



## **Impact of Remittances on Household Welfare and Spending Pattern: A Case Study of Hailakandi District**

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### **Abstract:**

This paper investigates the impact of remittances on household welfare and expenditure pattern of rural households. It also examines determinants of rural out migration using logit regression and finds migration network plays a critical role in the process of economic migration in rural areas. The study finds a positive and significant relationship between remittances and households monthly consumption expenditure and households' annual expenditure on education. It is found that the monthly households consumption expenditure and annual households expenditure on education of remittances receiving households is higher by Rs-616 and Rs-8967 respectively than those households who do not receive remittances at all. It is also found that the impact of remittances on household annual expenditure on health and durable goods is non-significant. Thus, by increasing households' expenditure on consumption and education remittances help in raising the wellbeing of households.

**Key Words:** *Remittances, Migration, Household Expenditure, Propensity Score Matching, Household Welfare.*

### **Introduction:**

In recent years the academic interest in migration studies has increased to a considerable extent. This increase of interest arises because of the fact that remittances obtained from migrants works as 'bottom up' source of development finance in migrant sending regions and also help to reduce the incidence, depth and severity of poverty at the origin (Jones, 1998). Researches on migration pointed out that remittances have welfare effect on poorer section by increasing consumption expenditure and enhancing investment in human and physical capital, with long-term implications for poverty alleviation (Taylor, 1999). Remittances are thus considered an important means to lower the vulnerability among poor and enhance the welfare levels of individuals. Indeed, it play an important role in raising the standard of living of remittance receiving households by increasing the level

of investment in human and physical capital (Hoddinot, 1994, Maitraamd Roy, 2003).

In fact, India is the home to one of the largest internal migrant population in the world and domestic remittances send by them has a significant impact on the development of socio economic condition of the households that received remittances (NCAER, 2014). According to a study conducted by Deshingkar and others (2010) internal migrants population in India, figure as high as 100 million. The domestic remittance market in India was estimated to be \$10 billion in 2007-08, of which 60 percent being inter-state transfers and 80 percent directed towards rural households. Domestic remittances financed over 30 percent of households consumption expenditure in remittance receiving households (Tumbe Chinmay, 2011). Thus, it indicates about the high dependency of rural population on remittances income. Particularly, in drought-prone semi-arid and flood vulnerable areas the inability of agriculture to fully guarantee livelihood security has accelerated migration as a much needed livelihood option with consequent remittances income used for several purposes that includes higher spending on education, household consumption, human capital formation and small enterprises (NABARD-GIZ, 2011). Despite its significance to the domestic economy, internal remittances have not received much academic and even policy attentions. Also, internal migrations remain grossly underestimated due to empirical and conceptual difficulties in measurement. Moreover, migration researches in India have chiefly concentrated on explaining the reason behind the movement of labour while very few studies exploring the outcome of such migration on economic status of remainder of households through the generation of remittances earnings. The channel through which money is remitted and seasonality of remittances are likely to exhibits seasonal variations and thereby justifying a disaggregated study at the district level. So, keeping these in mind, and also due to its significance, this study mainly give focus on finding out the impact of internal remittances on household welfare and spending pattern of rural household. The study also explored the determinant of rural out migration. The paper is organized into five sections including the current introductory one. Section 2 presents a literature review on the impact of remittances. Database and methodologies are discussed in Section 3. The next section contains the main analytical findings of the paper. The last section summarizes and concludes.

### **Review of Literature:**

Today the term remittances have taken a central place in debates among the development experts all over the world owing partly to the fact that its volume is growing at an exponential rate in recent years. The renewed debate started particularly after 1990s when it was observed that the dependency

theories and structural view on remittances, which dominates the 1970s and 1980s and maintained a pessimistic view on remittances, witness a downfall. The dependency theories were of the viewed that remittances never contributes to the development of the underdeveloped countries mainly because of the fact that international migration encourages brain drain from developing countries depriving them of human capital and that desperately need to meet their development goals.

