

Gender dynamics of female-headed households in rural Bihar, India: Reflections from the Koshi River basin



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Gender dynamics of female-headed households in rural Bihar, India: Reflections from the Koshi River basin

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Acronyms and abbreviations

ANSISS	A.N. Sinha Institute of Social Studies
Bigha	Traditional unit of land area measurement (1 bigha equivalent to 6,500 m ²)
FHH	Female-headed household
GC	General Caste
ICIMOD	International Centre for Integrated Mountain Development
KBI	Koshi Basin Initiative
KRB	Koshi River basin
MHH	Male-headed household
OBC	Other Backward Caste
SDIP	Sustainable Development Investment Portfolio
SC	Scheduled Caste
WPR	Work participation rate
UNDP	United Nations Development Programme

Executive summary

Changes in the economic and natural environment have a significant impact on women wherein they are found to be at a disadvantage due to gender-based discrimination and bias. This study focuses on the gender dynamics of female-headed households (FHHs) in rural Bihar, India, and spans 33 villages across 11 culturally and demographically diverse districts. The first phase of this study relied on the data collected under an ongoing research programme on socio-economic livelihood and policy analysis in the Koshi River basin. The data for the FHHs was extracted from a survey of 1,600 households. This gave a sample size of 264 FHHs. In the context of the Koshi region of Bihar, distressed male outmigration, driven by recurrent natural calamities and associated intensification in poverty and landlessness, has altered the scenario of work, survival, and food security of the women who are left behind. These women, thus, have become the de facto heads of rural households.

These FHHs in all the 33 villages have limited employment options, primarily confined to casual and/or domestic labour. The proportion of casual labour, both in agriculture and otherwise, is relatively higher among the FHHs than in male-headed households (MHHs), reflecting comparatively higher livelihood vulnerability among females. The occupational pattern of the FHHs underscore the characteristic of landlessness among them. Significantly, even among those FHHs engaged in self-employment, about 26% are involved in non-agricultural activities as compared to 18% among the MHHs, thereby reflecting weaker land access among the FHHs.

This state of landlessness among the FHHs is further accentuated in the case of those belonging to the backward castes. For example, the cultivable land owned by an average Scheduled Caste (SC) FHH is just 0.0759 bigha, as compared to 0.3485 among the FHHs from the General Caste (GC) categories. In these rural areas, landlessness and caste affiliation converge to render certain groups more vulnerable.

For the FHHs, remittances from outmigration form a central component (more than 50%) of their annual livelihood sources – this helps to ward off a crisis in food security in the long term as the remittances come on an annual or biannual basis; however, the FHHs face food and income shortage in the short run.

While outmigration appears to improve the food security status, agriculture and allied activities continue to be the pillar of food security among the FHHs. And, such migration holds greater importance for the FHHs, both as a coping mechanism against the losses inflicted by floods as well as by way of an adaptive strategy.

A significant finding is that in the villages with high male outmigration, women's mobility and bargaining power in the labour market have improved, while at the household level, they have been able to acquire considerable control over making important decisions. Moreover, greater participation of women from small- and medium-farm households was observed in farming activities. Nonetheless, it is important to note that in the context of the study area, women's enhanced control over the decision-making process is not an outcome of a demand for equality, but that of socio-economic compulsions. This study recommends targeted strategies to enhance the adaptive capacities of the FHHs so that they are better able to cope with the recurrent hardships in the basin.

Background

Changes in environment, livelihood, or policy processes often have differential implications for women and men. The gendered division of labour wherein women participate both in paid and unpaid activities within and outside the household (Tamang et al. 2014; Arora 2014; Chaudhary and Verick 2014; Washbrook 2004; Tuteja 2000) often results in them being at a disadvantage compared to the men. While this is a reality both in developed and developing countries (Washbrook 2007), the drudgery and hardship involved in the extensive range of women's work are considerably more intense in the case of the developing countries (Choudhary and Parthasarathy 2007). In certain socio-economic contexts, women's participation in market-based activities has increased, but this has not resulted in a reduction in their share of unpaid work. This trend is particularly evident in the context of feminization of agricultural labour, often associated with male outmigration from the rural areas (Kelkar 2009; Cornhiel 2006). Most often, the participation of women in the agriculture sector begins with a lack of or limited ownership rights, gender differential in wage rates, and lack of or limited participation in decision-making and leadership (Agarwal 1997).

Consequently, the growing representation of women in market-based and other paid work does not usually translate into a commensurate increase in the women's command over the resources or her ownership right to property. The idea that development is not gender-neutral has gained wide acceptance over the past decades, and the failure to address the issue of women's land rights has been a salient channel of persistent inequalities (Agarwal 1994). Each of these questions assume differential significance vis-à-vis the various changes in institutional arrangements or in the socio-economic and ecological landscape.

The socio-economic and ecological landscape of the Koshi River basin (KRB) has been undergoing gradual changes, especially in relation to water management and the threat of extreme weather events and natural calamities. The KRB is shared by China, India, and Nepal and provides livelihoods to almost 40 million people (Neupane et al. 2015). The inhabitants here suffer due to lack of water (drought), or due to too much water (flooding and sedimentation). This directly affects their livelihoods. The women are the worst affected and they bear the brunt of natural calamities because of their traditionally defined gender roles, limited access to education and productive assets (e.g., land, cash, and essential skills), and due to other social and institutional norms and practices which result in unequal gender power relations.

