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Pattern, reasons and determinants of circular mobility and migration: A case study of Murshidabad District, West Bengal

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Abstract

Poor individuals in developing nations like India have experienced various sorts of mobility throughout their lives due to the lack of secure livelihoods. The central idea of this paper is to systematically study this section of the population who regularly move out for alternative sources of livelihoods. Further, it examines intertwined factors associated with place of origin and destination that shape the different forms of geographical labour mobility. This study is based on a primary survey of 450 households (individual and household information) spreading over 25 villages of Murshidabad district (West Bengal, India). Statistical techniques like bivariate analysis (ratio and percentage distribution), binary logistic regression and multiple responses have been used in this study. The result found that petty business and employment-related reasons (economic push) are the most important factors, followed by indebtedness of the respondents at the place of origin. In circular mobility, the pulls of destination are as follows: local demand of particular products and high profit margin; while for migration, major pull-employment throughout the year and high wage rates attract. In the present study, circular mobility is facilitated by geographical proximity and well-developed transport and communication networks. For the present form of mobility, the determining role of socio-economic and demographic factors is observed at the individual, household and community levels.

Keywords

Migration, circular mobility, livelihood, distress, life course, origin, SDGs, circular mobility, social network, West Bengal

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Introduction

Geographic redistribution of the labour force in whatever form is one of the alternatives left for the rural poor people living in the developing countries to earn means of livelihoods. Migration is a significant coping strategy when there is no stable source of income. Movement of human beings does not necessarily always occur in the permanent or seasonal form but also in cyclical form with smaller span and multiple times throughout the year. In India, neither Census of India nor National Sample Survey Organisation-NSSO) collect or disseminate the actual magnitude of cyclical/circular mobility beyond migration. The field studies on India found that rural residents living in poverty use migration or a large portion of its circular movement or circular mobility as a key component of their alternative livelihood choices. (Deshingkar & Farrington 2009; Kumar & Bhagat, 2018; Bhagat, 2018). Extensive village-level studies from major states of India also documented an increase in transient, seasonal movements (Deshingkar and Anderson 2004; Deshingkar 2006b; Mishra, 2016). Over five lakh people (parents and children) migrate seasonally each year from the surrounding districts and neighbouring state of Jharkhand (formerly south Bihar) to the rice-producing region of Bardhhaman, West Bengal (Rogaly et al. 2001). The process and outcome of migration in most of the developing countries is the trade-off between 'push' factors at the place of origin and 'pull' factors of the destination (Bhagat, 2018; Bork, 2019). Rafique (2003) in this field study from Murshidabad district (West Bengal) found landless and below marginal landholding people seasonally migrate for transplanting/harvesting rice. The new economics of labour migration (NELM) in developing countries reported that migration is the collective decision of the households rather than individuals (Saha et al. 2018). So, in this context, analysis of labour mobility both across physical space (horizontal mobility) and across a set of jobs (vertical mobility) in developing countries like India is important for policy initiation. In the present study, two kinds of mobility are discussed: circular mobility and migration.

'Circular mobility' is defined as the process in which individuals from a particular household move out for occupation-related reasons and stay for at least two weeks to less than six months at the destination before they return home. This involves more than one outward movement and return in a year. 'Migration' in this study is defined as the process in which 'any person from a particular household who had stayed away from his present place of origin for more than six months for occupation-related reasons' during the last two years, provided he/she is still migrating at the time of the survey (Ansary, 2018).

Objectives

With this background, this paper is an attempt to achieve the following:

