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Dynamic use of remittances and its benefit on rural migrant households: insights from rural West Bengal, India

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Abstract The present paper examines the significance of remittances by the male outmigrants on socio-economic development of the receipient households in a frequently drought affected Bankura district in the *Rarh* region of West Bengal State of India with particular emphasis on the varied impacts with respect to differential access to landholding or lack of it. As many as 185 out of a total of 756 households were randomly selected for collection of data with the help of a structured household schedule. Logistic regression model has been fitted to analyse the relation between the size of migrant remittances and important socio-economic determinants. The study revealed that the size of the remittance depends on nature and types of work undertaken by the migrants at the destination. Only a small proportion of the recipient migrant households utilized the remittances received by them for a single purpose though the majority used it for a multiple of purposes. Majority of the migrant households utilized the remittances for food consumption as well as to repay the loans taken by them before adopting migration as a strategy to improve their living. Outmigration for a short or longer period appears to be a successful strategy for these households to withstand chronic poverty suffered by the most marginalised segment while the somewhat better-off sections manages to further improve their living conditions with the help of remittances received.

Keywords Temporary migration · Remittances · Rural households · Economic change · India

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Introduction

Outmigration is universally acknowledged as an important coping strategy for the poor and marginalized sections to improve their living conditions and reduce their livelihood vulnerabilty in developing countries like India. Rural outmigration however has both economic as well as non-economic consequences. The economic development achieved through migrant remittances is the result of certain practices of human and physical resources (Sethi, 2007). The effect of out-migration can be positive or negative depending upon the type of economic activity and patterns of migration (Simmons, 1976). The

impact of migration on the area of out-migration, the area of in-migration and the migrants themselves are extremely varied (Khullar, 2004). However, regardless of these varied influences migration has been viewed as the most significant positive influence on the rural economy (Taylor & Martin, 2001). Temporary labour migration is a common feature of economic development, and this temporary or permanent migration is a routine part of agricultural activity (Mendola, 2012) in most developing economies. The present study explores the impacts of rural out-migration and the concomitant remittances, on the socio-economic development in the source regions.

Economic theories explain the phenomena with the help of two different perspectives on migration (Constant & Massey, 2002), namely the Neoclassical Economics (NE) and the New Economics of Labour Migration (NELM). The NE theory contends that migration is primarily governed by geographical differences in the supply and demand for labour, such as those between the labour-rich versus capital-rich countries. The basic tenet of this theory rests on wages (Kurekova, 2011; Mendola, 2012) and differential wage as the chief driving force behind migration. As per this theory highly skilled labourers move from labour-rich countries to capital-rich countries in order to maximise returns. Decision to migrate is essentially individual though government policies can influence the expected earnings at both the source and destination (Massey et al., 1993). The NELM theory on the other hand has come to challenge some of the assumptions and conclusions of neoclassical theory (Stark, 1991; Stark & Bloom, 1985). The NELM contends that the decision to migrate is primarily not individual, rather the result of the collective strategy of a family or household to maximize the income while minimizing the risks (Lauby & Stark, 1988; Stark & Levhari, 1982; Taylor, 1986). Given the contrasting implications of the two apparently different approaches to migration, the flow of migration would be greatly influenced by the manner of decision-whether it is individual or family made. As Bhattacharyya (1985) rightly observes, aggregate flow of migration is affected if migration decisions are predominantly family decisions. In rural India, as much as in West Bengal, where the institution of family continues to be important as an unit of decision making, the NELM theory appears to be more acceptable in migration analysis. The role of the family is even more important in the case of small and marginal landholding, and landless families who have to more frequently resort to migration as a coping strategy either on a long term or on a temporary basis. Constant and Massey's (2002) study shows that the households promote the migrants from its fold for shorter trips and return to their place of origin when they achieved their earning target. The rural males migrate seasonally to maximize their income on one hand and to minimize risks on the other.

Bankura district in West Bengal is selected for the present study due to higher propensity of seasonal and temporary migration witnessed in the area (Debnath, 2020; Debnath & Nayak, 2020; Debnath & Nayak, 2021a). The western part of this district is drought-prone and the rural folk from here usually migrate out in search of employment both within the state and to other parts of India often involving long distance movement. The families depend on the remittance made by the migrant members to counter financial hardship experienced by them or to improve their wellbeing. A greater proportion of the migrant households in the study area are found to directly depend on such remittances. Given this existential reality, it may be worthwhile to examine the dynamic use of the remittances received by the migrant households and its impact on the socio-economic conditions of the landless as well as the small and marginal landholding households from rural areas in the selected Bankura district of *Rarh* region. A major determinant of the impact on the wellbeing of the remittance receiving households and consequent socio-economic development in the source region is the size of such remittances sent by the migrants. The study explains socio-economic changes in the rural areas effected through outmigration and the ability of the outmigrant members to send remittances depending upon a host of factors such as the utilization of remittances, change in occupational status, number of working days, differential wage rate, investment pattern, savings, household assets accumulation etc.

