EFFECT OF SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS ON AGRICULTURAL LABOURERS MIGRATION IN BIDAR DISTRICT OF 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 current study was an attempt to obtain the different motives for the migration of farm labourers from the district of Bidar and to create the correct models for migration data. Tabular research was led in the sample villages of Bidar district for the specific characteristics of migrants and non-migrants. The tabular research found that about 50 percent of people from all talukas migrate from sample households. The tabular analysis exposed that 44 per cent of individual migration compared to the entire family migration and individuals belonging to the 15 – 30-year age group migrate more. Research also found that agricultural labourers in the villages are fleeing because of underemployment and unemployment. Agricultural families are not successful, so many leave with smaller land holdings for better opportunities. Also, the current study attempted to know the nature and magnitude of the association between the agricultural labourers migration in the bidar district and their socioeconomic characteristics. Results of the correlation coefficients of migration over other variables *viz*. land holding, family size, education, income including migrants income (IMI), and income excluding migrants income (EMI) revealed a significant relationship among land holding and migration. Along with family net income and relocation, the important relationship still occurred. Even between migration and family size.

KEYWORDS: Socioeconomic characteristics, Demographic characteristics, Agricultural labour, and Migration.

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). The movement of an individual or a family from their home to another city, state, or country for a job, shelter, or some other reason is called migration. These individuals are called 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 the past few years in India and everywhere across the world (Somwaru *et al*., 2001). 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 are 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 (Priya Deshingkar, 2010). Hence, they were facing a multitude of problems related to food, sanitation, hygiene, a proper place for living, etc.

Among the several reasons causing migration conflicts, violence, drought, and natural calamities are the main core causes of migration and forced displacement. 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 influence the movement of people (Channveer *et al*., 2011). 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 (Rye and O'Reilly, 2021) but also owed to the diversity of social, economic, cultural, and etymological groups and sub-groups within the groups that occur within and between districts and states of India (Suresh *et al*., 2007).

In India, agriculture is the major source of employment (about 50 %) and contributes to about 15 percent of national GDP. (Vijay Korra, 2010). Economic factors in India govern the cycle of migration from rural to urban areas. About 70 per cent of farmers and their associated agricultural activities afford their livelihoods. Population overcrowding within the agriculture sector and hidden unemployment are very serious issues in the region. 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′s migration to the leading urban sectors (Sinha *et al*., 2012).

The magnitude of agricultural worker′s 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, their employment chances, work and living conditions and trends. (Bilsborrow *et al*., 1987) 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 jet (Anonymous 2011). 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 (Dubey *et al*., 2004).

Migration status in Karnataka

Karnataka stands the 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. (Brigitte *et al*.,2009) 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 total area and is home to 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 (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 high cost of cultivation, scarcity of irrigation water, stagnation of productivity in agriculture, prices fluctuation of agricultural products and exploitation by middlemen (Deepak Mishra, 2010). These factors converted agriculture into the non-profitable sector of employment. In such distress conditions, rural labourers and farmers are compelled to move from villages to urban areas and cities in

search of betterment of their livelihood (Gouradevi, 2010). Thus, the current study was conducted in the Bidar district: to study the effect of socioeconomic and demographic characteristics on agricultural labour migration.

MATERIAL AND METHODS:

Based on the 2011 Census Bidar district which is located in a Kalyana Karnataka region of India and from where the migration of people is high was selected for the study (Brigitte *et al., 2009).* Three taluks of Bidar district were selected based on the highest labour force *viz*., Bidar, Bhalki and Basavakalyan. Four villages were selected from these chosen taluks at random. A total of 240 samples were selected for this purpose with 80 samples from each taluk. From each selected taluka four villages were selected at random. Ghotal, Kitta, Morkhandi and Narayanpura villages were selected from Basavakalyan taluk. Bhatambra, Halipurga, Khurabkhelgi and Nagral from Bhalki taluk. In the same way Chitta, Hippalgaon, Kamathan and Solpur were selected from Bidar taluk. From each selected village 20 sample households were selected randomly for the study. The total sample size was 240 households.

Point Biserial Correlation:

Point Biserial Correlation analysis was carried out to assess the nature and magnitude of the association between the variables like family size, per capita land holding, education, income including migrant's income (IMI) and income excluding migrants' income (EMI) with the migration using the SPSS and R software.

