

Are All Rural Female-Headed Households Poor?

*Brett M. Ballard and Ingrid FitzGerald look at the relationship between the sex of rural household heads and a number of important variables concerning land-related matters, including landholding size, land acquisition, household assets and income, labour resources, rice sufficiency and rice production investments.**

Earlier international and Cambodia-specific literature suggested that female-headed households are generally poor. Recent evidence from several CDRI studies suggests otherwise, with important implications for policy.

This article looks at the relationship between the sex of rural household heads and a number of important variables concerning land-related matters, including landholding size, land acquisition, household assets and income, labour resources, rice sufficiency and rice production investments. Two striking patterns emerge from data collected in early 2004 for CDRI's rural land titling baseline survey conducted for the Land Management and Administration Programme (LMAP).¹ The first pattern is that female-headed households generally have less access to and control over productive assets than male-headed households across all landholding intervals. Although this tends to affirm the general impression that female-headed households are one of the groups in rural society most vulnerable to falling into and remaining in poverty, a second pattern reflects a substantial degree of differentiation among lower and upper income female-headed households in terms of access to and control over productive assets. This in turn suggests that female-headed households employ different livelihood strategies according to their asset holdings and available labour. These two sets of observations may help policy makers better design and target poverty reduction interventions.

Landholdings

Generally speaking, the average number and size of agricultural plots steadily increases along with total household landholdings. This pattern holds for both male- and female-headed households. However, the average number and size of plots is less for female-

headed households than for those headed by males in each landholding size interval. Table 1 shows that male-headed households average 4.44 plots per household and 0.39 hectares per plot, while female-headed households average 3.78 plots per household with an average of 0.30 hectares per plot.

Table 1. Agricultural Land Summary, by Gender

Land Size (ha)	No. HH		Area/HH		Plots/HH		Area/Plots	
	M	F	M	F	M	F	M	F
< 0.5	123	78	0.28	0.26	2.28	2.36	0.12	0.11
0.5 – 0.99	164	59	0.70	0.69	3.78	3.89	0.18	0.18
1.0 – 1.99	180	49	1.40	1.40	4.86	4.40	0.28	0.31
2.0 – 2.99	102	20	2.43	2.29	5.29	5.65	0.46	0.40
> 3.0	113	19	5.36	4.59	6.32	5.89	0.76	0.77
Total	682	225	1.75	1.17	4.44	3.78	0.39	0.30

The baseline survey data also show that 34 percent of the female-headed households own less than one half hectare of agricultural land, while 18 percent of the households headed by males own less than one half hectare. Moreover, 60 percent of female-headed households own less than one hectare, while 42 percent of those headed by males own less than one hectare. Conversely, 17 percent of the households headed by females own more than two hectares, while 31 percent of the households headed by males own more than two hectares. This pattern of land distribution may have important implications concerning farming productivity and income. Broadly speaking, this also suggests that land fragmentation and atomisation may tend to run in the direction of female-headed households,² while land concentration and consolidation may run more in the direction of male-headed households. These two propositions would need to be tested by research specifically focused on rural households headed by single women.

Land Acquisition

The mode of land acquisition also reveals several important factors concerning the relationships between the sex of household head and land ownership. Table 2 shows that female-headed households have a much higher percentage of plot acquisitions from the state (70.9 percent) than do male-headed households (51.3 percent). The percentage of plot acquisitions by inheritance is much lower for

Table 2. Land Acquisition by Gender (percent)

Land Size (ha)	From State		Inheritance		Purchase		Cleared	
	M	F	M	F	M	F	M	F
< 0.5	39.5	73.1	43.1	19.4	14.9	6.5	2.5	1.1
0.5 – 0.9	52.0	71.6	29.6	6.7	15.7	16.4	2.6	4.9
1.0 – 1.9	58.7	77.9	21.5	6.9	14.9	8.3	4.9	6.9
2.0 – 2.9	51.5	73.5	18.5	12.4	18.5	6.2	11.4	8.0
> 3.0	46.1	50.0	22.1	12.5	16.7	22.3	15.2	15.2
Total	51.3	70.9	24.7	11.0	16.1	11.6	7.8	6.3