Owing to natural calamities and the associated intensification in poverty and landlessness, there has been large-scale migration of men to cities within and outside the country in search of better opportunities. This has directly affected the scenario of work, survival, and food security of the women who are left behind in the villages, and has notably led to the emergence of FHHs. In Bihar, more than 24% households are headed by women, higher than the national average of 15% (IIPS and ICF 2017). Thus, FHHs are increasing because of economic changes and downturns, as well as social pressures (Zarhani 2011). This has led to the growing participation of women in both paid and unpaid work. However, this has not paved way for women to exercise more command over the resources or for them to own property.

This study was undertaken in collaboration with the A.N. Sinha Institute of Social Studies, Patna, in order to understand the gender dynamics of the FHHs in rural Bihar in the context of male outmigration.



Methodology

This study was conducted between 2017 and 2018. The first phase relied on the data collected under an ongoing research programme on socio-economic livelihood and policy analysis in the KRB. The larger study spanned 33 villages across 11 districts of Bihar. A sample size of 50 was drawn out from each village for the household survey, thereby giving a total sample size of 1,600 households. The data for the FHHs was extracted from the survey of these 1,600 households. This gave a sample size of 264 FHHs.

Household survey: Sample distribution and characteristics

Among the total number of households surveyed for this study, the FHHs comprised 16.5%. An FHH is defined as a household headed by a female family member – either due to the outmigration of the male head, or due to his death. These FHHs are distributed across 33 villages falling under 11 districts, viz. Madhubani, Supaul, Saharsa, Madhepura, Darbhanga, Araria, Samastipur, Purnea, Katihar, Khagaria, and Bhagalpur (Table 1). The district of Madhubani accounted for the largest (19.7%) sample of FHHs, followed by Saharsa (18.9%) and Madhepura (16.5%).

Table 1 : Distribution of sample FHHs across districts and villages in the Koshi basin (2017–2018)

District	Village	Percentage of sample FHHs
Madhubani	Janakinagar, Tangraha, Hatni, Bihnagar, Sirkharia	19.7
Darbhangha	Jhagarua, Itahar	5.8
Supaul	Dighia, Chandargarh, Hariraha, Mahuwa, Manganj, Lachhminia	8.8
Saharsa	Aarapatti, Panchbhinda, Sahnur, Sara Paharpur, Nado, Dahad	18.9
Madhepura	Muraut, Kalasan, Patori, Rampur	16.5
Purnea	Parora, Sadipur	5
Araria	Sonapur, Parsahat	4.7
Samastipur	Salepur, Magurgarh	10
Khagaria	Mali, Malpa	8.5
Bhagalpur	Gobindpur	1.5
Katihar	Tingharia	0.6
11 districts	33 villages	100%

Interviews and focus group discussions

Data analysis from the household surveys was complemented by undertaking open-ended individual interviews of women who headed households, as well as by conducting focus group discussions (FGDs) with community members (both men and women) in selected villages. On an average, there were 15 participants in the FGDs.

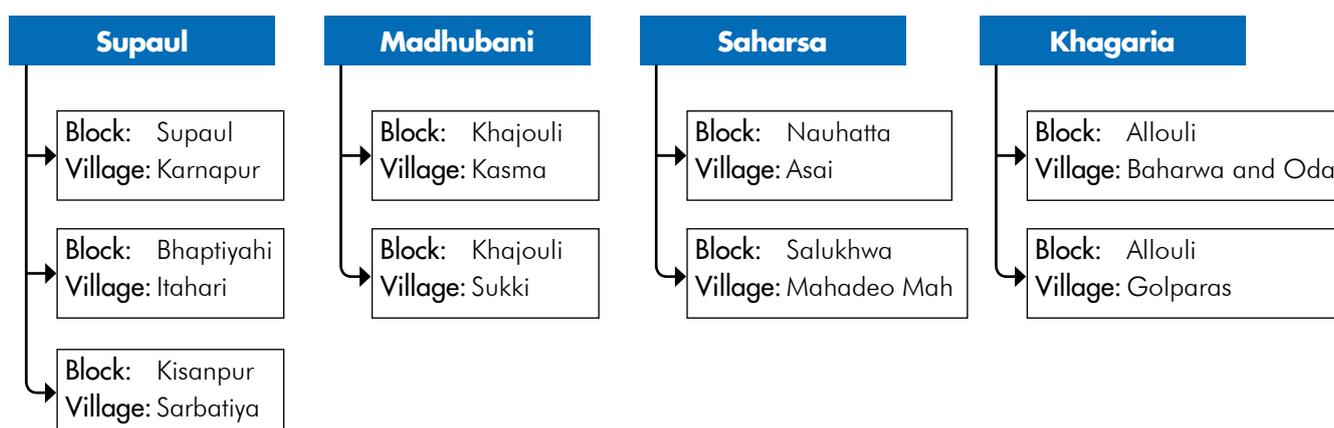


Figure 1: Location of interviews and focus group discussions



Review of secondary data

To obtain an overall understanding of the demography and work participation in the study districts of Bihar, a review of secondary literature and data was also conducted (Census of India 2011). In addition, a review of past literature assisted in contextualizing the study.



Findings

Changing scenario of female work participation rate across the study districts

With regard to the female work participation rate (WPR) across the rural parts of 11 districts of Bihar, it is interesting to note that the male WPR remains consistently similar across the districts, while the female WPR shows sharp fluctuations (Figure 2). This may have to do with the circumstantial nature of women's work participation and the secondary status of their employment in the family. Araria and Saharsa districts have the highest female WPR, at around 31% and 30% respectively, while Samastipur and Khagaria districts have the lowest, at around 15%.

