

# Preferences among Local Vs Migratory Labour in Paddy Cultivation: Farmer's Perspective in Haryana

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## ABSTRACT

A large number of migratory labourers are observed each year in paddy farms of Haryana. This inflow of migratory labour has broadened the choice of farmers regarding selection between local and migratory labour. Thus, the present study is aimed to find out farmer's preference between local and migratory labourers for various paddy farming operations and the reasons thereof. The study is based on the primary survey of paddy farmers of Haryana. Descriptive statistics and chi-square test has been used for data analysis. Results indicates that almost all farmers prefer migrants specifically for paddy transplanting as they are comparatively more skilled, demand low wages and are humble and hardworking than their local counterparts. On the other hand, mostly farmers prefer local labour for spraying and weeding operation in paddy farming. The reason of preference is non-availability of migrant during these operations and locals being more conversant in these activities. Farmers are quite neutral between local and migratory labourers for paddy harvesting and threshing as combine harvesters are extensively used. Overall, the farmer's preference between local and migratory labourers varies as per various operations in paddy cultivation.

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## 1. Introduction

### Need of Migratory Labourers in the Agriculture Sector

Labour migration processes emerged as a result of capitalistic development of agriculture in India and abroad since British colonial period (Gill, 1998). Earlier, migration for agriculture work was forceful during British raj in India but later agricultural migrants started moving voluntarily to nearby states for economic reason (Jha, 2005). Simultaneously, the trend of using family labour was transformed to hired labour (Singh, 2015). Moreover, Haryana experienced a major transformation in cropping pattern as area under paddy crop has extensively increased since late 1960s during the period of green revolution (Gill *et al.*, 2017; Sidhu *et al.*, 1997). Paddy farmers are dependent on migratory labour due to insufficiency of local labour to meet the peak demand (Sharma, 1982; Sidhu and Rangi, 1998; Ahlawat, 2003: 315; Singh *et al.*, 2007). Such large number of migratory labourers get absorbed during peak paddy season due to shortage of local labourers by their outmigration to urban areas (Ahlawat, 2003: 316; Martin, 2016).

### 2. Farmers Employ Migrant Labourer even though their Local Counterparts are available

Capitalistic development of agriculture has transformed use of family labour to hired labour hence further accelerated the phenomena of seasonal migration. Farmers recruit migrant labourers even though their local counterparts are available. Reasons for migrant's preferences as stated by farmers are their sincerity, comparatively low wage demand and flexibility in recruiting and relieving them (Breman, 1979; Srivastva, 1998; Patel, 2005; Singh, 2012). Migrant labourers are more efficient in paddy transplantation as they belong to traditional paddy

growing states of India (Sidhu *et al.*, 2007). Farmers also succeed to accumulate agricultural profits through access to enlarged choices of labour with inflow of migratory labourers (Rogaly *et al.*, 2001). An effort is made through this study to find out paddy farmer's choices between local and migratory labourers during various paddy farming operations in Haryana.

### 3. Paddy farming operations and farmer's perspective regarding local and migratory labourers during these operations

Paddy cultivation comprises various activities such as nursery preparation and land preparation, paddy transplanting, spraying in paddy crop, weeding and paddy harvesting-cum-threshing etc. The objective of this study is to identify the farmer's preference between local and migratory labourers separately as per these activities. It is summarised as follows:

#### 3.1 Nursery preparation and land preparation for planting paddy

Foremost activity of paddy cultivation is nursery preparation of paddy sapling. Once the saplings obtain a particular height of around ten inches, farmers indulge in land preparation activity viz. watering and levelling of fields. Land preparation activity is commonly accomplished through tractors but sometimes computerised levellers are used for better results. Uniform levelling helps in retaining even water level in the fields which enhance paddy productivity. This activity is fully mechanised requiring only one or two labourers. The aforesaid two activities are accomplished either by the farmers alone or by permanent servants (siri) of farmers. Sometimes farmers hire the services of computerised levellers. Thus, farmers sometimes face a conflict between use labour and

machinery for various farm operations. A survey on farmers of Haryana was conducted to find out the extent of use of labour (local vs. migratory) and machinery during various paddy farming operations. Responses of 240 paddy farmers belonging to four districts of Haryana was collected through structured questionnaire during year 2017-18. Selected districts were Kaithal, Karnal, Jind and Palwal. Aforesaid districts belong to different administrative zones of Haryana, having highest area under paddy crop in their respective zones. The cultivation activities are categorised as follows.