The point biserial correlation coefficient was worked out using the following formula.

$$r_{pb} = \left|\frac{M_1 - M_0}{s_{n-1}}\right| \sqrt{\frac{n_1 n_0}{n(n-1)}}$$

Where,

r_{pb} = Point Biserial Correlation coefficient

M_1= Mean of the Variables (size of the family, per capita land holding, education and income) for all data points in group 1

M_0= Mean of the variables for all data points in group 0

n_1= Migrated number of data points in group 1

n_0= number of data points in group 0

$n = n_0 + n_1$

$$s_{n-1} = standard\ deviation = \sqrt{\frac{1}{n}\sum_{i=1}^{n}(x_i - \bar{x})^2}$$

$$\frac{M_1 - M_0}{s_{n-1}} = normalizing\ constant$$

Normalizing constant is used to tell how the factors are associated with migration. If it was negative then factors were correlated negatively, if it was positive then there was a positive correlation.

t–test: To test the significance of the correlation coefficients''- t test was computed with the help of following formula.

$$t_{(n-2)} = \left|\frac{r_{pb}\sqrt{n-2}}{\sqrt{1 - {r_{pb}}^2}}\right|$$

Where,

n = Degrees of freedom

r_{pb} = Point Biserial Correlation coefficient.

RESULTS AND DISCUSSION:

Effect of socio-economic and demographic characteristics on Agricultural labour migration

4.1.1 Incidence of migration in Bidar district

From every selected village 20 households were chosen at random, comprising 10 households having migrants. Thus, 80 households were selected with fifty per cent of migrants for the research from each taluka. (Table 1)

The data on migration incidence in sample villages of the district of Bidar (Table 1) indicated that the overall number of migrants in all the talukas was equal. The people migrated permanently to all of the talukas. It was interesting to note that four sample villages from all three talukas had the same number of migrants as some trained people had migrated more in quest of good employment for better opportunities. The villages of Narayanpur, Kamathana, and

Hippalgaon were mostly dry land sited at the remote, people migrated because of joblessness and underemployment (Donald *et al*., 1995).

Table 1. Incidence of migration

Villages	Total No of HouseHolds	Number of Households With At Least One Member Migrated	Percentage
Basavakalyan Taluk			
Ghotal	20	10	50
Kitta	20	10	50
Morkhandi	20	10	50
Narayanpur	20	10	50
Sub-Total	**80**	**40**	**50**
Bhalki Taluk			
Bhatambra	20	10	50
Halipurga	20	10	50
Khurabkhelgi	20	10	50
Nagral	20	10	50
Sub-Total	**80**	**40**	**50**
Bidar Taluk			
Chitta	20	10	50
Hippalgaon	20	10	50
Kamathana	20	10	50
Solpur	20	10	50
Sub-Total	**80**	**40**	**50**
Grand total	**240**	**120**	**50**

1.2 Migrates in Bidar district

In the selected households of Bidar district, it was noticed in eight households (3.33%) both husbands and wives were migrated, eight (3.33%) whole families and 104 households (43.33%) individuals were migrated (Zhang, H.X., 1999). In Basavakalyan taluka, in two households both husband and wife (one each from Ghotal and Kitta village), two families from the taluka (from same villages) and in 36 households' migration was observed, which comprised eight from Ghotal, eight from Kitta, ten from Morkhandi and ten from Narayanpur villages.

It could be observed from the results presented in Table 2 that in Bhalki taluka in three households, both husband and wife (two from Halipurga and one from Nagral), three families (one each from Bhatambra, Halipurga, and Nagral villages) and 34 households (nine in

Bhatambra, seven in Halipurga, ten in Khurabkhelgi and eight in Nagral villages) individual migration was observed (Ohajianya, D. O, 2005).

It could be observed from the results presented in Table 2 that in Bidar taluka in three households, both husband and wives (two from Kamathana and lone from Hippalgaon), three whole families (one each from Hippalgaon, Kamathana and Solpur villages) and in 34 households (ten in Chitta, eight in Hippalgaon, seven in kamathana and nine in Solpur villages) individual migration was observed.

Table 2. Migrant and Non-migrant households in Bidar district

Village	Non-migrants	Migration in the family			
		Both	Family	Individual	Total
Basavakalyan Taluk					
Ghotal	10	1	1	8	20
Kitta	10	1	1	8	20
Morkhandi	10	0	0	10	20
Narayanpur	10	0	0	10	20
Total	40	2	2	36	80
Bhalki Taluk					
Bhatambra	10	0	1	9	20
Halipurga	10	2	1	7	20
Khurabkhelgi	10	0	0	10	20
Nagral	10	1	1	8	20
Total	40	3	3	34	80
Bidar Taluk					
Chitta	10	0	0	10	20
Hippalgaon	10	1	1	8	20
Kamathana	10	2	1	7	20
Solpur	10	0	1	9	20
Total	40	3	3	34	80
Total for the selected talukas of Bidar District					
Grand Total	120	8	8	104	240
Percentage	50	3.333	3.333	43.333	100

