



# Effect of Urbanization on Employment, Wages and Livelihood of Rural People in Haryana, India

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## **Authors' contributions**

*This work was carried out in collaboration between both authors. Author RT had prepared the structure of the article, collected data and wrote the article while author SKS had carried out the analysis of data and made the tables. Both authors read and approved the final manuscript.*

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## **ABSTRACT**

**Aims:** This paper examined the effect of urbanization on employment, wages and livelihood of rural people in Haryana.

**Study Design:** Two stages purposive sampling design was used for the selection of sample. At first stage, three districts namely Gurugram, Rewari and Mahendergarh had been selected purposively indicating different level of urbanization. At second stage, road side villages located within 10 Kilometer from their respective urban centre (Cluster 1) and villages located more than 10 Kilometer from urban centre (Cluster 2) had been selected purposively to collect the required information.

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**Place and Duration of Study:** The study was conducted in Haryana during February and March 2018. The relevant primary data was collected from village head of sampled villages through personal interview using pre tested schedule.

**Methodology:** Total 90 villages were surveyed to collect the information on relevant variables. The collected data were analyzed using tabular method to achieve the objectives of the study.

**Results:** The study revealed that more people were residing in villages located away from urban centre (cluster 1) as compared to villages located near to urban centre (cluster 2) in all districts. The literacy rate was a little higher in cluster 1 than cluster 2 for both male and female population. Majority of population was engaged in agriculture in both clusters while higher percentage of population was engaged in agriculture in cluster 2 as compared to cluster 1. 87.13 percent and 66.09 per cent of total workers were engaged in non-farm sector in cluster 1 and cluster 2, respectively. The majority of village head in both clusters reported that urbanization had created better marketing facilities, job opportunities and provided better services. Although, the facilities had increased in the villages due to urbanization but more improvement was required to reduce the urban- rural gap. The majority of job created by urbanization was unskilled type in both clusters. The private sector had played a very important role in the development of villages in cluster 1 while in cluster 2, the government agencies had played important role in the development of villages.

**Conclusion:** The study concluded that urbanization had created opportunities for the rural people in Haryana. However, a good policy framework was still required to get the robust result of urbanization on rural transformation.

*Keywords: Rural; urban; urbanization; employment; wage; livelihood.*

## 1. INTRODUCTION

Traditionally, urbanization has been linked to positive economic outcomes, including higher income and growth. By providing improved access to goods and services, employment opportunities, information, and creating markets for agricultural products, urban areas have the potential to drive overall economic growth, particularly benefiting the rural economy (Dorosh & Thurlow, 2012). In this way, the urban-rural inequalities can be reduced (OECD & European Commission, 2020) and yield, growth and standards of living can also be improved. For instance, the integration of urban and rural areas has facilitated the movement of agricultural goods to cities and industrial goods and services to rural areas, boosting agricultural productivity and improving living standards (Michaels et al., 2012). Putting differently, when properly managed, the structural and spatial changes that accompany urbanization not only enhance the flow of goods and services but also set countries on a long-term path to prosperity (World Bank, 2018). Rapid urbanization is creating new economic opportunities that diversify rural livelihoods, but its effects have varied across different countries and communities (Sakketa, 2022). There is significant debate surrounding the nature and effects of urbanization on rural development outcomes, particularly in relation to poverty and inequality (Gong et al., 2012; Parnell

& Walawege, 2011). In recent periods, urbanization is occurring continuously in the developing countries (World Bank, 2020). The less urbanized region is becoming urbanized rapidly especially in Africa and Asia region and it is estimated that more than two-thirds population of world will be residing in the urban area by 2025 (United Nations Development Programme [UNDP], 2012). The growth of urbanization in Africa and Asia regions and the factors behind their growth differ significantly (Duranton, 2015; Farrell, 2017). The horizontal expansion of urban areas has converted agricultural land into developed areas, which can lead to a reduction in farmlands and crop yields, loss of livelihoods, and ultimately a decline in agricultural production—an essential factor for poverty reduction and food security (Cobbinah et al., 2015; Cobbinah & Aboagye, 2017; de Janvry & Sadoulet, 2010; Foley, 2005; Satterthwaite et al., 2010).

