Rethinking Female-Headed Households in India: Diversity of Household Structure, Contrasting Socioeconomic Status.

Thomas Licart (Université de Strasbourg)

Long abstract

Context & objectives

According to the National Family Health Survey (NFHS), the proportion of Female-Headed Households (FHH) is constantly growing in India, from 9% in 1992–1993 to 15% in 2015–2106. Such trend can have two possible causes: an improvement in the status of women or an increase in the number of women living without husbands. In a deeply patriarchal society like India, which is experiencing an increase in sex differential in life expectancy (Singh & Ladusing, 2016), a steady flow of male migration and slow nuclearization process (Licart, 2018), the latter cause seems to prevail. Thus, the absence of a husband can be a source of vulnerability for FHH. One less adult male means a greater economic burden for the female head while there is still a significant gender gap in employment (30% of labour force participation for women compared to 70% for men) and education (one third of working-age women have never been to school, two times less for men). Therefore, FHH have been a major concern for both researchers and policy makers, with an emphasis on their living conditions. Some studies have confirmed the link between gender of the household head and various poverty indicators based on expenditure per capita (Drèze & Srinivasan 1997; Meenakshi & Ray, 2002), employment (Mukherjee & Jhilam, 2014) or household possessions (Unisa & Datta, 2005; Kumar, & Gupta, 2012). Meanwhile, some Indian States, such as Kerala and Tamil Nadu, have launched social schemes targeting FHH.

However, the researchers have also provided a more nuanced picture of FHH. First, they offer greater autonomy and responsibilities for women (Unisa & Datta, 2005; Desai & Banerjee, 2008; Chakrabarti, 2019). Secondly, their economic condition is closely linked to the marital status of the head of the household. When the woman is still married, she can expect a remittance from her migrant husband. Its impact can be considerable on the standard of living, particularly in case of international migration (D'cruz & Bharat, 2001). On the other hand, a widow suffers from worst economic and health conditions (Chen & Drèze 1995; Swain & Pillai, 2005). Thirdly, the socioeconomic situation of FHH depends on their household structure. Complex households tend to have a better standard of living than nuclear in India (Niranjan & Roy, 2005; Jadhav & al., 2013). While more than half of the total population still lives in a complex household, the proportion is lower for FHH. However, few studies take into account the household structure. It is sometimes approached by rough indicators such as household size, number of adults and number of children. The economical gap between FHH and Male-Headed Household (MHH) is then largely diminished (Gangopadhyay & Wadhwa, 2004). Drèze and Srinivasan (1996) went further, dividing the FHH into different household types (single member household, nuclear, or extended). They showed that MHH economic advantage was high among single member households, low among nuclear households and reversed among extended. However, these results were highly sensitive to the economy of scale on per capita expenditure.

Since this last study based on outdated data (1987–1988), the living arrangements of FHH have received little attention. The objective of this paper is to analyze the situation of Female-Headed Households in India in the light of their household structure. Firstly, we closely examine the sociodemographic characteristics of different FHH types. Using a household classification, we show how FHH are economically and demographically heterogeneous. Secondly, we compare for each FHH type the existing economic differences with their MHH counterparts. It will bring another perspective on the relation between the gender of household head and the standard of living. Finally, we analyze the factors leading to choose a mother as head of the household while

she is living with a married son. We argue that beyond simply describing an economic condition, a FHH can be the results of multidimensional causes.

Sources and methods

This work is based on data from the fourth round of the National Family and Health Survey (NFHS-4) conducted by the IIPS (*International Institute for Population Sciences*) in 2015–2016. The aim of this survey is to provide estimates on fertility, mortality, and general family welfare. It includes 568 200 households spread throughout all states and union territories of India. For all usual residents of each household, we have their relation with household head, their basics sociodemographic characteristics (age, sex, marital status, education level, religion, caste) as well as a measure of household wealth (composite index based on the ownership of different assets).

We divide the FHH into five categories:
- Single member FHH i.e. Women living alone
- Broken nuclear FHH i.e. Women living without any other members than her child (ren).
- FHH with spouse i.e. includes all female heads of households living with her spouse.
- Broken Complex FHH i.e. includes all female heads of households living without a spouse but with her married son and with his wife and/or child (ren)
- Other complex FHH i.e. any other type of complex FHH.

