

VOLUME AND STATUS OF AGRICULTURAL LABOURERS' MIGRATION IN BIDAR DISTRICT, KARNATAKA

ABSTRACT:

The study was carried out in the Bidar district of Kalyana Karnataka where a people's migration is big. Three talukas were chosen based on the highest labour force from the district. In specific, they were Bidar, Bhalki and Basavakalyan. In random selection, four villages from each taluka were selected. The primary data was taken via the personal interview process from a total of 240 samples randomly from every taluka for the experiment, with 80 samples. The gravity model results revealed that the rate of migration and volume of migration decreases as the distance of to the destination increases. A logistic regression model was fitted for Bidar district migration results for three talukas viz. Basavakalyan, Bhalki and Bidar. The results displayed that with the odd ratios more than unit, per capita land holding was negatively significant, so we can interpret that lower per capita land holding caused more migration. The other features viz., family size, with unit or less than unit value for odd ratio, it was positively significant for some villages and negative for others. The positive significance displayed that the migration was more affected when the family size was high, the other factor was education, the model disclosed that educates migrate more than illiterates do due to underemployment. Income including migrants' income (IMI) had a positive influence and income excluding migrants' income (EMI) had a negative influence on migration. Which tells us that for having a high income for a family, any member of the family should migrate. Both Wilcoxon's signed rank and t-tests displayed that for better income and life-style of a people they should migrate because the migrated people situation is upgraded in this study.

KEY WORDS Keywords: Volume of migration, Status of migration, agricultural labours migration and Bidar.

INTRODUCTION:

Migration study is a unique demographic branch. Its multidisciplinary nature has engrossed the attention of researchers from distinguished disciplines. These studies in the field were categorized based on sharing of ideas in a variety of scientific disciplines such as anthropological, economic, geographical, psychological, sociological, cultural, etc. (Greenwood *et al.*, 1991). Movement of an individual or a family from their home to another city, state, or country for a job, shelter or some other reasons is called migration. These individuals are called as-migrants. This migration may be from rural to urban, rural to rural, urban to urban, foreign migration, etc. Rural to urban areas migration is the most common migration and has amplified in past few years in India and everywhere across the world (Bilsborrow *et al.*, 1987). Such, migration alters the population structure and size of both urban and rural areas. Most of the migrants are not

qualified or educated, and usually work on a daily basis (workers paid for their services at the end of each day). The daily wages do not enough for the betterment and survival of their families and to meet their basic needs. Hence, they were facing a multitude of problems related to food, sanitation, hygiene, a proper place for living, etc (Donald and Mandlaket al., 1995).

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Among the several reasons causing migration conflicts, violence, drought, and natural calamities are the main core causes of migration and forced displacement (Mensah-Bbonsu et al., 2000). Many migrants were forced to move because of socio-economic factors, poverty, landlessness, food insecurity, lack of employment opportunities, limited access to social protection, natural resource diminution, and the adverse impacts of environmental deprivation and climate change health hazards to make an-influence over the movement of people. Thus, migration streams are determined via a multifaceted collaboration of economic, social, environmental, and demographic factors. In the Indian background, the analysis of internal migration seems more challenging and complex than anywhere else because of insufficiency of accessible data or uneven dissemination of land or natural resources but also owed to the diversity of social, economic, cultural, and etymological groups and sub-groups within the groups that occurs within and between districts and states of India (Singh and Singhet al., 2011).

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In India, agriculture is the major source of employment (about 50 %) and contributes ing to about 15 per-cent percent of the national GDP. (Brigitte and Micharlet al., 2007). Economic factors in India govern the cycle of migration from rural to urban areas. About 70 per-cent percent of farmers and their associated agricultural activities afford their livelihoods. Population overcrowding within the agriculture sector and hidden unemployment are very serious issues of inthe region (Munshiet al. and Rosenzweig, 2016). Recurrent droughts, non-remunerative prices for farm produce, lack of agricultural inputs, and dearth of appropriate irrigation facilities are the features responsible for the rural people migration to the leading urban sectors (Channa veeret al., 2011).