**3.2 Paddy transplanting:** Paddy transplanting is a significant activity as the major labour requirement and their absorption in paddy cultivation arises during this activity. It requires specialised skill in uprooting of paddy sapling, careful handling of seedlings and transplanting saplings to paddy fields. Paddy planting may be accomplished either manually or mechanically. Migratory labourers from adjacent states are available in large number during this activity. Hence, it creates a curiosity to identify the choice of farmers among local labour and migratory labour which is highlighted through present study under the following heads in a systematic way:

**Table 1:**  
**District-wise Farmer's Preferences Between Local And Migratory Labourer During Paddy Transplanting**

District	Migrant labourer		Local Labourer		Chi-square value	p value	Neutral		Total	
	No.	%	No.	%			No.	%	No.	%
Kaithal	21	35	10	16.67	3.90	0.048*	29	48.33	60	100
Palwal	21	35	27	45	0.75	0.386	12	20	60	100
Karnal	60	100	0	0	N.A.	N.A.	0	0	60	100
Jind	58	96.67	2	3.33	52.27	0.000*	0	0	60	100
Total	160	66.67	39	16.05	75.27	0.000*	41	17.28	240	100

\*indicates significant at 5% level of significance level. Neutral responses has been removed while computing chi square test statistics

**Source:** Computed through primary survey

Table 1 indicates that farmers of Jind and Karnal specifically prefer migratory labour over the local labour for paddy transplanting. Farmers stated migrants are comparatively easily available, more skilled, work fast and maintains proper gap among paddy saplings which results in enhanced productivity of paddy. Although, farmers of Kaithal prefer migratory labour but in situation of labour scarcity prefer labour on availability basis<sup>1</sup>. Previous studies indicate labour scarcity as a major problem at paddy farms of Kaithal (Nirmalaet *al.*, 2009). However, farmers of Palwal do not significantly prefer either local or migratory labourers. Some farmers prefer locals as they may be forced for better work due to their social obligation and can be paid later on. Others (farmers) prefer migrants as they have experience and work fast. Such contradictory results of Palwal occurred due to its comparatively small paddy cropped area. Hence, there is comparatively not much dire need of labour at peak season. Overall, the preference of paddy farmers is inclined towards migratory labour for transplanting paddy. Results of present study of paddy farmer's preference for migratory labourers are similar to previous findings (Kauret *al.*, 2011; Bagchi and Singh, 2012).

**3.2.1 Preference of farmers between local and migratory labour during paddy transplanting:** Paddy transplanting is one of the most labour intensive activities. Furthermore, it requires specialised skill for proper productivity. Hence, farmers have to supplement family labour with hired labour possessing specialised skills to meet the peak demand (Ninan, 1984; Singh, 2015).

Moreover, at high level of economic development; the phenomena of using family labour in agriculture are shifted to hired labour all over the world (Taylor and Charlton, 2018). Even the small farmers of India hire labour because paddy transplanting is a time bound activity (Rudra and Mukhopadhy, 1976; Ninan, 1984). Moreover, capitalistic development of agriculture in Haryana has made the farmers almost completely dependent on hired labour. Such agricultural development of the state has ensured the inflow of migratory labour from Bihar and Eastern Uttar Pradesh during peak paddy season. Thus, farmers of Haryana have the option to hire between local and migratory labourers for paddy cultivation.

**Spraying activity in paddy farms:** Spraying activity has its significance not only as it protects plants from insects but also that it required special caution of the operator. Spraying of fertilizers may be applied for proper growth of paddy crop. Spraying of insecticides is required frequently after a fixed interval of days hence requires labour from time to time. Here the importance of labour lies in the fact that special skill and caution is required in this activity as chemical exposure may be harmful to health and life. The continuing discussion will highlight mechanisation of spraying activity, availability and preference for labourers among farmers. Further, wage disparity among local and migratory labourers is discussed.