The migration ranged from family to family. There was mention of individuals, both husbands and wives then the entire family migration in the village (Holley *et al*., 2010). Thus, the data taken for sample villages of the Bidar district (Fig. 1) displayed that person migration was more compared to migration of entire families or both husband and wife This could be attributable to the fact that if the whole families migrate to other urban areas, the burden of living

increases compared to the village lifestyle would be high and migration also affects their children's education, hence the migration of individuals was far greater than husband and wife or the whole family (Shanti, 2006).

1.3 Age profile of the respondents from the sample villages in Bidar district

Table 3 showed that male migration is more frequent in all age groups except in age groups of < 15 years. The highest migration was detected for both males and females in the age groups of 15-30 years. In the age group of more than 45 years, female migration was zero in all the chosen villages. The migration of males and females was maximum in kitta village, while no migration was detected in the lesser than 15 years age group in four villages *viz*. Narayanpur (Basavakalyan taluka), Bhatambra (Bhalki taluka), Hippalgaon and Kamthan (Bidar taluka).

Among the age group of 15-30 years of male migrants' highest migration was observed in Khurabkhelgi (Bhalki taluka) with 13 migrants and minimum in Bhatambra (Bhalki taluka) of only three migrants. For female in Kitta (Basavakalyan taluka) and Chitta (Bidar taluka) villages eight females migrated each and no female migration in Narayanpur (Basavakalyan taluka), Bhatambra (Bhalki taluka), Hippalgaon, Kamthan and solpur (Bidar taluka) villages.

In the age group of 31-45 years highest male migration was observed in Khurabkhelgi (Bhalki taluka) village and minimum in Narayanpur (Basavakalyan taluka) and solpur (Bidar taluka) villages. Among the age group 31-45, no female migration in Morkhandi, Narayanpur (Basavakalyan taluka), Halipurga (Bhalki taluka) and Hippalgoan (Bidar taluka). When approaching the age group of more than 45 years noted that there is zero female migration the highest male migration was noticed in Bhatambra (Bhalki taluka) village (5).

The age profile of respondents in various talukas presented in Table 3 disclosed that male and female migration in Basavakalyan was maximum (87), and no female migration was observed in the village of Hippalgaon Bidar taluka. For the 15-30 age group, the respondent's male migration was found to be highest in Bidar (32) and minimum in Bhalki taluka (27). Migration of females in Basavakalyan was maximum and was the least in Bhalki taluka. It was noticed that the proportion of male migrants noticed was the same in both

Basavakalyan and Bhalki talukas (21) in the age group 31-45 years, while the minimum in Bidar taluka.

Concerning female migration, nine had migrated from Bhalki taluka and six and five from Bidar and Basavakalyan taluka, respectively. In the case of more than 45 years age group, none of the females migrated in all three talukas where a greater number of male migrations was noticed in Bhalki taluka (10).

Persons belonging to the age group 15-30 years, migrates were more (Pratibha *et al*. 2010) compared to other age groups (Table 3), since people who finished high school or post-graduate schooling migrate in quest of some work in factories or else other, and also young analphabets. No females migrate after forty-five years of age, then fewer males migrate within that age group as the work efficiency will be lower.

Table 3. Age profile of the respondents from the sample villages in Bidar district

	<15 Years		**15-30 Years**		**31-45 Years**		**>45 Years**		
Village	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Total**
Basavakalyan Taluk									
Ghotal	1	1	5	3	7	3	0	0	20
Kitta	3	6	10	8	6	2	0	0	35
Morkhandi	1	2	6	2	7	0	4	0	22
Narayanpur	0	0	7	0	1	0	2	0	10
Total	5	9	28	13	21	5	6	0	87
Bhalki Taluk									
Bhatambra	0	0	3	0	4	0	5	0	11
Halipurga	2	0	5	2	8	4	0	0	21
Khurabkhelgi	1	0	13	2	9	3	3	0	31
Nagral	1	0	6	1	2	1	2	0	13
Total	4	0	27	5	21	7	10	0	74
Bidar Taluk									
Chitta	1	2	9	8	4	4	2	0	30
Hippalgaon	0	0	5	0	6	0	4	0	15
Kamathana	0	0	12	0	6	1	2	0	21
Solpur	0	1	7	0	1	1	2	0	12
Total	1	2	32	8	15	6	8	0	78