Literature review

Migration remittances are considered as the prime linkage between migration and development at the source region. The impacts of remmitances on socio-economic developments of the receiving households

and its utilization pattern are rarely uniform as they are conditioned by a number of factors ranging from the amount remitted, size of the family, debts taken to meet urgent felt needs of the receiving families to overcome short or medium term financial needs etc.. Most however agree on the crucial role played by the migrants' remittances on the source regions. Studies on the impact of migration remittances on socio-economic development at the source region reveal the importance of the changes in expenditure and investment patterns of migrant households (Mendola, 2012). The types of remittance utilization by the receiving households are rarely uniform and tend to be context specific. In some cases remittance-receiving households have been found to spend less for consumption and invest more on goods, education and housing (Adams & Cuecuecha, 2010). Katz and Stark (1986), Stark (1991) argued that due to continuous receipt of remittances from the migrant member, household liquidity and credit constraints increased. Neverthess, remittances are essential components of the migration of Indian farming households (Panda, 2016). It may be however noted that migration per se does not automatically translate into wellbeing of the migrant households; it is the size of the remittances that determines the welfare of the receiving households (Cuong & Linh, 2018).

Economic migration has varied impacts on the sending households in the source region. Remittance is an important component of enhancing the standard of living of migrant households through increased local consumption and investment. Taylor and Lopez-Feldman (2010) pointed out that the consumption capacity of migrant households changed due to remittances. Remittances sent by the migrants are used for a variety of purposes and are conditioned by the needs and wants of the sending families belonging to different socio-economic strata. Three primary reasons for sending remittances by the migrants as noted by Cuong and Linh (2018) include repaying the debt, increasing household income as well as the consumption capacity of the households and getting some benefit in return (Cox, 1987).

However, there is no unanimity on the effects of remittances being always positive. Cuong and Linh (2018) in their study found remittances increased per capita income; per capita consumption; per capita expenditure and played significant role in reducing poverty. But they also concluded that the total impact of remittances on migrant households is largely indeterminate. However, majority of the studies find a positive impact of the remittances on migrant households at the source region (Simmons, 1976; Taylor & Martin, 2001; Adams & Cuecuecha, 2010; Acosta et al., 2007; Taylor & Lopez-Feldman, 2010) though there are equally compelling results of studies that reveal negative impacts of the remittances (Azam & Gubert, 2004; Jetly, 1987; Kiros & White, 2004; Yang, 2008). The present study, conducted in one of the most backward drought-prone regions of West Bengal, reveals that migration remittances constitute the main strength of the recipient households which boost their economic potency where the migrant households' spending pattern mostly focus on food, clothing and loan repayment. Remittances are one of the main income sources of the migrant households in the study area. Migration remittances do have a significant impact on the economically deprived landless, marginal and small landholding migrant households who are often left with no other choice but to resort to migration as a coping strategy in a region that suffers from frequent droughts and consequent unemployment.

Methods

The present research is designed to examine the size of migration remittances and its benefits on the rural households. A stratified sampling technique has been adopted to classify Bankura district into two broad areas, i.e. the drought-affected and the non-drought affected. As many as four community development blocks (sub-districts) have been purposively selected depending upon the extent of outmigration experienced (see Fig. 1). Two of these blocks are drought prone while the remaining two belong to the non-drought-prone area. Based on a pilot survey, sample villages were randomly selected for the purpose of field survey. Households from each of these villages were selected randomly based on their landholding size and were thus classified into three categories, i.e. the landless, the marginal (Less than 1 hectare) and the small landholding (1.0–2.0 hectares) households as per the definition adopted by Department of Agriculture, Government of India. Size of landholding is an essential indicator of socio-economic status of the rural households which is a significant influence on

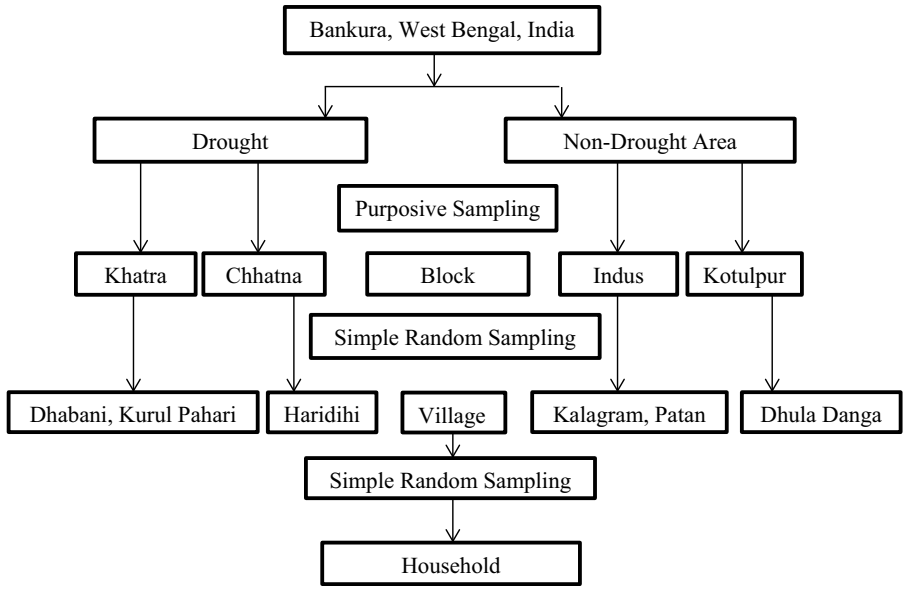


Fig. 1 Sample design of the present study, Bankura, West Bengal, India

the quality and quantity of rural outmigration in the study area. Besides, differential access to landholding is assumed to have significant bearing on the size of the remittances as also the pattern of its utilization by the receiving households.

