custom		0.21		0.15
		(0.12)		(0.35)
Intercept	0.91***	0.91***	0.85***	0.86***
	(0.00)	(0.00)	(0.00)	(0.00)
<i>N</i>	172	159	172	159
<i>R</i> <sup>2</sup>	0.029	0.047	0.001	0.011

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . p-values in parentheses. Standard Errors are robust to heteroscedasticity.

## By Council

Figure A4: Daughter bias by Institution Membership

