Social and Welfare Impacts of Male-Outmigration on Migrant Families: A Study of Darbhanga District of Bihar

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Migration of young men has several social, economic and welfare impacts on the families of the migrants. This paper focuses on the social as well as welfare impacts that male outmigration have on the lives of the families of the migrants. This paper aims to study the impact of migration on changing decision-making roles of women in both farming and household spheres. It also covers the felt changes by the migrant families on family expenditure, social status and overall welfare. Migration increases the role of women in household decision making and in farming activities. The negative impacts of male outmigration include shortage of labour and increased workload on women. The positive impacts include improvement in quality of food intake, healthcare of the pregnant women and elderly and increased emphasis on the education of girl children.

Keywords: Male outmigration, Welfare impacts, Women empowerment, Welfare Assessment Index, Women Empowerment Index

Migration has been happening since the beginning of human history. Many theories explain the occurrence of migration. A number of social, cultural, economic, spatial, climatic and demographic factors affect migration. Among them, the economic factors are considered to be the primary reasons for migration. India has witnessed more than threefold increase in the levels of mobility from 10.8 percent of the total population classified as migrants in 1951 (Mehta, 1990) to 37.5 per cent in 2011 (Census of India, 2011). Migrants from rural areas accounted for 60 per cent of the total migrants in India in 2011. This reveals that there is still a strong tendency to migrate from rural to urban areas. Migration brings several socio-economic as well as political ramifications at both places from where out-migration takes place and where in-migration settles. The neo-classical theory of migration states some of the issues concerning rural-urban migration. Rural-urban migration is seen as a part of the development process in which surplus labour in the rural sector supplies the workforce for urban industrial economy (Lewis, 1954). Material progress is associated with shifting of economic agents from traditional agriculture based rural economy to industry based urban economy (Todaro, 1969).

Migration from Bihar has been reported since the pre-independence era of the 1830s with a large number of workers from Bihar going to the British colonies of Mauritius, Guyana, Trinidad and Fiji to work as labourers in the fields. After independence, in the mid-1960s and 1970s during the Green Revolution, a large number of labour migrated from Bihar to Punjab and Haryana. In the 1990s and

2000s, after the opening of the economy and post-liberalisation, a significant number of migrants have also started going to several other areas to work which includes Delhi, Gujarat, Maharashtra, and Assam (Sharma et al., 2005). Migration together with socio-economic development has been identified as an issue, which needs to be properly analysed and understood. Migration of labourers from Bihar to states like Punjab, Gujarat, Delhi, Maharashtra, West Bengal and other places of large-scale development works are declining due to development activities (such as MGNREGA etc.) initiated in Bihar. It has been reported that labour migration has declined by over 26 per cent in 2006-08 as compared to 2001-03 (Bihar Institute of Economic Studies, 2011).

Various Impacts of Migration on Migrant Families

Migration is known to have varied impacts on migrants and their households, and on the social and political life in the source and destination areas. These impacts are complex and run in different directions. For example, rural-urban migration is a primary source of growth and development in the economy, specifically in the destination regions. Remittances are a primary channel through which migrant workers are able to stabilise or improve their conditions of living. Remittances play an important role in the improvement of intra and inter-household growth and development in the source areas. Migration contributes to human capital formation. There is a growing body of evidence suggesting that the income from remittances is disproportionally spent on education and health rather than everyday consumption (Adams, 2005; Adams et al., 2008; World Bank, 2006). Evidence from Latin America, Africa, South Asia and other regions suggests that remittances reduce the depth and severity of poverty, and indirectly stimulate economic activity (Adams, 1991; Adams, 2006b; Gupta et al., 2007). The impact of out-migration has revealed that remittances received from the migrants have resulted in an increase in the happiness of the family. There has been increased emphasis on the education of children, especially of the girl child. Receivers of remittances have reported an increase in the consumption of cereals, pulses, vegetables and milk. Migration has also shown a positive impact on the healthcare facilities of the family members of the migrants (Singh et al., 2011).