Six villages i.e. Kurul Pahari, Dhabani, Haridihi, Dhula Danga, Patan, and Kalagram villages in Bankura district were selected for the present study (Fig. 2). Required information at the household level have been collected with the help of pre-designed schedule. Keeping the objectives in view, migrant households from each village were selected based on the size of the landholding of these households. The migrant households were identified (as per Keshri & Bhagat, 2013; Pradhan & Narayanan, 2019) if the household reported at least one of its member as a migrant at the time of the survey. Out of 756 households from all the six selected villages, 185 migrant households were selected randomly. The field survey was carried out from March 2018 to October 2019. The interview was carried out in the local language (Bengali) to elicit information about the migration remittances in all its dimensions.

Different socio-economic variables were taken into consideration which directly or indirectly influenced the size of migration-linked remittances. The logistic regression model was fitted to analyse the relation between the size of migrant remittances and socio-economic determinants. Variables like income level, number of working days, working category, social group, education level, marital status, destination region, types of family, size of households, landholding size etc. were considered as important influences on the remittance. All these independent variables are in categorical form.

The basic form of logistic regression is [Eq. (1)]:

$$P = \frac{1}{1 + e^{-z}} \tag{1}$$

The logistic regression may perform when numerator and denominator are multiplied by e^z. It can express as [Eq. (2)]:

$$P = \frac{\exp(z)}{1 + \exp(z)} \tag{2}$$

The logistic regression model was fitted to analyse the relation between the size of migrant remittances and socio-economic determinants. The model is explained as [Eq. (3)]:

$$Y = \beta o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \varepsilon \tag{3}$$

where Y = Dependent Variables (Migration remittances); β_0 = Constant; β_1 = Coefficient of variables; X_I = Independent Variables (X_1 category of work at

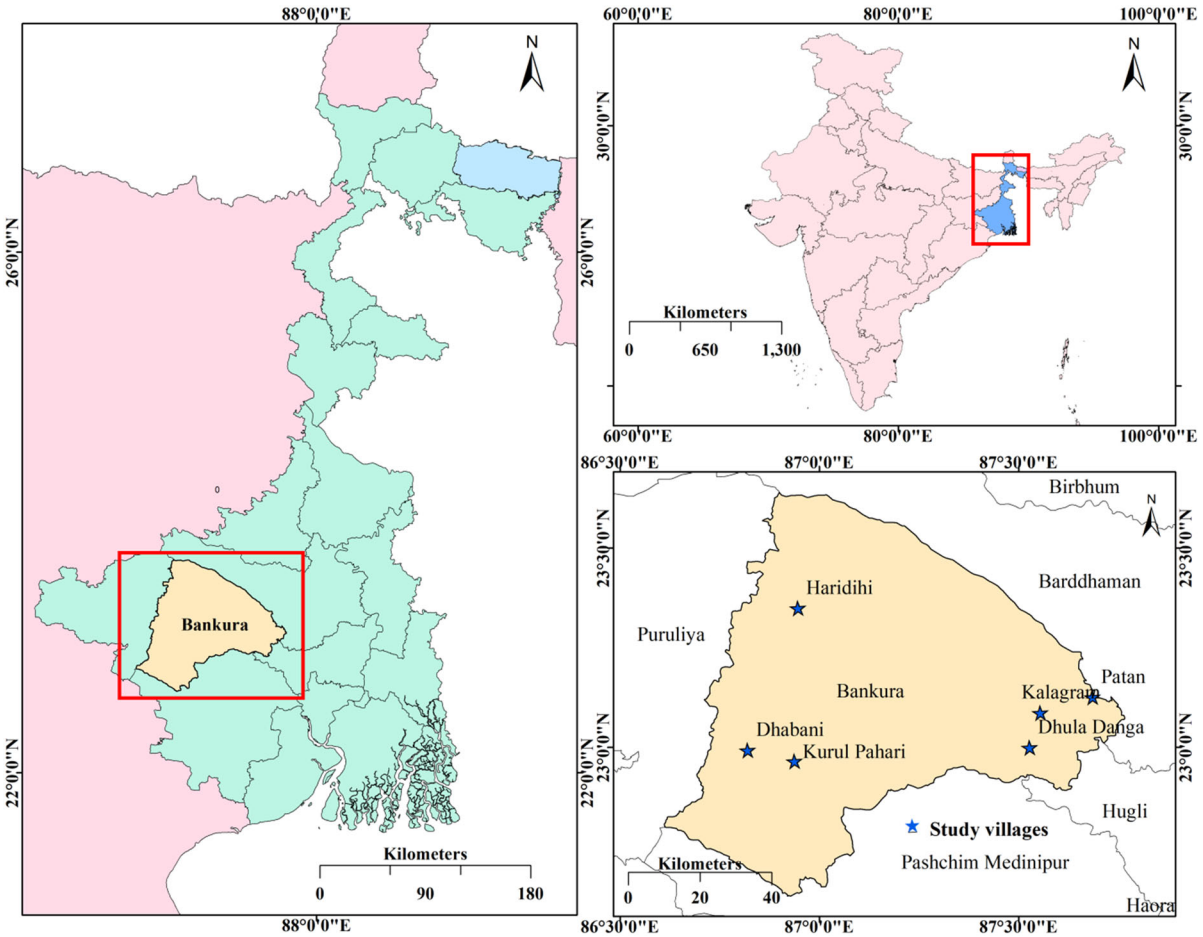


Fig. 2 Map of the study area, Bankura, West Bengal, India

destination; X_2 number of working days at destination; X_3 income level (monthly INR.); X_4 education level; X_5 destination place (rural or urban); X_6 marital status; X_7 types of family; X_8 size of households; X_9 landholding size; X_{10} social groups) and ε = Error Term.