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Table 3. Household Assets and Labour (average value in mouen riels per household)

Land Size (ha)	Livestock *		Durable Assets		Non-Farm Fixed Assets		Farm Assets Non-Machine		Farm Assets Machine		HH Labour	
	M	F	M	F	M	F	M	F	M	F	M	F
0	54.7	41.3									4.1	4.6
< 0.5	111.8	87.6	36.4	28.1	29.9	2.4	3.7	3.4	9.2	2.0	3.6	2.9
0.5 – 0.99	167.0	150.7	40.7	37.8	10.4	3.3	11.2	5.8	22.1	3.4	4.2	3.8
1.0 – 1.99	212.2	127.0	62.4	14.1	23.9	0.8	14.8	9.5	36.7	5.2	4.5	2.2
2.0 – 2.99	245.9	129.9	51.7	27.8	12.8	5.3	23.5	13.2	41.5	11.6	4.9	4.4
> 3.0	309.4	318.7	60.6	43.5	24.6	22.3	40.2	20.2	45.9	29.6	5.1	4.4
Total	197.4	128.7	50.7	28.8	20.4	4.1	18.2	7.8	31.4	6.7	4.4	3.4

* N = 888 households reported owning livestock.

female-headed households (11.2 percent) than for male-headed households (24.6 percent). This difference is not surprising given traditional practices in rural Cambodia where land tends to be passed on to sons.

Table 2 also shows that the percentage of plot acquisitions by purchase and clearing is generally fewer for female-headed households than for male-headed households. Taken together, the lower percentages for inheritance, purchase and clearing suggest that female-headed households are less able to acquire additional plots than male-headed households, except for households with three or more hectares of land. Table 3 helps to explain this observation. It shows that female-headed households in each landholding interval have, on average, less assets and income than male-headed households. Fewer assets, especially farm-related assets and adult labour, suggest a constraint on the amount of land that can be farmed or cleared, while less income suggests a constraint on buying new land.

Rice Sufficiency

Not surprisingly, rice sufficiency corresponds closely to landholding size. Generally speaking, the percentage of households producing enough rice or a surplus tends to increase with landholding size, while the percentage of households that must buy rice for nine or more months of the year decreases sharply as landholding size increases.

Larger landholding households seem to have an advantage over smaller landholders in other respects as well. For example, households with three or more hectares of land account for 23 percent of the households producing a surplus, even though they are only 13 percent of the households in the sample. Households with 0.5 hectares or less (including the landless) account for 6.8 percent of surplus producers but 27 percent of the households in the population. Landless households account for 37 percent of households that must buy all their rice, yet they represent only 6.3 percent of the households in the survey.

Interestingly, households with two or more hectares account for 24 percent of the households that must buy all their rice. At first glance this does not appear correct, as one would expect households with that much land to produce at least some rice. One possible explanation for this is crop losses due to pests, flood or drought. This would also help explain why many smaller landholders had to buy all their rice as well. This proposition is supported by the data concerning household crises and shocks showing that 67 households in the LMAP survey group experienced at least some crop damage from pests, including 15 households with three hectares or more of agricultural land. A total of 398 also reported crop damage from floods or drought, including 71 with three or more hectares of land. Moreover, it should be kept in mind that 2003, the year for which agricultural data was collected,

Table 4. Rice Sufficiency

Land size (ha)	Surplus		Enough		7-10 months		3-6 months		< 3 months		Buy all		total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0	5	0	3	0	0	0	0	0	0	1	32	20	40	21
< 0.5	9	5	13	4	32	21	33	20	19	17	17	11	123	78
0.5 – 0.9	52	12	17	13	45	16	25	9	14	3	11	5	164	58
1.0 – 1.9	65	12	33	7	30	7	24	9	15	8	13	6	180	49
2.0 – 2.9	40	10	15	1	13	3	13	0	7	3	14	3	102	20
> 3.0	56	7	17	2	15	1	11	4	9	2	5	3	113	19
Total N	227	46	98	27	135	48	106	42	64	34	92	48	722	245
% total F/M	31.4	18.8	13.6	11.0	18.7	19.6	14.9	17.1	8.9	13.9	12.7	19.6		
Total	273		125		183		148		98		140		967*	

* N = 3 missing

was characterised by flood and drought in various parts of the country, including some areas in the survey sample.

