

Women's Land Ownership and Participation in Agricultural Decision-Making: Evidence from Ecuador, Ghana and Karnataka, India

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Do women landowners manage the plots of land that they own? There has been surprisingly little research on this question, although the answer is crucial to investigating whether there are gender differences in productivity or the adoption of new technology, among other issues. This lacuna in the knowledge base is due to several factors, including the lack of appropriate sex-disaggregated data on land ownership and the prevailing assumption in the literature that the household head makes all the decisions on the plots owned by its members.¹

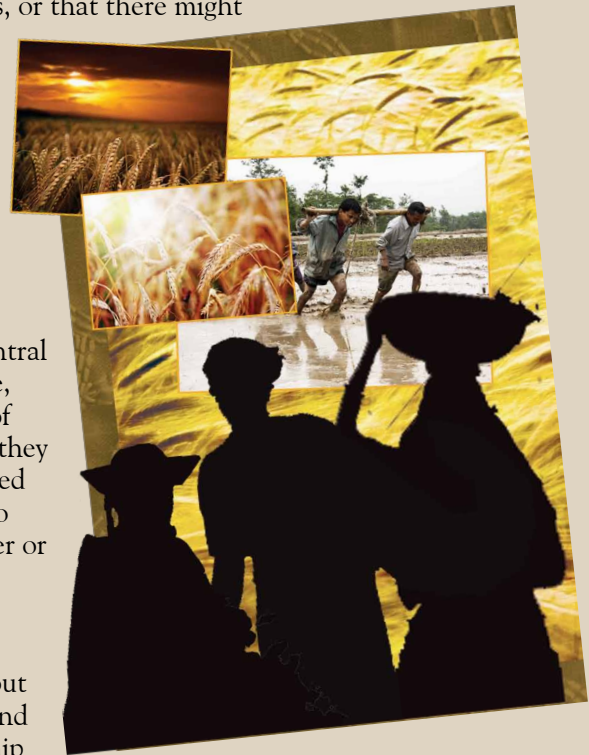
Both points are well illustrated by the agricultural censuses which rarely inquire about who in the household owns the land and implicitly attribute productive outcomes to the household's principal agriculturalist who is often equated with the household head. This assumption implies that all farm decisions are made only by one member, ignoring the possibility of joint decision-making among household members, or that there might be a gender division of responsibility in farm activities – such as between crop and animal raising – or that participation in decision-making may vary according to the specific decision, task or crop.²

In this brief, we present survey data on the participation of female landowners in the agricultural decisions regarding their own plots and investigate whether their participation varies according to marital status, the form of land ownership and the type of decision. We show that women landowners in three very heterogeneous settings are quite involved in the central decisions regarding agricultural production. At the same time, there are important differences in the degree of participation of female landowners in decision-making depending on whether they are partnered (married or in a consensual union) or unpartnered (never married, separated, divorced or widowed), according to whether they own land individually or jointly with their partner or someone else, and based on the specific decision.

Methods

This analysis draws upon the household asset surveys carried out by the Gender Asset Gap project in 2010 in Ecuador, Ghana and the state of Karnataka in India.³ Information on land ownership was collected in two ways. First, in the household inventory (which was completed by the person(s) most knowledgeable about the household's assets), a listing was made of all the land parcels owned by household members, including the identity of their owner or owners. Then, up to two respondents per household were queried in more detail about whether they owned these or any other plots and about their participation in decision-making on those that they owned.⁴

In this brief we focus on three of the main decisions carried out on the plots cultivated by household members:⁵ the decision on what to grow; on how much of the crop to sell; and over the use of the income generated from crop sales.⁶ For each decision, respondents were asked whether they made the decision alone, jointly with another person(s) and the identity of that person(s), or whether they did not participate in the decision.