Urbanization induced growth of economy was evident in the post trade liberalization years and the service-centric growth which contributes in Indian GDP had also centered on urbanization. In national and regional studies researcher had reported inter-linkages between urban and rural areas (Cali & Menon, 2013; Jha, 2011 Rao & Joshi, 2009; Reddy et al., 2014). Urbanization can reduce the urban-rural gap and play a major role in facilitating rural development (Tacoli,

2004; Von, 2007). India is an example of rapid urban growth as 31.16 percent (Office of Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India, 2011) of people were residing in urban areas and this percentage was growing day by day as people were coming to the cities for different opportunities. Urbanization in Haryana had also been increased from 28.9% in 2001 to 34.7 in 2011 and plays an important role in growth due to its proximity with other developed states leading to growth, income and employment of the people. But there was variation among the districts with respect to extent of urbanization as some districts like Gurugram, Faridabad, Panchkula, etc are highly urbanized while others are least urbanized. Thus, the fruits of growth cannot be shared by everyone equally. Therefore, in this background, it was significant to find out the effect of urbanization on employment, wages and livelihood of rural people in Haryana.

## **2. MATERIALS AND METHODS**

### **2.1 Sampling Design**

The two stage purposive sampling technique had been used to select the ultimate sample (villages). At the first stage, three districts namely Mahendergarh, Rewari and Gurugram of Haryana state had been selected purposively to assess the effect of urbanization on employment, wages and livelihood. These districts had been selected because the effect of urbanization on employment, wages and livelihood could be reflected more accurately with these districts as Gurugram was second highly urbanized district (census 2011) and Mahendergarh is the second least urbanized district while Rewari is comes under middle urbanized district of state. At the second stage, the villages near to urban centre (up to 10 Km) and away from urban centre (more than 10 Km) in each selected district had been selected for collection of primary data. Thus, total 90 villages were selected for final survey.

### **2.2 Data**

The study was based on primary data collected from sampled villages. To assess the effects of urbanization on employment, wages and livelihood of rural people in Haryana, primary data had been collected during February and March 2018. The data on relevant variables had been collected through survey method using well

structured schedule by personal interview of village head and panchayat members of the selected villages. The data on distance of village from urban centre, population of village, number of households in village, demographic characteristics of population in village, workers, industry of their employment, price of commodities, wages for various works, etc, were collected. The opinion of people regarding the effect of rural transformation in creating jobs, providing better market, providing better services, etc., had also been recorded.

### **2.3 Analytical Framework**

The simple tabular method was employed to analyze the collected data. The percentage, average, etc, had been estimated to assess the effect of urbanization on employment, wages and rural livelihood in Haryana.

## **3. RESULTS AND DISCUSSION**

### **3.1 Profile of Study Area**

The profile of sampled villages regarding area, number of villages, level of urbanization, density and employment structure has been given below. The table brief description of the districts sampled in the study. The profile of sampled districts had been presented in the Table 1. The Table 1 revealed that the numbers of villages were found highest in Rewari district as compared to Mahendergarh and Gurugram district. The population density was observed to be highest in Gurugram district and it was lowest in Mahendergarh district. The Mahendergarh district had least number of towns while Gurugram and Rewari districts had equal number of towns. The size of population was found highest in Gurugram was having the highest population followed by Mahendergarh and Rewari. The number of household was found highest in Gurugram district while lowest number of households were observed in Mahendergarh district. Table indicates that Gurugram was the highest urbanized districts as compared to Rewari and Mahendergarh. The percentage of population living in urban area was found highest in Gurugram district while it was lowest for Mahendergarh district. The highest sex ratio in rural area had been reported in Rewari district followed by Mahendergarh and Gurugram district. Literacy rate was observed to be highest in Gurugram district while it was found lowest in Mahendergarh district.

