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## **A Study on Impact of Remittances on Household Expenditure in West Bengal**

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### **Abstract**

*India is the second most populous country in the world and the home of 1.21 billion populations (Census, 2011). More than 65 percent of them population lives in rural areas and the majority of them engaged in agricultural and allied activities. Thus, the average income and expenditure in India are similarly quite modest at Rs.48,097 and Rs.44,025 respectively (NCAER, 2010). 24 percent of the rural population lives below the poverty level. According to Yadav (2006), 47 percent of private consumer expenditures are on products and services. This study's objective is to examine the income and expenditures of scheduled tribe households. The interview approach is planned for data gathering and straightforward statistical methods are utilized for analysis. This study discovered that the average monthly income and expenses are Rs.5556 and Rs.5237 respectively. This study demonstrates conclusively that income is low and expenses are high in indigenous areas.*

**Keywords: Expenditure, household, income, poverty, remittances, West Bengal**

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**Introduction:** The 2011 Indian Census estimates the total number of migrants of all durations and ages to be approximately 450 million, whereas the total number of migrants in West Bengal is approximately 33 million. In its 2007-08 survey, the National Sample Survey Organization (NSSO) presented information about migration and migrants from a variety of perspectives, including those of in-migrants, migrating households, short and long duration out-migration, and households with one or more out-migrating members and return migrants. In India, there were 324 million internal migrants in 2007-08, of which 140 million were employees, according to an NSS report. The NSS estimates for out-migration from households include both domestic and foreign out-migration.

International out-migrants formed only 3.8 percent of the overall number of out-migrants, according to these statistics. Even with regard to household remittances, the NSS estimates that overseas remittances were around half of domestic remittances (Tumbe, 2011). For developing nations, international remittances are an essential source of foreign currency. Furthermore, in many poor nations, remittances account for more than 20 percent of their Gross Domestic Product (GDP). Internal remittances paid by an out-migrant to a native or a member of his own household play a significant part in the domestic growth of

the state. Over the past decade, India has become the largest beneficiary of international remittances. World Bank estimates (2017) that India received approximately US \$ 62,744 million in remittances in 2016, followed by China (US\$ 61,000 million), Mexico (US \$ 28,670 million) and France (US \$ 24,371 million).

**Flow Patterns of Remittances to West Bengal:** In the year 2007-08, West Bengal ranked sixth among Indian states in terms of its percentage share of the overall amount of remittances received by all states, which amounted to approximately Rs. 2,841 crores. First place was held by Kerala, which received 16.9 percent of total remittances. In terms of overseas remittance, West Bengal ranked thirteenth (13th) among the states, with a 1.25 percent contribution equivalent to approximately Rs.208 crores and a percentage stake of only 1.25 percent. In this regard, Kerala, Punjab and Tamil Nadu were the leading states. However, West Bengal's percentage share of internal remittances was approximately 8.1 percent, totalling approximately Rs. 2,633 crores, placing it fourth (4th) among Indian states. Thus, it is evident that in the case of West Bengal, domestic remittances continue to dwarf overseas remittances.

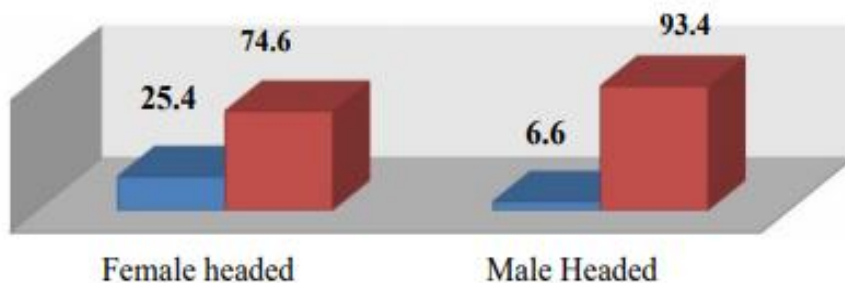
Table 1: Remittance Received by Districts as a Percentage of West Bengal's Total Remittance