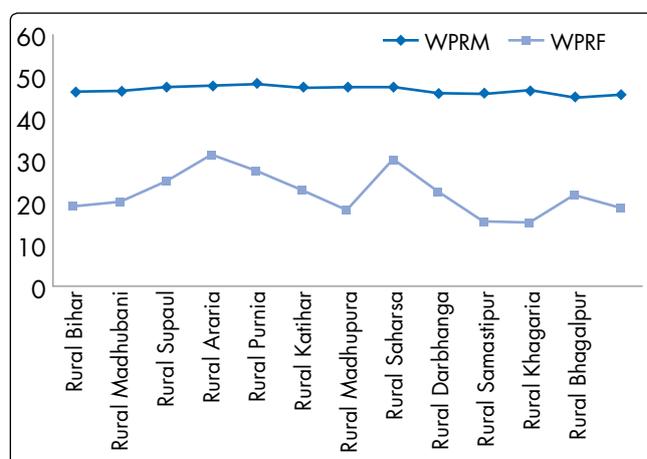
With regard to the WPR among females in the 33 study villages, Chadargarh in the district of Supaul has the highest rate, at 46%, while Sadipur Bhatta in Purnia district has the lowest, at around 2% (Figure 3). The female WPR shows contextual variations depending on the rural socio-economic fabric. Women comprise less than 20% of the main workforce in these two districts on an average and most of them are agricultural labourers. This could be one of the reasons for the above statistics. Moreover, the villages in Madhubani, Supaul and Darbhanga districts reflect a higher female WPR, which could be due to an increase in women's work participation and their improved employment status in the family. Further, the proportion of women workers in these villages also varies significantly. For example, in Sirkharria in Madhubani and Itahar in Darbhanga, female workers comprise 41–43% of the total main workforce (i.e., those who work for more than six months a year). In a similar vein, Bihnagar (Madhubani), Hariraha and Dighia (Supaul), Panchbhinda and Aarapatti (Saharsa), Parsahat (Araria) and Magurgarh (Samastipur) also have a relatively higher proportion (31–36%) of women in the main workforce; while Mahuwa (Supaul), Paharpur (Saharsa) and Sadipur Bhatta (Purnia) have a much lower proportion. Thus, although employment seems to be the primary concern of female workers, a majority of them continue to remain marginal workers in all the villages, which reconfirms their secondary status as household income earners.

Differential employment options among male- and female-headed households

Figure 4 shows that the female heads of households are less self-employed in agriculture compared to the male heads. Past studies on the occupational and resource structures of the FHHs, as compared to that of the MHHs, have established evidence on landlessness among the FHHs, the role of migration in livelihood, as well as on the gendered nature of the labour market – all to the disadvantage of female workers (Anker 1998; Mies 1996). This is explained in the following ways through this study:

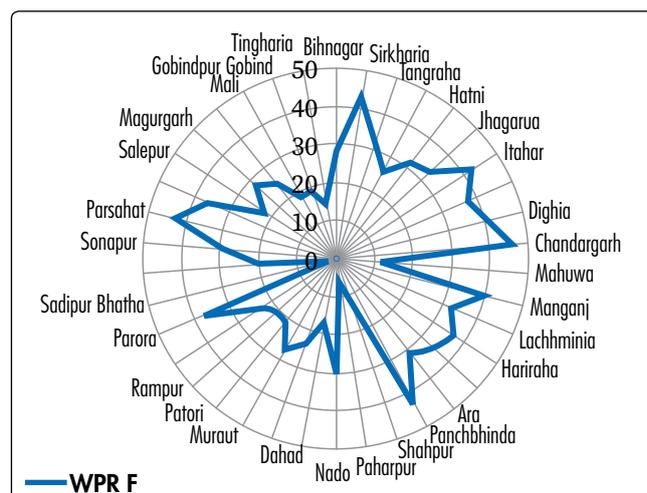
- Employment options for the FHHs are limited and primarily confined to agricultural casual labour and domestic labour, as against the MHHs for which self-employment is the primary option (Figure 4). The proportion of

Figure 2: Male and female work participation rates in the study districts



Source: Census of India, 2011

Figure 3: Female work participation rate in the study villages



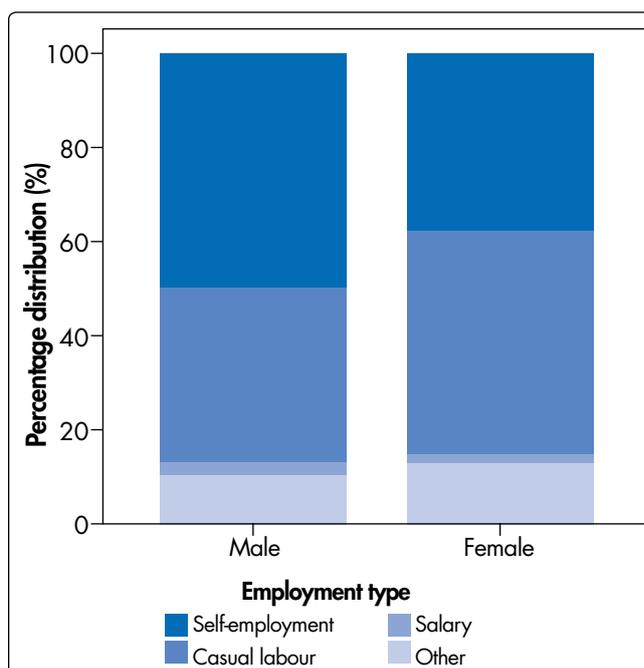
Source: Household survey data

casual labour, both in agriculture and otherwise, is relatively higher among the FHHs than the MHHs, thereby reflecting a comparatively higher livelihood vulnerability among the former. The occupation of male household heads is much more diverse, as many of them are engaged in construction work, self-employed in agriculture and business, and so on (Table 3). Alongside, only 7% of the FHHs are cultivators as compared to 33% among the MHHs. Such gender segregation of jobs has been a widely discussed issue in various previous studies (Chaudhary and Verick 2014; Swaminathan and Majumdar 2006; Anker 1998).