Results and discussions

As has been mentioned earlier, Bankura district, situated between the Bengal Gangetic Plain and the Western Chhota-Nagpur Plateau of India is frequently drought prone (DDMP, 2016) experiencing mild to severe intensity of drought almost every year (Kar et al., 2012). Bankura district is chraracterised by infertile soil and suffers from lack of work availability (Debnath & Nayak, 2021b). The area, situated in the lower Gangetic Plain, is a typical example of increasing temperature, decreasing rainfall and frequent drought (Banik et al., 2002; Datta & Das, 2019; Rogaly, 1998) forcing a significant proportion of the rural people to move out to look for gainful employment elsewhere. Only half (50.20%) of the district is arable while 21.65 per cent area is under forest cover; 21.46 per cent of the area is not available for cultivation and 5.46 per cent is under current fallows. The district has 3 Sub-divisions consisting of 3830 Mouzas, 3577 inhabited villages in 22 Community Development Blocks. A large proportion (28.87%) of the households in the district live under extreme poverty and are officially classified as living below the poverty line (BPL). Further, the district has 3.19 per cent families which are houseless and a little less than half (46.12%) of the families reside in *kuchha* (The walls and/or roof made of un-burnt bricks, bamboos,

mud, grass, reeds, thatch, loosely packed stones, etc.) houses. At least one member from 14.32 per cent of the families frequently migrate as casual labourers. The district has high incidence of landlessness with 42.01 per cent households are bereft of access to any cultivable land while 36 per cent are marginal farmers, 14.28 per cent small farmers and 42.28 per cent are agricultural labourers. Only a small proportion of the workers (25.5%) are more regularly employed and are classified by the Census of India as the main workers who could avail more than 180 days of work in a year. Despite the harsh physical and agro-climatic condition prevailing in the district, the density of population in Bankura (523) though considerably lower than West Bengal (1028) is higher than the population density of India (382) (District Census Handbook Bankura, 2011).

The district as a whole is also one of the most economically backward regions in West Bengal as evident from the fact that it ranked 11 in Human Development Index (0.52) among the 17 districts in West Bengal. In addition, in terms of Income Index (0.26) the district is at the bottom ranking 16 among the 17 districts in the state (District Human Development Report, 2007). Agriculture is primarily rain-fed as the district lacks in irrigation facility. Farming activity is neglible in most of the year except for the monsoon paddy cultivation undertaken during the brief rainy months lasting for 3–4 months. Although seasonal and temporary migrations are commonly practiced by many rural households, the intensity increases during the drought years as also in the non-rainy months making it an important coping strategy for the survival (Gupta et al., 2011; Keshri & Bhagat, 2012; Raleigh et al., 2008). While the landless does resort to outmigration more than the other categories, due to indebtedness and pressure on common household consumption, the marginal and small farmers too are forced to migrate out from their native villages.

Migration pattern and destinations

It is common that the males outnumber females among the rural out-migrants in India as they enjoy greater freedom to move away from the village (Oberai & Singh, 1980). Males dominate in all spatial scales of rural outmigration in Bankura district—at the intra-district, inter-district, and inter-state level. The data shows that the inter-state out-migration stream has the largest share (60.41%) of the migrant males, followed by inter-district (33.88%) migration; Intra-district out-migration is the lowest (4.49%) revealing the dominance of long distance migration undertaken by the male out migrants. Incidence of long distance migration, mainly inter-state in nature, is more pronounced among the males from landless families. Short distance migration (within the district) is negligible for them. The pattern is more or less identical among the migrants from marginal and small landholding households too. Significantly however, the share of the inter-state migration stream decreases with a corresponding increase in the inter-district and intra-district migration among households with increasing access to land indicating greater preference for shorter distance migration among households with access to land. Inter-district out-migration (47.22%) is recorded highest among the small landholding households, followed by the marginal landholding households (41.79%). A little under 69 per cent of the male outmigrants from landless households migrate out to areas farther away from the place of their origin involving inter-state movement. The proportion of such migrants falls to 50.75 per cent among the marginal landholding households. Another important finding relates to urban location as the preferred destination of the male out-migrants from the selected villages irrespective of their landholding status. A little more than three-fourths (76.33%) of all the out-migrants had urban destination. Moreover, the destination cities were more or less specific for each of the selected villages indicating the importance of community network in selection of the destination. It was observed that male out-migration occured in a chain system. Initially some of the rural males migrate to a specific destination and send remittances to their native village attracting newer migrants to join them as the older migrants become the source of information and could help the new migrants find a place to stay and work. Majority of the males are therefore well informed before migrating to a specific destination (Table 1). At the inter-district level, the highest percentage of male migrants moved to Barddhaman and Kolkata districts. Barddhaman district received the highest male migrants from Haridihi and Patan village. Dhabani, Kurul Pahari, Dhula Danga, and Kalagram villages sent a major proportion of inter-district male migrants to Kolkata. It is noteworthy that Barddhaman district is relatively more developed in

Table 1 Regional patterns: Major migration destination regions, 2018–19 *Source: Household survey, 2018–2019*

Types of rural migration stream (%)	All HHs	Landless	Marginal	Small
Internal migration (%)				
a. Intra-district	4.49	1.94	05.97	5.56
b. Inter-district	33.88	27.18	41.79	47.22
c. Inter-state	60.41	68.93	50.75	47.22

b. Inter-district migration stream (%)

