

## **EFFECT OF SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS ON AGRICULTURAL LABOURERS MIGRATION IN BIDAR DISTRICT, INDIA**

### **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 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. Tabular research found that about 50% 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 belong to the 15-30 years 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 was attempted to know the nature and magnitude of association between the agricultural labourers migration in 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.

**KEY WORDS:** 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

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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 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 most common migration and has amplified in past few years in India and everywhere across the world (Somwar *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, usually work on 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 (Priya Deshingkar, 2010). Hence, they were facing 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 an influence over 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 but also owed to diversity of social, economic, cultural and etymological groups and sub groups within the groups that occurs within and between districts and states of India (Suresh *et al.*, 2007).

In India, agriculture is the major source of employment (about 50%) and contributing to about 15 per cent 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 of 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 migration to the leading urban sectors (Sinha *et al.*, 2012).

The magnitude of agricultural workers migration has been attracted to policymakers' attention by liberalization and they are hunting 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. (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 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 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 287<sup>th</sup> ranking in India (out of a total of 640). Bidar district accounts for 2.84 per cent of total area and home of 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 middle men (Deepak Mishra, 2010). These factors converted agriculture into 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 Bidar district to study the effect of socio-economic and demographic characteristics on agricultural labour migration.

#### **MATERIAL AND METHODS:**

Based on 2011 Census Bidar district which is located in a Kalyana Karnataka region and from where the migration of a 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 Basavakalyantaluk. Bhatambra, Halipurga, Khurabkhelgi and Nagral from Bhalkitaluk. In the same way Chitta, Hippalgaon, Kamathan and solpur were selected from Bidartaluk. From each selected village 20 sample households were selected by 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

$$n = n_0 + n_1$$
$$s_{n-1} = \text{standard deviation} = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_i - \bar{x})^2}$$
$$\frac{M_1 - M_0}{s_{n-1}} = \text{normalizing constant}$$

Normalizing constant is used to tell how the factors 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.

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

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 of 10 households having migrants. Thus, from each taluka 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 in all of the talukas. It interesting to note that in four sample villages from all the 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 House Holds	Number of Households With At Least One Member Migrated	Percentage
<b>Basavakalyan Taluk</b>			
Ghotal	20	10	50
Kitta	20	10	50
Morkhandi	20	10	50
Narayanpur	20	10	50
<b>Sub-Total</b>	<b>80</b>	<b>40</b>	<b>50</b>
<b>Bhalki Taluk</b>			
Bhatambra	20	10	50
Halipurga	20	10	50
Khurabkhelgi	20	10	50
Nagrals	20	10	50
<b>Sub-Total</b>	<b>80</b>	<b>40</b>	<b>50</b>
<b>Bidar Taluk</b>			
Chitta	20	10	50
Hippalgaon	20	10	50
Kamathana	20	10	50
Solpur	20	10	50
<b>Sub-Total</b>	<b>80</b>	<b>40</b>	<b>50</b>
<b>Grand total</b>	<b>240</b>	<b>120</b>	<b>50</b>

### 1.2 Migrates in Bidar district

In the selected households of Bidar district, it was noticed in eight households (3.33%) both husband and wives were migrated, eight (3.33%) whole families and 104 household (43.33%) individuals were migrated (Zhang, H.X., 1999). In Basavakalyantaluka, 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' individual migration was observed, which comprised of 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 Bhalkitaluka 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 in 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 Bidartalukain 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 husband wives then the entire family migration in the village (Holley *et al.*, 2010). Thus, the data taken for sample villages of the Bidar district (Figure: 1) displayed that individual persons 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 life style would be high and migration also affects their children's education, hence the migration of individuals was far greater than husband and wife or 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 the male and female in 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 male and female was maximum in kitta village, while no migration was detected in the lesser than 15 years age group in four villages viz. Narayanpur (Basavakalyantaluka), Bhatambra (Bhalkitaluka), Hippalgaon and Kamthan (Bidartaluka).

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

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

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 village of HippalgaonBidartaluka. For the 15-30 age group, respondent's male migration was found to be highest in Bidar (32) and minimum in Bhalkitaluka (27). Migration of females in Basavakalyan was maximum and was the least in Bhalkitaluka. It was noticed that the proportion of male migrants noticed was same in both Basavakalyan and Bhalkitalukas (21) in the age group 31-45 years, while minimum in Bidartaluka.