**Labour preferences for spraying in paddy:** Small farmers generally accomplish spraying activity at their own. This activity is exclusively performed by male labourers i.e. either local or migratory, if available. Spraying requires specialised skill as incautiousness can endanger the life of concerned labourers. Normally, few migratory labourers are available for spraying as majority of them move back home after paddy transplanting.

**Table 2:**  
**District-wise Farmer's Preferences Between Local And Migratory Labourer During Spraying Operation In Paddy Crop In Haryana**

District	Migrant labourer		Local Labourer		Chi-square value	p value	Neutral		Total	
	No.	%	No.	%			No.	%	No.	%
Kaithal	0	0	19	31.67	N.A.	N.A.	41	68.33	60	100
Palwal	1	1.67	14	23.33	11.27	0.001*	45	75.00	60	100
Karnal	2	3.33	53	88.33	47.29	0.000*	5	8.33	60	100
Jind	2	3.33	30	50.00	25.49	0.000*	28	46.67	60	100
Total	5	2.06	116	48.15	102.82	0.000*	119	49.79	240	100

\*indicates significant at 5% level of significance level. Neutral responses has been removed while computing chi square test statistics

Source: Computed through primary survey

Paddy farmers of Karnal and Jind prefer local labourers over the migratory one for spraying activity as they are easily available and have expertise in spraying. Similar evidence of preferring local labour was found in previous studies (Kauret *et al.*, 2011) However, majority of farmers at Kaithal and Palwal are indifferent to hiring between local and migratory labourers, if available as both perform well. On the contrary, remaining farmers who prefer specifically local labourers stated that locals can be forced for better work due to their social obligation and help in other farm operation also viz. irrigating field, making bunds in the field etc.

**Weeding operation in paddy crop:** Weeding is required when the paddy plant attains a particular growth but requires sideways space for further flourishing. Weeding activity in paddy fields is labour intensive operation. Although, spraying of Weedicides has reduced the frequency of weeding work.

**Table 3:**  
**District-wise Farmer's Preferences Between Local And Migratory Labourer During Weeding Operation In Paddy Farming Of Haryana**

District	Migrant labourer		Local Labourer		Chi-square value	p value	Neutral		Total	
	No.	%	No.	%			No.	%	No.	%
Kaithal	0	0	22	36.67	N.A.	N.A.	38	63.33	60	100
Palwal	1	1.67	12	20.00	9.31	0.002*	47	78.33	60	100
Karnal	0	0.00	52	86.67	N.A.	N.A.	8	13.33	60	100
Jind	19	31.67	15	25.00	0.47	0.493	26	43.33	60	100
Total	20	8.23	101	41.56	54.22	0.000*	119	50.21	240	100

\*indicates significant at 5% level of significance level. Neutral responses has been removed while computing chi square test statistics

Source: Computed through primary survey

Table 3 indicates that farmers of Karnal specifically prefer local labourers for weeding as they are easily available and have experience in weeding. However, farmers of Jind are neutral between local and migratory labourers, if both are available. These farmers stated that both kinds of labourers perform well. Similarly, majority of farmers at Kaithal and Palwal are neutral in their selection between local and migratory labourers.

However, some farmers at Kaithal and Palwal specifically prefer local labour as they are easily available, help in other farm operation viz. irrigating fields and constructing bunds in the fields etc. Overall, local labourers are available during this

But, still weeding activity assumes its importance. The aftermath discussion is arranged as mechanisation of weeding activity and absorption of local and migratory labourers in weeding. Further, it is analysed whether wage disparity exists between local and migratory labourers for weeding in paddy fields.

**Farmer's preferences regarding local and migratory labourer for weeding**

Weeding activity is performed either by local labourers or through migratory labourers, if available. This activity is generally performed by female local labourers (Baliyan, 2018; Duvvuru & Motkuri, 2013; Ninan, 1984; Agarwal, 1984). Small farmers accomplish weeding activity at their own by using family labour especially women (Baliyan, 2018). Sometimes, permanent servants at field (siri) of large farmers perform this activity.

activity as majority of migrants move back to their home after transplanting paddy. Thus, availability is considered as major factor for farmer's preferences. Hence, local labourers are preferred for weeding activity (Kauret *et al.*, 2011).

