

Consequences of Rural-Urban Migration on Rural Families: Empirical Study

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Abstract—Rural-urban migration, mainly adult male migration makes heavy demand on all family members who are left behind in rural area to shoulder the responsibility of agricultural production and food security. The study reveals the consequence of rural-urban migration on rural families. In the paper, sample is restricted to households that are agrarian in nature. This research was conducted in Potheri village of Tamil Nadu State, India. A purposive sampling is adopted to select the households and this research covers 120 sample households. The study is based on the link between rural-urban migration of adult persons and families' life in the area. The empirical result shows that an additional rural migrant of a household increases the probability of having child worker in that household by approximately 51%. In addition, this study identifies that families of migrant households receive less preventive health care in the area. The study also shows that an additional adult worker of a household increases the probability of having child worker in that household by 29%. For this reason, the research supports the hypothesis that children are the last economic resource of a household.

Keywords: Rural-Urban Migration, Rural Family, Migrant and Non-migrant Households, Child Farm Labour, Child Activities, Child Health, Family Labour.

1. INTRODUCTION

In a modern time, migration is one of the socio-economic challenges that world is facing. According to United Nations estimates, about 50% of the projected increase in the world's urban population will come from rural-urban migration so that by 2025, over 1.1 billion urban people in Less Developed Regions will be rural migrants (Guerny, 1995). Long-term male migration from rural to urban areas may fundamentally change the gender division of labour in farm households. Subsequently this will affect both women and children agricultural work.

With a diminishing supply of adult labour especially male in rural areas due to adult-urban migration, the farm has to depend on either women or children of that area or hired adult labour from other area. Studies on several Asian countries have conclusively shown that it is primarily the young, able-bodied and better educated rural inhabitants who emigrate, leaving substantial gaps in the agricultural and labour force in the rural. As farming is essentially a family enterprise in most

developing countries like India, rural-urban migration of able-bodied young workers leaves the burden on older, women and children in rural areas that tend to be less productive. The long-term implications of agricultural labour force shortages are likely to result in a decline in the health status of rural families including a rise in mortality and a rise in child farm workers.

The main objective of this research paper is to focus on the impact of rural-urban migration on the rural families. In this case, efforts are made to find out the impact of rural-urban migration on the following: (1) child farm labour, (2) families activities, and (3) families health. Further, a comparison has been made between migrant households and non-migrant households by using the features of household structure and child activities.

2. LITERATURE REVIEW

Ashagrie (1997) estimates that about 70% of working children of 26 developing countries are engaged in agricultural activities. The next heaviest users of child labour have much smaller shares, including manufacturing 8.3%, trade 8.3% and personal services 6.5% etc. In case of India, about 75% of Indian population live in rural areas which their main sources of survival is agriculture.

Population of India has been increasing at the rate of 1.9% per annum. Adequate food production is needed to feed the teeming millions. In recent years there has been considerable debate about the need to ensure food security for the raising population. Dr. M.S. Swaminathan writes, "The future of food security depends on the conservation and care of arable land through attention on soil health and replenishment of fertility and conservation and careful management of all water sources so that more crops can be produced. Improvement of production in perpetuity without associated social or ecological harm is vital to safeguard food security".

Several articles have already studied the issues of child labour and rural-urban migration separately. But the literature about

the consequences of rural-urban migration on the children of origin is very limited. Among such studies, Hildebrandt and McKenzie (2005), using a nationally representative demographic survey of Mexico, finds that children in migrant households receive less preventive healthcare facilities such as breastfeeding and vaccination than children in non-migrant households.

Moreover, Salmon (2005) identifies that children are much more likely to work when they live in a household where the potential of income generation is low and whether this potential has already been used up. His results are based on the Bangladesh Labour Force Survey, 2000.

Rural-urban migration or internal migration is in essence a change in the spatial distribution of population in a given country over time. Migration and the change in population distribution are influenced by specific characteristics of the economic development process (Ammassari, 1994), and by various stages of development in a country Tabuchi, et al., (2002).

3. METHOD OF DATA COLLECTION

Data for this paper has been collected from Potheri village of Kattankulathur-603203, Tamil Nadu, India. The financial and temporal constraints are the main reasons for selecting small sample size. A purposive sampling is adopted to select the village and this study covers 120 sampled households. Sample is restricted to households that own and/or operate agricultural land in this village. To cover the information, a modified definition of households is adopted. A household is defined as a dwelling unit where a group of persons usually live together in rural area and takes food from common kitchen. It also includes those who live outside the villages but claim the household to be their own. Persons of this category work outside the villages and often send remittances. Such persons are called the migrated members of the household and such households are known as migrant household. If there is no migrated member in a household then it is called non-migrant household. The study is performed based on field level survey. In most of the cases, information has collected from the households head for reliable and desirable information. In the absence of the household head information has been collected from another adult member of that household. The analysis done in this study is based on a data set with an explicit focus on rural-urban migration and rural children.

