Nature, trend and determinants of agricultural labour migration in Karnataka

Sangmesh Chendrashekhar, Murtuza Khan, GM Gaddi, Mahin Sharif, MN Thimmegowda and V Manjunath

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Abstract

The present paper intends to examine the nature, trend and determinants of Agricultural labour migration in Raichur and Yadgir districts of Karnataka. The results revealed that the majority of population were inter district migrants with the highest decadal growth rate of 68.53 per cent. And it has also used latest census 2011 data and made compared with previous census report of 2001, revealed that highest per cent of migration was in rural as compared to urban area. The most of the labourers in irrigated situation migrated near village and within the district but in rainfed situation, labour migration to other districts was relatively high. In both the situation majority of labourers migrated permentally and the frequency was highest (62.5%) in rainfed situation. The elasticity coefficients for wage rate, land holding, family size and indebtedness were significantly influencing the migration in the study area.

Keywords: Agricultural labour, migration, trend, determinants

Introduction

Migration is the characteristic feature of any growing economy and occurs as a result of surplus labour force in one region flow towards the region of scarcity in search of employment and better conditions of living. India being second in the world with more than 1.3 billion population accounts for more than 45.36 crore internal migrants (In 2001-31.45 crore) in India are migrants now settled in a place different from their previous residence. According to the 2011 census of India, the total population of Karnataka was 6.1 crore population of which (50.7%) were male and (49.3%) were female and more than 2.58 crore population were internal migrants.

The recent discourse on migration in developing economies seeks to revisit the conventional binary approach where distress and development-induced migratory movements were seen as dichotomous situations. The new paradigm looks at migration, for economic motive, as an important exit route from poverty, including for the chronically poor, irrespective of the initial characteristics of distress influencing mobility. Recognizing the complex, multi-patterned and dynamic nature of migration, especially among developing economies with a large proportion of the labour force residing in rural areas, the new perspective tends to re-emphasize the positive role of migration, as an integral part of the diversified strategies adopted by the poor (Hann de 1999; Deshingkar 2006; Shah 2009; Srivastava 2011) [3, 12, 17]. This is at variance with the policies adopted till recently in a large number of developing economies, such as India where the emphasis was mainly on preventing, rather than supporting, migration. There is, however, counter-evidence from micro-level situations in India, which demonstrate that migration does help many poor (though not all and the poorest) to help improve the living conditions at the place of destination and/or origin, to make productive investments and also avert entry into poverty (Shah and Shah 2005; Deshingkar and Farrington 2009; Shah 2009; Singh 2009) [11, 8, 12, 13]. This of course, intuitively confirms the basic economic rationale where the shift of labour force from backward to developed economies is expected to improve the economic and social status among migrants; in the absence of this, they may not have migrated or continued to stay away from their place of destination for economic reasons.

Indian agriculture was marked by plentiful supply of farm labour till recent years. The available labour force was remained under-utilized due to the residuary nature of work in the agriculture sector.

Corresponding Author:
Sangmesh Chendrashekhar
Department of Agricultural Economics, UAS, GKVK, Bengaluru, Karnataka, India

MN Thimmegowda
Department of Agronomy, AICRP on Dry land Agriculture, UAS, GKVK, Bengaluru, Karnataka, India

V Manjunath
Department of Agricultural Statistics, UAS, GKVK, Bengaluru, Karnataka, India
One of the apparent reasons for the oversupply of labour was low levels of productivity and low wages in farming, which encouraged more labour inclusion to earn a subsistence level of income from the non-farm activities. This may give rise to a negative association between labour productivity and absorption in farming sector. Migration is a global phenomenon, where uneven economic development, inter-regional disparity and differences in living standards between socio-economic groups are some of the important reasons responsible for migration. Avenues of better employment and higher wages serve as pull factors for labour, whereas non-availability of employment opportunities in backward regions, draught and scarcity conditions are push factors in the migration process. This study examines the nature and trends of agricultural labour migration and factors/determinants for labour migration in Raichur and Yadgir districts of Karnataka.