However, in recent decades many studies reveal that remittances to household generally improve their income level and standard of living making more resources available for food provision and providing enhance accessibility to education and health care services. Attempts to empirically understand the contribution of remittances to recipient household welfare Vis a vis their education and health status have been characterized by inconsistencies. There are divergent and conflicting finding on the contribution of remittances to improve the health and education status of children from migrant household tend to improve from remittances, other argue that impact are not always positive. Research findings in South Africa show that children from remittances receiving household have higher school enrolment propensities than their peers from non-migrant household (Lu and Treiman 2007).

Due to its impact on poverty alleviation remittances enable recipient households to improve their access to quality education and health services and also it leads to enhance its welfare. Evidence from household surveys shows that remittances may have reduce the share of poor people in population by 11 percentage point in Uganda, 6 percentage point in Bangladesh and 5 percentage point in Ghana (Ratha 2007). Cross country analysis of 78 developing countries also shows significant poverty reduction due to effects of remittances, a one percentage increase in per capita official remittances may lead to 3.5 percent decline of share of poor people in total population (Adams and page 2005). Campos and Palomo (2002) find that in 2000 remittances helped reduce the national poverty rate by 2.4% in El Salvador as well as reduced the Gini coefficient from 0.55 to 0.53. Lopez Cordova (2005) finds that remittances have statistically significant impact on reducing poverty in Mexico at municipality level. Gustafsson Makannen (1993) used the data of 7680 households from 1986-87 survey to examine the impact of remittances on poverty and welfare in rural urban Lesotho. They found that 35% of household income comes from remittances. It shows that if remittances were set to zero, the average per capita household consumption would fall by 26%. In addition, a cessation of remittances would lead to a 52% increase in poverty gap index.

Remittances are most important linking factor between migrants and their family which provide sustenance and contribute to improve the livelihood of the receiving households (Hoddinott, 1994, Maitray and Ray, 2003). From the theoretical perspective researchers have different opinions regarding how these remittances are spend by households and what is their impact on the economic development of the households. Some author argued that remittances are fungible and are spend like income from any other sources, while others claim that receipt of remittances can cause behavioural changes at household level (Brown 1994, Alderman 1996). For example, empirical studies in India have suggested that remittances are spent mainly on subsistence needs (Krishnaiah, 1997, Deshinkar et al., 2006 and Samal, 2006); however, a small proportion of that is used for investment purposes that are education, livestock, farming, and small scale enterprises etc. (Oberai and Singh, 1980; Ratha, 2003; and Mueller and Shariff, 2009).

Deshingkar (2006) shows how international remittances acted as an insurance flow for the Sri Lankan economy. As far other south Asian countries are concern, in India, Rajan (2004) and Mullick (2011) discussed the impact of migration and remittances on recipient economy. One of the earliest papers showed that remittances income help poor people built some forms of assets was based on data set of Pakistan (Adams, 1998). Walker and Brown (1995) found for the Tongan and western Samoan migrant households that remittances are not only used exclusively for consumption purposes and played an important role contributing to both savings and investment in migrant sending countries. They also found that remittances were not driving exclusively by altruistic sentiments and need for family support, but also, among some migrants categories, by the motivation to invest. There appears to be substantial scope for policy intervention on the part of pacific Island Governments to increase the flows of remittances into their economies. More recently a study, on Pacific Island of Fiji and Tonga generally found that remittance income has led to a fall in poverty and income inequality (Brown 2008).

Using data from Philippines Yang (2008) examines how household expenditure behavior responds to favorable exchange rate shocks when international remittances are received. In particular the paper looks at the expenditure patterns of 1646 households before and after 1997 Asian financial crisis. Receiving more remittance income is associated with a more positive effect on the ownership of various types of durable goods, hours worked in self-employment and investment in capital intensive enterprises like transportation, communication and manufacturing. The most likely the exchange rate shock relaxed the credit constraints face by the household providing them with necessary resources to start new business activities. The

access to international remittances helps to overcome the credit constraints (Woodruff and Zentano's, 2004). They find that remittances are responsible for more than 25 percent of all capital investment in small micro enterprises in rural Mexico. The percentage increases more than 40 percent within those regions having higher level of migration.