These categories have been chosen based on economic and social concerns. First, a distinction must be made between FHH composed of a single adult and the others because of the heavier economic burden. It is also important to go beyond the number of adults and children because a same number includes households from different social scopes. For instance, in a patriarchal country, a woman living with two adult daughters cannot be compared to a woman head living with her husband or with her son's family. These three situations have different economic, social and cultural outcomes.

Initial findings

1) FHH vs other FHH (Figure 1)

In India, 14.5% of households are Female-Headed Households. Our classification highlights the great diversity of their household arrangement. The most represented category is the broken nuclear FHH (37%), followed by the broken complex FHH (28%) and the single member (15%). Women head living with her husband constitute only 6% of all FHH while the proportion of the extremely heterogeneous category of other complex FHH is 14%.
Among the FHH, single member are the most economically disadvantaged: 42% of them belong to the household with the lowest wealth index and 68% have never been to school. On the other hand, broken complex FHH seems to have a more favorable economic situation with only 15% of them belonging to the lowest wealth index quintile.
Each type of FHH also has a specific sociodemographic profile. Older, women living alone or with a married son are more likely to be widowed while the marital status of those living in a broken nuclear household is more diversified. FHH types with an adult male (broken complex or With spouse FHH) live more in urban areas than the average while single member and With Spouse FHH have the most atypical cultural and geographic distribution. Single member households are overrepresented in South India and among Hindus while With Spouse FHH are overrepresented in east and north-east but underrepresented among higher castes.

2) *Female Heade Household vs Male Headed Household*

A quick comparison of economic condition between MHH and FHH shows a clear advantage for MHH. While 27% of FHH are living in the poorest household, this concerns only 17% of MHH. Due to the gender gap in education, the education level of male head is much higher than that of their female counterparts (only 25% of male head have never been to school compared to 60% of female head). They are also more likely to own land (40% vs 70%). However, many of these differences can be explained by different age and household structure.

When we compare the broken nuclear and complex FHH with their male counterparts, gender differences in living standards are no longer as obvious as before. First, regardless the gender of the head, the broken nuclear households are poorer than average and broken complex richer. Then, if the gender gap in education persists and MHH have a higher proportion of land and house ownership, the proportion of poorest is equivalent for MHH and FHH. The gender difference is even reversed in the case of the broken complex households.

Some FHH types, though, cannot be directly compared to their corresponding MHH type. Single member households are mainly composed of elderly widows for women, while men living alone are mostly young married, or unmarried, economic migrants. For their part, women heads living with their husbands are from very localized communities in India, such as in the traditionally matrilineal north-eastern state of Meghalaya.

Thus, we have applied the same logistic regression model for each type of household on the odds for a household to belong to the 10% of households with the lowest wealth index (figure 2). The main variable of interest here is the sex of the household head but we also control the age, marital status, education level, religion, caste of the head as well as the region of residence, and the number of adults and minors in the household. Contrary to the expectations, a male head of household increases the odds to belong to the poorest household compared to a female head, ceteris paribus. However the odds vary according to the household structure. They are maximum for the other complex household, not very significant for head living with a spouse, and women living alone have a greater chance to be poor than men, even taking into account age and marital status.

3) *Son head vs Mother head (Figure 3)*

Of all FHH types, the broken complex households are perhaps the most puzzling. These are households headed by a woman while she lives with an adult and married man, her son. Of all the mothers living with a married son, 42% is headed by the son and is therefore not a FHH. In a society valuing both parenthood and patriarchy, it is interesting to study the factors that allow one of these values to overtake the other in the choice of household head. Thus, the preference for a mother as head of the household rather than a son, in all households with a lone mother and at least one married son, have been tested with a logistic regression.

It confirms the multidimensional factors leading to the choice of the household head. First, the socioeconomic component, households with a higher wealth index are more likely to be headed by a mother than a son. However, this relation is only significant in rural areas. On the other hand, in both areas, the more educated the mother is, higher are her odds to be the household head, with a role of education level enhanced in an urban setting. Ownership of land or house gives the son more power and more chance to be designated as the head. In comparison, when there is no land/house owned or even more when they belong to a woman, the odds to have a mother as household head are much higher.