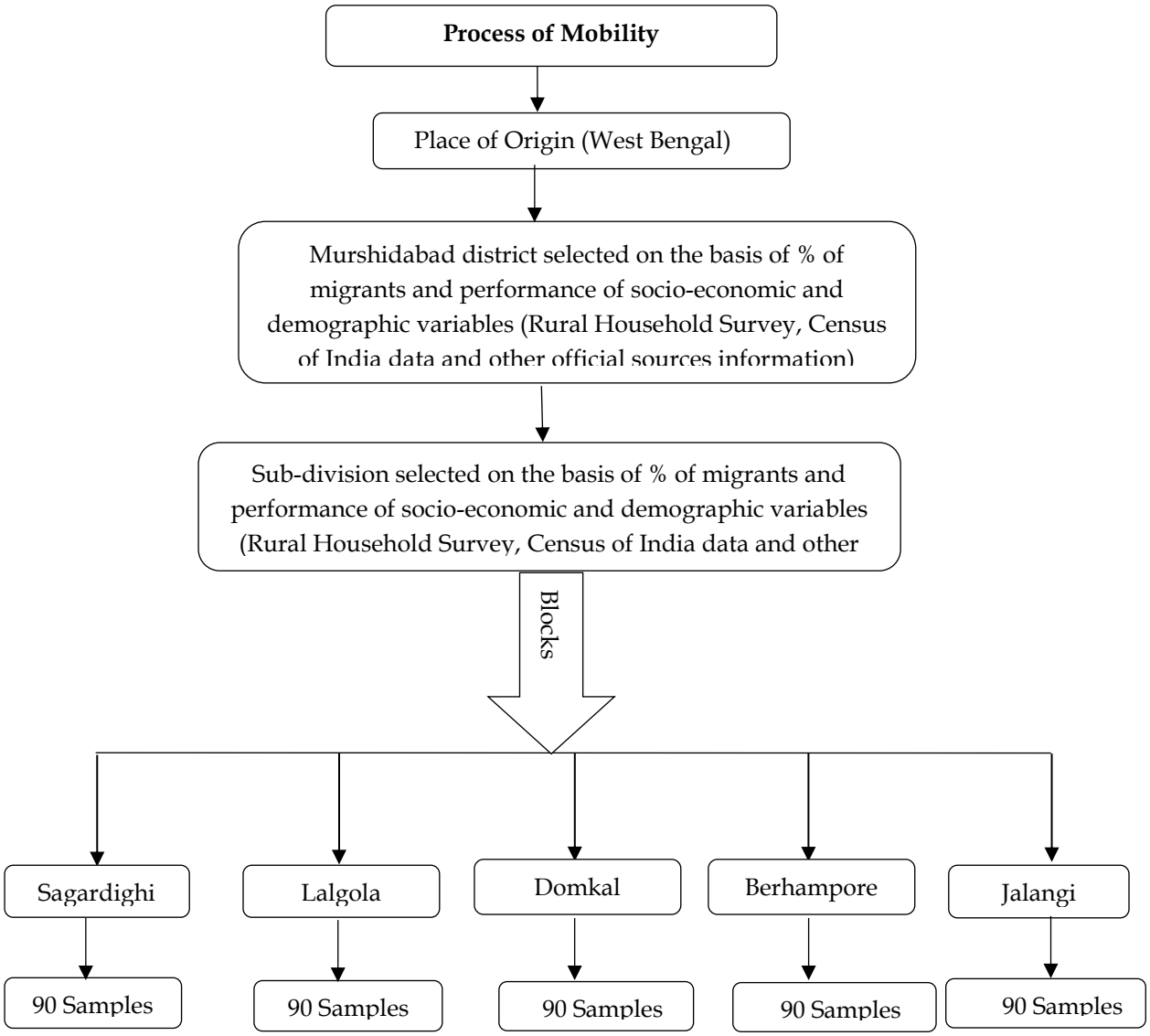
a). Study the geographical labour mobility (i.e. circular mobility and migration) from Murshidabad district, West Bengal (India).

b). To analyse the reasons and determinants of circular mobility and migration between the place of origin and destinations in the study population.