Migration of the male members of the family has both positive and negative impacts on the women of the migrant families. On one hand, their role in the decision making process is considerably increased while on the other hand, many responsibilities which were otherwise borne by their male counterparts now rest on their shoulders thus adding on to their drudgery. Roy and Nangia (2005) in their study attempted to examine social well-being, mental stress and physical health, especially reproductive health, of left behind wives of male out-migrants and compare them to the wives of non-migrants. The study reported that absence of a husband increases the responsibility of women in managing the household affairs (such as financial crisis, education and health related problems of children, and additional work).

Datta and Mishra (2011) in their study on the problem of women in migrant households (physical workload, mental stress) reported that as many as 59 (86 per cent) groups had an increase in tasks when male members of the family migrated. Women necessarily undertook more tasks, including those requiring mobility like visits to the doctor and going to the market. Singh et al. (2011) in their study found

that the migration of male members has empowered the female members of the households in terms of enhancing their decision-making role in various activities. As a result of massive flow of labour away from the farm, women often assume major responsibilities in farming and household chores in case of migrant families; this has shown higher migration induced drudgery indices of women from migrant households as compared to non-migrant households. The contribution of women to agricultural and food production is significant but it is impossible to verify empirically the share produced by women. Women's participation in rural labour markets varies considerably across regions, but they are invariably represented in unpaid, seasonal and part-time work, and the available evidence suggests that women are often paid less than men, for the same work (ILO, 2016). While women have always played a role in agricultural production, their importance has been growing. The increase in cropping intensity, higher yields and the absence of men have increased the demand for female and child labourers. In 1999, they were mainly involved in harvesting; in 2009, more women reported doing transplanting and weeding, while women from landowning families oversee cultivation also. There has been a substantial increase in milch animals in particular among smaller cultivators and agricultural labourers. This increased involvement of women in agriculture includes both work in their own farm and as wage labour (Rodgers & Rodgers, 2011).

Although it appeared that the nature of work for most women has remained the same before and after migration, there were many caveats. Women who were agricultural labourers before their husbands migrated continued to remain agricultural labourers, but were performing more diversified agricultural activities. Additionally, they had to tend to animals and single-handedly undertake many other activities which were earlier shared by the male and female members of the family (Datta & Mishra, 2011). Thus male out migration impacts the life of migrant families in several ways. In this study, we attempted to capture the social and welfare changes brought about in the life of the migrant households due to outmigration of the male members of the family. This study was conducted with the following objectives: to assess the changes in the role of women in decision making due to migration; and to study the social and welfare changes felt by the families of the migrants due to migration.

Methodology

Retrospective case control study design was applied in this study. The cases were 'migrants' and controls were 'non-migrants' households. Using the Census data, the highest male outmigration district was selected. On using just the criteria of highest male outmigration to select the study district, Patna figured as the highest district with male out-migration. However, Patna being the capital city, its other socio-demographic criteria were not comparable with other districts of the state, it was not deemed fit to be taken as a sample district. Hence, additional criteria were applied for selection of district, which include other socio-demographic and agricultural characteristics of the districts like percentage male out migration to total male population in the district, percentage male population in the district to total geographical area of the district and percentage female literacy in the district. Based on these criteria, Darbhanga was selected as the high out-migrating districts of Bihar.

Further, a two-stage stratified sampling was used for selection of villages. In the 1st stage, two blocks were randomly selected from the list of all the blocks of the selected district and in the 2nd stage from each of the selected block, villages were selected from the list of all villages. In all 200 data for households were collected from Darbhanga district, which include 100 migrants and 100 non-migrants households. The computation of indexes from various indicators could assist policy makers and program managers to prioritise activities based on their performance. Validation of the findings with that of other development indicators show that this can be one of the tools, which can assist in assessing development needs, health system performance for policy makers, program managers and others. The Women's Empowerment Index (WEI) is a composite index designed to measure progress in the multi-dimensional aspects of women's empowerment. It considers empowerment to be a factor of both women's achievements as well as of gender parity with men. WEI measures progress on women's empowerment by aggregating results across five key areas (or "domains"). Each domain consists of a series of metrics (or "indicators") which quantifies performance in this domain.