The Gender Land Gap

This comparative study of countries in three world regions is particularly interesting since women's land ownership differs significantly across the three locations. In Ecuador women nationally constitute 51% of the landowners, in Ghana 36%, and in the state of Karnataka only 20% (Doss et al 2011). We also estimated the gender gap in land wealth, a measure that takes into account the value of the land owned by men and women. In Ecuador women own 48% of the land wealth, in Ghana 24% and in Karnataka only 12%. Hence, in the latter two locations women tend to own smaller and/or lower quality plots than those of men (Ibid.). It should also be noted that Karnataka is the most rural of the three locations studied and where agriculture is still the most important activity. Ecuador is the most urban and where the rural economy is most diversified, with Ghana by these indicators representing a mid-point.

The gender land gap characterizing Ghana⁷ and Karnataka and the relative equality in land ownership found for Ecuador⁸ are partly explained by the differing marital and inheritance regimes which prevail in each country (Deere et al 2013). In Ecuador the default marital regime is partial community property where all assets acquired during the marriage legally belong to both partners (whether they are formally married or in a consensual union). In contrast, in both Ghana and India the prevailing marital regime is separation of property, where assets acquired during marriage belong solely to the person who purchased them. In all three countries, property acquired while single or which is inherited at any point is considered individually owned property. Inheritance laws and practices thus are also important in explaining the gender land gaps. In Ecuador the inheritance law guarantees children of both sexes equal shares of parental property and this norm is largely honored in practice. In India the amendment to the Hindu Succession Act of 2005 also now provides for gender equality in inheritance for a majority of the population, but in practice, daughters frequently do not inherit land. Ghana's inheritance legislation is silent on the issue, and land inheritance practices tend to discriminate against women (Ibid.).

The implications of these varying marital and inheritance regimes can be readily grasped in **Table 1**. The majority of landowning women in Ghana and India are unpartnered, whereas in Ecuador they are married or in a consensual union. The benefits of the partial community property marital regime are evident in the case of Ecuador. Two-thirds of the partnered women own land jointly, and mainly with their husbands, partly explaining why the majority of landowning women are partnered – they acquired land largely after marriage through land purchases and are legally co-owners.

Table 1. Distribution of women-owned land parcels by marital status and form of ownership (%)

	Partnered Women			Unpartnered Women			All Women		
	Individually owned	Jointly owned	Total	Individually owned	Jointly owned	Total	Individually owned	Jointly owned	Total
Ecuador	33.0	67.0	100	93.8	6.2	100	46.2	53.8	100
Number of parcels	35	197	232	60	6	66	95	203	298
Ghana	75.4	24.6	100	85.7	14.3	100	80.9	19.0	100
Number of parcels	118	39	157	145	22	167	263	61	324
Karnataka	54.6	45.5	100	97.2	2.8	100	77.6	22.4	100
Number of parcels	66	55	121	138	4	142	204	59	263

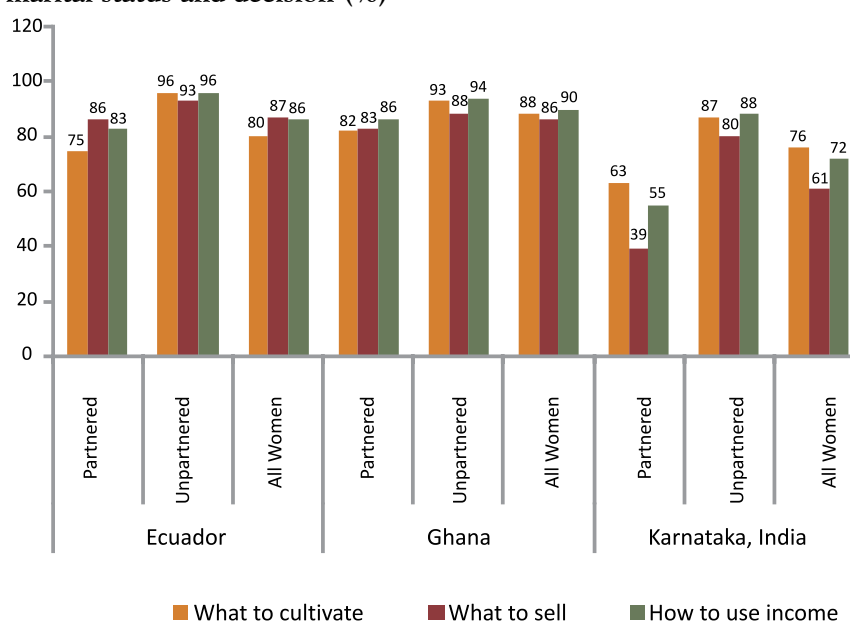
Note: N = Land parcels in cultivation and worked on by household members; all percentages are weighed by the sample expansion factors.