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The magnitude of agricultural workers migration has been attracted to policymakers' attention by liberalization and they are hunting for ways to end such migration. It is therefore important to research the effect of micro-level liberalization on farm workers, on-their employment chances, work and living conditions, and trends (Mishra Deepak-mishra, 2010). This issue has a direct effect on systemic changes both in migration areas of origin and destination. Although there can be no comparison of straight statistics on the rural-urban migration of farm

workers in India, the substantial growth in the urban population is clearly understood. From 27.81 per cent for 2001 to 31.16 per cent in 2011 the urban population increased (Paraganiha *et al.*, 2009). The cause was, in accumulation to the natural increase of city populations, the net migration of rural workers from weak agricultural economics (Tondon and Singh, 2007). Industries positioned in the urban areas require a steady supply of labour, which induces migration from the attached villages (Priya and Deshingkar *et al.* and Farrington, 2008).

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Migration status in Karnataka

Karnataka stands fourth position in the urbanization degree after Maharashtra, Gujarat and Tamil Nadu. The population currently in Karnataka amounts to 61.1 million of whom 37.5 million inhabitants live in rural areas, while 23.5 million in towns and cities (Shoba-Jain, 2010). Karnataka Urbanization grew from 33.99 per cent in 2001 to 38.57 per cent in 2011, compared with 66.01 per cent in rural areas declined to 61.43 per cent. According to the 2011 census, Bidar district has a population of 1,703,300 with 287th ranking in India (out of a total of 640). Bidar district accounts for 2.84 per cent of the total area and houses 2.78 per cent of the whole population in the state. Its population growth rate over the decade 2001-2011 was 13.16 per cent (Ministry of Home Affairs ANONYMOUS, 2011).

The per capita land availability is very less so agriculture itself is not providing a reliable source of income, especially in this era of globalization because of the high cost of cultivation, scarcity of irrigation water, stagnation of productivity in agriculture, prices fluctuation of agricultural products and exploitation by middlemen (Depoo, 2008). These factors converted agriculture into the non-profitable sector of employment. In such distressed conditions, rural labourers and farmers are compelled to move from villages to urban areas and cities in search of the betterment of their livelihood. Thus, the current study was conducted in Bidar district: to know the volume and status of agricultural labourers' migration in Bidar district (Priya Deshingkar, 2006).

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MATERIALS AND METHODS:

Bidar district was designated for the study because it is located in a region of Kalyana Karnataka and from where a people's migration is big (Barkhet *et al.*, 2007). Three Talukas were

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chosen based on the ~~highest-largest~~ labour force from the district. In specific, they were Bidar, Bhalki, and Basavakalyan. In random selection four villages from each Taluka. The primary data were ~~was~~ taken via the personal interview process to determine the study objectives. A total of 240 samples were selected at random from every Taluka for the experiment, with 80 samples. Further, the Gravity model (Lewer and Van Den Berge~~et al.~~, 2008) was used to predict the volume of the migration between the origin and the destination place. Through ~~which this~~ we could forecast the volume of migration for the future days.

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$$MI_{ij} = (p_i p_j / d_{ij}^2) * k$$

Where,

- MI_{ij} is the volume of migration between the centers i and j
- P_i and P_j are population size of the two centers,
- d_{ij} is the distance between them and
- k is a constant.

~~Logistic~~ A logistic regression model was used to examine the factors influencing the migration, the logistic model with, the most likely variables was fitted. The logit model postulates that P, the probability of migration is a function of an index variable Z, summarizing a set of the explanatory variables. In fact, Z is equal to the logarithm of the odd ratio, (i.e.) ratio of the probability of migration to the probability of non-migration and it can be estimated as a linear function of explanatory variables (X_k).