1.4 Occupational Pattern for migrant Sample households

Table 4 showed that landless agricultural labourers were observed to be the highest in Morkhandi village and minimum in Halipurga. No migrants belonging to the agriculture

community in every village from selected talukas. Non-farm wage labourers were observed seven in Narayanpur village, one in Kamathana. Three migrants each with business occupation were noticed in Nagral and Hippalgaon villages, no business occupiers were found in Ghotal, Kitta, Morkhandi, Narayanpur, Bhatambra, Khurabkhelgi, Chitta and Solpur villages. A maximum number of migrants were observed to have other work as occupation in Halipurga and Kamthan villages and no migrants with other work as occupation were found in Ghotal, Kitta, Morkhandi, Narayanpur, Khurabkhelgi and Chitta villages (Kaur *et al*., 1998).

Table 4. Occupational status for migrant Sample households

Villages	Farming	Land Less Agriculture Labour	Non-Farm Wage Labour	Business	Other	Total
Basavakalyan Taluk						
Ghotal	0	5	5	0	0	10
Kitta	0	6	4	0	0	10
Morkhandi	0	8	2	0	0	10
Narayanpur	0	3	7	0	0	10
Total	0	22	18	0	0	40
Bhalki Taluk						
Bhatambra	0	4	4	0	2	10
Halipurga	0	2	2	1	5	10
Khurabkhelgi	0	5	5	0	0	10
Nagral	0	3	3	3	1	10
Total	0	14	14	4	8	40
Bidar Taluk						
Chitta	0	6	4	0	0	10
Hippalgaon	0	4	2	3	1	10
Kamathana	0	3	1	1	5	10
Solpur	0	5	3	0	2	10
Total	0	18	10	4	8	40
Overall Bidar District						
Total	0	54	42	8	16	120
Percentage	0	45	35	6.667	13.333	100

A maximum number of migrants with landless agriculture labourers were seen in Basavakalyan (22) and fourteen in Bhalki tauka. There were no migrants found with farming as an occupation in all talukas. Non-farm wage labourers were maximum in Basavakalyan

(18) and a minimum in Bidar (11) talukas. Four migrants look after business in Bhalki and Bidar talukas and none in Basavakalyan**.** Migrants with other occupations were observed the same in Bhalki and Bidar talukas (8) and zero in Basavakalyan.

1.5 Occupational Pattern for non-migrant sample Households

Table 5 showed that from the selected respondents' a maximum number (10) of the non-migrants had farmed in Morkhandi village and minimum of four each in villages like Bhatambra, Nagral and Solpur. Three non-migrants were found landless agriculture labourers in Halipurga village, two each in Narayanpur, Ghotal, and Kamathana villages and lone each in Kitta and Nagral villages and the remaining villages had zero landless agriculture labourers. Two each nonfarm wage labourers were found in Ghotal and Nagral villages, one each in Narayanpur, Halipurga, Hippalgaon and Kamthan villages and the remaining six villages had zero non-farm wage labourers. Non-migrants with a business occupation were noticed one in each Nagral and Hippalgaon villages and there were zero business occupiers in the remaining villages which are selected. Six each non-migrants had the other occupation in Bhatambra and Solpur villages and none in Ghotal, Kitta, Morkhandi and Narayanpur villages (Surabhi *et al*., 2007).

Basavakalyan taluka had more non-migrants with framing occupation (32) and Bidar taluk had minimum (22). The highest number of landless agriculture labourers were observed in Basavakalyan taluka (5) then there were two landless agriculture labourers in Bidar taluka. Basavakalyan and Bhalki talukas had the same (3) nonfarm wage labours whereas Bidar taluka had two. There was only one business occupant in Bhalki and Bidar talukas and zero in Basavakalyan taluka. The non-migrants with other occupation was noticed the same in Bhalki and Bidar talukas (12) and zero in Basavakalyan.

Reporting on migrant and non-migrant job trends (Tables 4 and 5). The tables showed that there are more landless labourers among migrants compared to non-farm wage labourers. Many people were only engaged in farming among the non-migrants.