Women Empowerment Index (WEI) & Welfare Assessment Index

To compare the empowerment of women in terms of decision making capability on farming and non-farming activities among migrant and non-migrants households, the Women Empowerment Index was calculated. Scores were assigned on the basis of who makes the decision, assigning the highest score when the decision was taken by the spouse alone. The scores were assigned on the scale of 1 to 5. For each activity, the scores were then multiplied by the number of respondents under respective decision makers' categories which were then summed up and converted on the scale of 5 and named as empowerment scores. The Women Empowerment Index was then calculated as the average women empowerment scores for migrants/nonmigrants for all activities divided by 5. Welfare Assessment Index were also computed by assigning "Agree" as '2' and "Disagree" as '1' to the statements related to the welfare aspects like improvements in education, improvement in nutrition, and improvement in health status by the respondents from migrant households due to migration in the family. The scores were assigned on the scale of 1 to 2 then multiplied by the number of respondents under each statement which were then summed up and converted on the scale of 2 and named as Welfare Assessment Index.

Results and Discussions

Women Empowerment at the Source of Migration

Women empowerment has become popular in the field of development since the 1980s. It is widely recognised that women empowerment is essential for sustainable economic growth and reduction of poverty in developing countries (Klasen, 1999). Migration of the male member of the households leaving behind spouse, children and the elderly parent has increased the role of women in decision making in both households and farm related matters. As the decision making power entrusted to the women in the migrant households is forced, it does empower women by giving them the freedom to decide on financial and family related matters.

Comparison of Decision Making Roles on Various Farming Matters of Migrants and Non-Migrants

Women are key players in agriculture in most of the agrarian economies. In most developing countries, the roles of women in agriculture are defined by societal norms. Though women play a very significant role in production, processing and marketing, men have always dominated decision making in the farm sector. However, with migration of the male members of the family, there has been a role reversal and women are more actively involved in farm decision making in migrant families. Decision making roles of family members of migrants on various farming matters were examined. It was found that in the migrant households, the spouse of the migrant has a major role in decision making concerning various agricultural activities.

It can be seen from the score chart of women empowerment indices of migrants and non-migrant households (Table 1) that the role of women in decision making in all the farm activities including previously male dominant activities such as ploughing, sowing, irrigation and selling of farm produce is more in case of migrant households as compared to non-migrant households. The empowerment indices of migrant households of the study area were 0.87 as compared to 0.68 in case of nonmigrant households. This is due to increased involvement of women of migrant households in various farming activities such as ploughing, sowing, harvesting etc. It has empowered women of the migrant households by increasing their say in the decision-making of many activities. Similar results were reported in another study which stated that due to male out-migration, the women left behind in the villages assume a major role in various farm activities resulting in the so-called 'feminisation of agriculture' (Singh et al., 2011). The phenomenon of rising share of farm work being undertaken by women is termed as feminisation of agriculture. This happens generally in response to men's labour market activities and in pursuit of their own aspirations. Feminization is evident in women's ability to make decisions and increased visibility of women's participation in various activities and decisions (Pattanaik et al., 2017). However, ironically, the scores are higher in those activities which are labour intensive (ploughing, sowing, harvesting and weeding) and lower in those activities which involve financial dealings like selling of farm produce, application of plant protection chemicals and irrigation.

TABLE 1 Women Empowerment Index for Migrant and Non-Migrant Households in Farming Activities in the Study Area

Decision Making	Migrant	Non-migrant
Ploughing	5 · 2 4	4.28
Sowing	4.52	2.84
Irrigation	2.93	$2 \cdot 53$
Weeding	3.56	$2 \cdot 54$
Application of plant protection chemicals	2.47	1.61
Harvesting	4.09	3.16
Post harvest activities- Winnowing/Threshing	3.12	$3 \cdot 4$
Selling of Farm Produce	1.92	1.28
Empowerment Index	0.87	0.68

Comparison of Decision Making Roles on Various Household Decisions of Migrants and Non-Migrants