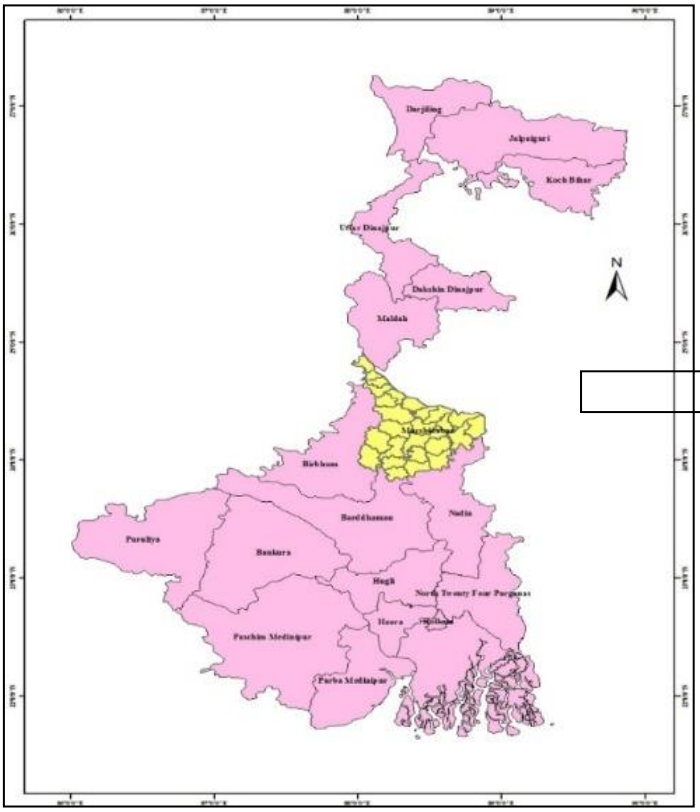
Data source and methodology

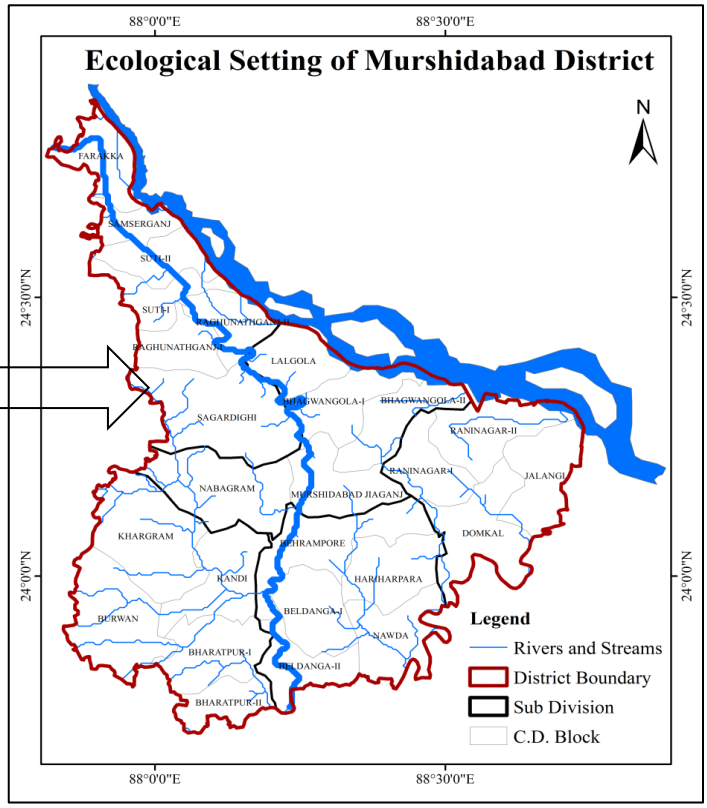
There is severe data drought pertaining to migration and mobility in India. Thus, this study is entirely based on primary data collected from the rural areas of Murshidabad district in West Bengal, using scheduled questionnaire. By using stratified random sampling technique, 450 samples (circular mobility - 280 respondents and migrants - 170 respondents) were collected extending over 5 blocks (from each block, 90 samples).

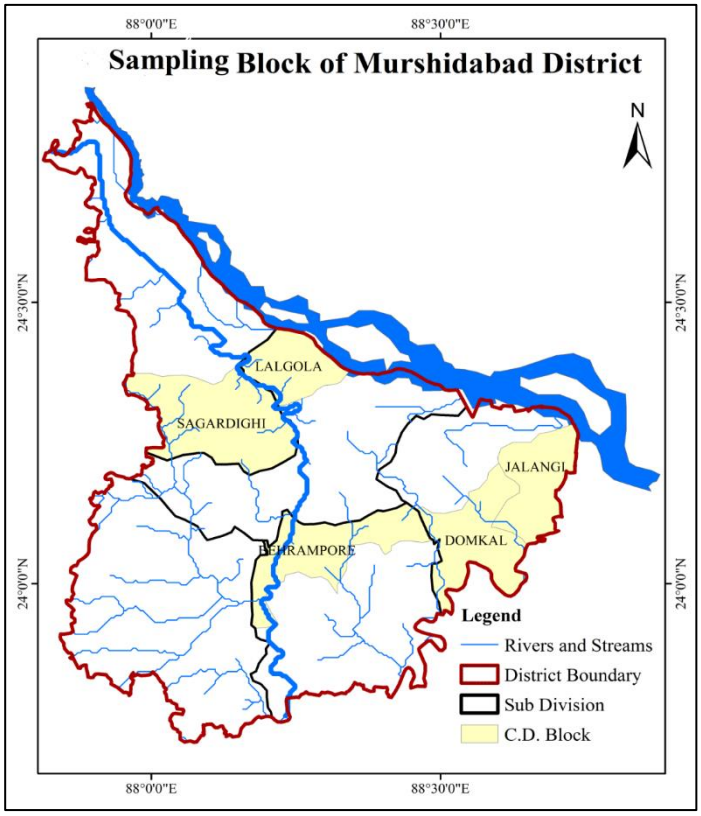
Snapshot of sample selection and distribution



Administrative location of the Study Area







Statistical tools and techniques

Simple statistical techniques like descriptive statistics have been used to meet the objectives of the study. Further, this study dichotomised types of movements based on the duration into cycles of mobility coded as (1) and migration coded as (0). Since the outcome or dependent variable is dummy, the Binary Logistic Regression model is used to estimate the likelihood of cycles of mobility over migration. Independent or predictor variables are selected based on the conceptual framework developed from the existing literature. A set of demographic and socio-economic variables are used as independent or explanatory factors.

Model specification is represented as follows,

$$Logit\ (p) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \beta_{13} X_{13} + \beta_{14} X_{14} + E$$

p = Dependent variable (cycles of mobility - 1 and migration - 0).