With respect to female migration, nine had migrated from Bhalkitaluka and six and five from Bidar and Basavakalyantaluka, respectively. In case of more than 45 years age group, none of the females were migrated in all three talukas where greater number of male migrations was noticed in Bhalkitaluka(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 alphabets. 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**

Village	<15 Years		15-30 Years		31-45 Years		>45 Years		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
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
Nagrals	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. There were no migrants belongs to 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. 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

Maximum number of migrants with landless agriculture labourers were seen in Basavakalyan (22) and fourteen in Bhalkitauka. There were no migrants found with farming as occupation in all talukas. Non-farm wage labourers were maximum in Basavakalyan (18) and minimum in Bidar (11) talukas. Four migrants look after business in Bhalki and Bidar talukas and none in Basavakalyan. Migrants with other occupation observed same in

Bhalki and Bidartalukas (8) and zero in Basavakalyan.

### **1.5 Occupational Pattern for non-migrant's sample Households**

Table 5 showed that from the selected respondents' maximum number (10) of the non-migrants had the farming 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 found in Ghotal and Nagral villages, one each in Narayanpur, Halipurga, Hippalgaon and Kamthan villages and remaining six villages had zero non-farm wage labourers. Non-migrants with business occupation were noticed one in each Nagral and Hippalgaon villages and there were zero business occupiers in 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 (Surabhiet *al.*, 2007).

Basavakalyantaluka had more non-migrants with framing occupation (32) and Bidartaluk had minimum (22). Highest number of land-less agriculture labourers were observed in Basavakalyantaluka (5) then there were two land less agriculture labourers in Bidartaluka. Basavakalyan and bhalkitalukas had same (3) nonfarm wage labours whereas Bidartaluka had two. There were only one each business occupants in Bhalki and bidartalukas and zero in Basavakalyantaluka. The non-migrants with other occupation was noticed same in Bhalki and bidartalukas (12) and zero in Basavakalyan.

Reporting on migrant and non-migrant job trends (Table 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 Agriculture 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
Nagrals	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 Migrants literacy profile

The highest number of illiterates were observed in Morkhandi and Narayanpur villages (11) and minimum in Khurabkhelgi and Chitta villages (2). Respondents having the primary schooling were noticed maximum (5) in Ghotal and Kitta villages none of the respondents had primary education in Bhatambra, Halipurga, Nagrals, Hippalgaon, Kamathan and Solpur villages. In Chitta village, there was maximum number (7) of respondents possessed high school education and four respondents from Morkhandi, Narayanpur, Bhatambra, Nagrals, Hippalgaon and Solpur villages who had finished their high school education (Deshingkar , 2010). Maximum number of respondents who had finished their education more than matriculation were 9 in all

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

The literacy profile of sample talukas revealed that Basavakalyantaluka had the maximum number of illiterates (36) and illiteracy was less in both Bhalki and Bidartalukas (22). Primary schooling was maximum (18) in Basavakalyantaluka and minimum (2) in both Bhalki and Bidartalukas (Shoba Jain, 2010). All the 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 bidartalukas and 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 high school education and 32.5 per cent respondents had matriculation and above (Barkhet *al.*, 2007).

**Table 6: Literacy profile**

Villages	Illiterate	Primary school	High school	Above matriculate	Total
Basvakalyantaluk					
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
Bhalkitaluk					
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
Bidartaluk					
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 migrating 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 incapability of parents to provide the appropriate schooling to their children hence illiteracy is growing in the communal (Deshingkaret *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 land-less (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 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 each were belongs to the class of the medium farmers group with more than 5 acres of land in Bidar district (Tumbe, C., 2012).

Basavakalyantaluka had highest number of land-less migrants (22) then minimum in Bhalkitaluka (14). Bhalkitaluka had the maximum migrants belonging to the class of marginal land holding then minimum in Basavakalyan. There were highest (13) non-migrants in Basavakalyantaluka and minimum (10) in Bhalkitaluka belonging to the class of marginal land holders. Eleven migrants everyone was belongs to small farmers group in Basavakalyan and Bhalkitalukas then other taluka had eight Migrants belongs to small farmers group. Among the non-migrants there were maximum (18) small farmers from Bhalkitaluka then minimum (8) in Bidartaluka. Maximum (11) migrant farmers in BidarTaluk and minimum (7) in Basavakalyantaluk were belonging to medium farmers group. Maximum (11) non-migrants in Basavakalyantaluka and minimum (8) from Bhalkitaluka belongs to the class medium land holding. (Table7)

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

**Table 7: Distribution of sample households under the study on the basis of land holdings**

villages	Land less		Marginal (< 2.5 acres)		Small (2.5 - 5 acres)		Medium (> 5acres)	
	M	NM	M	NM	M	NM	M	NM
Basvakalyantaluk								