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This can be expressed as $P = 1 / (1 + e^{-Z})$, which represents the cumulative logistic distribution.

$$\ln(P/1-P) = Z = F(X_1, X_2, X_3, \dots, X_k)$$

Once this equation is estimated, factors influencing migration can be ascertained. The significance of estimates was tested through Wald's test.

List 1: Specification of the variables used in the Logistic regression model:

Variables	Definition/code
Dependent variable (Y)	Y=1, if Migrant Y=0, if Non-migrant
Land holding	Ac/person
Family size	In Numbers
Income (Including Migrants income (IMI), Excluding Migrants income (EMI))	In Rs.
Educational status	1 = illiterate, 2 = primary education, 3 = high school, 4 = above matriculation

Migration status: Wilcoxon's matched-pairs signed rank test

This is used to examine the situations of migrants before and after migration, which is a non-parametric statistical hypothesis test used to compare two related samples, matched samples, or repeated measurements on a single sample to assess whether their population mean ranks differ (i.e., it is a paired difference test). It can be used as an alternative to the paired Student's t-test (also known as "t-test for matched pairs" or "t-test for dependent samples") when the distribution of the difference between two samples means cannot be assumed to be normally distributed.

$$z = \frac{T - \mu_T}{\sigma_T} \sim SND(0, 1) \text{ refer to the text above ???}$$

RESULTS AND DISCUSSION:

1. Gravity model: Gravity model was applied to estimate the amount of migration between the migrants' place of origin and destination. Table 1 reveals how much population is forecasted for migrate in the future. Migration volume would be determined by destination size. Destination distance increases as migration volume decreases. Mostly people migrate to urban cities like Bengaluru, Gulbarga, Hyderabad and Pune (Hoddinott, [J.](#) 1994).

Migration was determined by the appealing force among destination and place of origin and also by the cost of moving from one location to another. The labor migration gravity model (Table 1) indicated that the attractive forces among origin and destination locations depended on labor income differences in both locations (Lewer [and Van Den Berg, et al.](#) 2008). The size of the population also mattered more to the location of the source and more persons were likely to migrate. The gravity model displayed that the volume of migration had a descending trend as the distance between destination and place of origin increased. People moved largely to nearby cities or industrial areas in ~~the~~ search of ~~the~~ work. More the destination residents people migrate highly. ~~Gravity~~ The gravity model was used to forecast ~~the~~ volume of the migration (Rekha *et al.*, 2010).

2. Logistic regression model fitting

Using the logistic regression model, factors inducing agricultural labour migration have been established. The identified factors were land ownership, number of family members, family net income (IMI and EMI), and education. The logit model estimates ~~are~~ presented in ~~T~~able 2 to

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5. ~~Odd~~The odd ratio of point estimation of factors influencing migration ~~was~~functioned ~~out~~to provide a more precise explanation. The odd ratio could be well-defined as the ratios of migrant probability to non-migrant probability (Faustino and ProençaFaustino *et al.*, 2011).

Separate models were fitted to three talukas of Bidar district using, data related to 240 households. The influence of land holding in the four villages of Basavakalyan taluka viz., Ghotal, Kitta, Morkhandi, and Narayanpur was not statistically significant (Table 2). The migration was negatively affected by land holdings. In other words, the greater the per capita land holding, the lesser the chances of moving labour from that region. Lesser than unit value for Ghotal (0.957), Kitta (0.950), Morkhandi (0.686), and Narayanpur (0.841) villages odd ratios do not support labor migration as they had the smaller land holding.