In a study based in 14 states in Mexico, Tailor and Mora (2006) find differences in expenditure behavior among three different types of households: those without migrants, those with internal migrants and finally those with international migrants. In particular, compared to non-migrant's households, those with international migrants show a considerably large marginal spending for investment while those with internal migrants spend more on services, health and housing. Their findings support the view of productive uses of remittances. The same conclusion is reached by Adams and Cuecuecha (2010a) who also take into account of different sources of remittances. Using a nationally representative household's survey in Guatemala, they find that that at the margin both household receiving internal and international remittances spend more on investment goods like education, housing and less on food. In Nigeria, Osili (2004) finds that a large portion of remittance income is spent on housing. A ten percent increase in remittance income in Nigeria raises the probability of investment in housing by 3 percentage points.

In developing world, remittances sent by migrants make a direct contribution to increasing the income of the families left behind, and as such they contribute to easing budget constraints of the poorest, reducing poverty and improving the average living conditions (Acosta et al. 2008). International fund for Agricultural Development (IFAD) suggests that remittances are important source of fund to meet the immediate need of migrant's families in home countries to save and to invest in education and health. Remittances may play important role in poverty reduction and sparing economic growth in developing countries (IFAD, 2007a). Buch Kuckulenz and Manchec (2002), for example estimate that the average remittances to developing countries during 1990s are US\$ 81 billion per year. In recipient countries, remittances have become an important source of capital that could augment domestic investment.

However, the impact which remittances have on household welfare is dependent upon the local contexts in which the household operates. Migration research in Northeast India has chiefly concentrated on explaining the reason behind the movement of labour. There are no studies exploring the outcome of economic migration on economic status of left-behind households through the generation of remittances earnings. So our study

focuses on examining the impact of remittances on the welfare level and spending pattern of rural households.

**Data sources and Methodology:**

The primary data used in the study collected from the field survey conducted in Hailakandi of Assam (India) during 2018-19. The total number of sample in the study is 325 households surveyed by using two stage random sampling technique. In the first stage, 12 villages were randomly selected from all the five Development Blocks of the Hailakandi district. In the second stage, 8 percent of the total households from the each from the selected villages were randomly surveyed. Only work related migration is taking into consideration in the study.

The descriptive statistics technique is used to identify the frequency and channels through which money is remitted by rural migrants and the principal use of such remittances by rural households. The impact of remittances on household welfare and spending pattern is analysed by fitting a two stage regression. In the first stage, the households is categorized into two groups viz. treatment group (i.e households receiving remittances) and control group (households) not receiving remittances. The first regression is used to predict the probability of a household receiving remittance as a function of household baseline characteristics. Thus, the following discrete outcome model maybe fitted

$$Y^*_1 = \alpha + X\beta + u \dots \dots \dots (1)$$

Where the latent unobservable outcome variable  $Y^*_1$  is assumed to be a function of some household characteristics  $X$  and an error term  $u$  (Nelson 1974; Maddala 1999)

Here, the observed outcomes are as follows

$$Y_1 = 1 \text{ (the household receives remittances) if } Y^*_1 = \alpha + X\beta + u > 0 \\ = 0 \text{ (household does not receive remittances) if } Y^*_1 = \alpha + X\beta + u \leq 0$$

Equation 1 predicts the propensity scores. In the second stage, the impact of remittances on household welfare is ascertained by fitting the following weighted logit regression, the weights being the propensity scores obtained from Equation 1.

$$Y^*_2 = \delta + \gamma T + X\beta + \eta \dots \dots \dots (2)$$

Where,  $Y^*_2$  is the latent unobservable outcome variable which is assumed to be a function of treatment status  $T$ , some household characteristics  $X$  and an error term  $\eta$ .

