Impact of agricultural labour migration due to COVID-19 on income and employment: A case study in Mahabubnagar district of Telangana.

Abstract

The present study was undertaken to examine the income and employment levels of migrant agricultural labourers pre and during the COVID-19 pandemic. The study based on primary level survey conducted in Mahabubnagar district of Telangana. Various tools like tabular analysis were employed for the analysis of data. Income levels of migrant agricultural labourers who migrated for farm activities during COVID-19 pandemic when compared to before pandemic were compared in the study. The labourers earned an average income of Rs.20,126.90 and it has increased to Rs.30,740.83 per year. Whereas among those who migrated to non-farm activities, during the pandemic when compared to before pandemic were earned an average income of Rs.2,03,274.02 and it was decreased to Rs.1,32,824.98 per year. During the pandemic, some migrant agricultural labourers who migrated to both farm and non-farm activities were earned an average income of Rs.1,32,652.54 and regarding the employment levels of migrant agricultural labourers those who migrated for farm activities before and during the pandemic were for an average number of days of 48.60 man days and it was increased to 59.83 man days per year. Whereas among those who migrated to non-farm activities, during the pandemic were employed for an average number of days of 307.76 and it was decreased to 221.99 per year during the pandemic. Certain policy measures suggested from the study such as migrants should be treated as a special work group and all the required facilities such as EPF, Ration Cards and Insurance facilities are to be provided to prevent the decline in standard of living and during the pandemic times minimum wage act should be strictly implemented andshould focus on financial inclusion.

Key words: Agriculture labourers, Pandemic, Farm activities, Migration and COVID-19.

Introduction

Migration is the movement of people from one place to another place in search of livelihood. In India migration of agricultural labourers from villages to towns is not a new phenomenon, but its magnitude in the past one decade due to liberalization has attracted the attention of policymakers and they are trying to find ways to arrest the unwanted migration. Migrant agriculture labourers were affected during lockdown imposed in view of the widespread of the COVID-19 since 25th Mach 2020. Due to closure of agricultural marketing operations agricultural labourers were unable to go to work, seasonal labourers were unable to migrate to nearby villages to do agricultural operations due to closure of borders. Labour work under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was also stopped during the first phase of the lockdown period (25thMarch to 14thApril 2020).

The focus of this study is mainly on the labour migration due to COVID-19 on income and employment of agricultural labourers. Main objectives of the study are as follows:

Objectives

1. To study impact of migration and reverse migration due to COVID-19 on income levels of migrant agricultural labourer households.

2. To study impact of migration and reverse migration due to COVID-19 on employment levels of migrant agricultural labourer households.

Review of literature

Kaur *et al.* (2011) have studied about income and employment of migrated labour in the state of Punjab. They revealed that 23.00 per cent were unemployed and 60.00 per cent of them were getting lower than 250 days of work after migration. 41.00 per cent of them got more than 300 days of employment and 31.00 per cent got 250 to 300 days of work. As far as income was concerned 34.00 per cent got income more than Rs.50,000 and 28.00 per cent could get Rs.40,000-Rs.50,000 per annum.

Korra (2011) revealed from his study that income levels of the labourers were increased after migration. Majority of those who went for urban migration were working in construction sector, brick kilns, as auto drivers and factory labour, those who went for rural migration were working in agriculture sector. However, urban migrants were earning higher income than rural migrants. In case of urban migrants, factory and private service labourers were earning higher wages (Rs.2500 to Rs.3000 per month) followed by auto drivers (Rs.2000 to Rs.2500 per month), brick kilns, construction and hamalies were earning least. Whereas in case of rural migrant labourers working in agricultural activities earned around Rs.4000 to Rs.5000 per month in his duration of four to five months respectively.

Lei *et al.* (2020) in their study explained about the impact of COVID-19 on employment of migrant labourers. They revealed that nearly 30-50 million migrants lost their jobs. Nearly 20 million migrants could not able to find jobs. In China rural-Hukou workers were affected severely. More than 90.00 per cent of rural-Hulou workers and 42.00 per cent of urban-Hukou workers were not able to find the jobs. Less educated and low skilled workers were affected severely. Education of children was also affected due to COVID-19 pandemic.

Lee *et al.* (2020) in their study explained about the impact of pandemic on labour market disruptions. They revealed that globally there were 2 billion workers belonging to informal sector. Out of that 1.6 billion were significantly impacted by pandemic crisis. They further said that income of informal workers was decreased by 60.00 per cent during the first month of crisis and in Africa and America countries, income levels of informal workers decreased by more than 80.00 per cent.

Nathan *et al.* (2020) had explained about the impact of COVID-19 pandemic on health and employment and also revealed that 11 million people lost their job due to COVID-19 pandemic in India. They further said that immediate impact was very severe on small traders, daily wage earners and hawkers. However, woman workers proportionately lost more jobs than males.