Place of origin	Place of destination (%)				
Villages	Kolkata	Barddhaman	West Mednipur	Birbhum	Others
Dhabani	100.00	0.00	0.00	0.00	0.00
Haridihi	0.00	75.00	12.50	0.00	12.50
Kurul Pahari	90.91	0.00	0.00	0.00	9.09
Dhula Danga	80.00	0.00	20.00	0.00	0.00
Kalagram	47.37	36.84	0.00	5.26	10.53

c. Inter-state migration stream (%)

Dhabani	Odisha (44.44)	Andhra Pradesh (16.67)	Karnataka (16.67)	Others (22.66)
Haridihi	Maharashtra (20.83)	Jharkhand (20.83)	Odisha (12.50)	Others (45.84)
Kurul Pahari	Andhra Pradesh (44.44)	Maharashtra (27.78)	Jharkhand (16.67)	Others (11.11)
Dhula Danga	Tamil Nadu (52.50)	Karnataka (37.50)	Kerala (5.00)	Others (5.00)
Kalagram	Gujarat (51.51)	Odisha (15.15)	Delhi (9.09)	Others (24.15)
Patan	Maharashtra (58.82)	Gujarat (11.76)	Kerala (11.76)	Others (17.66)

agriculture and industry, providing seasonal employment opportunities to migrants both in agricultural as well as in non-agricultural sector in industrial establishments like Asansol, Durgapur, Kulti, and also in mining activities located in the East *Rarh* plain (Debnath & Ray, 2019). The highly urbanized and industrialized Kolkata metropolitan city and its surrounding areas attract rural male migrants from various parts of the state to work in a variety of urban informal sectors.

The study examined the the type of works undertaken by the rural male out-migrants at their destinations classified as off-farm and non-farm economic activity (Table 2). Majority of the male out-migrants from Dhula Danga village are migrated to Karnataka where they found wage employment in the poultry farms. Likewise, large proportion of the rural males from Kalagram village migrated to Gujarat to engage in wage labour in pisciculture. Significant proportion of male out-migrants of Dhabani and Kurul Pahari village is engaged in construction work at the destination. Around 36.74 per cent of the male out-migrants is engaged in activities that demand some skills. Higher percentage of skilled workers joined industrial work (13.47%) while cotton factory absorbed 7.76 per cent of them. A little over 6 per cent of these migrant workforce provided services as artisans of various kind. A greater proportion of the male out-migrants from Patan village worked as artisan after migration whereas the male migrants from Dhabani village worked at the cotton factories at the destination after their migration.

Size of remittances

Remittances by the migrants depend on a host of factors including their ability to getting work at the destination, types of work engaged in, prevailing wage rate, the regularity of payment at the source region etc.. Moreover, the decision of the migrants to send

Table 2 Work activity of migrants after migration at destination region *Source: Household survey, 2018–2019*

Farm activity	Occupation status		Percentage	Number
Off-farm	Wage labour at the poultry farm		13.06	32
	Wage labour as Pisciculture		06.53	16
Non-farm	Unskilled worker	Construction labour	15.51	38
		Daily wage labour	02.86	07
	Skilled worker	Artisan	06.12	15
		Industrial worker	13.47	33
		Cotton factory	07.76	19
		Others[a]	09.39	23
	Private sectors[b]		15.51	38
	Others[c]		09.80	24
Total			100.0	245

[a]Persons who were engaged as a mason, motor mechanic, driver, electrician, sweet maker, goldsmith and painting etc.

[b]Persons who were engaged as company, firm and security guard etc.

[c]Persons who were engaged as a business, hotel, street food maker, cook, quarrying and trader etc.

remittances depends on the degree of attachment and the need of the migrant households (Kumar, 2004). Table 3 presents the data on the remittance received by the migrant households and reveals that an overwhelming majority (92.43%) of the migrant households in the selected villages of Bankura district received remittances in the year of survey. The proportion of households receiving remittances was higher (95.15%) among the landless compared to small landholder households (88.89%).

The size of the remittances however varied greatly. Table 3 shows that about 36.93 per cent of the male out-migrants sent remittances lesser than INR. 3150 per month while a slightly higher proportion (40%) could manage to send more, i.e. INR. 3150–5300 in the preceding 12 months from the date of interview. The extent of variation in the remittances by landholding size of the migrant households was striking. The size of remittances sent by a substantial 46.94 per cent of the male out-migrants from landless households was very low- only INR. 3150 or less per month compared to the migrants from the small landholding households where only 12.50 per cent sent similar amount as remittance. Nearly 35 per cent male outmigrants from small landholding households could manage to send much higher remittances of INR. 5300 or more. It is evident that that the small landholder male migrants could send higher remittances compared to their landless counterparts.

Table 3 Distribution of remittances received by migrant households *Source: Household survey, 2018–2019*

Remittances	All HHs	Landless	Marginal	Small
HHs received remittances (%)	92.43	93.90	92.21	88.46
Male out-migrants sent remittances (%)	93.88	95.15	94.34	88.89
Remittances (INR.) sent by migrant during the last 12 months (%)				
Very High (Above 9600)	4.78	0.00	6.00	15.63
High (7450–9600)	3.48	4.08	3.00	3.13
Moderate (5300–7450)	14.78	9.18	20.00	15.63
Low (3150–5300)	40.00	39.80	35.00	53.13
Very Low (Below 3150)	36.96	46.94	36.00	12.50
HHs received mean monthly remittances (INR.)	4439	3796	4700	5594
HHs received mean yearly remittances (INR.)	53,270	45,551	56,400	67,125

The study depicts that the mean monthly remittances sent by the male out-migrants at household level was INR. 4439 while it was much lower by the landless male out-migrants (INR. 3796) and marginally higher (INR. 4700) by the marginal landholding households. Male out-migrants from small landholder families sent the highest mean monthly remittances of INR. 5594 per month. The highest annual remittances of INR. 67,125 were sent by the male out-migrants from small landholding households followed by the migrants from marginal landholding (INR. 56,400) and landless (INR. 45,551) households respectively. Lower remittances from the landless migrants resulted from their employment in unskilled works yielding less wages on average.