The rice sufficiency data show that male-headed households tend to have an advantage over female-headed households. For example, male-headed households account for 83.2 percent of surplus-producing households, while representing 74.6 percent of all households. Female-headed households account for 34 percent of the households that must buy rice year round, although they are 25 percent of the surveyed households. Female-headed households also account for 53.1 percent of households that produced enough rice for only three months or less, and 39.6 percent of the households that produced enough for three to six months. The distribution of rice sufficiency among female-headed households can be explained in part in terms of their smaller land holdings, fewer assets and less available adult labour.

Rice Production Expenditures

In addition to land and capital assets and labour, the difference in rice sufficiency across the different landholding sizes can also be explained by the amount of investment in rice production. Table 5 shows that the average amount of rice production investment generally increases with landholding size. This pattern is observed for both male- and female-headed households across all landholding sizes. It is also interesting to observe that male-headed households generally invest more than female-headed households in each landholding category, except for the largest landholding size, in which female-headed households on average invested about 60 moeun riels per household compared to 50 moeun riels for male-headed household. Given the general shortage of labour in the female-headed households, it is quite likely that female-headed households will compensate for less labour whenever they have the resources with which to do so.

Discussion

The rural land titling baseline survey data provide a useful snapshot of the variation in assets among female-

and male-headed households across and within different landholding sizes and corroborate other studies that highlight the many disadvantages that female-headed households face in terms of land tenure security and maintaining livelihoods. However, there are at this point insufficient data with which to trace such patterns over time. For example, at what point do women become single household heads, and what then happens to their landholdings and other assets? We can also assume that, on average, female-headed households probably received less land during the 1989 land distribution, but what have been their trajectories since then?

Rural female-headed households are often portrayed as among the most vulnerable and the most prone to moving into poverty. This impression was borne out in CDRI's recent participatory poverty assessment (PPA) of the Tonle Sap, which found that the majority of female-headed households were either poor or destitute in all the study villages, regardless of livelihood strategy. Moreover, in several locations, villagers reported that there were more poor and destitute female-headed households in 2005 than in 2000.

International analysts and more recent Cambodian studies have challenged such findings.³ They suggest that while female-headed households are often less well off in the aggregate than male-headed households, there is also significant variation in income and consumption as well as asset distribution among female-headed households. For example, CDRI's Moving Out of Poverty Study (MOPS) found that while female-headed households were over-represented among those trapped in chronic poverty, a substantial proportion of female-headed households were able to move out of poverty, and some that were well off remained so. Although female-headed households in aggregate earned less and had smaller landholdings than male-headed households, better off female-headed households had incomes and assets comparable to better-off male-headed households. Upwardly mobile female-headed households were also likely to be landless, suggesting they rely on other sources of income apart from agriculture to move out of poverty.⁴

The rural land titling baseline survey data affirm that female-headed households tend to be at a disadvantage in term of landholding size and land acquisition patterns compared to

Table 5. Rice Production Inputs (moeun riels/hh)

