A Pilot Study on Enigma of Smart Cities and Urban Poor Migrants

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Abstract - **The development of any city cannot be completed unless it reaches the core of the society and development of smart cities is one such initiative which has gained relevance in recent context as it proposes to reform the cities the way they look and work, but entailing reforming among other factors human and social capital at the grass root level are the most important and when it comes to urban poor this section of the society has been ignored unaccounted. The current paper tries to bring out the socio economic condition of the urban poor migrants in Lucknow city and the relevance it stands in context to smart city.**

Keywords — Migration, Smart Cities, Gaps, Socio-Economic condition, Vicious Circle.

I. INTRODUCTION

Migration a double edge sword has both positive and negative impacts on urban poor people and poor countries. The positive side of the migration is migrants earn money and improve their livelihood and schooling of their children. The negative side of the migration is the development of non-planned colonies in the cities having lack of basic infrastructure to sustain the basic living standard of the migrating population. Censuses of India 2011, showing that 69 per cent of the populations of India are living in rural areas are migrating at an incremental rate in their nearby cities to improve their livelihood. India's largest metropolitan cities like Mumbai, Delhi, and Kolkata are among the top 25 cities out of 100 fastest growing cities of the world in terms of migrating population. The primary reason of this migration is to find sufficient economic opportunities which are scanty in the rural areas. The National Sample Survey 2007-08 shows that migration rate towards urbanization are growing at 35 per cent.

Migration (human), the movement of people from one place to another place may be permanent or semi-permanent, seasonal or circular migrants. Migration of Non skilled labor including permanent, semi-permanent, and seasonal or circular migrants have raised a great challenge for Indian Cities. At the migratory place identity of these impoverished laborers is one of the core issues, a problem that can persist for years to decades after their migration. Lack of identity causes migrants are not able to avail social safety nets and basic social services such as subsidized food, fuel, health services, or education that

are made for socially and economically deprived peoples of the country. The problem in accessing the benefit of social services specifically education to their children and health and sanitation facility to the family generate a vicious circle for this class of people. The cities slums are indistinctly linked to these migrating peoples created a greater pressure on the local governing bodies to accommodate them. Unable to get verified these groups are unable to open bank accounts to be linked with main stream are generally cheated by fraudulent agents pretending to assist them in case of money transfer and small saving investment schemes. Due to migration this class is also facing political exclusion not able to cast their votes are deprived to many opportunities. 22 per cent of seasonal migrant workers in India have no voter ID or their names in the voter ID due to absence from their birth place and lack of identification in migrant cities. It has been also observed that majority of these migrants due to long distance migration; missing voting in elections at least once because they were away for livelihood options [1].

i. Concept of Smart City

There is not a single definition of the smart city and various academicians have given their own definition in this regard, majority of the researchers have focused on the Information Communication Technology (ICT) aspect and argue that ICT is the core for developing a city as a smart city, but as we believe the reality is far more different what the policy makers ignore is that marketing a new concept is not the true implementation, but acceptance by the masses what makes a policy successful in true sense. Going smart or becoming smart

does not depend on one aspect but it depends on other factors/parameters also. Inclusion of the lower strata of the society in a true sense means smart, what is the point in going for smart city if a large section of the society is deprived of even the basic amenities of life.