In Ghana, the great majority of partnered women landowners are the sole owners of their plots although they are less likely to be sole owners compared to unpartnered women landowners. Karnataka shows evidence of both practices, with the sample moderately favoring individually owned parcels among partnered women as opposed to jointly owned plots. The main commonality across the three countries is that the great majority of unpartnered women own their land individually.⁹ The differences by marital status in the form of landownership suggest that women's participation in agricultural decision-making is likely to vary depending on whether they are partnered as well as the form of land ownership.

Variations in Women's Participation in Decision-making

Graph 1 presents the incidence of cultivated parcels on which their female landowners engage in decision-making, irrespective of the form of ownership or the manner in which the decision is made. First, consider the aggregate findings by country (the column 'All women'). The data confirm that the majority of female landowners in all three locations participate in the decisions regarding their own land parcels. However, they are much more likely to do so in Ecuador and Ghana than in Karnataka, India. Thus while in the former two countries, land ownership is a fairly good predictor of whether a woman is involved in decision-making, in Karnataka it is not.

Graph 1. Incidence of cultivated parcels on which women landowners engage in decision making, by marital status and decision (%)



Moreover, there is considerable variation among the three locations with respect to the decision in which women are most likely to participate. Whereas in Karnataka it is the decision on what to grow, in Ecuador it is the decision on how much to sell, and in Ghana, over the use of the proceeds of crop sales. However, in Ecuador and to a lesser extent in Ghana, there is less variation in magnitude compared to Karnataka in the share of plots in which women landowners participate in each decision, suggesting a stronger association between land ownership by women and their participation in decision-making in these two countries.

While useful insights can be gleaned from this aggregate data, there are notable differences in the incidence of women's participation in decision-making according to their marital status, confirming why this is such an important variable in gender analysis. In all three locations unpartnered women are much more likely than partnered women to participate in each of these major decisions. In Karnataka, for example, which has the lowest overall participation rates, 87% of unpartnered women landowners participate in the decision on what to grow on their plots, compared to only 63% in the case of partnered women; the gap is even more pronounced in the decision over what to sell. Thus, overall, the lower participation of women landowners in agricultural decision-making in Karnataka than in Ecuador and Ghana is largely explained by the much lower participation of partnered women in decision-making.

In Ecuador, where partnered women dominate the sample of female landowners, the aggregate pattern largely follows that of partnered women, with a larger share of partnered women participating in the decision over what to sell and the use of income than the decision on what to cultivate. By not participating in the decision on what to grow, some married women landowners may be opting out of direct involvement in agricultural production yet using the bargaining power conveyed by their land rights to decide on the disposition of the crop and use of the income so generated.¹⁰

In Ghana, both partnered and unpartnered women landowners are most likely to participate in the decision over the use of income. Partnered women are just as likely to participate in the decision on what to cultivate as they are in the decision over what to sell.

Forms of Ownership and Types of Decision-making

Tables 2 – 4 consider the relationship between the form of land ownership – individual vs. joint—and the type of decision-making - whether the decision is taken alone, jointly with someone else, or whether female landowners do not participate in the decision at all. Since we expect the decision-making process in households where the women are partnered to be different from those in which they are unpartnered, we analyze each group separately.

First, consider decision-making among partnered women. For Ecuador there is a clear association between the forms of ownership and decision-making among partnered women (Table 2). Women who own their land parcels individually are most likely to make all three decisions alone; they are also much more likely to make each of the decisions alone than women who own their plots jointly with someone else. Women who are joint owners are most likely to make all of the decisions jointly. When the decision is made jointly, in all cases it is made jointly with the spouse, who in the great majority of cases of joint ownership is also the joint owner.