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
Bhalkitaluk								
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
Nagrul	3	1	2	0	3	4	2	5
Total	14	4	6	10	11	18	10	8
Bidartak								
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 results presented in Table 8 that there were lot of reasons for migration to other places. It was concluded that non-profitable nature of farming and better opportunities are the major reasons for migration, which 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 loan (7.5%), children 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 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 Basavakalyantaluka**

In Ghotal village, migration was associated with income (IMI) and significant at one per cent level, family size was associated significantly at 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 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 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 normalizing factor was positive. Whereas income (EMI) and education was 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 Basavakalyantaluka'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 in the villagers of Morkhandi and Narayanpur had the negative relationship, i.e., if the illiterates were more, 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 Basavakalyantaluka**

Migrants Villages	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 <sup>NS</sup>	+	0.124 <sup>NS</sup>	+
Income (EMI)	0.202*	-	0.287*	-	0.434	-	0.381 <sup>NS</sup>	-
Education	0.148 <sup>NS</sup>	+	0.148 <sup>NS</sup>	+	0.265 <sup>NS</sup>	-	0.265 <sup>NS</sup>	-
Family Size	0.456*	+	0.456*	+	0.065	+	0.065 <sup>NS</sup>	+
Land Holding	0.076 <sup>NS</sup>	-	0.091 <sup>NS</sup>	-	0.449*	-	0.374 <sup>NS</sup>	-

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 Bhalkitaluka

In Bhatambra village, migration was associated with income (IMI) and significant at 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 Bhalkitaluka**

Migrants Villages	Bhatambra		Halipurga		Khurabkhelgi		Nagrals	
	$r_{pb}$	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 <sup>NS</sup>	+	0.228 <sup>NS</sup>	+
Income (EMI)	0.294 <sup>NS</sup>	-	0.374*	-	0.038 <sup>NS</sup>	-	0.338 <sup>NS</sup>	-
Education	0.262 <sup>NS</sup>	-	0.274 <sup>NS</sup>	+	0.363 <sup>NS</sup>	-	0.262 <sup>NS</sup>	-
Family size	0.190 <sup>NS</sup>	+	0.351 <sup>NS</sup>	+	0.277 <sup>NS</sup>	+	0.293 <sup>NS</sup>	+
Landholding	0.072 <sup>NS</sup>	-	0.308 <sup>NS</sup>	+	0.070 <sup>NS</sup>	-	0.439 <sup>NS</sup>	-

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 was associated non-significantly with

migration where these factors normalizing factor was positive. Whereas income (EMI) non-significantly correlated with migration and normalizing factor was negative. (Table 10)

In Khurabkhelgi 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)

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)

Bhalkitaluka revealed no significant or 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 Basavakalyantaluka in 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 Bidartaluka**

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 was 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 Bidartaluka (Table 11) it was noticed that the accessibility to land holding had association with migration having negative normalizing factor in Hippalgaon and Solpur villages, i.e. as the land holding rised 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) related with positive normalizing factor ant income (EMI) also related but normalizing factor is neagative that suggested a rise in income to increase in 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 the overtime work. Therefore, income also rises as migration increases.

**Table 11: Point Biserial Correlation analysis for Bidartaluka**

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 <sup>NS</sup>	+	0.303 <sup>NS</sup>	+	0.602 <sup>**</sup>	+	0.498 <sup>*</sup>	+
Income (EMI)	0.100 <sup>NS</sup>	-	0.311 <sup>NS</sup>	-	0.214 <sup>*</sup>	-	0.369 <sup>NS</sup>	-
Education	0.363 <sup>NS</sup>	-	0.208 <sup>NS</sup>	-	0.274 <sup>NS</sup>	+	0.262 <sup>NS</sup>	-
Family size	0.277 <sup>NS</sup>	+	0.293 <sup>NS</sup>	+	0.351 <sup>NS</sup>	+	0.190 <sup>NS</sup>	+
Landholding	0.011 <sup>NS</sup>	+	0.425 <sup>NS</sup>	-	0.241 <sup>NS</sup>	+	0.311 <sup>NS</sup>	-

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

Correlation was measured to the variables for the entire district of Bidar in which migration was associated with income (IMI) and family size were associated significantly at one

per cent level where these factors normalizing factor was positive. Whereas income (EMI) and land holding were significantly correlated at five per cent level with migration, education correlated non-significantly and these factors normalizing factor was negative. (Table 12)

When correlation study was directed for the entire district of Bidar (Table 12), the availability of per capita land holding was associated to migration with 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 outcomes was shown by Akwasimensah-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 <sup>NS</sup>	-
Education	0.102 <sup>NS</sup>	-
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 lead in the sample villages of Bidar district for the specific characteristics of migrants and non-migrants. 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 belongs to the 15-30-year age group migrate more. Research also found that an alphabets 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. It was concluded that better opportunities and 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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