ß0 = Constant; ß1 = Coefficient of variable X1; E = Error Term

Geographical Labour Mobility from Murshidabad District

The issue of geographical labour mobility (i.e., migration) from Murshidabad district to other districts within the state boundaries has a long history, but migration to states far away is a recent phenomenon. The male population dominates migration from Murshidabad district (interdistrict and inter-state) for employment-related reasons (Rogaly et al. 2002; Rafique et al. 2006; Mishra & Sarkar, 2018). The secondary source of data (Census of India 2001) reported in terms of movement within the state boundary that the Hugli district received 7.18 thousand male out-migrants from Murshidabad district. It is followed by Bardhhaman (5.37 thousand), North 24 Parganas (5.3 thousand) and Nadia (4.8 thousand). Regarding inter-state out-migration from Murshidabad district, the most favourable destination is Jharkhand, which has a common border with the district. The second-most favourable destination place is Delhi (capital city of India), where the volume of migrants is approximately 4.24 thousand. The district of Mumbai (suburban) and Mumbai received 1.59 thousand migrants from Murshidabad, out of which, 325 are female migrants. Analyses of primary survey data of the selected villages of Murshidabad district (West Bengal, India) found more than half of the respondents float within the state boundary (51%) to earn livelihoods other than their place of origin (figure-1). Rest of the 49 percent is moving out of the state. Interestingly, among the inter-state respondents, states far away attracted more people (34%) than the neighbouring states (14.7 %). Further, analysis of selection of destination states by two different types of mobility patterns presents fascinating findings. The respondents are more likely to practice of circular mobility within the state boundary or hardly to the neighbouring states or states that have a common border with West Bengal. Kolkata (West Bengal) is still a more favourable destination to the respondents opting for circular mobility, where they were mostly engage in building and construction works (i.e., mason and helpers). The second-most conducive destination state for respondents engaged in circular mobility is Bihar. In Bihar, most of the respondents are involved in petty business and move around in districts like Araria, Katihar, and Purnia. Other neighbouring states like Odisha and Jharkhand are the third and fourth favourable destinations for respondents opting for circular mobility, respectively. In both, the states' most favourable districts are Deogarh Balasore, Jajpur, Mayurbhunj and Jharsuguda. Only few respondents in circular mobility reported destinations located far away (Kerala, Tamil

Nadu, Andhra Pradesh and Gujarat). This indicates distance plays a decisive role in determining whether people from the study area opt for circular mobility over migration.

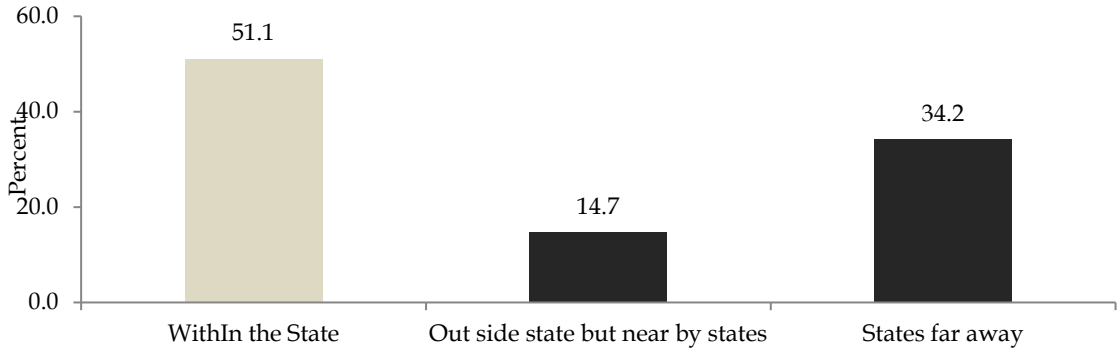


Figure 1 Distribution of respondents by destination

Source: Computed from the field survey data, 2016

Further analysis found 'states far away', which accounted for 34.2% of all mobility, and included long distances as well as a long spell of time outside the state boundary. The most favourable destination for the migrants from the study area is Kerala. In Kerala, the most desirable destination districts are Aluva and Ernakulam, where most of the respondents from Murshidabad migrate. The second-most choice-able destination is Surat in Gujarat, where most of the respondents are engaged in house painting and tiles-fitting work. There was a great demand for this kind of job in Surat and other regions of India because of expert labourers from Murshidabad who did this specific task. The migrants from Murshidabad district also favour southern states like Tamil Nadu (Chennai) and Karnataka (Bengaluru). The neighbouring states (Odisha, Jharkhand and Bihar) are economically less vibrant and have thus, pulled fewer migrants (4.5%) from the study area. In these states, the most favourable destination districts are Ranchi (Jharkhand), Jharsuguda (Odisha) and Patna (Bihar).

Pattern and Reasons for Migration

Individual's age plays an important role in the migration process. The propensity of male out-migration for work reaches its zenith in the working age. Thus, the young age population migrates in search of jobs or better employment by taking risk independently (Pattanik, 2009; Lusome and Bhagat, 2006). This study also found the decisive role of age of the respondents for the development of a particularly unique form of mobility from the study area. In the present form of mobility process, movement begins slowly from 18 years onwards, then accelerates up to the age group of 20-39 years and finally slows down from 40-44 years onwards as it approaches a limit. Out of every ten respondents, seven are in the age group of 20-39 years. The data reveals that 29.4 percent of the migrant respondents belong to the age group of 25-29 years, while only 20 percent of those in cycles of mobility belong to the same age (figure-2). Thus, the age group of 25-29 years serves as the dividing line between young working age and late young working-age among those who regularly migrate from Murshidabad. Although the propensity of these two types of movement declines at a late age, respondents who opt for cycles of mobility dominate at later ages.