Table 1: Volume of migration among the place of origin and destination by Gravity model

Origin	Destination	Population at origin	Distance	Predicted Volume of Migration
Ghotal	Bengaluru	4100	741	78
	Gulbarga	4100	98	284
	Hyderabad	4100	209	797
	Pune	4100	360	123
Kitta	Bengaluru	3500	741	67
	Gulbarga	3500	98	243
	Hyderabad	3500	209	680
	Pune	3500	360	105
Morkhandi	Bengaluru	5100	723	103
	Gulbarga	5100	98	354
	Hyderabad	5100	209	991
	Pune	5100	360	153
Narayanpur	Bengaluru	9152	723	184
	Gulbarga	9152	98	635
	Hyderabad	9152	209	1779
	Pune	9152	360	275
Bhatambra	Gulbarga	8000	114	410
	Bengaluru	8000	780	138
	Hyderabad	8000	160	2654
	Pune	8000	380	216
Halipurga	Bengaluru	1300	765	23
	Delhi	1300	1560	1
	Gulbarga	1300	110	72
	Hyderabad	1300	150	491
	Pune	1300	350	41
Khurabkhelgi	Raichur	1300	240	7
	Bengaluru	2550	723	51
	Gulbarga	2550	100	170
	Pune	2550	360	77
Nagraal	Bengaluru	829	718	17
	Gulbarga	829	110	46
	Pune	829	360	25

Chitta	Bengaluru	5500	723	111
	Gulbarga	5500	100	366
	Pune	5500	360	165
Hippalgaon	Bengaluru	1400	718	29
	Gulbarga	1400	110	77
	Pune	1400	360	42
Kamathana	Bengaluru	11100	765	199
	Delhi	11100	1560	8
	Gulbarga	11100	110	611
	Hyderabad	11100	150	4189
	Pune	11100	350	353
	Raichur	11100	240	56
Solpur	Gulbarga	1200	114	61
	Bengaluru	1200	780	21
	Hyderabad	1200	160	398
	Pune	1200	380	32

The family size had a positive influence on the migration of labour in all four villages. In comparison with Morkhandi (1.089) and Narayanpur (1.089), the greater ~~the~~ odd ratio in Ghotal (2.185) and Kitta (2.185) proposed that the family's effect on migration was greater in Ghotal and Kitta than in Morkhandi and Narayanpur.

Logistic regression outcomes also indicated that literacy has a positive impact on migration in villages Ghotal (0.296) and Kitta (0.296) and ~~a~~ negative effect in villages Morkhandi (-0.599) and Narayanpur (-0.599). The probable reasons ~~of for~~ literate migration in Ghotal and Kitta villages were in search of better occupation and in other villages people ~~have~~ migrated because of unemployment in the villages even when they are illiterates. ~~Odd-An~~ oddratio greater than ~~the~~ unit value in the villages like Ghotal and Kitta indicates that the odd ratio for migration rises with an increase in educational level. Income (IMI) had a positive effect and income (EMI) had ~~a~~ negative impact on all four villages: Ghotal, Kitta, Morkhandi, and Narayanpur, ~~this~~ denotes that when the individual had the greater income in the village, they were likely to migrate.

When the logit regression was fitted for Basavakalyan taluka, it was noticed that ~~the~~ coefficient for land holding was negative for all the villages but, had no significant influence. While income (IMI) had ~~the~~ ~~a~~ positive influence and income (EMI) had ~~a~~ negative influence on migration in all the four villages, who migrated and got better wages there. With respect to education, it had ~~a~~ negative impact on migration in Morkhandi and Narayanpur, whereas Ghotal

| and Kitta had [a](#) positive effect. Therefore, literates in search of getting suitable jobs have migrated.