Table 5. Occupational status for non-migrant Sample households

Villages	Farming	Land Less Agrilculture Labour	Non-Farm Wage Labour	Business	Other	Total
Basavakalyan Taluk						
Ghotal	6	2	2	0	0	10
Kitta	9	1	0	0	0	10
Morkhandi	10	0	0	0	0	10
Narayanpur	7	2	1	0	0	10
Total	32	5	3	0	0	40
Bhalki Taluk						
Bhatambra	4	0	0	0	6	10
Halipurga	5	3	1	0	1	10
Khurabkhelgi	6	0	0	0	3	10
Nagral	4	1	2	1	2	10
Total	19	4	3	1	12	40
Bidar Taluk						
Chitta	6	0	0	0	4	10
Hippalgaon	7	0	1	1	1	10
Kamathana	6	2	1	0	1	10
Solpur	4	0	0	0	6	10
Total	23	2	2	1	12	40
Over All Bidar District						
Total	74	11	8	2	24	120
Percentage	61.667	9.167	6.667	1.667	20	100

1.6 Migrant′s literacy profile

The highest number of illiterates was observed in Morkhandi and Narayanpur villages (11) and the minimum in Khurabkhelgi and Chitta villages (2). Respondents having primary schooling were noticed a maximum (of 5) in Ghotal and Kitta villages none of the respondents had primary education in Bhatambra, Halipurga, Nagral, Hippalgaon, Kamathan and Solpur villages. In Chitta village, there was a maximum number (7) of respondents possessed a high school education and four respondents from Morkhandi, Narayanpur, Bhatambra, Nagral, Hippalgaon and Solpur villages who had finished their high school education (Deshingkar, 2010). The maximum number of respondents who had finished their education more than

matriculation was 9 in all villages except Ghotal, Kitta, Morkhandi, and Narayanpur and only one respondent were having above matriculation in Morkhandi and Narayanpur villages (Table 6).

The literacy profile of sample talukas revealed that Basavakalyan taluka had the maximum number of illiterates (36) and illiteracy was less in both Bhalki and Bidar talukas (22). Primary schooling was maximum (of 18) in Basavakalyan taluka and a minimum (of 2) in both Bhalki and Bidar talukas(Shoba Jain, 2010). All three talukas had the same number (20) of respondents possessing high school education. The respondents having above matriculate education was found to be more (36) in both Bhalki and Bidar talukas and a minimum (6) in Basavakalyan. Hence in Bidar district, it was noticed that 33.33 per cent are illiterates and among the 66.67 per cent of literates 9.167 per cent had primary education. 25 per cent had a high school education and 32.5 per cent of respondents had matriculation and above (Barkh *et al*., 2007).

Table 6. Literacy profile

Villages	Illiterate	Primary school	High school	Above matriculate	Total
Basvakalyan taluk					
Ghotal	7	5	6	2	20
Kitta	7	5	6	2	20
Morkhandi	11	4	4	1	20
Narayanpur	11	4	4	1	20
Total	36	18	20	6	80
Bhalki taluk					
Bhatambra	7	0	4	9	20
Halipurga	6	0	5	9	20
Khurabkhelgi	2	2	7	9	20
Nagral	7	0	4	9	20
Total	22	2	20	36	80
Bidar taluk					
Chitta	2	2	7	9	20
Hippalgaon	7	0	4	9	20
Kamathana	6	0	5	9	20
Solpur	7	0	4	9	20
Total	22	2	20	36	80
	For entire Bidar District				
Grant Total	80	22	60	78	240
Percentage	33.333	9.1667	25	32.5	100

The educated persons after their matriculation preferred to go for ITI and migrate to places where companies are located. Very few persons had primary education as they are not interested in education or it may be due to the incapability of parents to provide the appropriate schooling to their children hence illiteracy is growing in the community (Deshingkar *et al*., 2009).

1.7 Distribution of Sample Households Based on Land Holdings

The grouping of the households based on the acreage is presented in Table 7. It could be observed from Table that 22.5 per cent and 4.17 per cent of migrants and non-migrants respectively were landless (Naomi Jacob, 2008). About four per cent and 15 per cent possessed 2.5 acres of land, in the case of migrants and non-migrants, respectively. The 12.50 per cent and 18.75 per cent of migrants and non-migrants respectively had 2.5-5 acres of land holding. Just over 11 per cent each of the migrants and non-migrants belonged to the class of the medium farmer′s group with more than 5 acres of land in Bidar district (Tumbe, 2012).

Basavakalyan taluka had the highest number of landless migrants (22) the minimum in Bhalki taluka (14). Bhalki taluka had the maximum number of migrants belonging to the class of marginal land holding the minimum in Basavakalyan. There were the highest (13) non-migrants in Basavakalyan taluka and a minimum (10) in Bhalki taluka belonging to the class of marginal landholders. Eleven migrants everyone was belongs to the small farmer′s group in Basavakalyan and Bhalki talukas then other taluka had eight Migrants belonging to the small farmer′s group. Among the non-migrants, there were a maximum (of 18) small farmers from Bhalki taluka the minimum (8) in Bidar taluka. Maximum (11) migrant farmers in Bidar Taluk and minimum (7) in Basavakalyan Taluk were belonging to the medium farmer′s group. Maximum (11) non-migrants in Basavakalyan Taluka and minimum (8) from Bhalki taluka belong to the class medium land holding. (Table 7)

Sample households were grouped based on the per capita land holdings (Table 7). The majority of the migrants took place in land-less groups. Hardly few migrants and non-migrants belonged to the medium farmers group the remaining all were belonging to the class of marginal and small farmers.