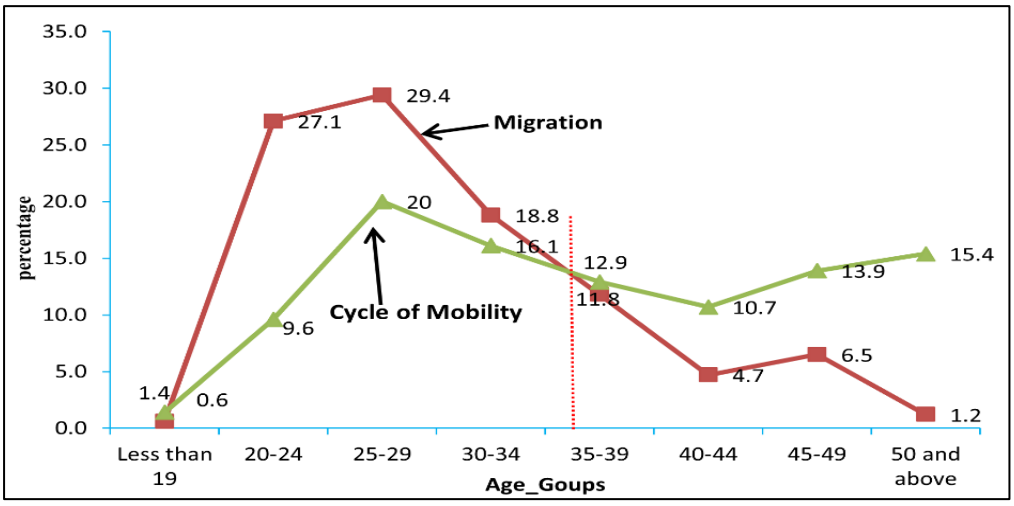


Figure 2 The Age Profile of the Respondent

Source: Computed from field survey data, 2016

Further, the median age of the respondents opting for migration is 28 years with standard deviation of 7.43 years. The coefficient of variation (CV) in the age distribution among the migrants is 25.4 percent, which indicates the precision of the estimation. On the other hand, the median age among the respondents in cycles of mobility is 35 years with standard deviation of 10.5 years. The coefficient of variation (CV) in the age distribution among the respondents in cycles of mobility is 28.9 percent, which indicates the precision of the estimation. The result of Chi-square test concluded that there appears to be a strong relationship between age and migration and the cycle of mobility in the study population and the result is statistically significant.

It emerges from the informal discussion with the respondents that many of them do not migrate due to age burden, which they used to do previously. Instead, they adopt cycles of mobility for an alternative source of livelihood due to age burden, family attachments or social bonds or to look after agricultural and allied work at their home. Thus, an individual's age decides whether they move out for short or long distance or short duration or semi-permanently or permanently or not at all. People at an older age develop a strong family attachment that prevents them from moving out or absenting for longer spell of time from their household activities. In this study, only male migrants who move out from the households for work-related reasons are considered.

The reasons associated with the place of origin and the place of destination act differently. During the field survey, respondents are asked to define specific reasons that pushed them from their place of origin and specific reason that attracts them to select one destination over another. Multiple responses analysis (MRA) approaches were employed in this section because the respondents cited multiple reasons for their current relocation from the study area and the destination they chose.

Table 1 Push factors at the place of origin

Push	Circular mobility	Migration
Lack of market, less profit margin and high competition	112.9	2.9
Less number of workdays and low wage rate	14.0	48.8
In search of employment/better employment	12.9	77.6
Decaying of Traditional craftsmanship	12.0	45.2
Landlessness	12.9	8.2

Source: Computed from the field survey data, 2016

Table-1 is prepared by using MRA technique. Since most of the respondents cited more than one reason for their present form of mobility, the total number of responses are 1320. Thus, on average, one respondent cited nearly three reasons for their present form of mobility from the study area. Those who are in circular mobility reported business-related push while migrant respondents mentioned search of employment or better employment and low wage rate as the actual push for their present form of mobility. Respondents opting for circular mobility cited petty business related reasons for their present form of mobility, accounting for around 113 percent of all responses. Employment-related reasons accounted for 29 percent. Although circular mobility is overwhelmingly dominated by petty businessmen, many of the respondents in circular mobility work as construction labourers; so, a considerable share of employment-related reasons is observed (Bhagat, 2018). Landlessness as a reason for circular mobility accounted for around 13 percent of all the responses. Migrant respondents reported employment-related reasons as the dominant factor influencing their decision at the place of origin, accounting for more than 126 percent. Among these, migration in search of employment/better employment accounted for about 78 percent. About 49 percent of the respondents cited low wage rate and seasonality of work at the place of origin as reasons for migration. It emerged that decline of traditional craftsmanship at the place of origin accounted for more than 45 percent of the responses. Lastly, more than 8 percent of all the responses reported landlessness as one of the pushing reasons operating at the place of origin. Even though landlessness is one of the primary causes of migration among rural residents in impoverished areas in India, relatively few respondents cited this as the primary driver of their current mode of mobility.

An analysis of the pull of destinations of all the respondents is presented in Table-2. Many respondents cited more than one reason for the selection of a particular destination (total responses are 792). It has been observed from Table-2 that those who are in circular mobility and engaged in petty business reported local demand of the products acting as a pulling force, accounting for about 69 percent of all the responses. The profit margin related to a particular petty trade accounted for 41 percent of all responses for the selection of a particular destination. The next most important reason is cultural affiliation and geographic proximity, accounting for about 32 percent of all responses. Due to nearness to home and homesickness, attachment with family in a later age, migrants sometimes either pull back or even halt to move out from a particular situation (Wolpert, 1970; Ritchey, 1976; Reja and Das, 2016). About 43 percent of responses in circular mobility reported high wage rate/wage differences. Since many respondents in circular mobility are engaged in building and construction; so, pull of the destination for regular income from employment throughout the year, accounted for more than 44 percent.