4. RESULTS AND DISCUSSIONS

The sample consists of 120 households, of which 95 households report to have at least one migrant. All households participated in the interview in order to find out general household characteristics, such as household size and number of adult member, etc. And labour profile of a household such as number of adult workers among all adult persons and

number of child worker among all the children, etc. Moreover, this study uses the sample of households with child worker to investigate the impact of rural-urban migration on rural families' life.

4.1 Present Circumstances of Migrant and Non-migrant Households

Analysis of Variance (ANOVA) test shows the present circumstances of migrant and non-migrant households on the basis of different characteristics like household structure and child activities (Table 1). The independent variable is a dummy variable taking-on values of 0 or 1, if the value is 0 means non-migrant household and if is 1 means migrant household. For each feature in the result the dummy variable is considered as an independent variable to find out whether migrant household make any differences in that particular feature.

4.1.1 Household Structure:

The study analyses the household structure size of migrant and non-migrant household under the following heads to address its objectives:

Household Size: The total number of children is slightly higher in migrant households than in non-migrant households. Since null hypothesis ($H_0: =0$) is rejected at the 1% significant level, the result indicates that the average number of children of the two categories is different (Table 1).

Percentage of Adult Workers Engaged in Agriculture and Stay in Rural Area: If the area of origin is considered then migrant households generally has less adult workers engaged in agriculture than in non-migrant households. It identifies that in case of migrant households the average percentage of adult workers engaged in agriculture and staying in rural area is 27% lower than non-migrant households (Table 1).

Percentage of Child Workers Among all Children: Due to the shortage of adult workers in migrant households as a result of rural-urban migration, these households more often use their children as workers. The mean percentage of child workers among all the children is much higher for the migrant households (Table 1).

4.1.2 Child Activities

This research work also analyses the child activities of rural migrant and non-migrant households of the following concerned study area:

Total Participation: From the Table 1, it can be seen that the average percentage of household child farm workers among all child workers is high for migrant households but the percentage of wage workers of migrant households is less than non-migrant households. The Table 1 also shows that the average percentage of school attainment among all the children is less for migrant households than non-migrant households.

Participation in One Activity: The results shows that the percentage of only household farm worker among all the child workers of migrant households is about 52% higher than that of non-migrant households. But in case of only wage worker among all child workers and only school going children among all the children the mean percentage of migrant households is lower than non-migrant households (Table 1).

Combination of Types of Work: In some cases, it is found that a child works as both household farm worker and wage worker. But this type of combination of worker is less likely in case of migrant households than non-migrant households (Table 1).

Combination of Work and School: This research paper tries to find out the combination of child work and school attendance. It finds that in case of combination of farm work and school attendance, the mean percentage is lower for migrant households (Table1).

Table 1: A comparison of household structure and child activities of migrant and non-migrant households

Characteristics	Coefficient (β)	Test * H0: β=0
Household Structure		
Household size	1.151 (0.243)	***
Number of children	0.658 (0.127)	***
% of adult workers among all adults	11.041 (2.008)	***
% of adult workers engaged in agriculture and stay in rural area	-26.846 (1.538)	***
% of child workers among all children	20.543 (3.457)	***
Child Activities		
a. Total Participation	14.205 (4.752)	***
Household farm work (in %)	-32.620 (6.003)	***
Wage work (in %)	-26.254 (2.995)	***
School (in %)		
b. Participation in one Activity		
Farm work only (in %)	51.553 (5.170)	***
Wage work only (in %)	-11.598 (3.009)	***
School only (in %)	-19.975 (3.392)	***
c. Combination of Types of Work		
Household farm & wage work (in %)	-15.240 (3.922)	***
d. Combination of Work & School		
Farm work & school (in %)	-22.896 (6.599)	***
Wage work & school (in %)	-4.890 (2.512)	**

Source: Field survey, November, 2014.

Note: *** H0 is rejected at the 1% significance level, ** H0 is rejected at the 5% level and * H0 is rejected at the 10% level. Null hypothesis, H0: β=0 and alternative hypothesis, HA: β ≠ 0. Parentheses indicate standard error of slope coefficient.

4.2 Impact of Rural-urban Migration on Farm Labour

The goal of this section is to find out the impact of adult migration from rural to urban on rural families particularly on child labour. The working sample includes households where

at least one child aged between 5 to 14 years is working as a worker. Here the dependent variable is households with child worker. Several independent variables are included for analysis such as household size, age of the household head, number of adult members and number of adult migrant, etc Salmon (2005), argues that children are more likely to work when they live in a household where all the adult are working. For this reason, the hypothesis of child labour being the last economic resource of household is supported by his findings.