**Table 1. Basic information of sampled districts**

Basic Indicators	Mahendergarh	Rewari	Gurugram
Number of Villages	370	403	242
Number of Towns	5	9	9
Number of Households	170,824	177,753	325,239
Population (P)	922,088	900,332	1,514,432
% of Urban Population	14.41	25.93	68.82
Density of Population	486	565	1204
Area (in sq Km.)	1899.00	1594.00	1258.00
Sex ratio (Rural)	896	907	878
Literacy Rate	77.72	80.99	84.70
Main Workers (%)	23.03	27.79	32.19
Marginal Workers (%)	13.68	9.72	3.78
Cultivators* (%)	44.05	30.41	13.29
Agricultural Labourers* (%)	11.32	8.35	4.97
Household Industry Workers* (%)	2.26	2.90	3.35
Other Workers* (%)	42.38	58.34	81.39

\*Cultivators, agriculture labourers, workers in household industry & other worker contain main & marginal workers.

Source: District census handbook for different districts, Population census of Haryana, 2011.

Occupational structure also plays an important role in determining the employment and livelihood of the people of a region. It can be observed from the table that percentage of main workers was highest in Gurugram district as compared to Rewari and Mahendergarh districts. More employment in main works showed the stable employment as compared to marginal works. Thus, it can be concluded that the percentage of main workers was higher in the most urbanized district which signifies the effect of urbanization on rural people. The cultivators and agricultural labourers were found to be highest in the least urbanized districts and lowest in the most urbanized district. This shows that the regions with less urbanization had fewer opportunities to work in non- farm activities. On the other hand, workers in household industries were highest in Gurugram and lowest in Mahendergarh implying that in urbanized regions people had more possibilities to work in non-farm activities as there were chances to have more industrial activities with urbanization.

### 3.2 Demographic Profile of Study Area

The demographic profile of sampled villages had been presented in Table 2. As perusal of Table 2 indicates that the more people was residing in villages located away from urban centre (cluster 2) as compared to villages located near to urban centre (cluster 2) in all district. Moreover, district with higher urbanization had been found more populated than the district with less urbanization i.e. Gurugram was more populated than

Mahendergarh and Rewari. Out of total population, 52.63 per cent were male and 47.37 per cent were female in the cluster 1 while 54.69 per cent and 45.31 per cent were male and female, respectively in cluster 2. On an average, 31.21 per cent, 46.05 per cent and 22.75 per cent of total population were belonging to General, OBC and SC/ST category respectively in cluster 1 while in cluster 2, 32.83 per cent, 47.87 per cent and 19.30 per cent of total population were belonging to General, OBC and SC/ST category respectively. Overall, 91.79 per cent of total male population and 70.10 per cent of total female population had been found literate in cluster 1 and 91.28 per cent of total male population and 68.95 per cent of total female population was found literate in cluster 2.

### 3.3 Main Occupation of the Population in Sampled Villages

The distribution of population of selected villages according to their occupation had been presented in the Table 3. As the Table 3 revealed, overall, 65.07 per cent of total population were engaged in agriculture followed by agriculture + industry (22.37 per cent), industry (16.67 per cent) and industry + service (10.51 per cent) in cluster 1. In cluster 2, 71.30 per cent of population was engaged in agriculture, 26.05 per cent was engaged in agriculture + industry, 15.79 per cent were engaged in self business and 10.53 per cent were engaged in industry. The Table 3 also indicates that higher proportion of workers was

**Table 2. Demographic profile of sampled villages**

Particulars	Mahendergarh		Rewari		Gurugram		Overall	
	Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 1	Cluster 2
Total Population (No.)	2006.74	2555.00	1927.11	2990.63	2127.33	2864.38	2020.39	2803.34
No. of households	424.48	619.05	376.33	651.00	400.83	646.00	400.55	638.68
Male (No.)	1062.43	1370.00	1007.67	1648.38	1120.00	1580.95	1063.37	1533.11
	(52.94)	(53.62)	(52.29)	(55.12)	(52.65)	(55.19)	(52.63)	(54.69)
Female(No.)	944.30	1185.00	919.44	1342.25	1007.33	1283.43	957.03	1270.23
	(47.06)	(46.38)	(47.71)	(44.88)	(47.35)	(44.81)	(47.37)	(45.31)
General (%)	29.17	28.65	25.78	32.85	38.67	37.00	31.21	32.83
OBC (%)	46.30	50.60	53.00	49.00	38.83	44.00	46.05	47.87
SC/ST (%)	24.52	20.75	21.22	18.15	22.50	19.00	22.75	19.30
<b>Literacy (%)</b>								
Male	91.54	91.63	91.44	90.00	92.39	92.20	91.79	91.28
Female	69.35	68.75	66.22	67.46	74.72	70.63	70.10	68.95

Figure in parentheses indicate percentage to total population.