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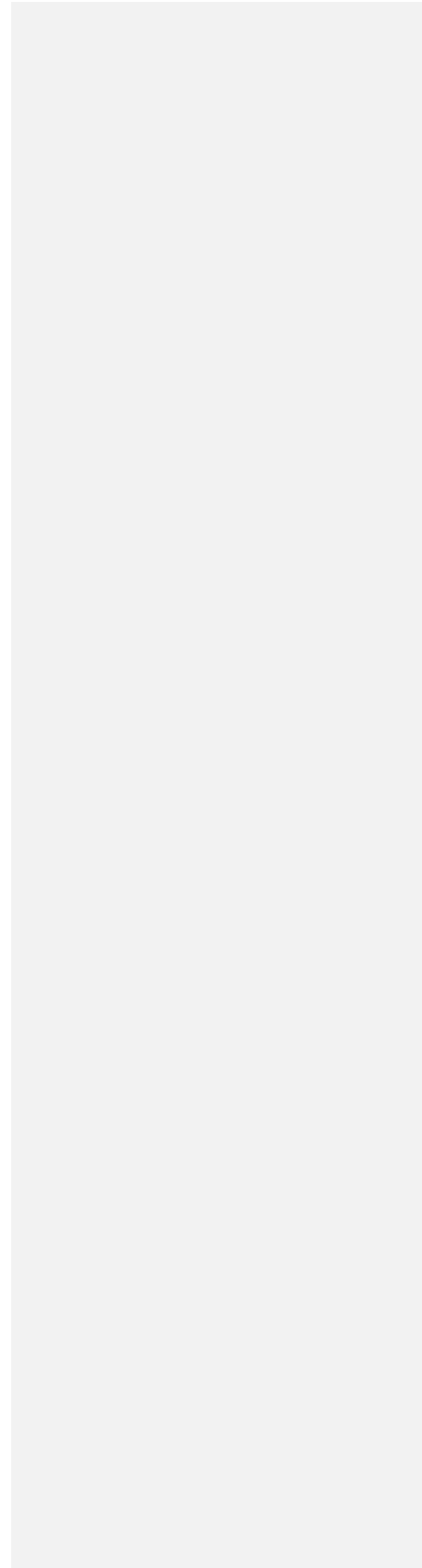


Table 2: Logistic regression model for Basavakalyan taluka

Villages	Ghotal		Kitta		Morkhandi		Narayanpur	
	Estimates	Odd Ratio	Estimates	Odd Ratio	Estimates	Odd Ratio	Estimates	Odd Ratio
Income (IMI)	$0.1 \times 10^{-3}^{NS}$	1.000	0.002	1.002	$0.1 \times 10^{-6}^{NS}$	1.000	$0.4 \times 10^{-3}^{NS}$	1.000
Income (EMI)	$-0.2 \times 10^{-3}^{NS}$	1.000	$-0.1 \times 10^{-3}^{NS}$	1.000	$-0.2 \times 10^{-4}^{NS}$	1.000	$-0.1 \times 10^{-7}^{NS}$	1.000
Education	0.296^{NS}	1.344	0.296^{NS}	1.344	-0.599^{NS}	0.549	-0.599^{NS}	0.549
Family Size	0.782^{NS}	2.185	0.782^{NS}	2.185	0.086^{NS}	1.089	0.085^{NS}	1.089
Land Holding	-0.044^{NS}	0.957	-0.051^{NS}	0.950	-0.376^{NS}	0.686	-0.173^{NS}	0.841

NS- Non-Significant

Table 3 showed the estimates for the four villages in Bhalki taluka. In Bhalki taluka the three villages had the negative influence of land holding on migration and Halipurga (0.158) village had a positive impact but all were not significant. The family size was not significant in all ~~the~~ four villages but had a larger ~~the~~ odd ratio in Nagral (1.761) as related to Bhatambra (1.358) ~~indicated-indicating~~ that the impact of ~~the~~ family size on labour migration was more in Nagral, Halipurga, and Khurabkhelgi as compared to Bhatambra. Logistic regression estimates for literacy in Halipurga village (0.449) were notable while Bhatambra, Khurabkhelgi, and Nagral villages had a negative influence. ~~Odd-An odd~~ ratio more than the unit value in the village of Halipurga (1.567), shows that illiterates had migrated more from the villages during the summer seasons. Income (IMI) had a positive effect for the villages of Bhatambra (0.000013) and Halipurga (0.0000094) and they are significant at the level of 5 ~~per cent~~ percent and two other villages have had a positive impact but they are not significant, income (EMI) had negatively non-significant ~~impant-impact~~ on migration. ~~Odd-An odd~~ ratio with unit value suggested that for every rise in family income level, labor migration has been affected (~~Rab~~ Vijay, 2010).