Venugopal *et al.* (2020) had conducted a survey all over India between March 27 and 29, 2020. The major objective of the survey was to find out the impact of COVID-19 lockdown on migrant workers and on their income and employment. They selected total 3196 migrant workers out of that 68.00 per cent were from Madhya Pradesh, 30.00 per cent were from Uttar Pradesh, 0.25 per cent from Delhi and 1.75 per cent were from other states. Majority of them engaged in construction (37.00 per cent) followed by agriculture (21.00 per cent) and manufacturing work (16.00 per cent). They carried out telephonic interviews. Furthermore, he reveled that nearly 92.50 per cent of labour lost work ranging from one week to three weeks. A labour lost nearly Rs.4,000 to Rs.6,000 average wages for 21 days. At the time of survey, 42.00 per cent of the workers said that they did not have ration left for one day whereas 42.00 per cent said that they had ration for the next two weeks and 16.00 per cent reported that they had enough ration for 2-4 weeks.

Methodology

Primary data required for evaluating the specific objectives designed for the study was collected from sample migrant agricultural labourer households. The data collected covers the period of 25th March 2019 to 25th March 2021. Multistage sampling technique was used in selection of districts, mandals and villages. In the first stage Mahabubnagar district of Telangana state is purposively selected. Similarly, in the second stage two mandals namely Devarakhadra, Jadcherla were selected based on highest number of agricultural labour population. In the third stage, two villages from each selected mandal with highest registered agricultural labour population *viz.*, Kodgal (1411), Gangapur (916) villages were selected from the Jadcherla mandal and Nagaram (920) and Koukuntla (880) villages were selected from Devarakhadra mandal. From each selected village, 15 numbers of migrant agricultural labour households were selected randomly totally 60 migrant agricultural labour households were selected. The required primary data is collected from sample migrant labourers by using a pre tested questionnaire and secondary data collected from various related public organizations, reports published by different institutions and official websites of different organizations. Various tools and techniques like tabular analysis and garrets ranking test were used.

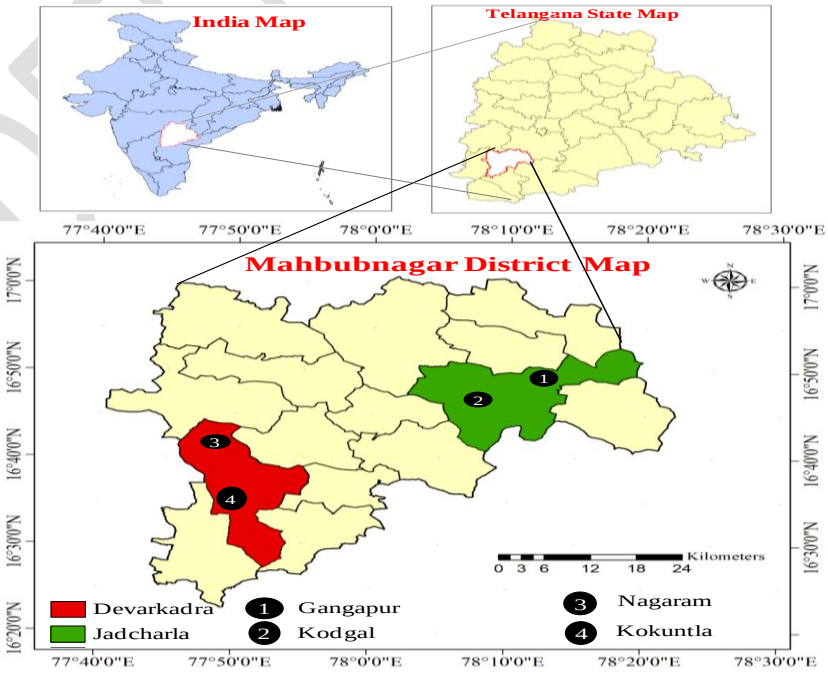

Figure-1 Pictographical representation of study area

Statistical Tools

For analysing the collected data, simple tabular analysis were employed.

Tabular analysis

Tabular analysis involving the computation of means, percentages, ranges *etc*. were used to present the data regarding the socio-economic profile and opinions expressed by the sample farmers and migrant agricultural labour households.

Results and discussion

Impact of migration and reverse migration due to COVID-19 on income of agriculture labourer migrant households

The migrations of labour primarily engaged in non-farm activities reduced during COVID-19 pandemic except for few months of lockdown, this has created an impact on income levels of migrant agricultural labourers. As there was lockdown in the urban areas, income levels of migrant agricultural labourers were decreased as shown in the Table 2.