Even while engaged in similar work, there is an evident difference in the earnings of the FHHs and MHHs (Figure 5). The female head of a household in the Koshi basin earns INR 2,483 per month (approximately USD 36) on an average, which is significantly lower than what the male head of a household earns – INR 3,513 (approximately USD 51). Similarly, there is a difference in the weekly earnings, though the gap is small in this case.

The occupational patterns of the FHHs underscore the characteristic of landlessness among them. The study findings show that even among those FHHs engaged in self-employment, only around 26% are involved in non-agricultural activities as compared to 18% among the MHHs – thus reflecting lower land access by the FHHs (Table 3). The FHHs are at a clear disadvantage as far as ownership of land resource is concerned. As shown in Figure 6, except in the case of flood-prone land, the FHHs have access to much smaller area of land in all categories as compared to the MHHs. While the size of homestead land and orchards owned by the FHHs is smaller than the MHHs, the gap is higher in the case of cultivable land.

Figure 4: Percentage distribution of MHHs and FHHs across employment types

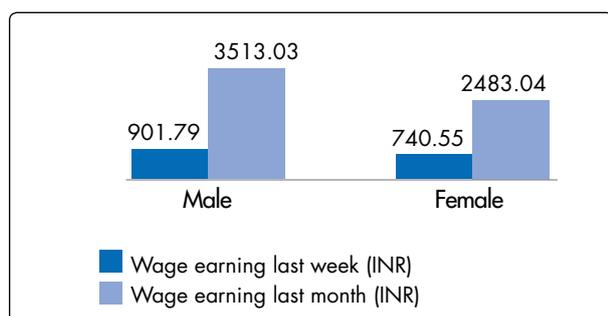


Source: Household survey data

Table 3: Percentage distribution of MHHs and FHHs by principal economic activity

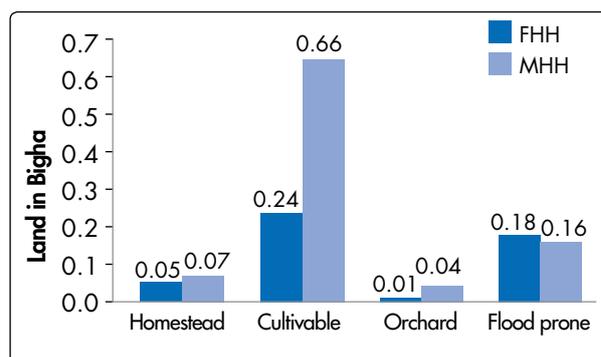
Employment type	Sex of HH Head	
	Male	Female
Self-employment in agriculture	31.7	11.7
Self-employment in non-agricultural activity	18.1	26.1
Agricultural labour	29.9	37.1
Casual labour	7.1	10.2
Salaried work	2.8	1.9
Others	10.4	12.9

Figure 5: Total wage (cash plus kind) in INR earned by the heads of MHHs and FHHs during the last week and last month (of the survey period)



Source: Household survey data

Figure 6: Access to land by FHHs and MHHs



Source: Household survey data

The average size of cultivable land owned by an MHH is 0.66 bigha, which is more than double the size of cultivable land owned by an FHH on an average (Figure 6). Interestingly, the size of flood-prone land owned by the FHHs on an average is higher than that of the MHHs. The relative access to cultivable and flood-prone lands by the MHHs and FHHs ostensibly indicates that the latter are at a considerable disadvantage in terms of resources for agricultural activities, both quantitatively and qualitatively, as far as the Koshi River basin is concerned.

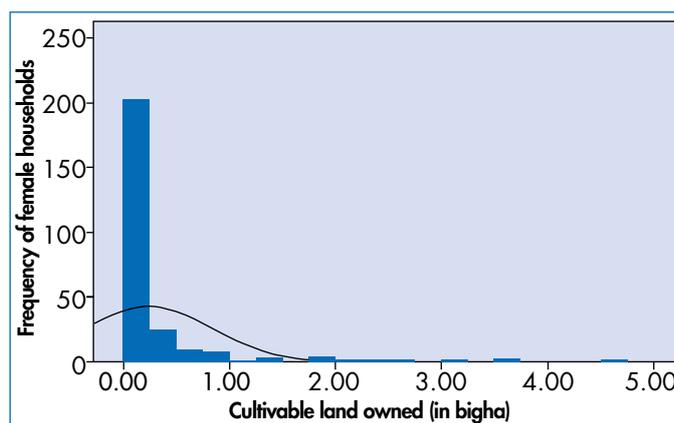
The state of landlessness among the FHHs is further accentuated in the case of the “socially backward caste categories” (a collective term used by the Government of India to classify castes which are educationally or socially disadvantaged, also see Census 2011). For example, on an average, the cultivable land owned by an SC FHH is just 0.07 bigha as compared to 0.31 bigha among the FHHs from the Other Backward Caste (OBC) groups, and 0.35 bigha among the FHHs from the general and other caste categories. This reinforces the argument that in the rural areas, ownership of property (land) is shaped by caste to quite a large extent due to which the socially backward castes become the most vulnerable groups. As discussed earlier, most of the FHHs are those where the male heads have migrated; so, the lack of access to land for the FHHs is reflective of the precarious circumstances under which rural outmigration takes place. In such a situation, the FHHs have to fend for themselves.