In Bhalki, it was witnessed that per capita land holding for Bhatambra, Khurabkhelgi, and Nagral villages have a negative impact and the odd ratio was lesser than the unit value which specified that migration was not mainly preferred in those villages as most of the individuals had the land holdings then they migrated because agriculture is not profitable (Tumbe, ~~C~~, 2012). In the Halipurga village estimated value was Positive but not significant. The odd ratio was more than unit, presenting that migration was favoured even when there were enough land holdings because of lack of irrigation facilities and droughts (~~Shabir ahamad~~ *et al.*, 2010).

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Table 3: Logistic regression model for Bhalki taluka

Villages	Bhatambra		Halipurga		Khurabkhelgi		Nagraal	
	Estimates	Odd Ratio	Estimates	Odd Ratio	Estimates	Odd Ratio	Estimates	Odd Ratio
Income (IMI)	$0.1 \times 10^{-4} *$	1.000	$0.9 \times 10^{-5} *$	1.000	$0.1 \times 10^{-4}^{NS}$	1.000	$0.2 \times 10^{-5}^{NS}$	1.000
Income (EMI)	$-0.1 \times 10^{-5}^{NS}$	1.000	$-0.8 \times 10^{-5}^{NS}$	1.000	$-0.2 \times 10^{-4}^{NS}$	1.000	$-0.4 \times 10^{-7}^{NS}$	1.000
Education	-0.405^{NS}	0.667	0.449^{NS}	1.567	-0.878^{NS}	0.416	-0.405^{NS}	0.667
Family size	0.305^{NS}	1.358	0.423^{NS}	1.534	0.421^{NS}	1.523	0.566^{NS}	1.761
Land holding	-0.093^{NS}	0.911	0.158^{NS}	1.172	-0.035^{NS}	0.966	-0.272^{NS}	0.761

NS- Non-Significant, * Significant at level of 5%

Table 4: Logistic regression model for Bidar taluka

Villages	Chitta		Hippalgaon		Kamathana		Solpur	
	Estimates	Odd Ratio	Estimates	Odd Ratio	Estimates	Odd Ratio	Estimates	Odd Ratio
Income (IMI)	$0.1 \times 10^{-4} *$	1.000	$0.3 \times 10^{-4} NS$	1.000	$0.1 \times 10^{-4} *$	1.000	$0.1 \times 10^{-4} *$	1.000
Income (EMI)	$-0.4 \times 10^{-7} NS$	1.000	$-0.1 \times 10^{-7} NS$	1.000	$-0.2 \times 10^{-5} NS$	1.000	$-0.5 \times 10^{-5} NS$	1.000
Education	$-0.878 NS$	0.416	$-0.323 NS$	0.724	$0.449 NS$	1.567	$-0.404 NS$	0.667
Family size	$0.421 NS$	1.523	$0.566 NS$	1.761	$0.428 NS$	1.534	$0.306 NS$	1.358
Land holding	$0.004 NS$	1.005	$-0.276 NS$	0.759	$0.111 NS$	1.117	$-0.414 NS$	0.661

NS- Non-Significant, * Significant at level of 5%

Table 4 revealed the outcomes of logistic regression for the four villages of Bidar taluka. Land holding Landholding attained a negative effect for Hippalgaon (-0.276) and Solpur (-0.414) and a positive effect for Chitta (.004) and Kamathana (0.111). Lesser than the unit for odd ratio (0.661) in Solpur village disfavored labour migration. Family size had a positive impact in all the four villages of Taluka, which specified that even when there were small families there was more labour migration. Greater than the unit value for the odd ratio displayed that the effect of family size on labour migration was more in all the four villages. Logistic regression estimates for education had a negative influence for Chitta (-0.878), Hippalgaon (-0.323), and Solpur (-0.404) i.e., literates had migrated fewer from these villages. Kamathana (0.449) had the a positive effect, where literates had migrated more in search of better occupations. Income (IMI) had the a positive influence in all the villages and significant at a level of five per cent percent similarly Hippalgaon also have a positive effect but i.e., not significant. Income (EMI) had a negative non-significant impact on all the four villages migration. The odd ratio (1.000) exhibited that there was a rise in the family net income of the migrants in all the four villages.