Income levels of sample migrant agricultural labourers before COVID-19 when compared to during COVID-19, in farm and non-farm activities were presented in the Table-1. From the table it was observed that the income levels of sample migrants who were engaged in farm activity before COVID-19 was highest among those who were engaged in land preparation (Rs.26,942.86) followed by cotton picking (Rs.20,064.52) and transplanting (Rs.13,373.33) respectively.

The scenario has changed during the COVID-19 pandemic, income levels of sample migrant agricultural labourers were highest among those who were engaged in land preparation (Rs.51,222.27) followed by cotton picking (Rs.22,777.50) and transplanting (Rs.18,222.74) respectively. During the COVID-19 pandemic, the percentage change of 36.26, 13.52 and 90.11 per cent were seen in transplanting, cotton picking and land preparation/fertilizer application. Overall an average income levels of Rs.10,613.93 was increased during pandemic period in farm activities when compared to the before COVID-19 period.

When the income levels of sample migrant agricultural labourers who were engaged in non-farm activities before pandemic observed that the highest income levels were earned by those who were engaged in auto driving (Rs.2,51,635.89 per annum) followed by plumber work (Rs.2,40,575.00 per annum), painter work (Rs.2,16,780.00 per annum), manson work (Rs.1,67,127.33 per annum) and daily labourers (Rs.1,40,251.90 per annum). The scenario was changed during COVID-19 pandemic, highest income levels were earned by those who were engaged in plumber work (Rs.1,80,750.00 per annum) followed by manson work (Rs.1,48,408.83 per annum), auto driving work (Rs.24,505.75 per annum), painter work (Rs.1,20,890.00 per annum) and daily labourer work (Rs.89,571.43 per annum). During the pandemic, the percentage change of -11.20, -24.86, -90.36, -50.52 and -36.13 per cent were seen in case of manson work, plumber, painter, auto driver, daily labourer activities respectively. Overall an

average income levels of Rs.70,449.03 was decreased during the pandemic in non-farm activities when compared to the before pandemic period.

The income levels of sample migrant agricultural labourers who were engaged in both farm as well as non-farm activities during pandemic was Rs.1,32,652.54.

Table-1. Income levels of sample migrant agricultural labourers (Activity wise)

S.No.	Particulars	Before COVID-19 pandemic (Rs./Year)	During COVID-19 pandemic (Rs./Year)	Change over
I.	**Farm activities**			
1.	Transplanting	13,373.33	18,222.74	+4849.41 (36.26)
2.	Cotton picking	20,064.52	22,777.50	+2712.98 (13.52)
3.	Land preparation/ fertilizer application	26,942.86	51,222.27	+24279.41 (90.11)
	Average	20,126.90	30,740.83	+10,613.93 (52.73)
II.	**Non-farm activities**			
1.	Manson	1,67,127.33	1,48,408.75	-18,718.58 (-11.20)
2.	Plumber	2,40,575.00	1,80,750.00	-59,825.00 (-24.86)
3.	Painter	2,16,780.00	1,20,890.00	-95,890.00 (-90.36)
4.	Auto driver	2,51,635.89	1,24,504.75	-1,27,131.14 (-50.52)
5.	Daily labour	1,40,251.90	89,571.43	-50,680.47 (-36.13)
	Average	2,03,274.02	1,32,824.98	-70,449.03 (-34.65)
III.	**Both farm and non-farm activities**			
1.	Agricultural labour and daily labour	-	1,32,652.54	-
	Ratio of mean farm to non-farm activities	0.09	0.23	+0.14 (155)

Note: Figures in the parentheses indicate percentages.

It can be concluded that ratio of average income levels of migrant agricultural labourers who were engaged in farm activities to non-farm activities was increased from 0.09 to 0.23 whereas, those who were engaged in non-farm activities was decreased and farm activities was increased mainly due to lockdown in urban areas.

Impact of migration and reverse migration due to COVID-19 on employment of agriculture labourer migrant households

The migrations of labour primarily engaged in non-farm activities reduced during the pandemic except for few months of lockdown, this has created an impact on employment levels of migrant agricultural labourers. As there was lockdown in the urban areas, income levels of migrant agricultural labourers were decreased as shown in the Table-2.

Employment levels of sample migrant agricultural labourers before and during COVID-19 in farm and non-farm activities were presented in the Table-2. It was revealed from the table that in case of the employment levels of sample migrants who were engaged in farm activity before the pandemic was highest in cotton picking (61.29 man days) followed by transplanting (42.85 man days) and land preparation (41.67 man days).

The scenario was changed during COVID-19 pandemic, the highest income levels were earned by those who were engaged in land preparation (84.34 man days) followed by cotton picking (53.66 man days) and transplanting (41.50 man days) respectively. During the COVID-19 pandemic, the percentage change of -3.15, -12.45 and +102.39 were seen in transplanting, cotton picking and land preparation/fertilizer application respectively. Overall an average 11.23 employment days was increased during the pandemic in farm activities when compared to the before pandemic period.