	Districts	International	Internal	Grand Total
<i>Less Developed Districts</i>	Bankura	0.0	2.9	2.6
	Birbhum	0.1	2.8	2.6
	Dakshin Dinajpur	0.1	0.8	0.7
	Jalpaiguri	2.9	1.7	1.8
	Koch Bihar	0.0	2.0	1.8
	Maldah	0.1	2.2	2.0
	Medinipur	1.8	16.7	15.6
	Murshidabad	6.3	6.4	6.4
	Puruliya	0.1	1.3	1.2
	Uttar Dinajpur	0.0	2.2	2.0
		<b>Average</b>	<b>1.1</b>	<b>3.9</b>
<i>Developed Districts</i>	Bardhaman	6.0	7.8	7.7
	Darjeeling	2.4	3.7	3.6
	Howrah	4.4	6.2	6.1
	Hoogly	3.6	9.0	8.6
	Kolkata	20.5	5.4	6.5
	Nadia	39.7	8.1	10.4
	North 24 PGS	11.3	14.3	14.1
	South 24 PGS	0.8	6.6	6.2
		<b>Average</b>	<b>11.1</b>	<b>7.6</b>
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: National Sample Survey Report, 2007-08

The table depicts the proportion of internal and foreign remittances received by districts relative to the total remittances of West Bengal. This section discusses the amount of remittances received by households in the year prior to the NSSO survey. The proportion of remittances received varies significantly between districts. Regarding internal migration, undivided Midnapur received the highest proportion of remittances (15.6 percent). The second position was held by the North-24 Parganas district with a 14.1 percent share, followed by Nadia (10.4 percent), Hoogly (8.6 Percent) Bardhaman (7.7 percent) and Kolkata (6.5 percent). In rural areas of West Bengal, approximately 10.1 percent of households received remittances, compared to approximately 5 percent of those in urban areas. The average amount of remittances received by rural households is approximately Rs.14,879 compared to Rs.35,304 by urban ones. The average amount of remittances received in rural and urban areas is approximately US \$ 1,883. In 2007-08, the proportion of West Bengal's total remittances received by rural areas was greater than that of urban areas. This is owing to the fact that a greater proportion of rural households received remittances than urban households.

Figure 1: Gender Wise Percentage Share of Remittance Received and Not Received Households in Household Head



Source: National Sample Survey Report, 2007-08

**Characteristics of Families in Relation to Remittances:** The survey includes around 8770 sample homes in West Bengal, of which 3856 households (40.9 percent) are migrated and 2209 households (25.2 percent) receive remittances. If we divide the sample households into two groups of districts, namely relatively backward (or less developed) and developed districts, the numbers of sample, migrated and remittance-receiving households are 4020, 1659 (41.3 percent) and 1012 (25.2 percent) households respectively.

We can also compare the socioeconomic and demographic characteristics of households receiving and not receiving remittances. Remittances received vary greatly between rural and urban regions, with the share of remittances received in rural regions remaining larger than in urban regions. Similarly, West Bengal's generally less developed districts received higher remittances than the developed regions. Furthermore, remittances differed greatly between social groups and households of various religions. Additionally, the caste

affiliation of a household suggested that Scheduled Caste (SC) and Scheduled Tribe (ST) families received less remittance than non-SC and non-ST households.

Muslim households have received higher remittances than non-Muslim families when households are categorized according to their religious affiliations. Moreover, it is clear that the quantity of remittance differs across landholding classes. Higher landholding classes (Medium and Large holding) have received greater remittances than lesser landholding classes.