From Figure 7 (on distribution of cultivable land among the FHHs), it is apparent that the ownership pattern of cultivable land is rather skewed. Nearly 75–80% of the FHHs are landless. The majority of the remaining 20–25% are marginal farmers, and less than 2% of them can be considered medium-farm households. And, as for widowed female heads, they are not necessarily the most vulnerable. Ownership of land usually passes on to the widow although the subsequent responsibility is often shouldered by the eldest son or a close male relative. Therefore, the average cultivable land owned by a widow-headed household is 0.46 bigha, as compared to 0.19 bigha by those FHHs where the men have out-migrated.

Remittances from outmigration form a central component of the annual livelihood sources for the FHHs. It accounts for almost 50%, and plays a critical role in sustenance (Figure 8). As for the rest, agricultural and casual labour wages account for 25% of the annual income of the FHHs on an average, and together are the second most important source of income.

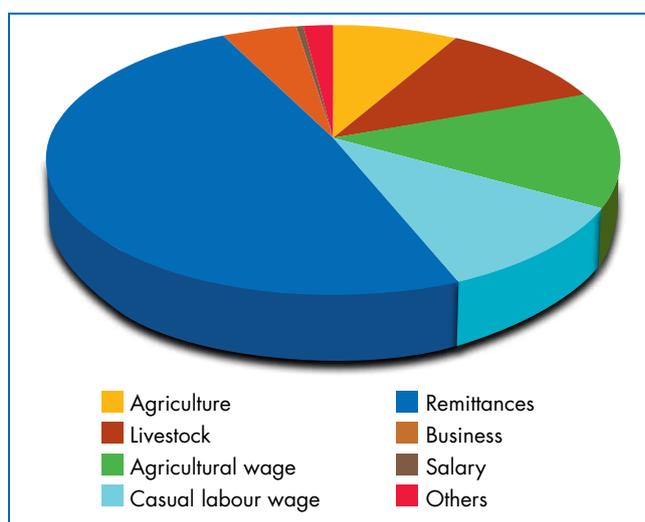
Of the total surveyed FHHs, about 66% have an outmigrant in the family, which does seem to improve the livelihood status of these households. On an average, an FHH with an outmigrant earns an income of INR 58,847 (approximately USD 858) per year, which is significantly higher than INR 39,806 (approximately USD 580) among the FHHs where no one has outmigrated. Remittances, thus, are not only the central component of the annual income of the FHHs, but also considerably improve the overall income status of these households.

Figure 7: Distribution of cultivable land ownership among FHHs



Source: Household survey data

Figure 8: Contribution of various sources to the annual income of FHHs on an average



Source: Household survey data

Food insecurity and coping strategies

The FHHs face relatively greater spells and extent of food shortages and inadequacy than the MHHs. The number of days on an average when food availability is a concern and when adequate food is not available are three and nine respectively among the FHHs, as compared to two and seven respectively for the MHHs. There is a considerable gap between the MHHs and FHHs as far as the percentage of households facing food shortage is concerned (Table 5). Approximately, 30% of the FHHs face food shortage as compared to 20% of the MHHs. At the time of the survey, both the FHHs and MHHs maintained food stocks that could last for a little more than two months. The number of months on an average when food was inadequate or when food availability was a concern during the last one year was about two and three months respectively for the MHHs, and not much less than three months in both cases for the FHHs. As reflected from the FGDs, it is likely that food security is more of a concern for the FHHs in the short run as compared to the longer one, since remittances – on an annual or biannual basis – from male outmigrants have the potential to ward off such a crisis.

Table 5: Indicators of food insecurity

	Current status of food shortage	Number of days with inadequate food in last one month	Number of days in last month when food availability was a concern
Monthly indicators of food security			
MHH	20	7	2
FHH	30	9	3
Yearly indicators of food security			
	Stock for months	Number of months with inadequate food in the last one year	Number of months during the last one year when food availability was a concern
MHH	3	2	3
FHH	2	3	3

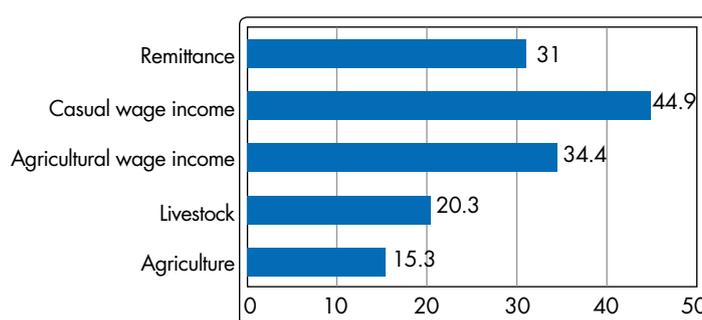
Source: Household survey data

As seen, a greater proportion of the MHHs that faced food insecurity relied on borrowing from relatives or the markets to cope with the crisis, as compared to the FHHs that faced a similar crisis. Relatively, a greater proportion of the FHHs coped by using up savings (35%) or by curtailing expenditure on health and education (17%), as compared to the MHHs. During this period, the same proportion (26%) of MHHs and FHHs sold their livestock to purchase food. In addition, all the MHHs and FHHs reported that food consumption was reduced by adults so that the children could get food during times of food insecurity. As compared to the MHHs,

a relatively greater proportion of the FHHs coped with the food crisis by using up savings, because women have a greater propensity to save up or spend each additional unit of income on household welfare, which also enhances a household's food security (Razzaque and Toufique 2007; Haddad et al. 1996).