II. RELEVANCE OF THE STUDY

The study finds its relevance in the context to developing of cities as smart cities, the study will help in assessing the socio economic condition of the urban poor migrants who are in fact the city makers of the city and actively contribute in the overall development of city. The current study will help the policy makers in identifying the gaps and frame policies in accordance. The study is an attempt to bring out the aspects of urban poor people who live in disguise but in an indirect way the city makers of the city, a study of their socio-economic condition will help in drawing a proper plan of developing a city as smart city. Globalization, development and urbanization are simultaneously going by hand in hand. A formal planning for urbanization becomes a flurry of high profile policies for the existing governing bodies in the cities. Problem of overburdened cities have grownup due to right to cities not the right to property brood informal urbanization [2]. The growing population in the urban cities named it "Informal hyper growth" due to migrating population towards cities [3]. In same line while through contrasting view De Soto (1989, 2000) viewed that swelling migration in the cities are to fulfill their unsatisfied need from parental place have overburdened the urban economic structure [4] [5]. The authors viewed that these migratory peoples build their own cities inside the formal cities without any knowledge of the bureaucratic apparatus of planning and controlling machinery. The informal migratory populations have developed distinctive type of market due to absence of formal planning and regulation [6] [7]. Migratory problem in urban cities are not only in developed counties but also exist in second and third world cities [8]. The concept of urbanization and globalization based on the assumptions about urbanization taken U-turn need to be redefined [8] [9]. Parker (2015) in the book entitled 'Urban theory and the urban experience: Encountering the city' scanned a wide range of problems faced by cities globally [10]. In their first edition author raised the concern for migrating population in smart cities. Gottdiener et al. (2015) in their book focused new dimensions of urbanization such as financial and fiscal crisis, globalization and meltdown, modern urban planning, planning and public space, sustainable urbanization, temporary use and adaptive urbanization to find the concern and prospects for smart cities in the era of globalization [11]. Landry (2012) in the book 'The creative city, a toolkit for urban innovators' focused on rethinking of cities on their potential assets, and how one convert creative thinking into reality, author have

tried to elaborate to many innovative ideas to solve urban problems [12]. Castells (1988); Doebele (1987); Gilbert (1994); Morse (1965); Portes (1989) and Gelder (2013) focused on the outnumbered increase of slums in urban cities of developing counties by quoting the report of united nations report -2006 that Africa and Asia's cities are going to be overburdened by 2030 mostly through informal migration that will create the crisis of inadequate infrastructure, basic amenities and public services consequently the living standard of peoples will deteriorate [13 to 18].

Following are the objectives:
1. To study the demographic status of Uttar Pradesh
2. To study the demographic status of rural and urban areas of Uttar Pradesh
3. To study the demographic status of migrating peoples to Lucknow City.
4. To study the living standard of the migrating people in the Lucknow City
5. To study the awareness and availing of basic amenities provided by the Government to migrating peoples.

III. RESEARCH METHODOLOGY

This study is descriptive in nature to know the status of Urban Poor migrating people in Lucknow City along with the demographic status of Uttar Pradesh. Data is collected from both the sources i.e. primary and secondary. Data related to migrating peoples are collected through the questionnaire and data related to state demographic status are taken from the data source Census of India 2011.

i. Discussion and Interpretation

This study is sub divided into two parts; first part is based on the secondary data taken from the Census of India 2011. While the second part of the study is based on the randomly collected data through questionnaire.

Table 1: Comparative Study of Demographic Status of Uttar Pradesh

Description	2011	2001
Actual Population	199,812,341	166,197,921
Male	104,480,510	87,565,369
Female	95,331,831	78,632,552
Population Growth	20.23%	25.80%
Percentage of total Population	16.50%	16.16%
Sex Ratio	912	898
Child Sex Ratio	902	942
Density/km^2	829	690
Area km^2	240,928	240,928
Total Child Population (0-6 Age)	30,791,331	31,624,628
Male Population (0-6 Age)	16,185,581	16,509,033
Female Population (0-6 Age)	14,605,750	15,115,595
Literacy	67.68 %	56.27 %
Male Literacy	77.28 %	67.30 %
Female Literacy	51.36 %	43.00 %