Bidar Taluka of the district of Bidar (Table 4) noted, the positive effect of per capita land value in the villages of Chitta and Kamathana displayed that even when the land holding was bigger, people migrated for the reason that the productivity was poor due to lack of rain. Positively non-significant and even odd ratio was greater than unit education in Kamathana village. It was proved that people are settling in city areas because they are in search of a better work suitable for their education. The other three villages took the negative estimated value of the odd ratio at lesser than the unit value, which revealed that even though the persons were not skilled, they migrated in small numbers to the different regions in search of jobs, as there was under jobs in the place of origin with restrictions on land holdings or less property (Priya D~~e~~shingkar, 2010).

To examine the factors influencing the migration, the logit model estimates for all the three talukas were given in Table 5. The per capita land effect was significant for the Basavakalyan taluka but not significant for the other two talukas. The land per capita had a negative impact in Basavakalyan (-0.137), Bhalki (-0.0149), and Bidar (-0.025), indicating that more land ownership owners with the family were less likely to migrate from the origin. Lower than unit value for odd ratios also specifies that the mobility of labour was disfavoured. For all

the three talukas, the family size had the positive impact and they are all significant at 5 percent level. Which suggested that smaller family size affects labor migration as well.

Table 5: Logistic regression model for all talukas

Talukas	BasavaKalyan		Bhalki		Bidar	
	Estimates	Odd Ratio	Estimates	Odd Ratio	Estimates	Odd Ratio
Income (IMI)	0.1×10^{-5} NS	1.000	0.6×10^{-5} **	1.000	0.7×10^{-5} **	1.000
Income (EMI)	-0.6×10^{-6} NS	1.000	-0.6×10^{-6} *	1.000	-0.1×10^{-5} *	1.000
Education	-0.100 NS	0.904	-0.227 NS	0.797	-0.201 NS	0.818
Family size	0.369*	1.446	0.397*	1.487	0.397*	1.487
Land holding	-0.137 *	0.872	-0.0149 NS	0.985	-0.025 NS	0.975

NS- Non-Significant, * Significant at level of 5%, ** Significant at level of 1%

Which suggested that smaller family size affects labor migration as well. Table 5 also shows that in Basavakalyan, Bhalki, and Bidar have more than the unit values for odd ratios (1.446, 1.487, and 1.487), respectively showed showing that it favored labor migration. Logistic regression estimates show that literacy had a negative impact for on all three talukas suggested suggesting that they had migrated in quest of jobs even when they were illiterates. Income (IMI) was significant at a level of one percent for Bhalki (0.0000065) and Bidar (0.0000078), and was not significant for Basavakalyan but had a positive effect on migration. Income (EMI) had the negative influence on migration. The unit value for the odd ratio displayed that there was the rise in migration for every alteration in the income level.

The logit model which was appropriate for the three talukas (Table 5) showed that the income was important in two talukas with an identical unit value of the odd ratio which presented that there was an increase in the family income level due to the migration, for the other village it is also positive but there was not so an increase in the income level.

The logit model fitted in (Table 6) for the whole district of Bidar specified that land holding had the negative influence on migration. In other words, the greater land holding held with family, the less people's chances of migrating from that family were. Lower than unit value for an odd ratio (0.942) often specifies that, it has disfavoured the movement of labour. The outcomes of the logistic regression for the family size had a positive (0.386) effect on labor migration, i.e. even though the family size was more likely to migrate, but the odd ratio (1.471)

for the Bidar district indicates that there is an effect of family size on labor migration. Education also affected migration negatively; Literates migrated less compared with the district illiterates. The odd ratio (0.849) for education was lower than the unit value, suggesting that analphabets move more in a job search than literates. Income (IMI) had the a positive influence on migration in the district. Greater than the unit value for the odd ratio for income specified that rise in income, rise the labour migration. whereas income (EMI) had a negative influence on migration which also tells the same.