Figure 9 depicts the percentage of the FHHs that faced food shortage in relation to their main sources of income. As shown, the FHHs engaged in casual work were the most vulnerable to food insecurity. Around 45% of the FHHs that had casual wage as the main income source faced food shortages, while that figure is 34% for those FHHs that relied on agricultural wage. The FHHs that had agriculture as the main source of income were better off than others, and only 15% of them faced food shortage. As for those FHHs that generated their main income from agriculture and livestock, their condition was even better than those FHHs that received remittance incomes. Thus,

Figure 9: Percentage of FHHs facing food shortage in relation to their main income sources



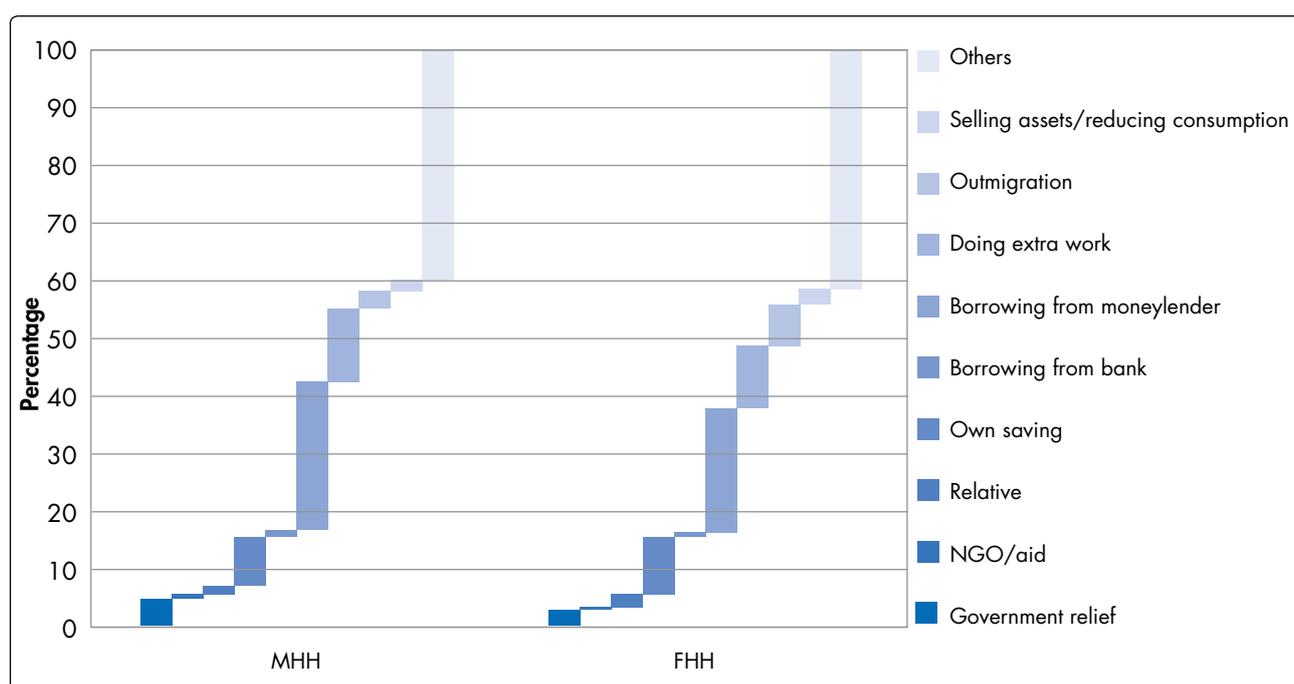
Source: Household survey data

while outmigration appears to improve the food security status of a household, agricultural income is still the biggest provider of food security here. Agriculture and allied activities continue to be the pillar of food security among the FHHs. As regards access to food per day, it is higher among those FHHs that earn their main income from agricultural sources during normal as well as crisis seasons. Outmigration, too, seems to have a positive impact on food security, and is the second pillar of such security for the FHHs in the study villages. And, as stated earlier, despite support from migration remittances, the role of agriculture remains crucial, with about 50–60% of the FHHs still engaged in agricultural activities (Sugden 2014).