Table 2. Ecuador – Participation of women landowners in agricultural decisions by marital status, form of ownership and type of participation in decision-making (%)

Decision	Participation	Partnered Women			Unpartnered Women	
		Individually owned	Jointly owned	Total	Individually owned	Total
What to grow	Alone	45.2	11.8	16.2	73.5	72.1
	Joint	19.1	66.2	59.0	24.1	23.9
	None	35.7	22.0	24.8	2.4	4.0
	Total	100	100	100	100	100
	Number of parcels	35	195	230	60	66
What to sell	Alone	58.2	22.5	27.6	75.0	64.4
	Joint	19.8	65.2	57.9	21.3	28.8
	None	22.0	12.3	14.4	3.8	6.7
	Total	100	100	100	100	100
	Number of parcels	15	99	114	31	35
Use of income	Alone	54.4	7.7	14.6	80.8	71.5
	Joint	23.6	77.2	68.6	19.2	24.9
	None	22.0	15.1	16.8	0	3.6
	Total	100	100	100	100	100
	Number of parcels	15	101	116	30	34

What is perhaps somewhat surprising in Table 2 is that in Ecuador, women who are the sole owners of their parcels are also more likely than those who are joint owners to *not* participate in any of the decisions. This may suggest that married women who are sole owners, and thus very secure in their land rights, are exercising an option to not participate in agricultural production, a less prestigious activity in Ecuador than being a housewife or working off-farm and earning an independent income. Such women are more likely not to participate in the decision over what to cultivate than in decisions over what to sell or the disposition of sales income.

Ghana shows a similar pattern to that of Ecuador in that women who are individual owners of their plots are more likely than joint owners to make decisions alone, and those who are joint owners to make decisions jointly with someone else (Table 3). An interesting difference between Ghana and Ecuador is with respect to the partnered women landowners who are most likely *not* to participate in any decision at all—joint landowners rather than sole owners. On about 42% of the plots owned jointly, partnered women are not involved in the decision on what to grow. This suggests that they may be nominal owners only, being excluded from decision-making, or that they may be exercising choice. Support for the latter proposition is provided by the fact that much fewer opt out of the other crucial decisions—how much to sell and the use of the proceeds—thus exercising their ownership rights in these decisions.

Table 3. Ghana – Participation of women landowners in agricultural decisions by marital status, form of ownership and type of participation in decision-making (%)

Decision	Participation	Partnered Women			Unpartnered Women		
		Individually owned	Jointly owned	Total	Individually owned	Jointly owned	Total
What to grow	Alone	68.4	12.5	54.8	90.3	25.8	81.0
	Joint	20.8	45.9	26.9	4.5	57.7	12.1
	None	10.8	41.6	18.3	5.2	15.6	6.9
	Total	100	100	100	100	100	100
	Number of parcels	117	38	155	143	22	165
What to sell	Alone	68.9	21.3	57.4	80.8	25.7	72.4
	Joint	17.3	50.7	25.4	7.9	61.0	15.9
	None	13.8	28.1	17.3	11.4	13.4	11.7
	Total	100	100	100	100	100	100
	Number of parcels	85	27	112	88	15	103
Use of income	Alone	64.8	13.3	52.6	85.0	27.6	76.6
	Joint	25.6	57.8	33.2	8.9	65.7	17.2
	None	9.5	28.9	14.1	6.1	6.7	6.2
	Total	100	100	100	100	100	100
	Number of parcels	86	27	113	87	14	101

Karnataka conforms to the general pattern of female sole owners being more likely than joint owners to make decisions alone, and for joint owners to be more likely to engage in joint decision-making. However, here, key decisions on the majority of plots owned by female sole owners are made jointly with someone else, usually their partners. Moreover, as **Table 4** shows, the share of partnered female owners who do not participate in these decisions at all varies according to the specific decision, in yet a third pattern. In fact, the majority of both sole and joint female owners do not participate at all in the decision over crop sales. With respect to the other two decisions, joint owners are more likely than individual owners to not participate at all, as was found in Ghana.