Input	< .5		0.5 – 0.99		1.0 – 1.99		2.0 - 2.99		> 3.0		Total Ave
	M	F	M	F	M	F	M	F	M	F	
Ch. Fert.	5.8	5.7	10.6	8.7	12.0	8.3	13.6	8.9	17.6	32.7	11.21
Pesticide	1.4	.8	2.1	1.2	2.0	1.1	1.5	1.5	3.1	3.1	2.06
Pumping	3.2	2.7	4.0	4.0	5.1	4.1	7.5	3.0	11.5	15.0	5.59
Lbr: Prep	4.6	3.1	6.7	5.2	11.6	7.1	10.6	5.5	18.4	17.3	9.01
Lbr: Tran	6.8	5.7	9.2	8.3	11.8	8.8	14.5	11.1	22.5	33.5	12.2
Lbr: Harv	5.3	3.4	6.2	4.0	8.3	5.4	12.1	9.9	13.5	18.3	8.46
Threshing	2.7	2.3	2.8	2.3	3.9	3.2	5.8	3.6	6.7	9.3	4.2
Repairs	1.5	1.1	2.2	1.6	2.3	2.4	1.7	.95	1.9	15.0	2.07
Transport	1.8	2.0	2.7	2.6	3.2	2.6	3.5	1.9	6.6	3.9	3.23
Rent land	7.5		6.1	1.7	10.8		6.0		10.9		7.7
Rent Live	.2	5.0	4.9		3.2	5.0		6.0	10.0	1.5	4.48
Other	4.6	.97	4.4	5.5	10.6	20.0	3.1	10.0	7.4	6.3	7.2
Total	14.4	10.8	23.1	17.0	34.4	20.0	32.8	25.0	50.7	60.2	30.7 19.8
Total	13.03		21.57		31.77		31.6		51.98		28.2

male-headed households, due in part to the history of land distribution as well as limited assets and human capital. Like the MOPS, however, the rural baseline survey data show significant differences between female-headed households, which again suggests that not all of those households are poor. For example, Table 1 shows that 17 percent of the surveyed female-headed households had landholdings of two hectares or more. Table 3 shows a remarkable gap between the smaller and larger landholding households in terms of the value of livestock and capital assets. Table 5 shows that larger landholding households invest almost four times as much in rice production as the smaller landholding households.

These findings have important implications for effective targeting of policy. For example, land-titling initiatives should continue making special efforts to ensure that female-headed households receive land titles. In light of gendered inheritance patterns and less capacity to retain current landholdings and acquire new land, security of title is particularly important for these households to protect existing assets and promote access to formal credit. Access to formal credit is especially important in terms of facilitating more investment in small businesses, which are an increasingly important source of income for female-headed households. Land titles may even enable some female heads of households to sell their land for a better price in order to take advantage of non-farming income opportunities. Although this would show up as an increase in landlessness or near-landlessness among female-headed households, it might not represent a negative outcome if viable employment and business alternatives were available.

The above discussion suggests there is need for more gender-specific research regarding land tenure in Cambodia. One important dimension of such research would look at how land titles have improved or strengthened women's land tenure security within both male- and female-headed households, as well as the well-being of female-headed households. An important component of this research would focus on livelihood strategies and income sources according to the sex of household head. In both cases, qualitative research methods would need to be employed because many related issues may be sensitive and complex, and would therefore not be easily captured with a quantitative survey instrument. Indeed, many of the issues pertaining to gender equity in the areas of land tenure rights and security, including land concentration and atomisation as mentioned above, are primarily social and cultural in nature and therefore require innovative research methodologies.

Endnotes

1. The survey data cover 970 rural households in 32 villages in the four LMAP provinces of Kompong Cham, Kompong Thom, Sihanoukville and Takeo. Of

these households, 63 reported owning no agricultural land. As a result, the data referring to landholdings cover a sample of 907 households, 682 male-headed (75.2 percent) and 225 female-headed (24.8 percent).

2. One possible explanation may be found in the reasons a household has a female head. For example, women who are widowed, divorced, or abandoned may lose productive assets, including land (Fitzgerald, 2007).
3. See Chant (2003) for a discussion of the problems associated with the assumption that all-female headed households are vulnerable and/or poor. See Urashima et al. (2007) for an analysis of differences between female-headed households in Cambodia using CSES 2004 data. This analysis suggests that female-headed households without adult males and with more dependants are more likely to be poor than those with adult men and fewer dependants.
4. One possible explanation for the contrast between the findings in the rural land titling baseline survey and the MOPS on the one hand and the PPA on the other hand concerns the research methodologies. The PPA focused on poor households and communities and used qualitative methods, while the MOPS included both poor and non-poor households and communities in its samples. The MOPS also gathered quantitative data on household assets and expenditures that enable comparison of male- and female-headed households.

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