Table 2: Test of Proportion for the Variations in Remittances Received Across Various Indicators

<i>Variables</i>	<i>With remittances</i>		<i>Without remittances</i>		<i>Mean <sup>2</sup> Differences</i>
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	
<b><i>Characteristics of household</i></b>					
Age of household head	49.89	13.71	45.43	13.41	4.468***
Male -headed households	0.67	0.47	0.91	0.29	-0.239***
Female-headed households	0.33	0.47	0.09	0.29	0.239***
Household size	4.02	2	4.33	0.20	-0.311***
No. of children age upto 6 years	0.34	0.47	0.38	0.49	-0.039***
No. of children aged 7-18 years	0.55	0.50	0.58	0.49	-0.029***
No. of member aged 19-59 years	0.96	0.20	0.97	0.17	-0.014***
No. of member aged above 60 years	0.33	0.47	0.24	0.43	0.091***
Illiterate	0.65	0.48	0.65	0.48	0.004***
Primary education	0.76	0.43	0.75	0.43	0.005***
Secondary education	0.48	0.50	0.47	0.50	0.008***
Higher secondary	0.11	0.30	0.10	0.32	0.011***
Graduate	0.10	0.30	0.12	0.33	-0.022***
Diploma	0.01	0.09	0.010	0.10	-0.000***
<b><i>Region</i></b>					
Rural	0.10	0.49	0.90	0.51	-0.798***
Urban	0.05	0.49	0.95	0.51	-0.902***
<b><i>Household expenditure</i></b>					
Monthly consumption	4108.89	11986.86	3291.02	3791.87	817.86***
Monthly per capita expenditure	1348.8	5932.62	852.42	837.61	496.38***

When compared to households that do not get remittances, it appears that households that do receive remittances have a larger propensity to have female family heads and elderly family heads. Therefore, it appears that households that received remittances are more dependent on remittance income. It is also evident that the educational attainments of members of remittance-receiving households are significantly higher at all levels of schooling (e.g., primary, secondary, upper secondary, and technical degree or higher) than those of members of households that do not get remittances.

Therefore, the rate of remittances is anticipated to be greater for households with relatively higher levels of education. The table also indicates that households receiving remittances in rural West Bengal are more numerous than those in urban areas.

The number of remittance-receiving households is significantly lower than that of households without remittances in both rural and urban areas, and this regional difference is statistically significant. This study also demonstrates that remittance-receiving households had greater consumption expenditures and monthly per capita consumption expenditures than non-remittance-receiving households, and that the difference is statistically significant.

**Determinants of Remittances among Families:** While analyzing the determinants of remittances received by households in West Bengal, we considered independent variables categorized as economic factors, demographic characteristics, household education level, and geographical indicators. A Probit model was utilized to estimate the binary remittance influencing elements.

Here, we have categorized the household members based on their ages, which fall into four categories: AGE 6Y, AGE 7-18, AGE 19-60, and AGE > 60. We have evaluated three dummy variables in order to account for age group differences.

AGE 6Y shows whether the household has a kid younger than 6 years old; if the answer is affirmative, a value of 1 is assigned; otherwise, a value of 0 is assigned.

AGE 7-18, i.e., whether the household has children between the ages of 7 and 18; the value '1' is assigned if this characteristic exists; otherwise, its value is '0'. Again, the field 'AGE > 60' specifies whether the household has a person older than 60 years; its value is '1' if the member exists, and '0' otherwise. A female headed household (FHEADHH) is specified as a dummy variable with the value 1 if the household's head is female and '0' otherwise. Female headed. Household indicates that in the absence of a male earning member, the head of the family is a woman. The education level is divided into five categories: illiteracy (EDUILLIT), primary (EDUPRMY), secondary (EDUSECND), higher secondary (EDUHS), and graduate or diploma or above (EDUHS) (EDUGRDP).

### **Observable Outcomes of Probit Regression:**

**Factors Influencing the Receipt of Remittances** The coefficient of Probit Regression and its marginal effects (ME) are required to examine the determinants of household remittances. Let's begin with the favorable and statistically significant effects of home features,

demographic and socioeconomic determinants on remittance receipt. HHAGE, FHEADHH, AGE 6Y, AGE > 60Y, SECTOR, EDUSECND, EDUHS, and LANDPC all significantly explain the amount of remittances received.