Table 2 Pull factors at the destination

Reasons	Circular mobility	Migration
Local demand for the products	68.9	1.4
Profit margin high in the business	41.4	0.9
Employment throughout the year and regular income	44.2	74.5
High wage rate/ Wage differences	42.8	70.1
Cultural affiliation and geographic proximity	31.8	5.1
Others	1.1	8.8

Source: Computed from the field survey data, 2016

However, the majority of migrant respondents work in the building and construction industry, and they reported that high wage rates and wage disparities, employment throughout the year, and regular income drew them to certain locations. Many respondents were drawn from research by employment alternatives that were accessible and lower likelihood of seasonality of work in a certain location. Of all responses, 74.5 percent are attributed to the allure of regular income and year-round employment. The second-most dominant pull factor is high wage rate/wage differences, accounting for more than 70 percent. Several studies (Sjaastad, 1962; Harris and Todaro, 1970; Oberai and Bilsbarrow, 1984; Reja, 2016) indicated that higher wage rate at the destination and wage difference between origin and destination place pull the rural migrant labourers. Most of the migrants from the study area move out to states in southern and western India (i.e. Kerala, Tamil Nadu, Maharashtra and Gujarat), where average wage for unskilled labour has increased from Rs. 150 to Rs. 450 (Zachariah and Rajan, 2011). About 9 percent of migrants reported other factors for the selection of a particular destination over another.

Determinants of Circular Mobility and Migration

Theories of migration have given several explanations for why people migrate from rural areas to cities. In this section, the binary logistic model is used to find out likelihoods and explain the determining factors of circular mobility and migration from Murshidabad district. Model-1 presents results from the estimation of binary logistic regression of each independent variable.

To interpret the overall model for the goodness of fit, likelihood ratio test and omnibus test were applied. Omnibus tests of model coefficients found that many predictors are highly significant. To interpret the model after taking into account other variables in the model, the odds of being respondents in cycles of mobility is 1.647. Thus, the odds of being respondents in cycles of mobility are 64 percent greater than migrants. The result shows that entering variables reduces the -2Loglikelihood by 200.206, which is distributed as chi-squared with 26 degrees of freedom (df). The results are tabulated in Table 3.

Table 3 Omnibus Tests of Model Coefficients

		Chi-square	**df**	**Sig.**
Step 1	Step	200.206	26	.000
	Block	200.206	26	.000
	Model	200.206	26	.000

To summarise the model, 'pseudo R2' estimates indicate that approximately 36 percent or 49 percent of the variance in respondents in Murshidabad district, whether they opt for cycles of mobility or migration, can be predicted from the linear combination of all variables. However, the Cox and Snell R2 (36 percent) is usually an underestimate. The Nagelkerke R square is estimated at 49 percent, indicating that some demographic and socioeconomic variables are useful in predicting factors associated with place of origin for cycles of mobility from Murshidabad district.

The decision between circular mobility or migration is modelled by considering the above-mentioned sets of independent variables as they operate in the place of origin. To interpret and describe the relationship between the dependent and explanatory variables in the model, the value of odd ratio (OR) is used, which is also called as likelihood of occurring of a particular event over non-occurrence of the same.

In the model, at individual level, the age of the respondents is categorised into 24-34 years, 35-44 years and more than 45 years, whereas the age group less than 24 years is defined as the reference category. The result indicates that the likelihood of circular mobility of the age group of 35-44 years is 26 percent higher than those who are 24 years or less and the result is statistically significant. Similarly, the odds of opting for circular mobility is 1.40 times greater in the age group of more than 45 years than the reference category and the result is statistically significant. An interesting fact is observed from the model that with the increasing age of the respondents, the likelihood of circular mobility increases. Further, the result of the model indicates significant role and relationship of general level of education on the odds/likelihoods of circular mobility. Since both categories of respondents are moving out for lower-end heavy manual labour-intensive occupations (petty business and building construction work), the variations in level of education is minimal. Number of years of mobility experiences of the respondents, i.e. previous migration experience and the likelihoods of circular mobility is 1.06 times higher among respondents with mobility experience of 5-9 years than the reference category. In the occupation categories with reference respondents who worked as building and construction labourers as their previous jobs, likelihoods of circular mobility is 1.6 times higher among agricultural labourers. However, the result is statistically insignificant. Migration is often linked to debt cycles that push households or any members to migrate (Deshingkar, 2003).

Further, in demographic factors, at the households' level, large 'family size' plays an important role for the likelihood of circular mobility. It can be inferred from the result that the likelihood of respondents choosing circular mobility is 1.44 times greater than the family size of 2-3 and the result is statistically insignificant. In terms of religion as an explanatory variable in the model, there exists a relationship between circular mobility and migration. In this study, the likelihood of indebtedness is low among the respondents in circular mobility. In terms of land possession of the households, it is observed that the likelihood of land possession among the respondents in circular mobility is high when compared with the migrants and the result is statistically significant (table-4). The likelihood of circular mobility with a higher number of dependents (young, old and unemployed) also emerged from the model. With reference to no dependent family members, the likelihood of circular mobility is 1.97 times higher with dependent members (one or more), which is also statistically

significant. In the model, the odds of respondents in circular mobility who have daughter/sister of marriageable age is 1.35 greater than those with no daughter of marriageable age (reference) and the result is statistically highly significant.