Natural calamities and adaptation strategies

As per the survey data, nearly 70% of the FHHs were highly vulnerable to the vagaries of the Koshi River, resulting in loss of livelihoods and damage to assets in almost a similar manner as the MHHs. The data shows that the majority (66–68%) of both the MHHs and FHHs chose to stay at the same place during floods, whereas 24–27% of them managed to create temporary arrangements on their own for the duration of the flood. More than 60% of both the MHHs and FHHs denied having received any prior warning about floods. Around 7% of the FHHs reported loss of life due to floods during their lifetime. Analysis of the loss incurred by FHHs and MHHs in terms of workdays, household incomes, and assets over the last 10 years shows that there is not much difference in loss of workdays or assets in the case of both the MHHs and FHHs. The MHHs that experienced flood lost 62 workdays over the course of the study period, as compared to around 59 for the FHHs, which is not a significant difference. Similarly, 58% of the FHHs faced damage to their household assets in floods during the last 10 years, while that figure is 62% in the case of the MHHs. Exposure to floods is thus a central source of livelihood insecurity among both the FHHs and MHHs. However, there is a considerable difference between estimated losses in household income incurred during the last flood – the MHHs lost INR 15,833 (approximately USD 231), while the FHHs suffered a loss of INR 10,700 (approximately USD 156). Here, it has to be noted that the majority of the FHHs had an outmigrant male and their income depended considerably on remittances, which obviously does not get affected by floods in the villages. On an average, the overall extent of loss of land suffered by an FHH due to floods in the Koshi River was found to be worth around INR 87,118 (approximately USD 1,270), which is significantly less than INR 221,828 (approximately USD 3,234) – the extent of loss suffered by an MHH on an average. This difference is explainable by the observation that it is the landless or small farmers who out-migrate, and the FHHs with such outmigrants have much smaller landholdings as compared to the MHHs. At the same time, it is possible that due to loss of land following the Koshi floods, people have had to migrate from the villages.

Figure 10: Relative importance of various coping mechanisms



Source: Household survey data)

The households adopted multiple ways to adapt and cope with the frequent floods in the Koshi region (Figure 10). These adaptive strategies were fairly similar for both the MHHs and FHHs, except in the case of cultivation and changing agricultural land use. Since landlessness is relatively much higher among the FHHs, the question of land use change does not arise here. Migration as a coping mechanism against losses due to floods hold greater importance for the FHHs. As compared to 60% of the MHHs, 69% of the FHHs relied on migration as an adaptive strategy during floods. Since a majority of the FHHs were landless or consisted of small and marginal farmers, the salient coping mechanism for them was greater reliance on non-agricultural options such as outmigration than to undertake costly adaptive activities on their farms. As expected, informal credit continued to dominate the rural people's support system during times of crisis, as 22% of the FHHs and 25% of the MHHs relied on borrowings from moneylenders to cope against the losses, and this was found to be the second most important coping mechanism.

Along with floods in the Koshi River every year, the villagers in the region also face water crisis for around three months a year. As per the household survey, around 87% of the FHHs and MHHs reported that they faced annual water shortages. Further, 45–48% of the households reported drinking water crisis every year, whereas 81% of them reported a shortage of water for irrigation purposes. This annual crisis of water led to livelihood losses for both the MHHs and FHHs. An analysis of the survey data revealed that the FHHs' dependence on livestock was relatively higher than the MHHs', thus the former's losses in this regard were slightly greater than the latter's. Seasonal migration is one of the important consequences of drought in the Koshi region. In fact, migration is both a coping and adaptation strategy for the FHHs against floods as well as droughts. Prior saving of food and fuel for the crisis period is another adaptation mechanism.

FHHs – greater responsibilities, procedural control

A number of community interactions held with a group of female and male heads of households revealed three important points:

- The bargaining power of women as agricultural labourers has been enhanced due to labour shortage following the outmigration of men
- There is a greater participation of women from small- and medium-farm households in farming activities due to the outmigration of the men
- The women now enjoy more freedom and autonomy, and their decision-making ability has been strengthened

The field reflections confirmed the findings from the household survey data on women's work in agriculture, livelihood, and food security. In addition, the findings revealed a greater work burden on women as compared to men in all the villages that were studied. The group discussions brought out the overall picture, and it was found that the number of hours spent by women in paid and unpaid work was much more than what the men spent. This is interesting given the recent evidence on decline in female work participation in India in general (Das et al. 2015; Sanghi et al. 2015; Chaudhary and Verick 2014; Ghosh 2014), and this is something that needs a further detailed study.

The group discussion held in Asai village of Saharsa revealed that agricultural labour was largely represented by women, thus corroborating the argument that male outmigration is resulting in the feminization of agriculture labour, if not agriculture per se. Overall, livestock rearing and management was the central occupation of women and remained their prerogative. Broadly, women's daily chores included cattle feeding, farming on their own fields or as agricultural labourers, cooking, collecting firewood, and tending to the children. In Bahorwa and Oda villages of Khagaria district, women worked in the village as well as in nearby towns. They also vended commodities near the railway station. Interestingly, all through these activities, the women remained in veil. And even when the husband had not outmigrated, the women participated in the work equally, particularly in livestock-related activities.

In Kasma village of Madhubani district, women shared with the survey team that the limited availability of labour due to male outmigration had enhanced their bargaining power in the labour market, and they were getting a daily wage of around INR 200–250 (approximately USD 2.9–3.7), at least during the peak seasons. Thus, despite the lack of education and awareness among the women in Kasma, they have learned to take advantage of the labour-market crisis at the local level. Even though the women participated in agriculture primarily as wage labourers

in small- and medium-farm households, they also worked on their own farms and engaged in harvesting, food processing, and storage activities. Overall, the women's work burden had increased, since they had to single-handedly deal with outside work as well as household responsibilities. Even though outmigration enhanced the family income, it was not a regular inflow. Usually, it was an annual or biannual remittance, and women had to work to feed the family during spells when no remittance was received. Consequently, they had begun to acquire control on day-to-day household decisions and livelihood activities. However, this was not homogenous across villages and households. For example, in Itahari village of Supaul district, the group discussion brought out the fact that women had limited decision-making powers. At most, they were free to deal independently with minor day-to-day family matters. In fact, in the so-called FHHs, if the husband had outmigrated or died, the eldest son usually took the position of authority and decided on key matters. In some cases, if the household head was a widow and did not have a son living with her, she was the most independent, but such women were also poorer relatively. The women were rarely the owners of land in these villages.