In present analysis, it is found that the estimated slop coefficient is 0.252 that means an additional adult worker increases the probability of having a child worker in the household by approximately 29%. It also found that the coefficient of number of rural migrants turns out to be significantly positive. Hence, an additional rural migrant of a household increases the probability of having child worker in that household by approximately 51% (Table 2).

Table 2: Estimation results of logit model: marginal effects of the probability of becoming a child worker

Independent Variables	Households with Child Worker
Household Size	0.016 (0.067)
Age of the household head	0.003 (0.016)
Number of adult members	0.121 (0.102)
Number of adult workers among all adults	0.252* (0.138)
Number of adults engaged in rural agriculture	0.056 (0.212)
Number of rural migrants	0.413** (0.170)
Number of observations	113

Source: Field survey, November, 2014.

Note: *** indicates significant at the 1% level, **indicates significant at the 5% level and *represents significant at the 10% level. Parentheses indicate standard error of regression coefficient.

4.3 Impact of Rural-urban Migration on Child Activities

This section mainly tries to find out the impact of adult rural-urban migration on activities of rural children. The dependent variables in the child activities equation are as follow: (1) A variable indicating the total number of child household farm workers among all the children of a household. (2) A variable indicating the total number of child wage workers among all the children of a household. (3) A variable indicating the total number of children going to school among all the children of household. (4) A variable indicating the total number of children only goes to school among all the children of a household.

In case of regression 1, it is found that children are more likely to work as household farm worker when they live in a household where number of adult worker is high. Similarly,

the number of rural migrants of a household is highly significant in explaining the probability of child household farm worker (Table 3). From regression 2, it can be seen that there is a significant negative effect of number of rural migrants on the child wage working and the number of adult workers is not a significant for child wage working (Table 3). In regression 3, all the three independent variables are not significant determinant for school attainment of children (Table 3). In case of regression 4, the result shows that the number of adult workers is not significant determinant. But the number of rural migrants has an expected negative association with the probability of school attainment of those children who are not engaged in any type of work (Table 3).

Table 3: Estimation results of Logit Model: Marginal Effects of the Probability of a Particular Type of Child Activity

Explanatory Variables	(1)	(2)	(3)	(4)
Household size	-0.235*** (0.076)	0.124 (0.041)	0.041 (0.042)	0.013 (0.082)
Number of adult workers	0.219* (0.210)	-0.071 (0.254)	-0.047 (0.202)	0.131 (0.202)
Number of rural migrants	0.526*** (0.213)	-0.668** (0.314)	-0.310 (0.216)	-0.824*** (0.230)
Constant	0.043 (0.451)	-1.209* (0.660)	-0.254 (0.467)	0.218 (0.461)
Number of observation	113	113	113	113

Source: Field survey, November, 2014.

Note: *** indicates significant at the 1% level, ** indicates significant at the 5% level and * represents significant at the 10% level. Parentheses indicate standard error of regression coefficient.

4.4 Impact of Rural-urban Migration on Child Health

The main aim of this section is to find out the impact of adult rural-urban migration on rural child health. But during survey period information has collected for only one health input and that is the number of children received vaccination.

Table 4: Estimation results of logit model: marginal effects of the probability of a child received all vaccination

Explanatory Variable	Child Received all Vaccination
Dummy: if migrant household	-0.503* (0.288)
Household size	-0.194*** (0.073)
Mother's year of schooling	0.245*** (0.046)
Constant	1.158** (0.575)
Number of Observations	120

Source: Field survey, November, 2014

Note: *** indicates significant at the 1% level, ** indicates significant at the 5% level and * represents 10% level of significant.

Due to the lack of data this study only shows the impact of adult rural-urban migration on health input. After analysing the concerned data, it is found that children in migrant households to be significantly less likely to receive all vaccination than children in non-migrant households (Table 4). This means that children of migrant households receive less preventive health care in their infancy. One of the possible reasons for this may be a higher opportunity cost of time for migrant parents.

5. CONCLUSION

The analysis of link between adult rural-urban migration and child farm labour lends support to the hypothesis that an additional adult rural migrant of a household increases the probability of having child worker in that household. This study also found that children are much more likely to work when they live in a household where the potential income generation is low or where this potential has already been used up. It also shows that children are more likely to work as household farm worker when they live in a household where number of adult worker is high. The number of rural migrants of a household is highly significant in explaining the probability of child farm worker in rural areas. The empirical results also showed that there is a significant negative effect of number of rural migrants on the child wage working in rural areas. From the field observation, the idea is obtained that most of the rural migrant households uses the major portion of internal remittance to buy fixed assets like land. It also has significant positive impact on the child farm labour. Furthermore, the research is suggested on this particular topic, which can ensure the total welfare of working children especially in rural areas of India. According to this study, preventive health care is less likely for children in migrant households. The empirical results suggested a need for future research into understanding the causes of lower preventive healthcare in migrant households in order to develop appropriate policy responses.

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