Data and methodology
The study was taken up in Raichur and Sindhanur taluks of Raichur district and Yadgir and Shorapur taluks of Yadgir district. The concept of Agriculture Labour Enquiry Committee (A.L.E.C) concept for identification of agricultural labours i.e. based on the income, wherein, if 50 per cent or more of their income is derived from wage earning from work rendered in agriculture and allied activities, then it could be considered as agricultural labour household. Then migrant and non-migrant labour households are classified based on migration of any number of members from their family, but not the whole family. In the first stage Raichur and Yadgir districts were chosen purposively. In the next stage, two taluks from each of the district, in such a way that one taluk coming under canal irrigation and another taluk having predominant rainfed agriculture were chosen. In the next stage two villages were selected from each of the chosen taluks. Finally 35 respondents were selected from each village in which consists of 10 labour at source, 10 migrated labour at destination and 15 farmers. And also secondary data collected mainly from census, Department of agriculture, Government of Karnataka. Thus the study has made use of Census and NSSO latest available data published by government of India (GOI). To study the nature of migration and trends, their determinants for labour migration across space. Simple tabular analysis, decadal growth and multiple linear regression analysis has been taken up. To know the factors influencing migration several functional forms were tried, however linear regression was found to be the most suitable form. The model considered number of persons migrated per family is a function of wage rate, size of land holding, family size, education, indebtedness and distance of migration.

The function used for the study is

\[ Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + U \]

The variables chosen to run the linear regression for migration of labours is as follows:

- \( Y \): Number of persons migrated per family
- \( X_1 \): Wage rate (Rs/Day)
- \( X_2 \): Size of land holding (Acres)
- \( X_3 \): Family size (Numbers)
- \( X_4 \): Education
- \( X_5 \): Indebtedness
- \( X_6 \): Distance of migration
- \( U \): Error term

Results and discussion
To study the decadal growth rates of migration data from latest census (2011) has been made use and is compared with previous census report of 2001. The highest decadal growth rate were found in case of inter-district migration (68.53 %) followed by the abroad (61.92 %), state (60.14 %) and least was in case of intra-district (56.26 %) which is depicted in the below Table 1 and over the decades total migrants person rates has increased with growth rate of 59.76 per cent, while that of urban area has increased indicating growing opportunities and facilities in rural areas, and the effects of liberalisation, privatisation and globalisation (LPG) reflected in terms of more urban migration since the 1990’s LPG reforms. The migration trends over the decades, based on gender (male, female) show that across various periods the rate of female migration is quite high than the male migration, and accounts to 61 per cent in 2011 where as the male migration stands out to be just 39 per cent.

Table 1: A profile of migrants in Karnataka by “place of birth” (in numbers)

| Sl. No. | Migrants by place of birth | 2001 Census | 2011 Census | Decadal growth (%) |
|--------|----------------------------|-------------|-------------|--------------------|
| 1      | Total population           | 52850562    | 61095297    | 15.60              |
| 2      | Total Persons migrants     | 16560377    | 26463170    | 59.79              |
| a      | Males                      | 5690630     | 10204423    | 79.31              |
| b      | Females                    | 10869747    | 16258747    | 49.57              |
| 3      | Intra-district             | 9531671     | 14894366    | 56.26              |
| 4      | Inter-district             | 4497845     | 7580606     | 68.53              |
| 5      | Inter-state                | 4210806     | 3375486     | 60.14              |
| 6      | From abroad                | 44290       | 71715       | 61.92              |

Source Authors’ estimates from Census reports
Note Figures in parentheses represent percentage to total

Table 2: A profile of migrants in Raichur and Yadgir districts of Karnataka (in numbers)

| District | Year | Total migrants | Rural Persons | Urban Persons | Rural % | Urban % |
|----------|------|----------------|---------------|--------------|--------|--------|
|          |      | Persons | Males | Females | Persons | Males | Females | %     | %    | %     | %     |
| Raichur  | 2001 | 70,904  | 24,353| 46,551  | 36,636  | 18,492| 51,70   | 26.08 |        |
|          | 2011 | 117,618 | 38,155| 79,463  | 71,113  | 46,505| 60,46   | 39.54 |        |
|          |      | Decadal growth (%) | 65.88 | 56.67 | 70.70 | 94.00 | 151.00 |        |        |
| Yadgir   | 2001 | 90,548  | 22,521| 68,027  | 63,060  | 15,468| 69.64   | 17.08 |        |
|          | 2011 | 95,613  | 24,791| 70,822  | 67,108  | 28,505| 70.19   | 29.81 |        |