Source: District census handbook for different districts.

**Table 3. Distribution of population of sampled villages as per their main occupation**

Occupation	Mahendergarh		Rewari		Gurugram		Overall	
	Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 1	Cluster 2
Agriculture (%)	79.61	92.31	69.57	90.00	33.33	31.58	65.07	71.30
Industry (%)	-	-	-	-	16.67	10.53	16.67	10.53
Agriculture + Industry (%)		7.69	26.09	10.00	33.33	42.11	19.80	19.93
Industry + Service (%)	8.05	-	4.35	-	16.67	-	9.69	-
Self business(%)	12.34	-	-	-	-	15.79	.11	5.26
Total (%)	100.00	100.00	100.00	100.00	100.00	100.00	100	100

Source: Prepared by author from district statistical abstract.

**Table 4. Distribution of workers engaged in farm and non-farm sector across sampled districts**

Particulars	Mahendergarh		Rewari		Gurugram		Overall	
	Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 1	Cluster 2
Employment								
Main workers	595.25 (62.77)	666.20 (65.28)	970.75 (78.48)	843.97 (69.43)	1746.09 (91.20)	1104.51 (86.33)	1104.03 (80.79)	871.56 (74.38)
Marginal workers	353.09 (37.23)	354.34 (34.72)	266.21 (21.52)	371.63 (30.57)	168.41 (8.80)	174.86 (13.67)	262.57 (19.21)	300.28 (25.62)
Farm Sector								
Cultivators	192.05 (20.20)	484.37 (47.35)	120.52 (9.72)	350.08 (28.74)	104.61 (5.45)	190.25 (14.84)	139.06 (10.18)	341.57 (29.15)
Agricultural Labourers	47.20 (4.96)	48.13 (4.70)	32.92 (2.65)	78.37 (6.43)	40.15 (2.09)	48.42 (3.78)	40.09 (2.93)	58.31 (4.98)
Total farm worker	239.25 (25.16)	532.50 (52.05)	153.44 (12.37)	428.45 (35.18)	144.76 (7.55)	238.67 (18.62)	179.15 (13.11)	399.87 (34.12)
Non-Farm sector								
Household industry workers	6.33 (0.67)	20.54 (2.01)	9.96 (0.80)	20.60 (1.69)	27.50 (1.43)	39.37 (3.07)	14.60 (1.07)	26.84 (2.29)
Other workers	705.25 (74.17)	469.99 (45.94)	1077.04 (86.83)	768.95 (63.13)	1746.01 (91.02)	1003.91 (78.31)	1176.10 (86.06)	747.62 (63.80)
Mining & quarrying	-	-	-	-	-	-	-	-
Manufacturing, Processing, Services & Repairs	190.16 (20.00)	135.08 (13.20)	255.03 (20.56)	208.18 (17.09)	318.17 (16.59)	238.55 (18.61)	254.45 (18.62)	193.94 (16.55)
Construction	75.06 (7.89)	49.50 (4.84)	62.16 (5.01)	71.26 (5.85)	90.51 (4.72)	45.62 (3.56)	75.91 (5.55)	55.46 (4.73)
Trade and commerce	48.63 (5.11)	25.36 (2.48)	178.90 (14.42)	127.81 (10.49)	300.85 (15.68)	205.35 (16.02)	176.13 (12.89)	119.51 (10.20)
Transport, storage & communication	83.73 (8.81)	28.84 (2.82)	115.57 (9.32)	42.23 (3.47)	180.79 (9.42)	99.04 (7.73)	126.70 (9.27)	56.70 (4.84)
Other services	307.67 (32.36)	231.21 (22.60)	465.38 (37.52)	319.47 (26.23)	855.69 (44.61)	415.35 (32.40)	542.91 (39.73)	322.01 (27.48)
Total non-farm worker	711.58 (74.84)	490.53 (47.95)	1087.00 (87.63)	789.55 (64.82)	1773.51 (92.45)	1043.28 (81.38)	1190.70 (87.13)	774.45 (66.09)
Total worker	950.83 (100.00)	1023.03 (100.00)	1240.44 (100.00)	1218.00 (100.00)	1918.27 (100.00)	1281.95 (100.00)	1369.85 (100.00)	1174.33 (100.00)