Table 4. Karnataka, India – Participation of women landowners in agricultural decisions by marital status, form of ownership and type of participation in decision-making (%)

Decision	Participation	Partnered Women			Unpartnered Women	
		Individually owned	Jointly owned	Total	Individually owned	Total
What to grow	Alone	19.7	1.8	11.6	63.8	62.0
	Joint	45.5	58.2	51.2	25.4	24.7
	None	34.9	40.0	37.2	10.9	13.4
	Total	100	100	100	100	100
	Number of parcels	66	55	121	138	142
What to sell	Alone	9.3	0	4.5	62.4	62.5
	Joint	27.9	41.3	34.8	18.3	17.7
	None	62.8	58.7	60.7	19.4	19.8
	Total	100	100	100	100	100
	Number of parcels	43	46	89	93	96
Use of income	Alone	11.6	0	5.6	60.2	58.3
	Joint	46.5	52.2	49.4	28.0	29.2
	None	41.9	47.8	44.9	11.8	12.5
	Total	100	100	100	100	100
	Number of parcels	43	46	89	93	96

In Karnataka, a large number of partnered individual owners (35% to 63% across decisions) report not participating in the decision-making process at all. This suggests the prevalence of a patriarchal mode in crop management and sales, where women might be the owners, even sole owners, but more often than not, decision-making is not within their power. With specific reference to the decision of what to sell, this might be because it is men who actually market the produce and handle the transactions, irrespective of who owns the land. This is not surprising as women in South Asia face some restriction on their mobility which would impact their ability to participate in certain kinds of decisions.

The second set of columns in **Tables 2, 3, and 4** presents similar data for plots owned by unpartnered women. Recall that unpartnered women are much more likely to be sole rather than joint owners in all three locations; for Ecuador and Karnataka, there are actually very few observations of unpartnered women who are joint owners and thus, these are not shown in these tables. The data indicate that unpartnered women who are the sole owners of their land generally make these three decisions alone. Comparing the three locations, unpartnered women sole owners are less likely to participate in the three decisions in Ghana and Karnataka than in Ecuador, where the overwhelming majority are involved in decision-making regarding their own parcels. In both Ghana and Karnataka, once again the decision in which these female landowners are least likely to participate is the sale of their crops.

Since by definition, unpartnered women do not have a spouse, when unpartnered women landowners are not involved in a decision, it is usually being made by a family member who may or may not reside in the same household, and similarly, for the case of joint decision-making. In Ghana it is more likely that men (sons and non-male relatives) as compared to women are involved in the sale of the product when the unpartnered female landowner is not, although sometimes daughters or other female relatives are involved. In Karnataka, the other decision-maker is most likely to be an adult son of the woman respondent residing in the same household. In Ecuador this other person may be a former spouse, particularly in the few cases of jointly owned land that has not yet been divided following a separation or divorce.

Implications and Conclusions

Our findings suggest that when researchers assume that female household heads are the managers of the plots that they own, they are probably correct. The great majority of unpartnered women who are sole owners make the key decisions themselves regarding agricultural production on their parcels. At the same time, it cannot be assumed that male household heads are the managers of the plots owned by their wives or owned jointly by both of them. We have provided evidence that partnered women landowners are also actively involved in agricultural decision-making. The form of their participation, however, is conditioned by the form of ownership of land.

The general pattern in this three-country study is for partnered women who are sole owners of their plots to be more likely than joint owners to make decisions alone, and for female joint owners to be more likely to engage in joint decision-making. In both Ghana and Ecuador the majority of partnered women who are sole owners always make these key decisions alone. In Karnataka, such owners demonstrate much less autonomy, with the majority of sole owners making these decisions jointly with someone else.