Source Authors’ estimates from Census reports

A profile of Migrants in Raichur and Yadgir districts presents in the Table 2, Whereas, latest census (2011) has been made use and is compared with previous census report of 2001. The highest per cent of migration was in rural as compared to urban area, over the decades migration was increasing from 51.70 per cent in 2001 to 60.46 per cent in 2011 in case of Raichur district. Similar trend observed in case of Yadgir district.
Table 3: Land holding pattern in Raichur and Yadgir districts of Karnataka

| Particulars          | Raichur 2011 | Raichur 2015-16 | Yadgir 2010 | Yadgir 2015-16 |
|----------------------|--------------|-----------------|-------------|----------------|
| Marginal farmers (<1 Ha) | 101422        | 110208          | 71675       | 80151          |
| Small farmers (1-2 Ha)  | 111859        | 92290           | 79346       | 81160          |
| Semi medium farmers (2-4 Ha) | 78519        | 62173           | 53075       | 50588          |
| Medium farmers (4-10 Ha) | 35765        | 29695           | 20126       | 18753          |
| Large farmers (>10 Ha)  | 4468         | 4848            | 2236        | 1971           |
| Total                 | 332033       | 299214          | 226458      | 232623         |

Source Authors’ estimates from Karnataka at a Glance (2011 and 2016), DES, Bangalore, GoK.

With respect to the land holding pattern in both district of the study area were depicted in Table 3. The size of land holding has implications for sources of income and ultimately household decision making on short-term migration. Whereas latest report of 2016 has been made use and is compared with previous report of 2011. The results revealed that, there has decreases the small, semi medium and medium holding while increase the marginal holding over the two periods, mainly because of rapid growth the population over the periods. In case of Raichur district, the share of marginal land holders, i.e. those with less than 1 hectare land, has increased from less than 30.55 per cent in 2010-11 to over 36.83 per cent in 2015-16 and very least of number farmers of were holding large scale of land 1.62 per cent. Whereas, in case of Yadgir district majority of the farmers were holding a small land (34.89 %) followed by the marginal farmers (34.46 %) and very least of number farmers of were holding large scale of land 0.85 per cent. In the both districts the over years the small, semi medium and medium holding farmers losing their land and this declining trend in the average operational holding has led to underemployment in rural areas (Chandrasekhar and Sahoo, 2018) [6].

Table 4: Migration pattern of the labour respondents in study area

| Sl. No. | Category                        | Irrigated Condition | Rainfed Condition |
|--------|---------------------------------|---------------------|-------------------|
|        | Based on direction of movement  | labour @ Destination (n=40) | labour @ Destination (n=40) |
| I      | a) Rural to Rural migration     | 5 (12.5)            | 3 (7.5)           |
|        | b) Rural to Urban migration     | 26 (65)             | 32 (80)           |
|        | c) Urban to Rural migration     | 1 (2.5)             | 2 (5)             |
|        | d) Urban to Urban migration     | 8 (20)              | 3 (7.5)           |
| II     | Based on spatial dimensions     |                     |                   |
|        | a) Intra-district migration     | 6 (15)              | 2 (5)             |
|        | b) Inter-district migration     | 31 (77.5)           | 34 (85)           |
|        | c) Inter-state migration        | 3 (7.5)             | 3 (10)            |
| III    | Based on duration of migration  |                     |                   |
|        | a) Seasonal migration           | 11 (27.5)           | 13 (32.5)         |
|        | b) Temporary migration          | 6 (15)              | 2 (5)             |
|        | c) Permanent migration          | 23 (57.5)           | 25 (62.5)         |

Note Figures in parentheses represent percentage to total sample

The migration pattern of labour households on direction, spatial dimension and nature/duration of migration is presented in Table 4. In irrigated situation, based on direction of movement, sixty-five per cent of labourers migrated from rural to urban. 20 per cent migrated from urban to urban and 12.50 per cent of labourers migrated from rural to rural and only 2.5 per cent migrated from urban to rural. With respect to spatial dimension, 77.50 per cent of labour were inter-district migrants, 15 per cent of labour were intra-district migrants and only 7.50 per cent of were migrated to other state. In the total migrants, 57.50 per cent of labour were permanently migrated, 27.50 of labour were seasonal migrants and remaining fifteen per cent of labour were temporarily migrated.

In rainfed situation, based on direction of movement, eighty per cent of labourers migrated from rural to urban followed by 7.50 per cent of labourers migrated from urban to urban and from rural to rural and only five per cent migrated from urban to rural. With respect to spatial dimension, 85 per cent of labour were inter-district migrants, ten per cent of labour were migrants to other state and only five per cent of labour were intra-district migrants. In case of duration, 62.50 per cent of
labour were permanently migrated, 32.50 of labour were seasonal migrated and remaining five per cent of labour were temporarily migrated. Similar results were reported by (Amit Kundu, 2000; Handral et al, 2018) [2] [10].