Mode, regularity and kind of remittances

Table 4 shows that about half of the households received remittances through bank transfer while one fourth received in cash. A little over one-fourth (26.52%) of the total male out-migrants depend on the middlemen to send the remittances. The middlemen have a significant role in the rural outmigration process in the study area. They provide information about the destination, extend loan during scarcity period or before the migration, and act as a bridge between out-migrants and the left-behind members of the migrant households. Evidently, bulk of the iIlliterate and less educated landless migrants depended more on the middleman which is why a significant 37.76 per cent landless households received remittances through the middlemen. Majority of the marginal (50%) and small (53.13%) landholder migrants however sent remittances through bank transfer. In a majority of cases, migration remittances were received by parents (65.41%) followed by the spouse (26.49%) and son or daughter (3.24%) respectively. The result is more or less identical among all types of households.

It was found that the regularity of migration remittances depended on payment regularity at the destination. Greater proportion of small (69.44%) and marginal (52.83%) landholder households received regular remittances largely on account of their engagement in skilled jobs. On the contrary, 58.26 per cent of the landless migrant households received irregular and occasional remittances at the destination.

Table 4 Mode, regularity and kind of remittances
Source: Household survey, 2018–2019

Characteristics of Remittances	All HHs	Landless	Marginal	Small
Mode of transfer of remittances (%)				
Through Bank	43.91	34.69	50.00	53.13
Through Post Office	0.87	1.02	1.00	0.00
Through Middleman	26.52	37.76	19.00	15.63
By Cash	28.70	26.53	30.00	31.25
Remittances received by (%)				
Parents	65.41	69.51	59.74	69.23
Spouse	26.49	25.61	29.87	19.23
Son/Daughter	3.24	2.44	3.90	3.85
Others	4.86	2.44	6.49	7.69
The regularity of remittances received by HHs (%)				
Regular	48.57	36.89	52.83	69.44
Irregular	26.94	29.13	28.30	16.67
Occasional	18.37	29.13	13.21	2.78
Never	6.12	4.82	5.66	11.11
Kind of remittances received by HHs (%)				
Cash	97.39	98.98	97.00	83.33
Jewelries	4.35	3.06	3.00	11.11
Electronic	29.57	33.67	26.00	25.00
Furniture	4.35	4.08	3.00	8.33
Others	3.48	2.04	3.00	8.33

Two reasons were cited by the respondents for such irregularity in payment of wages. First, most unskilled landless migrant workers received wages on a daily basis and second, most of them depended on the middlemen to send the remittances.

The kind of remittances received by migrant households is of considerable significance. Almost all the migrant households received remittances in cash. Nearly one fourth of the migrant households (29.57%) received part of the remittances in kind as electronic gadgets such as a smartphone, music player, television, charging light etc. The study revealed the clear link between the size of remittance sent by male out-migrants and nature of work at the destination; between the mode of transfer and sectors of work and between the level of education of the male out-migrants and mode of transfer of remittances from the destination.

The study reveals high remittance by the male out-migrants who work in the private sectors (Table 5). About 35.89 per cent private sector workers and 37.50 per cent sent of those in other types of work sent good remittances. Only a negligible proportion of the unskilled (6.72%) and skilled (5.13%) migrant workers could save enough to send very high and high amount as remittances. Size of remittances depended on the nature and types of work at the destination. Educated and skilled migrant workers could send more remittances compared to the illiterate and unskilled worker.

A significant relationship is found between nature of work at the destination and the mode of sending migration remittances (Table 5). The large proportions of male out-migrants sent remittances through the bank who were the skilled workers. Those who got work with the help of middlemen and those who worked as unskilled labourers at the destination

Table 5 Relation among size of remittance, mode of transfer, education and working sector *Source: Household survey, 2018–2019*

Relation with remittances	Remarks
Size of remittances and sector of work	
Very High (> 9600)	Highest proportions of remittances send by those male out-migrants who work in the private sector and other workers
High (7450–9600)	The high proportion of remittances sends those male out-migrants who work in the private sector
Moderate (5300–7450)	The significant proportion of remittances also sends by the private worker and other workers
Low (3150–5300)	The highest proportion of skilled and unskilled worker (39.08%) sends a large percentage of small size of remittances
Very Low (< 3150)	Very low level of remittances sends by the male migrants who engage as unskilled (43.68%) labour at the destination region
Mode of transfer of remittances and sector of work	
By Bank	Those who work in the private sector (66.67%) and other activity (62.50%) usually send remittances through the bank
Through Middleman	Those who send remittances through a middleman (45.98%) are usually unskilled worker and have a low education level
By Cash	Migrants who send remittances by cash usually move a short distance and visit the native village regularly
Distance from the destination and mode of transfer	
By Bank	Migrants from long distance (inter-state) usually send remittances through the bank (70.30%)
By Cash	Migrants who send remittances from near distances usually send remittances as cash (46.97%)
Mode of transfer of remittances and Education	
By Bank	Those who have higher educational (12 years or more school) qualifications send more remittances through the bank (64.35%)
Through Middleman	Those who send remittances through middleman majority of them have a low education level
By Cash	There is no relation with remittance send as cash and education qualification