The role of women in household decision making has a great bearing on the overall welfare of the family. A woman's empowerment in household decision making increases the likelihood that her children will attend school, get proper medical attention during their sickness and will be more nutritionally secure. A comparative picture of the role of women among migrant and non-migrant families in various decision making activities is shown in Table 2. It can be seen that the role of women in major decisions like spending of money, large household purchases, daily household needs, healthcare etc., is more among migrants as compared to non-migrants. The overall empowerment index is 0.49 among women from migrant households as compared to 0.35 among women of non-migrant households in Darbhanga. These findings are in accordance with the observation in study (Singh et al., 2013) which states that women of migrant households are more empowered in taking agricultural and other household decisions than women of non-migrant households.

TABLE 2. Empowerment Indices in Various Household Decisions in the Study Area

Activities	Migrants	Non-Migrants
Decision on how to spend money	2.5	1.76
Final say on large household purchases	2.49	1.79
Final say on daily household needs	2.48	1.92
Final say on own health care	2.47	1.82
Final say on child health care	2.44	1.68
Decision on visits to family or relatives	2.43	1.59
Empowerment index	0.49	0.35

Changes Felt by Family Members of Migrant households

Distribution of Expenditure in Migrant Households

The expenditure details of migrant households, both current and 10 years ago in Darbhanga is presented in Table 3. In the past 10 years the share of expenditure on food has decreased among migrants in Darbhanga. The migrants have started spending more on health, clothing and house construction. There has also been a considerable amount of increase in the amount being spent on loan repayment in the recent years. It was observed that the current distribution of expenditure was more diversified than 10 years ago. In the study district of Darbhanga, current expenditure on food constitutes around 40 percent; education and medical expenses constitute around 13 percent, expenditure on clothing and house construction constitute around 13 percent of total expenditure. On the other hand, 10 years ago expenditures on food were 44.7 percent; education and medical expenditures constituted around 12 percent but expenditure on clothing and house construction

was comparatively less (less than 4 percent together). This observation is also in the line of general perception that food accounts for a significant proportion of income especially in the case of lower income group people. Also increase in income pushes the increase in expenditure towards household development. This result is in accordance with results of a similar study which stated that food constitutes a maximum share 62 per cent of the income and expenditure on clothing etc. constitutes a significant amount (13.6 percent) (Singh et al., 2011). Similarly, this study results coincide with the findings of a study which reports that the households receiving remittances spend less on food and more on education and health care. Increasing expenditure with remittance flow on these critical variables signifies the positive impact of remittances on household development (Mahapatro et al., 2014).

TABLE 3 Distribution of Expenditure of Migrant Households of Darbhanga

Particulars	Now	10 yrs ago (per cent)
Sample Size (n)	100	100
Food	39.9	44.7
Education	7.2	8.1
Medical	7.9	3.7
Clothing	5.6	1.6
House Construction	7.1	2.4
Tobacco Products	1.9	1.4
Farm Inputs	3.2	2.4
Social Obligation	2.7	0.4
Loan repayment	11.3	1.6
Farm Investments	3.8	0.0
Others	9.4	33.5
Total	100	100

Social Changes Felt by Migrant Households

The social changes felt by the migrant households in Darbhanga is given in Table 4. Due to male out-migration, there has been an increase in demand for labour as suggested by 83.5 percent of households. Male out-migration has also resulted in an increase in workload (74.5 percent) and problems in hiring and supervising labour (65.9 percent). Though migration has resulted in labour related problems as expressed by most of the migrant households, they have also accepted having reaped the benefits of migration in terms of improvements in quality of food (80 per cent), decrease in debt (91.5 percent) and improvements in social status and increased participation of families in social activities. Almost half of the migrants expressed the desire to come back if there is work available locally. These findings are in

accordance with findings of a study which states that respondents reported an increase in workload due to absence of migrants in around 81 percent of the migrant households in Bihar and 54 percent of the migrant households in UP. Similarly, it also reported problems in hiring and supervising labour in around 47 percent of the households of migrants in Bihar (Singh et al., 2011).