Figure in parentheses indicate percentage to total worker

Source: Prepared by author

**Table 5. Wages and prices of essential commodities in sampled villages**

Particulars	Mahendergarh		Rewari		Gurugram		Overall	
	Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 1	Cluster 2
<b>Wages for different work</b>								
Barber (Rs/person)	29.44	26.92	30.65	30.50	37.50	39.21	32.53	32.21
Carpenter (Rs/day)	538.89	553.85	593.48	557.50	633.33	650.00	588.57	587.12
Mason (Rs/day)	566.67	607.69	619.57	622.50	658.33	673.68	614.86	634.63
<b>Prices of commodities</b>								
Milk (Rs/ltr.)	52.48	50.70	48.33	45.92	59.17	58.16	53.33	51.59
Wheat (Rs/qtl.)	16.47	16.22	16.44	16.45	16.50	16.59	16.47	16.42
Egg (Rs/dozen)	81.39	78.60	82.67	73.85	92.00	90.32	85.35	80.92
Pulses (Rs/Kg.)	79.87	77.60	78.33	78.08	82.50	85.79	80.23	80.49

Source: Prepared by author.

**Table 6. Migration pattern of people in sampled villages**

Particular	Mahendergarh		Rewari		Gurugram		Overall	
	Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 1	Cluster 2	Cluster 1	Cluster 2
<b>Reasons for migration (%)</b>								
Education	68.24	59.56	37.25	42.48	31.36	49.15	45.62	50.40
Occupation	31.76	40.44	62.75	57.52	68.64	50.85	54.38	49.60
Both	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Nature of migration (%)</b>								
Daily	17.24	7.69	82.61	68.21	63.81	71.48	54.55	49.22
Weekly	21.51	18.26	-	5.45	18.35	12.73	13.29	12.30
Monthly	43.45	12.08	8.69	10.58	-	15.79	17.38	12.82
Seasonal	8.49	56.43	8.70	15.76	16.67	-	11.27	24.06
Yearly	09.39	4.81	-	-	1.17	-	3.51	1.60
<b>Major works (%)</b>								
Skilled	32.19	19.53	42.31	35.63	53.48	41.57	42.66	32.24
Semi-skilled	27.3	12.31	20.41	10.16	23.47	28.96	23.73	17.14
Unskilled	40.51	68.16	37.28	54.21	23.05	29.47	33.61	50.61

Source: Prepared by author.

**Table 7. Perception of village head about the effect of urbanization on village (Per cent)**

District	Cluster	Perception	Proximity to urban area	Better market	Better services	Better job opportunity	Income earning opportunity	any NGO /SHG	Lack of facilities
Mahendergarh	1	Yes	100	88.89	66.67	55.56	77.78	22.22	88.89
		No	0	11.11	33.33	44.44	22.22	77.78	11.11
	2	Yes	92.31	53.85	46.15	69.23	69.23	30.77	84.62
		No	7.69	46.15	53.85	30.77	30.77	69.23	15.38
Rewari	1	Yes	95.65	73.91	73.91	78.26	78.26	13.04	86.96
		No	4.35	26.09	26.09	21.74	21.74	86.96	13.04
	2	Yes	100	80	75	80	85	20	95
		No	0	20	25	20	15	80	5
Gurugram	1	Yes	100	66.67	50	50	66.67	-	66.67
		No	0	33.33	50	50	33.33	100	33.33
	2	Yes	100	100	100	100	100	26.32	57.89
		No	-	-	-	-	-	73.68	42.11
Overall	1	Yes	98.55	76.49	63.53	61.27	74.24	11.75	80.84
		No	1.45	23.51	36.47	38.73	25.76	88.25	19.16
	2	Yes	97.44	77.95	73.72	83.08	84.74	25.70	79.17
		No	2.56	22.05	26.28	16.92	15.26	74.30	20.83

Source: Prepared by author.