generally sent remittances by the middlemen. The proportion of the migrants who sent remittances through the middlemen was as high as 45.98 per cent among the unskilled male out-migrants. Migrants who visited their native places regularly and moved to relatively shorter distances for work, generally carried with them the remittances in cash. Distance between the place of origin and destination thus plays an important role in the mode of transfer of the remittances. Transfer through banks is a preferred mode with increased distance between the place of origin and the destination. Access to a bank account never created much of a problem as many sent remittances using relative or friend's bank account. Three fourths of all the migrants sent remittances through bank. Understandably, level of education plays an important role in sending remittances using bank transfer as a mode and this is validated in the present study too which shows more of the relatively better educated migrants preferred this mode to send the remittances.

Impact of remittances

As regards the impact of remittances on the receiving households and areas, available literatures generally point to recipient households spending such amounts on housing expenses such as food, clothing, education, health; or creating wealth through purchase of land and livestock, agricultural equipment or repayment of loan etc. (Siddiqui, 2001; Kumar, 2004; Economist Intelligence Unit, 2008). Adams and Cuecuecha's (2010) study revealed that remittance receiving households spend less on food consumption and invest more on goods, and on education and housing. Some of them use it mostly on house construction (Ndlovu & Tigere, 2018) or renovation of the existing houses while some others use it for agricultural production (Rozelle et al., 1999). One of the commonest utilization is also seen in education (Mendola, 2012). Significant proportion of the remittances is however spent on everyday household needs and more importantly on conspicuous consumption (Kumar, 2004). The present study found that the migrant households in the drought prone Bankura district of West Bengal utilized the remittances for a variety of needs. Though a few of the migrant households did spend their remittances only for a single purpose, the majority used it for multiple purposes with a priority accorded to food and loan repayment.

Improving household food security of the recipient migrant households, as evident from the responses from the households surveyed, appears to be the most important issue linked to remittances received. About 77.30 per cent of the migrant households spent major part of the remittances on daily needs of food consumption. This is more so among the landless segment (86.59%). Over three fourths (78%) of the landless households lived below the poverty line and majority of these households resorted to migration as a coping strategy in order to improve their food security through regular remittances. Access to land, however small it may be, certainly reduced the need to exclusively depend on remittances for food security as evident from the fact that a significantly lower proportion of the marginal (68.83%) and the small (65.38%) landholder households depended on migration remittances for daily food consumption. They produce rice from their own land which, though may not suffice for the whole year, make them relatively food secure for at least good part of the year except the years in which they suffer from crop losses. A substantial chunk of the marginal and small migrant landholding households therefore are able to spend remittances on other than food consumption i.e. on household investment, savings, assets accumulation etc. Incidence of indebtedness being very high among the migrant households, loan repayment is another important use of remittances by the recipient households (Bhagat et al., 2013; Murata, 2018; Siddiqui, 2001). Indebtedness among the migrant households is quite normal during the scarcity period for basic consumption requirement. Majority of the rural households (50.81%) as discussed earlier have outstanding loan taken from different sources. Overall, a significant proportion (35.14%) of the migrant households used parts of the remittances for loan repayment. It is the landless segment which suffers from a greater incidence of indebtedness, but only a smaller proportion is capable of loan repayment compared to the marginal and small landholding households. Significantly 45.12 per cent landless households took loan before migration though only 28.05 per cent of them used remittances for loan repayments revealing persisting indebtedness among them despite migration. This also indicates their inability to repay loans on account of lower size of remittances received. On the

other hand, much greater proportion of 40.26 per cent marginal and 42.31 per cent small landholding households used it for loan repayment. In general and more so among the landless, the remittances received by the migrant households was insufficient to repay the loan though the remittances could reduce the pressure of indebtedness of migrant households to a great extent.

Livestock rearing is one of the main income sources of the migrant households and constitutes one of the most important coping mechanisms to withstand food scarcity situation. Chicken, cow, bullock, buffalo and goat are important livestock reared by the migrant households in the study area. Over three fourths (75.14%) of the migrant households have livestock assets. Considering its importance as an alternative livelihood for the poor migrant families, considerable importance is attached to increase the livestock wealth if the remittances received permits it. This is why, only 11.35 per cent of the migrant households could spend their migration remittances to purchase livestock. The urge to invest in livestock appears to be more among the landless as evident from the fact that 15.85 per cent of the landless migrant households invested their remittances in purchase of livestock compared to marginal (7.79%) and small (7.69%) landholding migrant households. During the scarcity period landless households depend more on the livestock assets which they sell to obtain their basic necessities. Livestock sell during the scarcity is a common survival strategy of migrant households in the study area.