The following logit regression model is fitted to ascertain the factors affecting outmigration.

$$Y^* = \alpha + X\beta + \epsilon$$

Where  $Y^*$  is the latent outcome 3 variable which captures the decision by the  $i^{\text{th}}$  household to send a member as a migrant for employment,  $X$  is a set of household characteristics and  $\epsilon_i$  is the stochastic error term. The observed outcome variable is

$Y=1$ (household has an economic migrant) if  $Y^* = \alpha + X\beta + \epsilon > 0$   
 $=0$ (household does not have an economic migrant) if  $Y^* = \alpha + X\beta + \epsilon \leq 0$

### **Result and Analysis:**

The types of economic out-migrants by destination that is intra-state, inter-state, and international are shown in Table 1. Then in Table 2 findings of the modes or channels through which remittances are sent by migrant members to their families is presented. The frequency of sending remittances that is how many times a migrant send remittance to home in a year is shown in Table-3. In Table-4 uses of remittances by migrant households that is in which field remittances are invested by remitted family (by first use) is presented. Table 5 depicts the regression analysis on the impact of remittances on monthly household's consumption expenditure. Average Treatment Effect analysis is displayed in Table 6. Table-8 depicts the determinants of rural out migration.

Table-1 depicts that there are three categories of migrants viz intra-state (within the state), inter-state (outside the state), and international (outside the country). Proportion of inter-state migrants is very high compare to the rest of two categories. As shown in Table-1, out of total 121 economic migrants in the study area that 90 percent migrants are inter-state, 10.74 percent are intra-state and only 1.27 percent migrants are international. Most of the inter-state migrants are scattered in the city of Bangaluru, Mumbai, Hyderabad and Chennai also they are temporary in nature. Only economic migrants are taken into consideration in our study. Our study area Hailakandi district is very backward in respect of industries, infrastructure, trade and commerce. There is not a single large scale or small industry in the district. So, job opportunities at the local level are very limited and whatever available are at very low wage. Agriculture is the main source of livelihood in the district and it creates disguised unemployment. Therefore, large numbers youths migrated to various metropolitan cities especially to Bangaluru, Mumbai, Chennai and Hyderabad in search of jobs. That is why the proportion of interstate migrant is very high.

**Table-1: Out migrants in sample households (by destination):**

SL No	Migrant categories	Frequency	Percentage
1	Intra state	13	10.74
2	Inter state	108	90
3	International	1	1.27
4	Total Migrants	121	100%

Source: field survey

**Table-2: Mode of sending remittances:**

Modes ( Channels)	Percentage of migrants using the channel
Sent through Bank	97
By migrant himself	1.69
Through relatives	1.69

Source: field survey

Table-2 shows that around 97% of the migrants send remittances to home through their own bank account. It is very interesting findings in regards to financial inclusion particularly in rural economy. On the other hand, 1.69 percent migrant carry remittances by themselves in home during their visit and only 1.69 percent migrant send money through their relatives.

**Table-3: Frequency of sending Remittances**

Frequency	Number of migrant household	Percentage
1. Monthly	65	53.72
2. Bimonthly	18	14.88
3. Quarterly	30	24.79
4. Half yearly	8	6.61
5. Annually	0	0
Total	121	100

Source: field survey

The frequency of sending remittances is shown in Table-3. Analyzing household level data on sending remittances it is found that migrants of

53.73 percent households sent remittances to home monthly, migrants of 14.88 percent households sent remittances in every two months, migrants of 24.79 percent households sent remittances quarterly and also the migrants of 6.61 percent households sent remittances half yearly. In other words, 53.72 percent migrants’ households received remittances monthly, 14.88 percent bimonthly, 24.79 percent quarterly and 6.61 percent migrants’ households received remittances half yearly from their migrant member during the year of survey (2018-19). Thus, the study reveals that the monthly frequency of sending remittances is highest and annual frequency of sending remittances is zero. This finding of highest monthly frequency can be justified by another finding that 35 percent (as shown in Table-4) remittances receiving household uses remittances income for consumption in their first use. These poor people have few alternative sources of income but to use remittances income for consumption. So, migrant sent remittances monthly to meet the consumption expenditure of who left behind.