Table 7. Distribution of sample households under the study based on land holdings

villages	Land less		Marginal (< 2.5 acres)		Small (2.5 - 5 acres)		Medium (> 5acres)	
	M	NM	M	NM	M	NM	M	NM
Basvakalyan taluk								
Ghotal	5	2	0	2	2	3	3	2
Kitta	6	1	0	4	1	2	3	3
Morkhandi	8	0	0	5	1	2	1	3
Narayanpur	3	2	0	2	7	3	0	3
Total	22	5	0	13	11	10	7	11
Bhalki taluk								
Bhatambra	4	0	2	6	4	4	1	0
Halipurga	2	3	1	1	1	4	6	2
Khurabkhelgi	5	0	1	3	3	6	1	1
Nagral	3	1	2	0	3	4	2	5
Total	14	4	6	10	11	18	10	8
Bidar taluk								
Chitta	6	0	2	6	1	3	1	1
Hippalgaon	4	0	0	1	3	3	3	5
Kamathana	3	1	0	2	1	5	6	2
Solpur	5	0	1	3	3	6	1	1
Total	18	1	3	12	8	17	11	9
For entire Bidar District								
Total	54	10	9	35	30	45	28	28
Percentage	22.5	4.17	3.75	14.58	12.50	18.75	11.67	11.67

1.8 Reasons for a Migration

It could be observed from the results presented in Table 8 that there were a lot of reasons for migration to other places. It was concluded that the non-profitable nature of farming and better opportunities are the major reasons for migration, which was quoted by 86.67 per cent and 89.167 per cent of respondents, respectively. Next comes the unemployment problem (40.83 %) followed by small land holdings (25.83%), frequent droughts (20%), less wages (18.33%), landless (9.167%), pressure of loans (7.5%), children′s education (5%), off-season (3.33%) and natural calamities (1.67%) (Deshingkar, 2006).

Table 8. Reasons for migration of agricultural labourers.

Villages	Total	Agriculture Not Profitable	Better Opportunities	Loan Repayments	Drought	Children Education	Land less	Less Wages	Smaller Land Holdings	Natural Calamities	Unemployment	Off Season
Ghotal	10	7	10	1	3	0	0	1	8	0	3	0
Kitta	10	8	9	1	3	0	0	1	6	0	4	0
Morkhandi	10	9	10	0	1	0	1	5	2	0	1	0
Narayanpur	10	9	10	0	1	0	1	4	2	0	1	0
Bhatambra	10	10	9	1	3	0	0	1	4	0	2	1
Halipurga	10	9	8	0	5	4	0	1	2	1	5	0
Khurabkhelgi	10	9	6	2	0	0	3	1	0	0	6	1
Nagral	10	9	10	1	0	0	2	1	0	0	8	0
Chitta	10	8	9	1	0	0	2	2	0	0	7	1
Hippalgaon	10	9	7	1	0	0	2	1	0	0	5	0
Kamathana	10	9	10	0	5	2	0	3	2	1	6	0
Solpur	10	8	9	1	3	0	0	1	5	0	1	1
Total	120	104	107	9	24	6	11	22	31	2	49	4
Percentage	100	86.637	89.167	7.500	20.000	5.000	9.167	18.333	25.833	1.667	40.833	3.333

Point Biserial Correlation analysis for data of migration:

The analysis of the Point Biserial correlation was conducted to identify the extent of the association among migration and variables like land holding, family size, education status, income including migrant's income (IMI) and income excluding migrants income (EMI) (Kornbrot, D. 2014).

1.1 Point Biserial Correlation analysis for Basavakalyan taluka

In Ghotal village, migration was associated with income (IMI) and significant at one per cent level, the family size was associated significantly at the five per cent level with migration and education was associated non significantly with migration where all these factors normalizing factor was positive. Whereas income (EMI) was associated significantly at a five per cent level with migration and land holding was associated non-significantly with migration and these factors normalizing factor was negative. (Table 9)

In Kitta village, migration was associated with income (IMI) and significant at one per cent level, family size was associated significantly at the five per cent level with migration and education was not having significant association with migration, where all these factors normalizing factor was positive. Whereas income (EMI) was associated significantly at five per cent level with migration and land holding was associated non-significantly with migration and these factors normalizing factor was negative. (Table 9).