This study also demonstrates that female landowners' participation in decision-making varies according to the specific decision and the geographical context, for the three countries illustrate different patterns. In Ecuador the decision in which partnered female landowners are least likely to participate is the decision over what to cultivate, whether they own their plots individually or jointly. This trend may have to do with whether the women identify themselves as farmers, with land rights giving them the choice of opting out of agricultural production as a primary activity although they maintain control or participation in decisions over the income generated from agricultural sales on their plots.

In Ghana, partnered women are also least likely to participate in the decision on what to cultivate. This is due largely to the high incidence of joint owners who do not participate in this decision. Unpartnered women are least likely to be involved in the sales decision. Women landowners in Ghana are unlikely to be involved in the sales decision when they do not work on the plot.

In Karnataka, the decision in which women landowners are least likely to participate—whether partnered or unpartnered—is regarding the sale of crops. This may signal that women are much less integrated into agricultural product markets than men, being much less aware of market procedures. The focus group discussions revealed that women (whether or not they are landowners and even among the matriarchal and matrilineal communities) tend to leave a majority of crop management practices to male members of their households. One of the key reasons could be that the productive assets markets (particularly land and livestock) along with the product market are seen as men's domains and by the nature of their organization, pose barriers to women's entry.

Overall, this study has demonstrated an association between women's land ownership and their degree of participation in decision-making. In Karnataka, which has the lowest share of female landowners of the three locations, they also report the lowest degree of participation in decision-making. In Ecuador, where there is gender parity in landownership, women show very high rates of participation in the key agricultural decisions. Ghana is in between the other two sites with respect to these indicators, sometimes showing greater similarities to Ecuador and other times to Karnataka. The main commonality between the three countries is that the participation of female landowners in the decisions regarding their own plots differs according to their marital status, an insight that should guide future studies of women's participation in agriculture.

Notes

- 1 See Deere and Twyman (2012), Doss (2013) and Peterman et al (2013) on why it matters how a farmer is defined and for a summary of the studies which show that such, along with the unit of analysis (household vs. plot), make a difference in examining gender differences in outcomes.
- 2 See Deere and Twyman (2012). The FAO guidelines for the 2010 World Census of Agriculture did introduce the possibility of designating joint holders as well as sub-holders (FAO 2005), but to date no Latin American countries have adopted this innovation (Deere 2012).
- 3 On the methodology of the household asset surveys, see Doss et al (2011) and the country reports: Deere and Contreras (2011), Oduro et al (2011), and Swaminathan et al (2011).
- 4 The Karnataka instrument also collected decision-making information from women who were non-owners, allowing a comparison between owners and non-owners; the other surveys did not.
- 5 In Ecuador and Ghana the reference period was the previous year; in Karnataka it was not specified.
- 6 The Ecuador instrument also asked about the decision over input use and over land-improving investments made during the previous five years. This latter question was also asked in Ghana and Karnataka. In addition, all three surveys included questions over livestock management.
- 7 The data for Ghana exclude "family land" which is owned by the kinship group. Individuals within households have rights to farm this land but usually cannot sell it. About 30% of the total plots reported are made up of such land which is excluded from this analysis (Oduro et al 2011).
- 8 The data for Ecuador refer only to those landholdings where less than five workers are employed and thus under-represent the full distribution of landholdings in the country. Data on agricultural businesses was collected separately, as part of the business module. Women represent half of the owners of these agricultural businesses, but have much less business wealth than do men (Deere and Contreras 2011).
- 9 The composition of unpartnered women and how they acquired their land also differs across the three sites. In Karnataka the sample is dominated by widows and individual ownership is primarily a result of their having inherited land from a deceased spouse. Never married and separated/divorced women landowners are much more common in Ecuador and Ghana. In Ecuador, most such women landowners have inherited their land from a parent, and less frequently, have acquired it via some other mode, such as purchase with a former husband. In Ghana most of these landowners inherited the plot from a family member; very few acquired it through purchase.
- 10 In Ecuador multiple regression analysis reveals that women's participation in field work is positively and significantly associated with their participation in the decision over what to grow and what to sell, but not with the decision on how to spend the proceeds from the sale (Deere and Twyman 2012).

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