The use of remittances by the household’s of migrant family is presented in the above Table-4. Analyzing the household’s level data collected during field survey (2018-19), we have seen that highest proportion of spending of remittance occur in case of construction and modification of house building (36.36%) that is 36.36 percent households uses remittances income in construction and modification of their houses followed by consumption (35.54%), savings (10.74%), Education of child (5.79%), Medical expenses (3.31%), and debt repayment (1.65 %).

**Table-4: Spending of Remittances by migrant’s family (by first use)**

<b>Heads on which remittances is spent or invested</b>	<b>Percentage of households</b>
<b>1. Construction of house</b>	<b>36.36</b>
<b>2. Consumption Spending</b>	<b>35.54</b>
<b>3. Savings</b>	<b>10.74</b>
<b>4. Education</b>	<b>5.79</b>
<b>5. Health</b>	<b>3.31</b>
<b>6. Debt repayment</b>	<b>1.65</b>

Source: field survey

The spending of remittances on construction of house is highest among average remitted households because the poor people when get some extra income want to build a solid shelter (home) for them that will serve them in future. Moreover, these migrants are temporary in nature and went to other cities to earn money to consolidate their basic minimum needs. They are also mostly first generation migrants and their family income is low, so average

migrant families spend remittances income on building houses and on consumptions.

Regression analysis on the impact of monthly consumption expenditure of remittances receiving and non receiving household is shown in table 5.

Propensity score matching (PSM) on the impact of remittances on household monthly consumption expenditure by assuming remittances as treated variable, households monthly consumption expenditure as dependent variable and household head age, education, religion, caste etc as control variable. Here the treated group is remittances receiving households and controlled group is remittances non-receiving households.

The results of PSM as shown in Table-5 reflect that the variable like household size and age of household head that significantly influence the household monthly consumption expenditure. The coefficient of the variable household size is negative and significant implying that with the increase in the size of household monthly consumption expenditure of household declines. Interestingly, the variable remittance is affecting monthly household consumption expenditure positively. That is those households who received remittances their monthly consumption expenditure is higher than those of non-remittances receiving households. As remittances positively impact household consumption so, it will increase household welfare level too. Our study conforms to the study of Adams and Cuecuecha (2010b).

**Table-5: Impact of remittances on monthly household consumption expenditure: Propensity score marching.**

<b>variable</b>	<b>coefficient</b>	<b>t-value</b>
<b>Household size</b>	<b>-120*** (000)</b>	<b>-4.51</b>
<b>Household head Age</b>	<b>7.0026** (0.039)</b>	<b>2.07</b>
<b>Education of household head</b>	<b>21.654* (0.561)</b>	<b>0.58</b>
<b>Remittances</b>	<b>573.43*** (0.000)</b>	<b>5.57</b>
<b>Religion</b>	<b>67.304* (0.890)</b>	<b>0.14</b>
<b>Schedule cast</b>	<b>104.8438* (0.832)</b>	<b>0.832</b>
<b>Obc</b>	<b>415.401** (0.411)</b>	<b>0.82</b>
<b>Constant</b>	<b>1042.206</b>	<b>1.97</b>

\* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Source: field survey

The average treatment effect (ATE) on the impact of remittances on monthly household consumption expenditure (MHCE), annual household expenditure on education (AHEE), annual households’ expenditure on health (AHEH) and annual households expenditure on durable goods (AHED) is shown in table 6.