Another influential component is the demographic component. Ageing increase the odds to give up the headship for the benefit of the son (himself older). Women who are still married are three times more likely to be the head of the household than widows. Thus, the parental authority is strengthened when the father, absent from the household, is still alive.

The sociocultural variables have less impact. Only Christians have more odds than Hindus to be headed by a mother. Likewise, odds are slightly better for scheduled tribes in urban areas and higher castes in rural areas compared to the scheduled castes. From a regional perspective, the differences are more significant. The central Indo-gangetic plain is the region with less probability for the mother to be the household head while the northeast has the greatest odds.

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Figure 1. Socioeconomics and demographics characteristics of Female Headed Household types

Source: NFHS-4, 2015-2016

Figure 2. Odds ratio values of "gender of household head" variable (reference: Female) in logistic models on household poverty risk

		Odds-Ratio	Significance	95% Conf. Interval	Pseudo R²
Single member	Rural	0.89	*	[0.80;0.99]	0.23
	Urban	0.58	***	[0.48;0.70]	0.26
Broken Nuclear	Rural	1.61	***	[1.44;1.81]	0.21
	Urban	1.78	***	[1.49;2.11]	0.22
Broken Complex	Rural	1.69	***	[1.51:1.90]	0.23
	Urban	1.85	***	[1.55;2.20]	0.19
With spouse	Rural	1.07	-	[0.96;1.18]	0.24
	Urban	1.35	**	[1.14;1.60]	0.23
Other	Rural	1.95	***	[1.71;2.24]	0.21
	Urban	2.5	***	[2.02;3.07]	0.16
Total FHH	Rural	1.71	***	[1.65; 1.77]	0.24
	Urban	1.75	***	[1.64;1.87]	0.23

Source: NFHS-4, 2015-2016

*** p<0.01   ** p<0.1   * p<0.05   - non significant

Note: Only the odds ratio values relating to the sex of the household head are shown. However, each line correspond to a specific logit model on the odds to belong to the 10% of the poorest households. They all include variables on age, marital status, education level, religion, caste of household head as well as the region, the number of adults and minors (except for single member models) in the household.

Interpretation: A broken complex household living in an urban area have 1.85 more odds, ceteris paribus, to be one of the ten poorest households if the head is a man rather than a woman.

Figure 3. Determinants of mother headship for households including a mother living without a spouse but with a married son (Logit models, Odds-ratio)

		Rural		Urban	
		OR	Sign.	OR	Sign.
Age		0.94	***	0.9356693	***
Marital Status	Married	3.43	***	2.154581	***
	Separated	0.98	-	1.07221	-
	Widow	*Ref*		*Ref*	
Land owner	Male	0.72	***	0.6482125	***
	Female	1.67	***	1.207281	*
	Not owned	*Ref*		*Ref*	
House owner	Male	0.55	***	0.660711	***
	Female	3.07	***	3.235188	***
	Not owned	*Ref*		*Ref*	
Wealth Index	Poorest	*Ref*		*Ref*	
	Poorer	1.08	*	0.9564967	-
	Middle	1.24	***	1.033514	-
	Richer	1.52	***	1.111435	-
	Richest	1.70	***	1.128403	-
Education Level	No school	*Ref*		*Ref*	
	Primary	1.35	***	1.541255	***
	Secondary	1.42	***	1.620732	***
	Higher	1.36	-	2.11842	***
Religion	Hindu	*Ref*		*Ref*	
	Muslim	0.96	-	1.212525	***
	Chistian	1.28	***	1.412888	**
	Sikh	1.07	-	1.148704	-
	Other	1.06	-	0.8001411	-
Caste	SC	*Ref*		*Ref*	
	ST	1.08	-	1.395689	***
	OBC	0.96	-	0.9242815	-
	Higher	1.21	***	0.9044089	-
Region	Centre	*Ref*		*Ref*	
	North	1.47	***	1.385472	***
	East	1.24	***	1.076951	-
	North-East	2.30	***	3.244271	***
	West	1.24	***	1.464271	***
	South	1.15	**	1.040375	-
		Nb. Obs.	Pseudo R²	Nb. Obs.	Pseudo R²
		39 523	0.25	16 305	0.21

*** p<0.01   ** p<0.1   * p<0.05   - non significant