Table 4 Model-I Determinants of circular mobility and migration

Independent Variables	Categories	OR
Current age of the respondents	Less than 24 (R)	
	25-34	0.107**
	35-44	1.259*
	More than 45	1.404*
Education level of respondents	Not literate (R)	
	Up to primary (till class V)	0.556
	Up to secondary and above	0.379
Family size	2 to 3 (R)	
	4 to 5	0.786
	6 and more	1.441*
Religion	Hindu (R)	
	Muslim	1.810***
Social Group	Other than OBC (R)	
	Other Backward Class (OBC)	3.965***
Number of dependent (young + old+ unemployed)	No dependent(R)	
	One and more dependent	1.975*
Number of children pursuing higher education	No children pursuing higher education(R)	
	One and more children pursuing higher education	0.714
No. of daughters/sister at marriageable age	No(R)	
	Daughter/sister at marriageable age	1.350***
Liabilities or Debt	No(R)	
	Yes	0.486
Land possessed as on date of survey	No(R)	
	Yes	1.191*
Social Network	Own Self(R)	
	Co-villagers and Neighbour	0.998
	Relatives	1.409**
Total number of years in mobility	Less than 4 years	
	4 to 9 Years	1.069
	10 years and more	1.094
Previous migration experiences	New Respondents(R)	
	Respondents with previously migration history	1.469**
	Respondents with parents migration history	0.647
Occupation before mobility	Building and Construction Labourers (R)	
	Agricultural labourer	1.606
	Petty Businessman	0.574
	Studies	0.900

*Note: Dependent variables 'circular mobility coded (1) and migration (0). (R) = Reference Category *** Result is significant at 1% level ** result is significant at 5% level and * result is significant at 10% level. Number of observations 450 (circular mobility-280 and migration-170).*

The analysis demonstrates that, at the community level, the most important source of social network among the respondents is relatives. From the present model, it can be inferred that among the respondents in circular mobility, odds of using relatives for the selection of destinations is 1.40 times higher than moving out independently (reference), which is statistically significant at 5 percent level. Further, the likelihoods of opting for circular mobility is 80 percent higher among Muslim community than those from Hindu community, which is also highly significant statistically. In terms of social status of the respondents, the result of the model indicates that the odds (probability) of respondents choosing circular mobility is 3.97 times higher among non-OBC respondents than Other Backward Class, which is statistically highly significant.

Discussion and Conclusion

Adaptations of neo-liberal policy and declining opportunities in the rural areas have made agriculture less or non-profitable for small peasants (Fatima, 2019). Subsequently, it has given a push to the movement of rural folk working as agricultural daily wage labourers from the farm to non-farm activities (Khasnabis 2008). In the study area, the majority of respondents before migration directly depended on agricultural and allied activities for their livelihood, where they commonly faced seasonality of income and low wage rate. On the other hand, to meet household's consumption-expenditure, they moved out for diversified occupations instead of being stuck as agricultural wage labourers. It is seen that with the passage of time, the movements which used to be intra-state, gradually shifted to inter-state. The economic push is one of the most important reasons operating at the place of origin for the present form of mobility. In the economic push, petty business and employment-related reasons are the most important push factors followed by indebtedness (Borhade, 2016). In the compared group, migrants reported employment and wage rate related reasons as the principal push factor, while in circular mobility, petty business and indebtedness are the major push factors operating at the place of origin. The analysis of pull factors indicates those who are in circular mobility reported local demand for the products and high profit margin in business are the major pull, facilitated by distance, and transport & communication system. On the other hand, those who are migrating reported employment throughout the year, high wage rate and regular payments as the pull factors for migration. This study examined the determining role of socio-economic and demographic factors. Age of the target groups, years of migration experience and occupation before migration are the important determinants to decide type of mobility selected by respondents. At the household level, the family size, number of dependents, and number of daughters/sisters at marriageable age are also important determinants. Likelihood of cycles of mobility among Muslim community, Other Backward Classes and respondents is high compared to other groups. This study concludes that life cycles of the respondents play an important role. In different stages of life, social attachment with family increases, which may ultimately affect their decision of the temporal length of stay in the destination. Lastly, this study concludes that people moving out in the absence of secured means of livelihoods is an on-going long-term economic strategy adopted in the rural areas of Murshidabad district (West Bengal).

Based on the findings, the study suggests that a large-scale data agency in India may either conduct separate surveys or include additional questions to capture the various

types of migration and mobility, including cyclical mobility, and fill the data void to frame an effective policy. The Murshidabad district administration may adopt special initiatives to revamp traditional and world-famous crafts (silk, copper-brass, bidi and conch), in which people were engaged. Further, the state government as well as central government may promote small-scale agro-based (mango) start-up industries to make the district economy resilient.