Results obtained were similar to the results of (Deshingkar and Start, 2003; Singh, 2012; Singh, 2016; Chandrasekhar and Sahoo, 2018) [7, 14, 15, 6] observed that the reason for high percentage of inter-district migration might be due to urbanization, industrialization, better employment opportunities and transportation facilities available in the nearby districts. At the same time lower inter-state migration might be due to long distance from the place of origin and language. The probable reasons for high per cent of rural to urban migration might be due to availability of job opportunities in urban areas because of industrialization and availability of better facilities in the urban areas compared to rural areas. The duration of migration might be attributed to the fact that, unemployment during agriculture lean season and often may be linked to debt cycles and the need of money for repaying debts, covering deficits created by losses covered in agriculture and festivals, poor economic condition of the family which enforces them to move out in search of employment. The results are in conformity with results obtained by (Deshingkar and Start, 2003; Deshingkar and Farrington, 2009) [7, 8].

Table 5: Determinants of agricultural labour migration

| Sl. No. | Particulars          | R – coefficients |
|--------|----------------------|------------------|
|        | Number of observations | 80               |
|        | Dependent variable    | Number of persons migrated per household |
|        | Independent variables |                  |
| 1      | Intercept             | 3.243 (7.15)     |
| 2      | Wage rate (Rs.)       | -0.014*(2.78)    |
| 3      | Size of land holding (acre) | -0.071**(2.11)  |
| 4      | Family size (No.)     | 0.23 **(2.03)    |
| 5      | Education (Years)     | 1.23 (1.03)      |
| 6      | Distance of migration (km) | 0.024 (1.23)    |
| 7      | Indebtedness (Rs.)    | 0.078* (3.12)    |
| 8      | R²                   | 0.81             |
|        | R²-(adjusted)         | 0.73             |

Source Authors' estimates
Note Figures in the parentheses indicate t- values of the coefficients (* and ** denotes Significant at 1 % and 5 % levels, respectively).

The OLS estimates of linear regression with respect to number of persons migrated from each household was presented in Table 5. The results indicated that the number of persons migrated per household in both the situations has been significantly influenced by wage rate and land holding. The coefficient for wage rate were significant, indicating that for one rupee increase in the wage rate decreases the number of persons migration by 1.4 per cent per household. The elasticity coefficient for land holding was found to be significant but negatively, indicating that for every acre increase in the land holding decreases the number of migrated persons by 7.1 per cent per household. The coefficient for family size, indicating that for every one person increase in family, the number of migrated persons increases by 2.3 per cent per household. The coefficient for indebtedness found significant, indicating that for Rs.1000 increase in indebtedness increases would lead to the number of migrated persons by 7.8 per cent per household. The multiple regression analysis revealed that 73 per cent variation in migrated per household was explained by the independent Variables included in the model. (Adams, 1993; Faridi and Basit, 2011; Sivasakthi et al, 2011) [1, 16] have put forth similar results in their studies.

Results obtained were similar to the results of (Venu et al., 2016) [18] revealed that wage rate and land holding were significantly influencing the migration. The frequency of migration outside the district was comparatively higher in rainfed areas. Majority of labourers migrated seasonally and the rate was high in rainfed situation.

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Conclusion
Majority of labourers in Karnataka were inter and intra districts migrants, with the highest decadal growth and also female migration is quite high than the male migration which accounts to 61 per cent and the male migration stands out to be just 39 per cent in 2011. Whereas in case of both districts, the highest per cent of migration was in rural as compared to urban area, over the decades migration was increased more than nine per cent. Over years the small, semi medium and medium holding farmers losing their land and this declining trend in the average operational holding has led to underemployment in rural areas in the both districts. The dominant pattern of migration was found in both the situation were rural to urban with more than 65 per cent of the respondents. These findings have some important policy implications for reducing migration in study area. The study recommends that, there is a need to develop village level plans for proper utilization of resources, man power in each village for proper engagement of the farmers in villages during lean season. The farmers who had good educational background can be motivated and trained to start agro industries with financial support from nationalized banks to reduce the migration from rural to urban and also special awareness programme among agricultural labourers has to be provided to reduce migration of agricultural labour and to make them aware of employment opportunities within their village surroundings itself.

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