In the case of the employment days of migrant agricultural labourers who were engaged in non-farm activities before the pandemic was observed highest in case of auto driving (262.58 man days) followed by plumber (240 man days), painter (240 man days), daily labourers (232.92 man days) and manson works (231.54 man days) respectively. The scenario was changed during the pandemic, the highest employment days were observed among those engaged in auto drivers (206.44 man days) followed by plumber work (204 man days), manson (166.50 man days), daily labourers (145.73 man days) and painters (120 man days). During the pandemic, the percentage change of -28.03, -15.00, -50.00, -21.38 and -37.43 per cent were seen in case of manson work, plumber, painter, auto driver, daily labourer activities. Overall an average employment day of 72.87 was decreased during pandemic in non-farm activities when compared to pre COVID-19 period.

The employment days of migrant agricultural labourers who were engaged in both farm and non-farm activities during the pandemic were 152.54 man days.

Table-2. Number of days of employment of migrant agricultural labourers (Activity wise)

S.No.	Particulars	Before COVID-19 pandemic (Number of man days)	During COVID-19 pandemic (Number of man days)	Change over
I.	**Farm activities**			
1.	Transplanting	42.85	41.50	-1.35 (-3.15)
2.	Cotton picking	61.29	53.66	-7.63 (-12.44)

3.	Land preparation/ fertilizer application	41.67	84.34	+42.67 (102.39)
	Average	48.60	59.83	+11.23 (23.10)
II.	**Non-farm activities**			
1.	Manson	231.54	166.50	-65.04 (-28.09)
2.	Plumber	240.00	204.00	-36.00 (-15.00)
3.	Painter	240.00	120.00	-120.00 (-50)
4.	Auto driver	262.58	206.44	-56.14 (-21.38)
5.	Daily labour	232.92	145.73	-87.19 (-37.43)
	Average	241.40	168.53	-72.87 (-30.18)
III.	**Both farm and non-farm activities**			
1.	Agricultural labour and daily labour	-	152.54	-
	Ratio of mean farm to non-farm activities	**0.20**	**0.29**	**0.09 (+45.00)**

Note: Figures in the parentheses indicate percentages.

It can be concluded from the above information that ratio of employment days of migrant agricultural labourers who were engaged in farm activities to non-farm activities was increased from 0.20 to 0.29. Whereas those who were engaged in non-farm activities were decreased, farm activities were increased mainly due to lockdown in urban areas.

Summary

Among the sample migrant agricultural labourers, those who went for farm activities before the pandemic earned an average income of Rs.20,126.90 and it was increased to Rs.30,740.83 per year during the pandemic. Whereas, among those who went to non-farm activities, earned an average income of Rs.2,03,274.02 in pre pandemic and it was decreased to Rs.1,32,824.98 per year during the pandemic. During the pandemic, some migrant agricultural labourers who went for both kinds viz., farm and non-farm activities earned an average income of Rs.1,32,652.54.

Among the sample migrant agricultural labourers, who went for farm activities before the pandemic were employed for an average number of days of 48.60 man days and it was increased to 59.83 man days per year during the pandemic. Whereas among those who went to non-farm activities were employed for an average number of days of 241.40 before the pandemic and it has decreased to 168.53 per year during the pandemic. During the pandemic, some of the migrant agricultural labourers who went for both farm and non-farm activities were employed for an average number of days of 203.84 man days.

Conclusions

- The income levels of migrant agricultural labourers engaged in farm activities were increased during pandemic compared to pre pandemic time. Further, the incomes of those who were engaged in non-farm activities were decreased during the pandemic compared to pre pandemic.

- The employment days of migrant agricultural labourers who took up farm activities were increased compared to non-farm activities during the pandemic when compared to pre pandemic time.

Policy measures suggested

- Proper official data of migrant labour is required and that to be maintained at each Gram panchayat level by the government for initiating informed policy decision/action plans as in no sample village such data was maintained.

- Due to the lack of employment in local areas people thinking of migration. Hence, there is a severe need for massive investment in rural industrialization and infrastructure such as establishment of processing units which is expected to create local employment opportunities for the rural population.

- Alternate employment opportunities should be created for the reverse migrated labour during the special situations like COVID-19 pandemic.

- Migrant agricultural labourers were also shifted to non-farm works during COVID-19, this has proven that if the farm activities are regular migration can be decreased.

- Commercialization of agriculture helps in providing employment to return migrant agricultural labourers.

- Migrants should be treated as a special group and all the facilities, such as EPF, ration card, insurance and other safety nets are provided to them by the local Government at the place of migration.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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