Large-scale data agencies in India (i.e., Census of India and National Sample Survey or Demographic and Health Survey) should conduct either a separate survey or included queries in their questionnaire that capture cyclical mobility. Most of the surveys exclude a major chunk of circular or cycles of mobility respondents because of pre-decided definitions of migrants.

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References

Ansary, R. (2018). Cycles of mobility and Migration for Livelihoods: A case study of Murshidabad District, West Bengal, "Unpublished doctoral dissertation". Jawaharlal Nehru University.

Bhagat, R. B. (2018). Development impacts of migration and urbanisation. *Economic and political weekly, 53(48),* 15-19.

Borhade, A. (2016). Internal labour migration in India: Emerging needs of comprehensive national migration policy. Internal migration in contemporary India, 291-336.

Ansary, R., & Rath, K. C. (2021). Labour out-migration and covid-19 pandemic in India: a case study of Murshidabad district of West Bengal. *Migr Lett, 18(3),* 319-330.

Mishra, D. K. (2016). Seasonal migration from Odisha: A view from the field. Internal migration in contemporary India, 263-290.

Deshingkar, P. (2004, November). Improved livelihoods in improved watersheds: Can migration be mitigated?. In International Workshop on Watershed Management Challenges, New Delhi, India, organized by the Indian Council of Agricultural Research, International Water Management Institute, and International Crops Research Institute for the Semi-arid Tropics (pp. 3-4).

Deshingkar, P., & Anderson, E. (2004). People on the move: New policy challenges for increasingly mobile populations.

Deshingkar, P. (2006). Internal migration, poverty and development in Asia: Including the excluded.

Deshingkar, P. & John Farrington. (2009). Circular mobility and Multi-Locational Livelihood Strategies in Rural India. Oxford University Press.

Driscoll, P., Lecky, F., & Crosby, M. (2000). An introduction to everyday statistics—1. *Emergency Medicine Journal, 17(3),* 205-211.

Elliott, A. C., & Woodward, W. A. (2007). Statistical analysis quick reference guidebook: With SPSS examples. Sage.

Fatima, N. (2019). Impact of Neo-Liberal Policies over Employment and Development of Agricultural Workers in India. *NIU Journal of Humanities, 4(3),* 47-53.

Gill, S. S. (1998). Migration of labour in India. *The Indian Journal of Labour Economics, 41(4),* 617-624.

Babu, A. K. (2022). To stay put or migrate: Dynamics of migration in a village in Jharkhand, India. Transitions: *Journal of Transient Migration, 6(1-2),* 43-59.

Lusome, R., & Bhagat, R. (2006, June). Trends and patterns of internal migration in India, 1971-2001. In Annual conference of Indian Association for the Study of Population (IASP) during (Vol. 7, p. 9).

Ansary, R., & Rath, K. C. (2021). Labour out-migration and covid-19 pandemic in India: a

case study of Murshidabad district of West Bengal. *Migr Lett, 18(3),* 319-330.

Mukherjee, Soumi & K. C. Das. (2018). Regional disparity and youth migration in India with special focus on the EAG states. In S. Irudaya Rajan and P. Sivakumar (Eds.), Youth Migration in Emerging India: Trends, Challenges and Opportunities, Orient Blackswan, New Delhi, India.

Oberai, A. S. (1984). Theoretical perspectives on migration. Migration surveys in low income countries: Guidelines for survey and questionnaire design.

Pattanaik, B. K. (2009). Young migrant construction workers in the unorganised urban sector. *South Asia Research, 29(1),* 19-40.

Rajan, S. I. (2016). Factors associated with long-distance labour migration: a study on Bengali construction workers in Kerala Md. SELIM REJA AND BHASWATI DAS. In India Migration Report 2016 (pp. 321-334). Routledge India.

Rafique, A. (2003). Floods, poverty and seasonal migration. *Economic and Political Weekly,* 943-945.

Rogaly, B. (1998). Workers on the move: Seasonal migration and changing social relations in rural India. *Gender & Development, 6(1),* 21-29.

Rogaly, B., Biswas, J., Coppard, D., Rafique, A., Rana, K., & Sengupta, A. (2001). Seasonal migration, social change and migrants' rights: Lessons from West Bengal. *Economic and political weekly,* 4547-4559.

Saha, S., Goswami, R., & Paul, S. K. (2018). Recursive male out-migration and the consequences at source: A systematic review with special reference to the left-behind women. *Space and Culture, India, 5(3),* 30-53.

Vadean, F., & Piracha, M. (2010). Chapter 20 Circular Migration or Permanent Return: What Determines Different Forms of Migration?. In Migration and culture (pp. 467-495). Emerald Group Publishing Limited.

Walker, J.R. (2017). Internal Migration. The New Palgrave Dictionary of Economics and Law, Palgrave Macmillan.

Wolpert, J. (1970). Behavioural Aspect of the Decision to Migrate. *Proceedings of the Regional Science Association, 15*, 159-72.

Zachariah, K. C., & Rajan, S. I. (2015). From Kerala to Kerala via the Gulf: emigration experiences of return emigrants. In India Migration Report 2015 (pp. 269-280). Routledge India.