Table 6: Logistic regression model for the data of the entire Bidar district

Factors	Bidar	
	Estimates	Odd Ratio
Income (IMI)	0.4×10^{-5} **	1.000
Income (EMI)	-0.1×10^{-6} *	1.000
Education	-0.164 ^{NS}	0.849
Family size	0.386 **	1.471
<u>Land holding</u> <u>Landholding</u>	-0.060 *	0.942

NS- Non-Significant, * Significant at level of 5%, ** Significant at level of 1%

Overall results of the logistic regression model fitted for the data showed that the households with the less land holdings or landless families migrated more and some people migrated due to the underemployment in the village. Many farmers with the smaller land holdings expressed that agriculture was not profitable due to the lack of irrigation facilities and the occurrence of droughts. The persons who were educated migrated to the faraway places in search of better employment suitable to their profile (Gita Jaiswal, 2010).

3. Analysis for of migration status

The nonparametric test called Wilcoxon's signed rank test was used to know the migrated people's condition of in a Bidar district. The conditions of migrants before migration and after migration were considered (Ohajianya, D. O., 2005). The conditions like income wise, education status, new skills, the standard of living, assets created, and consumption patterns, these were compared. The results revealed that the migrants were improved their situations significantly with respect to all the components considered. The education status was significantly improved as the results were found significant at a five per cent level and all others were significant at a level of one per cent (Table 7).

Table 7: Wilcoxon's signed rank test for migrated people condition of a district

Factors	Standardized Test Statistic	Significance
Income Wise	10.565**	S
Education Status	4.000*	S
New Skills	10.227**	S
Standard of Living	10.634**	S
Assets Created	10.438**	S
Consumption Pattern	10.227**	S

* Significant at level of 5%, ** Significant at level of 1%

The t-test is used to know the income condition between migrants and non-migrants of a Bidar district and the income level of migrants was significantly high. ~~The~~ Wilcoxon's signed rank test was applied to know the family condition before and after migration. The result presented that family conditions like income wise, education status, new skills, the standard of living, assets created, and consumption pattern ~~was-were~~ improved.

The ~~t~~-test t-test was applied to know the income level between migrants and non-migrants. The results showed that the income level of migrants was high ~~that-which~~ may be due to ~~their-the~~ additional income ~~of from~~ work ~~which-that~~ they do in a migrated place.

CONCLUSION:

Studying the model of gravity showed that people migrate more to nearby places ~~to~~ of origin. It predicts how much migration will occur in the upcoming days. Here the rate of migration decreases as the distance ~~of to the~~ destination increases.

~~Logistic~~ A logistic regression model was fitted for Bidar district migration results. When this model was fit for three talukas viz. Basavakalyan, Bhalki, and Bidar, ~~they~~ displayed that with the odd ratios more than unit, per capita land holding was negatively significant, so we can interpret that lower per capita land holding caused more migration. The other features viz., family size, with unit or less than unit value for odd ratio, it was positively significant for some villages and negative for others. The positive significance displayed that the migration was more affected when the family size was high, the other factor was education, the model disclosed that educates migrate more than illiterates do due to underemployment. Income (IMI) had a positive influence and income (EMI) had a negative influence on migration. ~~Which-This~~ tells us that for having a high income for a family any of the family member should migrate.

Both Wilcoxon's signed rank and t-tests displayed that for better income and life style of a people they should migrate because the migrated people situation is upgraded in this study.

REFERENCES: You have a major problem in writing citations and used wrong written names and wrong references!!! Must be careful, look at all the corrections... However, still was not able to locate a couple!!! All references marked in RED are extra and must be removed from the list to avoid unethical use of inflation of references....

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