Source: Census of India 2011

Table1 show that Uttar Pradesh is the highest populated state of the India having 16.94 per cent peoples living in the state. The population growth rate of state is 20.23 per cent, still one of the top five growing states of India. Though other figures such as literacy rate, sex ratio etc. are also improved but still it is concern for the state to control the birth rate to reduce the already overburdened basic amenities and infrastructure of the state. Same is shown in figure 1 and 2 below.
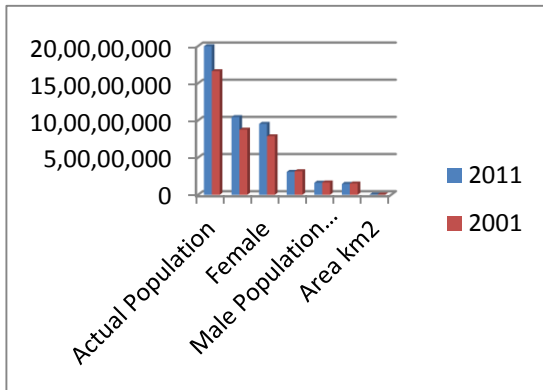

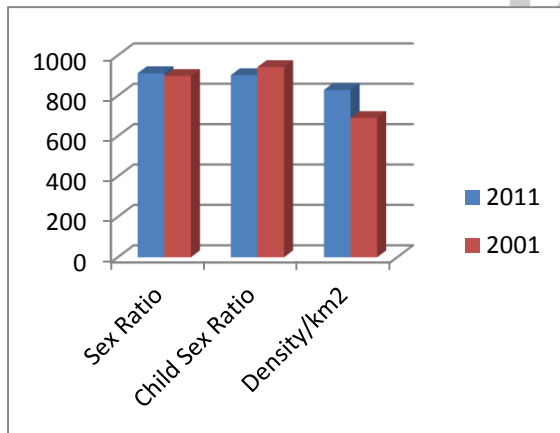**Fig 1: Demographic Status in 2011 and 2001 in Uttar Pradesh**

Fig 2: Sex Ratio in 2011 and 2001 in Uttar Pradesh

Table 2: Demographic Status of Rural and Urban Population in Uttar Pradesh in 2011

Description	Rural	Urban
Population (%)	77.73 %	22.27 %
Total Population	155,317,278	44,495,063
Male Population	80,992,995	23,487,515
Female Population	74,324,283	21,007,548
Population Growth	17.97 %	28.82 %
Sex Ratio	918	894
Child Sex Ratio (0-6)	906	885
Child Population (0-6)	25,040,583	5,750,748
Child Percentage (0-6)	16.12 %	12.92 %
Literates	85,284,680	29,112,875
Average Literacy	65.46 %	75.14 %
Male Literacy	76.33 %	80.45 %
Female Literacy	48.48 %	60.96 %

Source: Census of India 2011.

Table2 show the demographic status of rural and urban population of the state. This table show that 77.73 per cent of the population still living in the rural area. While the growth rate of the population in urban area is 28.82 per cent which is much higher than the growth rate in rural area having 17.97 per cent. This gap in growth rate of the population is basically due to migration of peoples from rural areas to cities for the search of livelihood and better education facilities for their children'. Same is represented in figure 3 below.
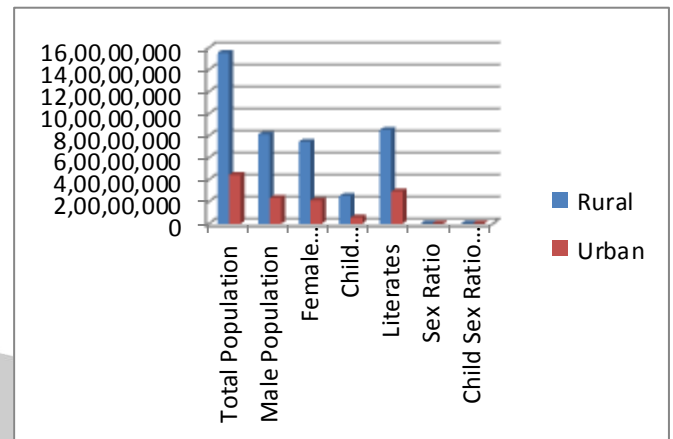

Fig 3: Demographic Representation of Rural and Urban Population of Uttar Pradesh in Year 2011.