In Morkhandi village, migration was associated non-significantly with income (IMI) and family size and the normalizing factor was a positive. Whereas income (EMI) and education were associated non significantly with migration and land holding was associated significantly at five per cent level with migration and these factors normalizing factor was negative. (Table 9)

In Narayanpur village, income (IMI) and family size had non-significant association with migration with positive normalizing factor. Whereas income (EMI), education and land holding were non-significantly associated with migration and these factors normalizing factor was negative. (Table 9)

The correlation study was accomplished for the Basavakalyan taluka's four villages, where land holdings had the negative connection with the migration that displayed that as land holding increased the rate of migration dropped. Similarly, education among the villagers of

Morkhandi and Narayanpur had a negative relationship, i.e., if the illiterates were, there was more migration in the family. Income association would reveal when there was migration in a family then their family net income was high. (Table 9)

Table 9. Point Biserial Correlation analysis for Basavakalyan taluka

Migrants Villages / Variables	Ghotal		Kitta		Morkhandi		Narayanpur	
	r_{pb}	Sign of n.f	r_{pb}	Sign of n.f	r_{pb}	Sign of n.f	r_{pb}	Sign of n.f
Income (IMI)	0.731**	+	0.728**	+	0.047 ^{NS}	+	0.124 ^{NS}	+
Income (EMI)	0.202*	-	0.287*	-	0.434	-	0.381 ^{NS}	-
Education	0.148 ^{NS}	+	0.148 ^{NS}	+	0.265 ^{NS}	-	0.265 ^{NS}	-
Family Size	0.456*	+	0.456*	+	0.065	+	0.065 ^{NS}	+
Land Holding	0.076 ^{NS}	-	0.091 ^{NS}	-	0.449*	-	0.374 ^{NS}	-

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

r_{pb} - point biserial correlation coefficient, n.f - normalizing factor

4.1.9.2 Point Biserial Correlation analysis for Bhalki taluka

In Bhatambra village, migration was associated with income (IMI) and significant at a five per cent level, family size was associated non-significantly with migration where these factors normalizing factor was positive. Whereas income (EMI), education and land holding were associated non-significantly with migration and these factors normalizing factor was negative. (Table 10)

Table 10. Point Biserial Correlation analysis for Bhalki taluka

Migrants Villages / Variables	Bhatambra		Halipurga		Khurabkhelgi		Nagral	
	r_{pb}	Sign of n.f	r_{pb}	Sign of n.f	r_{pb}	Sign of n.f	r_{pb}	Sign of n.f
Income (IMI)	0.535*	+	0.616**	+	0.404 ^{NS}	+	0.228 ^{NS}	+
Income (EMI)	0.294 ^{NS}	-	0.374*	-	0.038 ^{NS}	-	0.338 ^{NS}	-
Education	0.262 ^{NS}	-	0.274 ^{NS}	+	0.363 ^{NS}	-	0.262 ^{NS}	-
Family size	0.190 ^{NS}	+	0.351 ^{NS}	+	0.277 ^{NS}	+	0.293 ^{NS}	+
Landholding	0.072 ^{NS}	-	0.308 ^{NS}	+	0.070 ^{NS}	-	0.439 ^{NS}	-

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

r_{pb}- point biserial correlation coefficient, n.f - normalizing factor

In Halipurga village, migration was associated with income (IMI) and significant at one per cent level, family size, education and land holding were associated non-significantly with migration where these factors normalizing factor was positive. Whereas income (EMI) non-significantly correlated with migration and the normalizing factor was negative. (Table 10)

In Khurabkhelgi village, migration was associated with income (IMI), and family size non-significantly where these factors normalizing factor was positive. Whereas income (EMI), education and land holding were associated non-significantly with migration and these factors normalizing factor was negative. (Table 10)

In Nagral village, migration was associated with income (IMI), family size non-significantly where these factors normalizing factor was positive. Whereas income (EMI), education and land holding were associated non-significantly with migration and these factors normalizing factor was negative. (Table 10)

Bhalki taluka revealed no significant relationship between the migrants and the variables because in this Taluka people migrated where the sizes of the family are high. The same thing for a Basavakalyan Taluka in the case of land holding here as well. But for Halipurga village normalizing factor was positive, this was because of drought and other agricultural reasons. (Table 10)