**Table 8. Perception of village head about jobs created by urbanization and role of agency in village development**

District	Cluster	Type of work available (%)			Role of agency in village development (%)	
		Skilled	Semi-skilled	Unskilled	Government	Private
Mahendergarh	1	18.15	21.49	60.36	57.36	42.64
	2	14.92	23.18	61.9	47.37	52.63
Rewari	1	31.52	25.12	43.36	55.56	44.44
	2	23.08	29.68	47.24	53.85	46.15
Gurugram	1	37.21	30.27	32.52	52.17	47.83
	2	28.76	34.51	36.73	65	35
Overall	1	28.96	25.63	45.41	55.03	44.97
	2	22.25	29.12	48.62	55.41	44.59

Source: Prepared by author.

engaged in agriculture in less urbanized district while more people were found engaged in non agricultural sectors in district with higher level of urbanization. This might be due to the fact that the district with higher level of urbanization provides more diversified employment opportunities than district with low level of urbanization. Moreover, people residing in more urbanized area may be equipped with more technical expertise than the people in less urbanized area.

### 3.4 Effect of Urbanization on Employment, Wages and Livelihood of Rural People in Haryana

The review of past studies had indicated that urbanization had positive effect on employment, wages and livelihood by creating more employment, increasing the wages of unorganized sector and providing more livelihood opportunities along with creating urban amenities in less urban area. Since, Haryana is a more urbanized and industrialized state; the effect of these factors would be more concrete in the state. Keeping this in view, effects of urbanization on employment, wages and livelihood in the Haryana had been studied and discussed here.

#### 3.4.1 Effects of urbanization on employment and wages

The effect of urbanization on employment, wages and livelihood had been shown in Table 4 & Table 5. As perusal of Table 4 indicated that, 80.79 per cent and 19.21 per cent of total workers were engaged in main work and marginal work, respectively in cluster 1 while in cluster 2, 74.38 per cent and 25.62 per cent of

total workers were engaged in main work and marginal work, respectively. The proportion of workers engaged in main work increased with rise in the level of urbanization while proportion of workers engaged in marginal work decline with the rise in the level of urbanization. Out of total workers, 13.11 per cent and 34.12 per cent were engaged in farm sector in cluster 1 and cluster 2, respectively. The percentage of total workers engaged in farm sector reduced with the increase in urbanization. Majority of total workers engaged in farm sector were cultivators. On the other hand 87.13 per cent and 66.09 per cent of total working population were found engaged in non-farm sector in cluster 1 and cluster 2, respectively. Out of total non-farm workers, 86.06 per cent and 63.80 per cent were other workers in cluster 1 and cluster 2, respectively. Majority of other workers were engaged in other services (39.73 per cent) followed by manufacturing, processing, services & repairs (18.62 per cent) and trade and commerce (12.89 per cent). The proportion of other workers engaged in other service sector was found to be 39.73 per cent and 27.48 per cent in cluster 1 and cluster 2, respectively. In more urbanized area, higher proportion of other workers was found to be engaged in other services.

As the Table 5 indicated, the average wage received by barber, was higher in cluster 1 compared to cluster 2 in Mahendergarh district while in Rewari and Gurugram districts, average wage received by barber was higher in cluster 2 compared to cluster 1. The average wage received by carpenter was observed to be higher in cluster 1 compared to culsted 2 in Rewari district while it was recorded higher in cluster 2 compared to cluster 1 in Mahendergarh and Gurugram districts. The average wage received

by mason was found higher in cluster 1 compared to cluster 2 in all the districts. Overall, the wages for barber, carpenter had marginally increased while for mason it had reduced as we move from less urbanized (cluster 2) to more urbanized (cluster 1) area. Thus, it can be concluded that effect of urbanization on wage rate was not very concrete.