Many researchers find remittances to have positive effects on migrant households which increase household income, savings, assets accumulation and poverty reduction (Anupama et al., 2014). There is evidence of such accumulation by the rural migrant households in *Rarh* region increasing their ability to indulge in conspicuous consumption, investment in house, purchase of agricultural assets, livestock etc. About 61 per cent migrant households purchased different households assets after fulfilling the essential requirement of food and house renovation. Marginal and small landholder migrant households purchased more household assets compared to their landless couterparts. The landless respondents spent a greater proportion of the remittances only on food and house renovation. Migration remittances, as has been reported by many studies (Rutherford, 2000; Toxopeus & Lensink, 2008; Ratha et al., 2010; Anupama et al., 2014) increased domestic saving of recipient households. About one half of the migrant households in the slected villages accumulated financial assets in the form of savings so crucial to buy food and household assets during the scarcity period in the study area. Majority of the landless households however used their remittances on daily food consumption and hence could save little. On the other hand, small landholding and landless households could afford higher savings.

Occupational changes at the destination are common to migrants as the demand for work is of different types particularly if it is urban location. Occupational status of the migrants also depends on their working skill, education, experience etc. The study found that most of the unskilled migrants from the selected villages joined different unskilled activity in low wage category while their skilled counterparts attracted higher wage. About 60 per cent of the male migrants were non-worker or were unemployed before migration who worked in different destinations in diverse occupations and were in a position to send remittances. Evidently outmigration has a direct positive impact on increasing number of working days and the income level of the rural male migrants in the study area. On an average, the number of working days for the male out-migrants increased from a mere 62 days to as high as 269 days in a year consequent to their migration with an enhanced capacity to generate sufficient income to translate into remittances. It has been found that about 57.14 per cent male migrants were non-workers before resorting to migration. The income earned by these sections improved significantly considering their non-worker status before migrating out. The data collected from migrant households reveal that a great majority of the male out-migrants (77.96%) earned monthly income of more than INR. 5001 after migration. The average annual income of male migrants increased from INR. 12,430 to INR. 85,765 after migration playing an important role on the size of remittances.

Determinants of the size of remittances

Different socio-economic variables exercise influences on the size of migration remittances in *Rarh* region of West Bengal. The model adopted for this study reveals that factors like income level, number of

Table 6 Logistic regression estimates of the size of migration remittances of seasonal migrants

Variable	Coefficient	S.E	Sig
Work category	160.278	72.342	0.028**
The number of working days	301.284	120.13	0.013**
Income level (Monthly INR.)	1630.792	115.221	0***
Education level	− 39.404	90.449	0.663
Destination (Rural or urban)	59.714	175.177	0.734
Marital status	269.043	139.68	0.055*
Types of family	− 188.994	188.844	0.318
Size of households	332.123	176.052	0.06**
Landholding size	206.331	114.734	0.073*
Caste group	− 73.406	78.861	0.353
Statistics			
N	246		
Constant	− 426.133		

***, ** And * represents statistical significance at the 1%, 5% and 10% level of confidence

working days, working categories, marital status, size of households and landholding status of the migrant households have a statistically significant relationship with the size of migration remittances in the study area (Table 6).

Working status of the migrants has a direct relationship with the size of the remittances. A statistically significant positive relationship at 5 per cent level of confidence is observed between the work category at the destination of the migrant and the size of the migration remittance. The result indicates that skilled migrants can send more remittances compared to the unskilled migrants. There is a statistically significant relationship at 5 per cent level of confidence between the number of working days and the size of migration remittances. Income level is an important parameter determining the size of migration remittances. This is corroborated from a statistically significant positive relationship at 1 per cent level of confidence between the income level of the migrant and size of the remittance. Similarly marital status, size of the households and landholding size have positive relationship with the size of migration linked remittances. Other variables do not have much effect on the size of migration remittances in the study area.

Conclusion

Seasonal and other temporary migration in India constitutes an important characteristic of the rural labourforce, particularly from among the socio-economically deprived, landless and land-poor segments which depends on this strategy to overcome financial hardship faced by them. The compulsion to move out to other regions in search of employment is even more conspicuous among the deprived sections living in drought prone areas and areas that have low agricultural potential. Bankura district in the *Rarh* region of West Bengal State of India is one such area which was considered important to study the impact of outmigration with a particular emphasis on the nature, type and size of the remittances received by the migrant households classified by their access to landholding and caste. The study clearly revealed the importance of differential access to land as a powerful force determining the remittance size and its utilisation by the sending households. Understandably, bulk of the migrants from the most marginalised, poverty stricken and landless households consisted of the unskilled labourers earning far less in their destination and sending smaller size of remittances which were utilized to meet their basic needs of food and for repayment of loans. The study also found the new economics of labour migration accurately explaining the migration behaviour in the area that experienced outmigration driven more by distress than by a desire to take advantage of the inter-regional differential in wages. This conclusion however has to be viewed with some measure of caution as the study finds that the migrants from the landed sections and from privileged castes too moved out to improve their standard of living by sending larger returns utilized for diverse purposes. The landless was the least capable of

utilising the remittances for saving and investment while households with greater access to land invested more on savings and other non-food conspicuous consumption. The study however revealed that migration as a strategy adopted by the migrant families, irrespective of their access to land or caste status has been successful in meeting the challenge of chronic poverty and/or improving living standards of these households. Out-migration as the study finds, involves a greater proportion of the poor, lower caste, and less educated and may have both long and short term implications for poverty reduction. While this may be true to a great extent, many issues still remain to be answered in further studies to be undertaken. Some of these issues which need urgent scholarly attention include the impact of the remittances on improvement of health and educational needs of the migrant households, especially of the landless and the land-poor segments; income inequalities between migrant and non-migrant households with similar economic base; policies to reduce unbanked remittance methods; changing gender relations in view of the fact that outmigration is largely male selective and the actual recipient of the remittances in the source village households.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

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