Age of the household head (HHAGE) is one of the significant factors of remittance receipt, both in terms of significance level and marginal effects. The likelihood of receiving remittances increases with the age of the household's head. Female-headed families are more likely to receive remittances than male-headed families. The data indicate that female-headed households rely mostly on remittance income because remittances enhance the reservation pay of migrant family members left behind and encourage them to withdraw from the labor market (Khan and Valatheeswaran, 2016). We know that a worker's age approximates their work experience. As such, it provides some indicator of the individual's earning potential. In light of these findings, it is evident that an increase in the number of children younger than six years (AGE 6Y) and adult members older than sixty years (AGE > 60Y) in a family has a higher likelihood of receiving remittances than a family with active adult members between the ages of seven and sixty years. This study confirms the solely altruistic motivation of migrants sending remittances to households and demonstrates their genuine concern for their families.

### Remittances' Effect on Poverty:

Remittances have had a substantial effect on the prevalence of poverty and the poverty gap. In this study, we evaluated the incidence of poverty (Head Count Ratio or HCR) and the Poverty-Gap (PGP) among migrant households in West Bengal in 2007-08. Remittances have significantly contributed to the elimination of poverty in both rural and urban areas. In the rural area, remittances have decreased the HCR by four percentage points. Approximately 1.7 percentage points in the urban region.

Table 3: Impact of remittances on poverty and the disparity between urban and rural areas in West Bengal,

Impact	HCR			Poverty Gap (PGP)		
	With remittance	Without remittance	Percentage Change	With remittance	Without remittance	Percentage Change
Urban	20.5	22.2	1.7	4.4	6.7	2.3
Rural	46.2	50.2	4.0	10.2	14.4	4.2
Total	39.5	42.8	3.4	8.7	12.4	3.7

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had greater consumption expenditures and monthly per capita consumption expenditures than non-remittance-receiving households, and that the difference is statistically significant.

**Empirical Results of Probit Regression: Factors Influencing Remittance Receipt:** The coefficient of Probit Regression and its marginal effects (ME) are required to examine the determinants of household remittances. Let's begin with the favorable and statistically significant effects of home features, demographic and socioeconomic determinants on remittance receipt. HHAGE, FHEADHH, AGE 6Y, AGE > 60Y, SECTOR, EDUSECND, EDUHS, and LANDPC all significantly explain the amount of remittances received.

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FHEADHH is a dummy variable whose value is '1' if the head of the household is a woman and '0' otherwise. In the absence of a male breadwinner, a female-headed home consists of a female as the family's head. Male out-migrant family in which the female head of the family and her family are unable to maintain their household consumption expenditures, necessitating male out-migration.

Regarding the education level of household members, we have evaluated two dummy variables, EDUHS and EDUGRDP. EDUHS is a dummy variable that takes the value '1' if the member's education is up to High School and '0' otherwise. EDUGRDP is similarly specified as a dummy variable whose value is '1' if the member's education level is Graduate or Diploma and '0' otherwise. The level of education of a family is determined by the total number of years of schooling completed by its members. A household's ability to escape poverty is facilitated by the head of the household's or another member's access to wage or salaried occupations that need a higher degree of education. To determine the effect of regional characteristics on poverty, we evaluated two dummy variables: sector (SECTOR) and development status of the districts (LDDIST).

**Conclusion:** The research also reveals that features of the household, such as CAST and regional location (LDDIST), are substantially linked with POVT and POVTG. In other



words, the likelihood of experiencing poverty is considerable for households belonging to SC and ST communities and residing in comparatively less developed districts. The likelihood of a poverty gap also increases for households located in comparatively less developed districts and belonging to the SC or ST category. It is also obvious that households in rural areas are more likely to be impoverished. The size of households (HHSZ) is strongly correlated with the occurrence and severity of poverty, meaning that larger households are more likely to be impoverished. As the age of the household head (HHAGE) rises, the likelihood of impoverished households and the severity of poverty increase.

Lastly, it is obvious that homes headed by a woman are more likely to be poor, and that the poverty gap is also likely to be large in these households.

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