FHHs – potential agency versus transformation

The change in women's work and lifestyle following male outmigration in the study villages was a permanent trend, resulting in non-tangible consequences for them. Nonetheless, it is important to note that although women's control over resources had the potential to enhance their intra-household bargaining power, the effectiveness varied significantly across the villages (Scott 2012). To cite an interaction from Kasma (Madhubani), the women there stated that they experience "greater freedom in the absence of (their) husbands" and that their decision-making ability has improved. Interestingly, the women in one of the villages asserted that "power rests with men and only in their absence can we make some independent decisions". This questions the transformative potential of such an exercise of women's autonomy (Kabeer 2005). As for social norms, they are something that can be bargained over (Agarwal 1997), but whether these women do indulge in this process is yet to be explored. However, both the manner of women's access to resources and the implications it has on their values and their ability to act as agents of change, reflect the process of women's empowerment and gender equality. The present context of the Koshi region is representative of women's enhanced control over the decision-making process, but this has come about not because of a demand for equality, but because of practical needs and socio-economic compulsions. To understand as to what extent this enhanced control is empowering women and transforming social norms and gendered values, a more gender-sensitive data collection process needs to be followed.



Way forward

This study assessed the livelihood scenario of the FHHs based on household survey data, and also on independent reflections obtained from community interactions in selected villages from the Koshi basin region.

The rate of women's work participation varies sharply across the districts in the Koshi region, depending upon contextual factors such as the agricultural scenario, exposure to calamities, the local culture, and the extent of male outmigration. The foremost finding conforming to existing evidences is that women work more but at the margins. The number of FHHs has further reinforced women's engagement in wage work as well as in family farm activity. One of the chief features of the FHHs is landlessness. Casual labour is another. Remittances from outmigration are the central component of the annual income of the FHHs, which also improves their food security status considerably when compared to the FHHs that do not have support from such remittances. Overall, the FHHs remain disadvantaged compared to the MHHs (except the landless ones).

The community interactions, including FGDs and individual interviews, were helpful in providing some valuable insights. It emerged from the interaction that women have acquired a sense of independence and freedom in the continued absence of male heads of households. Although managing life alone in the villages is demanding, this appears to have imparted them with greater mobility and control over important household decisions. However, while women's status is improving, their position in terms of gender relations remains far from equal to the men. It must be underscored that much is yet to be understood as far as the functioning of intra-household dynamics and structural changes in gender relations are concerned. The analysis required for such an understanding puts much demand on gender-sensitive data.

The findings bring out some key requirements. In terms of public support, transfer of ownership was the intervention most sought after by the respondents. This needs to be seriously considered, as when women can stake claim to land independently, they will have the potential to address issues arising from any transgression of gender norms (Kelkar 2009).

In the wake of male outmigration in particular, the women are solely responsible for ensuring household food security while coping with often recurring disasters. Water management is a central issue in the context of the Koshi basin wherein women have to face the challenges of floods as well as water shortages, and this need to be urgently addressed.

There is high potential for enhancing women's bargaining power because of their increased participation in the labour market and enhanced autonomy in the household decision-making process in the absence of men. Ironically, this indicates that the actual power rests with the men and only in their absence can women make some independent decisions. So, the transformative implications of women's autonomy are yet to be fully realized. The present context of the Koshi basin indicates that women's greater control over the decision-making process was not triggered by a demand for equality, but it came about due to socio-economic compulsions. Specific strategies have to be put in place for enhancing gender equality and women's empowerment in this region.

- As there are only limited opportunities for women to work outside the agricultural sphere, there is an urgent need to improve their access to credit, diversify products, establish market linkages, and build capabilities. There is also a need to equip women with financial literacy wherein they will be included in the banking system. The use of remittances for the promotion of sustainable agricultural development interventions are crucial to bringing about transformative change and gender equality in the changing context of rural Bihar in the basin.
- The field reflections and interactions suggest that transfer of ownership to women can have far-reaching impact in addressing male dominance, and can bring about positive changes in terms of gender relations and women's empowerment. This has to be worked out further with the local government agencies that are mandated and responsible for empowering rural women through transferring land and property rights. Incentive provisions such as free land registration for women and/or first priority to register new land will help to implement such recommendations in practice.

- Though women have gained mobility and visibility, their workload has increased, so a support system for improving women's working conditions and wages is crucial in bringing about positive changes vis-à-vis women empowerment. Besides, an inclusive policy framework with strong emphasis on dignity of labour should be a critical element in addressing the patriarchal and social exclusion aspects of the FHHs. Local governments and relevant agencies working on promoting issues related to "equal pay for equal work" need to be supported through advocacy and policy interventions.
- In the context of male outmigration, the women have been solely responsible for ensuring household food security, while they have also got to address the challenges of natural disasters as well as water shortages. The strengthening of the food security support system is mandatory, particularly in terms of improving women's working conditions and building their skills and access to information and technologies.
- Women often have different preferences for communication channels and different information needs during periods of disasters; these gendered differences and preferences have to be taken into account.
- Further inquiry is needed to understand to what extent the enhanced control and autonomy is empowering women in the larger context of gender equality.



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