Table3: Population in Top Five Cities of Uttar Pradesh

Cities	Population	Male	Female
Lucknow	2,815,601	1,470,133	1,345,468
Kanpur	2,767,031	1,502,370	1,264,661
Ghaziabad	1,636,068	869,257	766,811
Agra	1,574,542	849,771	724,771
Meerut	1,309,023	689,567	619,456

Source: Census of India 2011.

The data of top five cities of Uttar Pradesh in terms population is shown in Table3 in which Lucknow is at no. one place with the population of 2, 815, 601.The successive cities are Kanpur, Ghaziabad, Agra and Meerut. The ratio of male to female is shown through Figure 4.
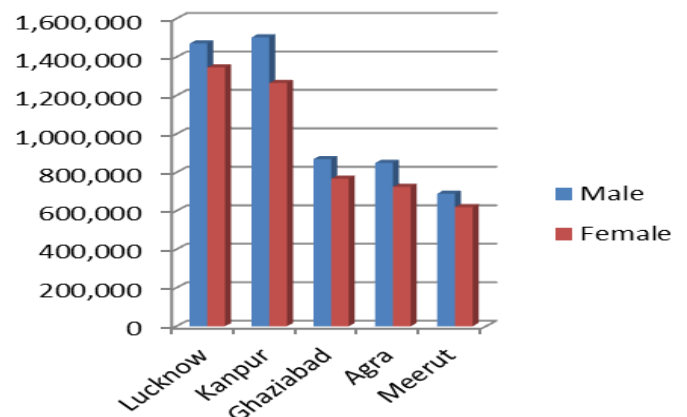

Fig 4: Ratio of Male to Female Population in Top 5 Cities in Year 2011

The second part of the study which is based on the questionnaire has collected 300 samples through random sampling procedure out of which the valid responses. The demographic descriptions of the sampled peoples are given in Table 4.

3.2. Demographic Description of Sampled Population

Socio Aspect

Table 4: Age Profile of Urban Poor Migrants

Age Group (Years)	Lucknow (%)
< 20	27 (9.57)
21 - 35	138 (48.94)
36 - 50	62 (21.99)
51 - 65	33 (11.70)
66 - 75	17 (6.03)
> 75	5 (1.77)
Total	**282(100)**

Source: Primary Data

Table 4 shows that around 48.94 per cent (i.e., 138 out of 282 respondents) in Lucknow fall in the age group of 21 to 35 which represents working age group. There were around 9.57 per cent respondents in the age group of less than 20 years and 21.99 per cent in the age group of 36 to 50. The respondents' age wise description is represented in Figure 5.
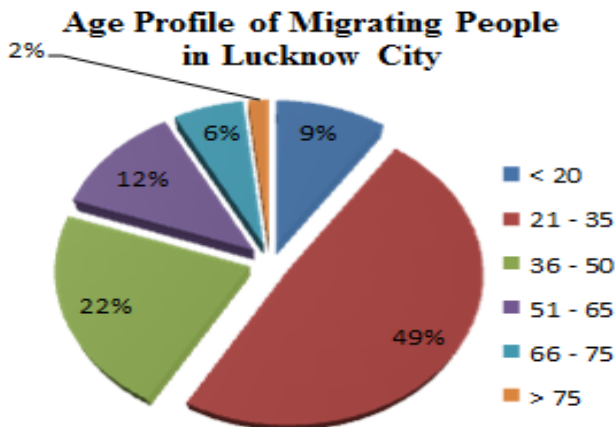

Fig 5: Age Profile of Migrated Respondent in Lucknow City

Table 5: Gender Wise Break Up of Urban Poor Migrants

Gender	Lucknow (%)
Male	187 (66.31)
Female	95 (33.69)
Transgender	0 (0.00)
Total	**282(100)**

Source: Primary Data

Table 5 shows that around 66.31 per cent of the Urban Poor respondents were male followed by 33.69 per cent respondents in the female category. Gender wise break is shown in Fig 6
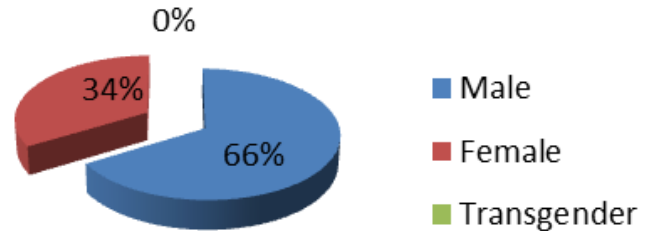