TABLE 4. Change Felt Including Social and Institutional Changes by Migrant Households in High Out-Migration District of Darbhanga

Particulars	Percentage Change Felt Including Social and Institutional Changes by Migrant Households (n=100) (per cent)
Increase in workload due to migrants' absence	74.5
Problem in hiring/ supervising labour	65.9
Share manpower with other villagers	53.6
Increase in demand for labour in the locality	83.5
Increase in operational landholdings	38
Improvement in quality of food consumed	80
Decrease in debt after migration	91.5
Improvement in the status of family in the society	89.1
Increase in participation of the family in social activities	64.4
Come back if work is available in the village	51.2

Note: Yes (%) is provided

Views of Respondents from Migrant Households on the Changes in Family Welfare

The remittances sent by the migrants do help in improving the family welfare status of migrant families. Views of the families from the migrant households on the changes in the family welfare status as indicated by three parameters of education, nutrition and health are presented in Table 5. Respondents were asked about two statements related to education, six statements related to nutrition and four statements related to health status. The responses were scored (highest score to agreement and the lowest to disagreement) and translated into an Index, named as 'Welfare Assessment Index' (WAI). It was made sure that the negative statements are scored in the reverse order so that the higher Welfare Assessment Index values imply better welfare status on the basis of that particular statement.

Most of the migrants in Darbhanga agreed to increase emphasis on girl's education after migration. Similarly an increase in nutrient intake by the migrant households

in terms of increased consumption of cereals, green vegetables, fruits, milk, meat and egg has been reported by the members of the migrant households of Darbhanga. As far as improvement in health is concerned, only 49 percent of migrant households in Darbhanga prefer to consult a Doctor during seasonal ailments. Around 67 percent of the migrant households of Darbhanga reported increased frequency of health problems in the Family. This is probably due to the added responsibilities of the spouse of the migrant who is also the caregiver of the family. Roy & Nangia (2005) in their study reported that absence of a husband increases the responsibility of women in managing the household affairs including financial crisis, education and health related problems of children, and other additional work. (Datta and Mishra, 2011) in their study on the problems of women in migrant households, reported increase in the workload of women due to outmigration of male members in the family. Most of the migrant households also reported improvements in health of the older persons in the family (97.1 percent) and treatment of pregnant women (74.1 percent).

TABLE 5. Views of Migrant Respondents Regarding the Family Welfare Status after Migration (in per cent)

Particulars	Agree (%)	Disagree (%)	Welfare Assessment Scores
Improvement in Education			
Children started going to school	83.3	16.7	1.83
Increased emphasis on girl's education Improvement in Nutrition	76	24	1.76
Increased consumption of cereals	81.8	18.2	1.82
Increased consumption of green vegetables	82.8	17.2	1.83
Increased consumption of fruits	74.7	25.3	1.75
Increased consumption of milk	70.1	29.9	1.70
Increased consumption of meats and eggs	73.3	26.7	1.73
Increase in overall happiness of the family	88.5	11.5	1.88
Improvement in Health			
Increased preference to consult a doctor in seasonal ailments	49.4	50.6	1.49
Increased frequency of health problems in the family	6 7	3 3	1.67
Improved health care of older persons in the family	91.7	8.3	1.92
Treatment of pregnant women	74.1	25.9	1.74
Overall Welfare Assessment Index			1.51

The findings are in accordance with the study conducted by (Singh et al., 2011) which reported that improvement in health status and nutritional status secured higher Welfare Assessment Index values as compared to that in case of improvement in education aspect.