The result of the average treatment effect on the treated is shown in Table-6. It is evident from the Table-6 that remittances have positive and significant impact on monthly household consumption expenditure and annual household expenditure on education for children. The results of ATE depict that on an average the monthly consumption expenditure of remittances receiving households is higher by Rs-616 than those of non-remittances receiving households. This difference is significant at 1 percent level. Similarly, on an average remittance receiving households spent Rs-8967 more on annual expenditure on education for children than those households which do not receive remittances. However, the impact of remittances on household annual expenditure on health and durable goods is non-significant. This implies that remittances do not have any impact on household annual expenditure on health and durable goods.

**Table-6: ATE analysis:**

<b>ATE</b>	<b>Mean difference</b>	<b>P value</b>
<b>MHCE</b>	<b>616</b>	<b>0.001</b>
<b>AHEE</b>	<b>8967</b>	<b>0.000</b>
<b>AHEH</b>	<b>-131.062</b>	<b>.396</b>
<b>AHED</b>	<b>-62.38</b>	<b>0.736</b>

Source: field survey.

**Determinant of rural out migration:**

The determinant of out-migration of rural working population from rural areas based on the logit regression analysis on the primary data of 325 households from Hailakandi district is shown in the Table 8. The binary dependent variable in the logit regression takes the value 1 if the household has a former member who has migrated for work; the value of the dependent variable is 0 if the household does not have an economic migrant.<sup>1</sup> Further, three caste categories were considered in the model viz. General caste, Scheduled Caste (SC) and Other Backward Caste (OBC). Scheduled tribes were not considered as there were no schedule tribe households in the sample. The Dependency Rate (DR) is measured as the percentage of

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<sup>1</sup> Formers members who have migrated for other reasons such as marriage or with an economic migrant were not considered.

household members who are children (aged below 14) and elders (aged above 64 years). Further, the migration network is measured by the proportion of households in the village who have an economic migrant. Clearly, this variable was constant for households within the village but varies across villages.<sup>2</sup> The marginal effects of Logit regression shows that the variables like age of households head, education of households head, per capita land and SC are not significant determinant of rural out-migration. That is any changes of these variables don't influence the rural out-migration. However, the variables like sex of household head, size of household, households having male members above age 14, migration network significantly influence out-migration. The marginal effects of Logit regression reveals that the log odds of a household having economic migrant increases by 22.3 percent if the household head is male. This implies that workers find it easier to migrate if the household head is male either because it helps to increase the cost of migration or because the male head can act as guardians of female members in their absence. The latter line of reasoning is also substantiated by the finding that every one percent increase in the number of male members aged 14 and above raises the log-odds of the household in sending a migrant worker by 29.5 percent. Similarly, larger the size of family, lower is the possibility of out-migration of workers from the family and vice versa. Compared to general caste households, households belonging to OBC caste have higher probability of having a former member who has migrated for work. This is evident from the positive and significant value of the coefficient of the caste dummy for OBC. The co-efficient for Scheduled Caste was not found to be significant. Further, if the dependency rate in the household increases by one percent, the log-odds of the household having a migrant worker also rises by 66.4 percent. Migration network also paves the way for economic out migration. A one percent increase in the proportion of households in the village with a migrant member increases the log-odds of the sample household in producing an economic migrant by 1.3 percent.

**Table: 7 Definition of variables used in Logit regression.**

SL NO	Variables	Definition of Variables	Expected Sign of Coefficients
1	AGEHH	Age of household head (in completed years)	Positive
2	AGEHHSQ	Square of Age of	Positive

<sup>2</sup> The data on percentage of households in the village with an economic migrant was obtained after discussion with the village head and verified through discussions with other knowledgeable persons in the village.