Fig 6: Gender Wise Break up of Respondents

Table 6: Level of Education of Urban Poor Migrants

Level of Education	Lucknow (%)
Middle	45 (15.96)
Secondary	24 (8.51)
Higher Secondary	9 (3.19)
Literate	67 (23.76)
Illiterate	137 (48.58)
Others	0 (0.00)
Total	**282(100)**

Source: Primary Data

Table 6 shows that majority of the urban poor migrants are illiterate (i.e., 48.58 per cent), followed by 23.76 per cent who were literate. A meager 3.19 per cent of the respondent's attained education till higher secondary level. This high rate of illiteracy among the respondents was on the background of lack of educational facilities at primary level. Figure 7 show the level of education among migrating respondents in sample.

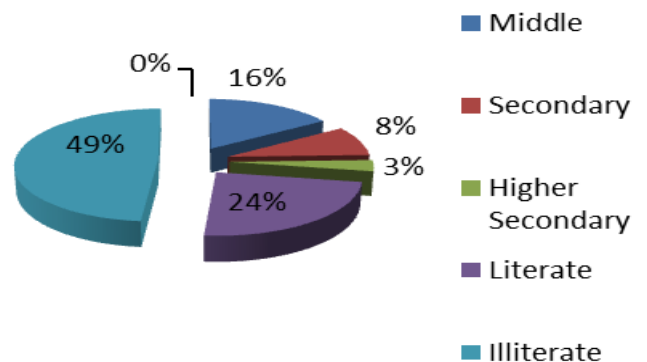**Fig 7: Educational Background of Respondents.**

Table 7: Occupation Profile of Urban Poor Migrants

Employment Avenues	Lucknow (%)
Works in hotels/shops	27 (9.57)
Road side sellers	34 (12.06)
Workers at construction site	68 (24.11)
Loaders/porters	8 (2.84)
Rag picker	17 (6.03)
Shoe polisher	4 (1.42)
Rickshaw puller	42 (14.89)
Auto driver	75 (26.60)
Others	7 (2.48)
No work	0 (0.00)
Total	**282(100)**

Source: Primary Data

Table 7 shows the occupation profile of the urban poor respondents and around 26.60 per cent of them pursuing daily occupation as auto drivers, followed by 14.89 per cent pursuing occupation as rickshaw pullers. Around 24.11 per cent of the respondents were cited working as workers at construction sites. 12.06 per cent of the respondents were pursuing occupation as hawkers and road side sellers. Figure 8 show the occupational profile of respondents.
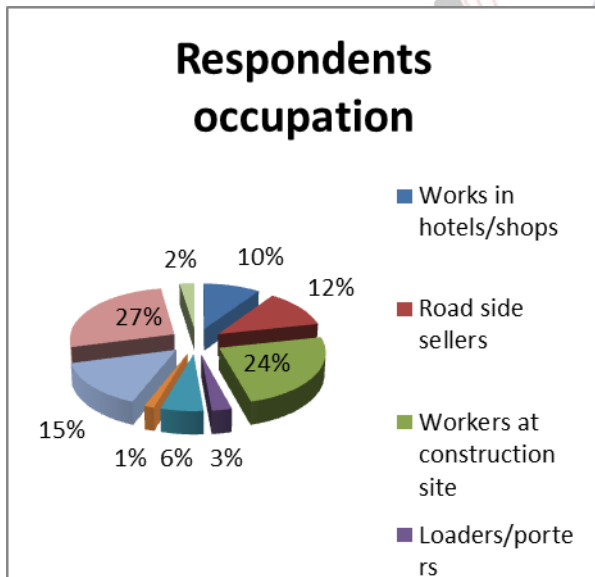

Figure 8: Respondents Occupational Profile.