Conclusion

About 80 per cent of Bihar's population is employed in agriculture. Bihar is the largest producer of vegetables and the second-largest producer of fruits in India. It has good soil and favourable climatic conditions such as good rainfall which favour agriculture. In spite of having favourable conditions for agriculture, like soil, climate and precipitation and a youthful population for labour, the rate of out-migration is second highest in Bihar. Male outmigration has several economic, social and welfare impacts on the families of the migrants. This study focuses on the social and welfare impacts of male outmigration on the families of the migrants. It was observed that due to increased involvement of women of migrant households in decision making of various farming activities such as ploughing, sowing, harvesting etc, the women empowerment indices of migrant households of the study area was higher (0.87) as compared to non-migrants households (0.68). The role of women in household decision making is also more in case of migrant families as compared to the nonmigrant families. A comparison of the distribution of expenditure of migrant households and 10 years ago in Darbhanga showed that the current distribution of expenditure was more diversified than 10 years ago. Due to migration of male members of the family, several changes, both positive and negative were felt by the members of the migrant family. The negative changes felt include increase in workload due to migrants' absence and problems in hiring/ supervising labour. The positive changes felt include improvement in quality of food consumed, increase in demand of labour in the locality due to out-migration, increase in emphasis of girl's education, increased nutrient intake and more care of elderly and pregnant women due to migration.

Authorship

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References

- Adams, R. H. (1991). The Effects of International Remittances on Poverty, Inequality, and Development in Rural Egypt. Research Report 86, International Food Policy Research Institute.
- Adams, R. H. (2005). Remittances, Household Expenditure and Investment in Guatemala. Policy Research Working Paper Series, No. 3532, The World Bank.
- Adams, R. H., Cuecueccha, A. & Page, J. (2008). Remittances, Consumption and Investment in Ghana. Policy Research Working Paper, No. 4515, World Bank.
- Bihar Institute of Economic Studies. (2011). Impact of Government Programmes on Seasonal Labour Migration. Indian Council of Social Science Research (ICSSR). Ministry of Home Affairs. (2011). Census of India.
- Datta, A., and Mishra, S. K. (2011). Glimpses of Women's Lives in Rural Bihar: Impact of Male Migration. *The Indian Journal of Labour Economics*. *54* (3).

- ILO. (2016). Women at Work Trends 2016.
- Roy, A.K., &Nangia, P. (2005). Impact of Male Out-migration on Health Status of Left behind Wives -A Study of Bihar, India. Iussp2005.princeton.edu/papers/51906
- Klasen, S. (1999). Does Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions. http://lst-iiep.iiep-unesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in]/?t2000=012842/(100)
- Lewis, W.A. (1954). Economic Development with Unlimited Supplies of Labour. *Manchester School of Economic and Social Studies*. 22, 139-91.
- Lipton, M. (1980). Migration from Rural Areas of Poor Countries: The Impact on Rural Productivity and Income Distribution. *World Development*. 8, 1-24. 10.1016/0305-750X(80)90047-9.
- Mahapatro, S., Bailey, A., James, K. S., &Hutter, I. (2014). Remittances and household expenditure patterns in India and selected states. *Migration and Development*. 6(1), 83-101. doi:10.1080/21632324.2015.1044316
- Mehta, S. (1990). Spatial Mobility in India: Evolving Patterns, Emerging Issues and Implications. *Population Geography*. 12(1-2), 1-9.
- Pattanaik, I., Dutt, K.L., Lockie, S. and Prichard, B. (2017). The feminization of agriculture or the feminization of agrarian distress? Tracking the trajectory of women in agriculture in India. *Journal of the Asia Pacific Economy*. 33(1).
- Sharma, A. N. (2005). Agrarian Relations and Socio-Economic Change in Bihar. *Economic and Political Weekly*. 40.960-972. 10.2307/4416306.
- Singh, N. P., Singh, R.P., Kumar, R., Padaria, R.N., Singh, A., and Varghese, N. (2011). Labour Migration in Indo-Gangetic Plains: Determinants and Impacts on Socioeconomic Welfare. *Agricultural Economics Research Review.24*, 449-458
- Singh, K. M., Singh, R.K.P & Kumar, A. (2013). Male Worker Migration and Women Empowerment: The case of Bihar, India.http://mpra.ub.uni-muenchen.de/49385/MPRA Paper No. 49385.
- Todaro, M.P. (1969). A model of labor migration and urban unemployment in lessdeveloped countries. *American Economic Review*. 59,138-48
- World Bank (2006). Global Economic Prospects 2006: Economic Implications of Remittances and Migration.