This increase in wages could occur due to the fact that urbanization creates more employment opportunities along with higher wages for same work as compared to rural/less urbanized area. Not only wages increased due to urbanization but price of commodities had also been increased. The people in urban area had to pay higher price for same commodities than their counterpart in less urbanized area. The prices of unprocessed milk, wheat, egg and pulses were found to be Rs. 53.33, Rs. 16.47, Rs. 85.35 and Rs. 80.23, respectively in cluster 1 while it was Rs. 51.59, Rs. 16.42, Rs. 80.92 and Rs. 80.49 for milk, wheat, egg and pulses, respectively in cluster 2.

### 3.4.2 Status of migration in sampled villages

The migration pattern of people in the sampled villages had been shown in the Table 6. As perusal of the Table 6 indicates that 54.38 per cent of population was migrating to urban area for occupation purposes and remaining proportion of population were migrating for education purposes in cluster 1. In cluster 2, 50.40 per cent of population was migrating towards urban area for education and 49.60 per cent of population had migrated for occupation purposes. The proportion of population migrating to urban area for education purposes increases with the decrease in the level of urbanization while migration for occupation purpose increases with the increase in urbanization. This may be due to the fact that people residing in rural area may migrate to urban area to get higher education because better educational facilities were available in urban area. In case of occupation, the more people were able to migrate due to their higher educational qualification attained in urban area. Nature of migration of majority of population was daily in both clusters. The percentage of population migrating daily had been found 54.55 and 49.22 for cluster 1 and cluster 2, respectively. In less urbanized region, the nature of migration of majority of population had been found seasonal followed by monthly. The people residing in less urbanized area (cluster 2) had high tendency to

migrate to urban area than people of more urbanized area (cluster 1). The majority of occupational migration had observed for skilled (42.66 per cent) works followed by unskilled works (33.61 per cent) and semi-skilled works in cluster 1. In cluster 2, majority of migration were observed for unskilled works (50.61 per cent) followed by skilled works (32.24 per cent) and semi-skilled works (17.14 per cent). The high migration was observed in skilled works in both clusters.

### 3.4.3 Perception of village head regarding the effect of urbanization

The village head of selected villages were asked to provide their opinions on the effect of urbanization on their villages. The result of the opinion of village heads had been presented in Table 7 and Table 8. The perusal of Table 7 indicated that 98.88 per cent and 97.44 per cent of village head in cluster 1 and cluster 2 believed that their villages had proximity to urban area. The majority of village head in both clusters believed that urbanization had created better marketing facilities in their villages and provided better service to the villages.

The job opportunity had increased due to urbanization and thus opportunity to earn more income had also increased. Majority of them also reported that urbanization had not resulted in the establishment of NGOs/SHGs in their villages. Although, the facilities had increased in the villages due to urbanization but some more improvement was required. The effects of urbanization on the above factors were more in those areas which was near to urban centre than areas away from urban centre.

The Table 8 revealed that majority of works created by urbanization was unskilled type followed by skilled and semi-skilled in cluster 1 while in cluster 2, the majority of works created was unskilled (48.62 per cent) type followed by semi-skilled (29.12 per cent) and skilled (22.25 per cent). The skilled type work created increased with the increase in level of urbanization while unskilled works created reduced with increase in urbanization. It can also be observed that in cluster 1, private sector had played a very important role in the development of villages while in cluster 2, it was the government agencies who had played an important role in the development of villages.

#### 4. CONCLUSION

More people reside in villages located away from urban centre (cluster 2) as compared to villages located near to urban centre (cluster 1) in all sampled district. The literacy rate was slightly higher in cluster 1 than cluster 2 for both male and female population. Majority of population was engaged in agriculture in both clusters while higher percentage of population was engaged in agriculture in cluster 2 as compared to cluster 1. Majority of working population was engaged in main work in both sampled cluster. More workers were employed in farm sector in cluster 2 than in cluster 1. Majority of total workers were engaged in non-farm sector in both cluster. The proportion of working population engaged in non-farm sector had increased with increase in urbanization. The wage rate and prices were higher in cluster 1. Majority of population had migrating to urban area either due to education purposes or occupational purposes. The people residing in less urbanized area had high tendency to migrate to urban area than people of more urbanized area. The high migration had been observed in skilled works in both clusters. Therefore, it can be concluded that in all three districts the most urbanized district i.e. Gurugram was creating the opportunities for the rural people.

#### DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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