**Paddy harvesting-cum-threshing:** Paddy harvesting and threshing activities are conventionally accomplished through complete manual method. Presently, combines provide fully mechanisation of harvesting –cum-threshing activities. Farmers may adopt semi-mechanised system by harvesting manually and threshing through mechanical threshers. These activities occur concurrently hence categorised under single heading “paddy harvesting-cum-threshing”.

However, separate explanation is made wherever required. Migratory and local labourers whosoever is employed for harvesting –cum-threshing also help farmers in loading of paddy to transport from fields either for storage or to markets for sale.

**Farmer’s preference between local and migratory labourers for harvesting-cum-threshing:** Combine harvesters are extensively used for harvesting and threshing of paddy which replaced human labour to a greater extent (Duvvuru & Motkuri, 2013; Sidhu et al., 2007). However, in spite of availability of combines, paddy harvesting operations still manually performed by local and migratory labourers.

Small farmers perform harvesting at their own by using family labour. Sometimes, even small farmers hire some labour to supplement family labour as paddy harvesting is a time bound operation (Ninan, 1984). Small farmers prefer local labourers as migratory labourer don’t accept to work along with family labour of farmers. However, many farmers hire whosoever labour is available or use combine harvester for timely completion of harvesting operation. Medium and large farmers prefer to hire migratory labourer as they have experience of harvesting and work fast. Many a times, these farmers hire labours on availability basis or use combine harvester in situation of labour scarcity.

**Table 4:**  
**District-wise Farmer's Preferences Between Local And Migratory Labourer During Paddy Harvesting And Threshing In Haryana**

District	Migrant labourer		Local Labourer		Chi-square value	p value	Neutral		Total	
	No.	%	No.	%			No.	%	No.	%
Kaithal	11	18.33	4	6.67	3.27	0.071**	45	75.00	60	100
Palwal	18	30.00	21	35.00	0.23	0.631	21	35.00	60	100
Karnal	5	8.33	21	35.00	9.85	0.002*	34	56.67	60	100
Jind	41	68.33	8	13.33	23.12	0.000*	11	18.33	60	100
Total	75	31.28	54	22.22	3.72	0.054**	111	46.50	240	100

\*indicates significant at 5% level of significance level. \*\* indicates significant at 10% level of significance. Neutral responses has been removed while computing chi square test statistics

Source: Computed through primary survey

Table 4 indicates that farmers of Karnal prefer local labour because they are easily available, harvest paddy to the nearby roots and they can be paid later on. Similar to the results of (Nirmala et al., 2009), farmers of Kaithal face labour scarcity hence hire labour on the basis of availability. Otherwise, they prefer migratory labourers if adequately available. Contrary to it, farmers at Jind prefer migratory labourers over the locals as they have experience and work fast. However, farmers of Palwal are neutral in their selection between both kinds of aforesaid labourers.

Overall, it is observed that the value and productivity of paddy crop largely depends on the skill of labourers at each operation. Thus, farmers have to decide between the urgency of time and skill to choose among local labour and migratory labour.

**4. Conclusion**

Paddy cultivation of Haryana is absorbing a huge pool of migratory labour from adjacent states. It increased the labour

supply and choice of farmers to hire between local and migratory labour. Almost all farmers prefer migrants specifically for paddy transplanting as they are comparatively more skilled, demand low wages and are humble and hardworking than their local counterparts. On the other hand, mostly farmers prefer local labour for spraying and weeding operation in paddy farming. The reason of preference is non-availability of migrant during these operations and locals being more conversant in these activities. Farmers are quite neutral between local and migratory labourers for paddy harvesting and threshing as combine harvesters are extensively used. Overall, the farmer’s preference between local and migratory labourers varies as per various operations in paddy cultivation. The study will provide the understanding of farmer’s preference regarding skill and hard work for employability in paddy cultivation. It will help the future researcher to extent the study further to all over Haryana and compare it with perspective of farmers from adjacent states having similar agricultural economy.

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<sup>i</sup> 48% of surveyed farmers at Kaithal responded as neutral between local and migrant labour for paddy transplanting. For remaining 52% farmers Chi-square statistics value of 3.90 (sig. value <0.05) is significant. Hence, farmers prefer migratory labour over local labour