4.1.9.3 Point Biserial Correlation analysis for Bidar taluka

In Chitta village, migration was associated with income (IMI), family size and land holding non-significantly where these factors normalizing factor was positive. Whereas income (EMI) and education were non-significantly correlated with migration and normalizing factor was negative. (Table 11)

In Hippalgaon village, migration was associated with income (IMI) and family size non-significantly where these factors normalizing factor was positive. Whereas income (EMI), education and land holding were non-significantly correlated with migration and normalizing factor was negative. (Table 11)

In Kamathana village, migration was associated with income (IMI) and significant at one per cent level, family size, education, and land holding were associated non-significantly with

migration where these factors normalizing factor was positive. (Sundaravaradarajan *et al*., 2011) Whereas income (EMI) non-significantly correlated with migration and normalizing factor was negative. (Table 11)

In Solpur village, migration was associated with income (IMI) and significant at five per cent level, family size was associated non-significantly where these factors normalizing factor was positive. Whereas income (EMI), education and land holding were associated non-significantly with migration and these factors normalizing factor was negative. (Table 10)

In Bidar taluka (Table 11) it was noticed that the accessibility to land holding had an association with migration having a negative normalizing factor in Hippalgaon and Solpur villages, i.e. as the land holding rise with the rate of migration decreased and here in two other villages land holding was related with positive normalizing factor but also high may be the drought was the major reason there. Income (IMI) is related to a positive normalizing factor and income (EMI) is also related but the normalizing factor is negative that suggested a rise in income to increase the rate of migration. The people from this taluka migrated more to the urban areas, where more salaries were paid for their jobs, and extra wages were paid for overtime work. Therefore, income also rises as migration increases.

Table 11. Point Biserial Correlation analysis for Bidar taluka

Migrants Villages / Variables	Chitta		Hippalgaon		Kamathana		Solpur	
	r_{pb}	Sign of n.f	r_{pb}	Sign of n.f	r_{pb}	Sign of n.f	r_{pb}	Sign of n.f
Income (IMI)	0.438^{NS}	+	0.303^{NS}	+	0.602**	+	0.498*	+
Income (EMI)	0.100^{NS}	-	0.311^{NS}	-	0.214*	-	0.369^{NS}	-
Education	0.363^{NS}	-	0.208^{NS}	-	0.274^{NS}	+	0.262^{NS}	-
Family size	0.277^{NS}	+	0.293^{NS}	+	0.351^{NS}	+	0.190^{NS}	+
Landholding	0.011^{NS}	+	0.425^{NS}	-	0.241^{NS}	+	0.311^{NS}	-

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

r_{pb}- point biserial correlation coefficient, n.f - normalizing factor

4.2.4 Point Biserial Correlation analysis for overall Bidar district

The correlation was measured to the variables for the entire district of Bidar in which migration was associated with income (IMI) and family size was associated significantly at one per cent level where these factors normalizing factor was positive. Whereas income (EMI) and land holding were significantly correlated at a five per cent levle with migration, education correlated non-significantly and these factors normalizing factor was negative. (Table 12)

When the correlation study was directed for the entire district of Bidar (Table 12), the availability of per capita land holding was associated with migration with a negative normalizing factor and so was also for education. The negative relationship was true because in the village there was an underemployment issue as the individuals were illiterate and they go to the different districts in search of employment. This type of outcome was shown by Akwasi Mensah-bonsu and Kees Burger (2000) (LeBlanc *et al*., 2017).

Table 12. Point Biserial Correlation analysis for Bidar District

Variables	Migration	
	r_{pb}	Sign of n.f
Income (IMI)	0.359**	+
Income (EMI)	0.143^{NS}	-
Education	0.102^{NS}	-
Family Size	0.266^{**}	+
Land Holding	0.130^{*}	-

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

r_{pb} - point biserial correlation coefficient, n.f - normalizing factor

CONCLUSION

The research was led in the sample villages of Bidar district for the specific characteristics of migrants and non-migrants. The tabular research found that about 50 per cent of people from all talukas migrate from sample households. Tabular analysis exposed that 44 per cent of individual migration compared to the entire family migration and individuals belonging to the 15-30-year age group migrate more. Research also found that alphabets in the villages are fleeing because of underemployment and unemployment. Agricultural families are not successful (Tudor *et al*, 2022), so many leave with smaller land holdings for better opportunities. It was concluded that better opportunities and the non-profitable nature of farming are the major reasons for migration.

Point Biserial Correlation analysis

Results of the correlation coefficients of migration over other variables *viz*. land holding, family size, education, income (IMI) and income (EMI) revealed a significant relationship among land holding and migration. Along with family net income and relocation, the important relationship still occurred. Even between migration and family size.

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