		household head	
3	SEXHH	Sex of household head (Dummy=1, if male; 0 otherwise)	Positive
4	HHS	Household size (number of members currently residing in the household who have a common kitchen)	Negative
5	EDUHH	Education of household head (in completed years)	Positive
6	MALES	Percentage of males aged above age 14 currently residing in the household	Positive
7	SC	SC (Dummy=1, if household belongs to SC category; 0 otherwise)	Negative
8	OBC	OBC (Dummy=1, if household belongs to OBC category; 0 otherwise)	Negative
9	PCLAND	Per capita agricultural land owned (in hectares)	Positive/ Negative <sup>#</sup>
10	DR	Dependency Rate (Percentage of household members who are aged below 14 and above 64 years)	Positive
11	MGN	Migration network measured by percentage of households in the village with an economic migrant	Positive

# Coefficient of PCLAND could be either positive or negative. It could be positive because increased land holding would mean that the households have enough assets to meet the economic costs of migration. However, lack of availability of cultivable land may result in distress migration. Hence, whether the coefficient is positive or negative depends on the underlying conditions in the study area.

SL NO	Variables	dy/dx	z
1	AGEHH	0.020	1.32
2	AGEHHSQ	0.000	-1
3	SEXHH	0.223***	3.38
4	HHS	-0.092***	-3.45
5	EDUHH	0.003	0.36
6	MALES	0.295***	6.39
7	SC	-0.108	-1.48
8	OBC	0.245*	2.27
9	PCLAND	-0.077	-0.34
10	DR	0.664***	3.03
11	MGN	0.013***	4.36

Source: field survey (2018-19).

\*\*\* indicates significant at 1 percent; \* indicates significant at 5 percent.

### Summary and Conclusion:

To sum up, it can be said that remittances income can play a key role in enhancing households' welfare by raising monthly household consumption expenditure and annual household expenditure on education. The study reveals that monthly frequency of sending remittances is very high compared to bimonthly, quarterly or half yearly frequency. About 53.72 percent migrants sent remittances monthly in last one year preceding survey. An important finding of our study is that near about 97 percent of the migrant members' uses bank account for sending remittances. It is a good signal towards government goal of achieving 100 percent financial inclusions in rural economy.

While analyzing the uses of remittances by the left behind members of migrant's household it is found that the spending of remittances income on construction or modification of house ranked first and spending on consumption of food items ranked second (by the first use). That is 36.6 percent remitted households used remittances income in construction and modification of houses where as 35.4 percent households used remittances income in consumption, 10.7 percent in savings, 5.79 percent in education and only 3.31 percent remittances receiving household used remittances income in health in last one year (by the first use).

However, the impact of remittances on household monthly consumption expenditure and household annual expenditure on education is quite significant whereas impact of remittances on household annual expenditure on health and durable goods is non-significant. It is found that the monthly households' consumption expenditure of remitted households is higher by Rs

616 and annual education expenditure of children is higher by Rs-8967 than those of non-remittances receiving households. Moreover, the variable like age of household head and size of household significantly influence the monthly households' consumption expenditure. This implies that remittances can play a key role in rising household welfare through increasing household consumption and education expenditure. The role of remittances on education is long lasting as it will affect the future generation too. On the contrary the study reveals that role of remittances on households expenditure on health and durable is not so effective. The logit regression for determining the causes of out migration of rural workers shows a very important result that migration networks play a critical role in the migration process in addition to other socio-economic factors such as sex of household head, size of household, proportion of adult male members in the household etc.

So it may suggest that more and more social security schemes and income injecting schemes should be implemented by the government in rural economy so that household can meet their consumption need from locally earned income and remittances income can be invested in other productive sources like opening up of new business, purchase of land etc. This will help in accelerating the growth of rural economy. The government may increase wages in MGNREGA to inject more money in rural economy.

We have also found that remittances receiving households used maximum remittances in construction or modification of house. So, in this respect it is suggested that the government scheme of 'Pradhan Mantri Awas yojana' should be strengthened by increasing its fund allocation so that its coverage can reach to all rural poor households. If this scheme can cover maximum rural poor, the use of remittances income in this field can be saved and may be used in other productive channels too.

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