Economic Aspect

On analyzing Table 8 it can be inferred that around 29.08 per cent (i.e., 82 out of 282 respondents) earn in the income range of Rs 101 to 200, followed by 20.21 in the income range of Rs 1 to 100 and 201 to 300 (i.e., 19.50 per cent) in the income range of Rs 201 to 300.A very meager percentage of around

6.38 are earning above Rs. 500 on a daily basis. Figure 9 represents income pattern of migrating respondents.

Table 8: Income Pattern of Urban Poor Migrants

Income (Rs.)	Lucknow (%)
None	0 (0.00)
1-100	57 (20.21)
101- 200	82 (29.08)
201-300	55 (19.50)
301-400	47 (16.67)
401-500	23 (8.16)
> 501	18 (6.38)
Total	**282(100)**

Source: Primary Data
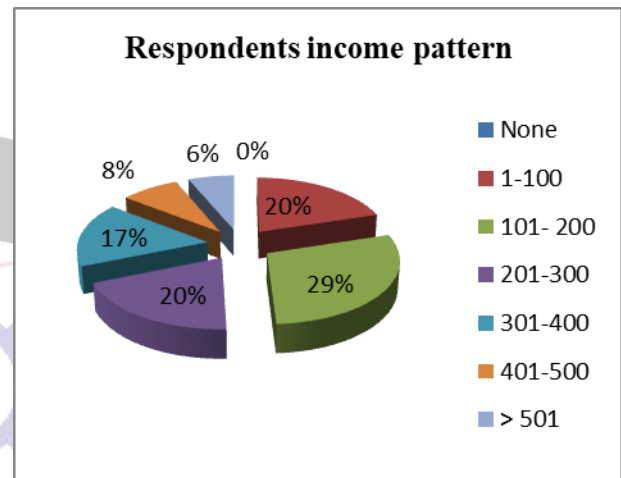
Fig 9: Respondents Income Pattern

Table 9: Savings Pattern of Urban Poor Migrants

Saving Amount (Rs.)	Lucknow (%)
None	34 (12.06)
1-50	20 (7.09)
51-150	42 (14.89)
151-250	95 (33.69)
251-350	67 (23.76)
> 351	24 (8.51)
Total	**282(100)**

Source: Primary Data

Table 9 shows that around 33.69 per cent of the urban poor respondents are able to save in the range of Rs 151 to 250, followed by 23.76 in the saving range of Rs 251 to 350. A minimal number of respondents (i.e., 8.51 per cent) were cited saving above Rs 351 on a daily basis. Figure 10 depict the saving pattern of migrating populations in Lucknow City.
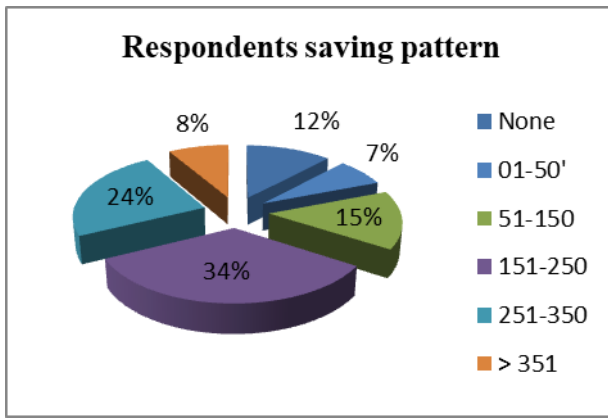
Fig 10: Saving Pattern of Respondents.

Table 10: Migration Pattern of Urban Poor Migrants

Place of Migration	Lucknow (%)
Rural to Urban area	178 (63.12)
Urban to Urban area	55(19.50)
Change of place within city (Short Migration)	49 (17.38)
Total	**282(100)**

Source: Primary Data

Table 10 shows that around 63.12 per cent of the urban poor respondents migrated from rural to urban areas, followed by 19.50 per cent who moved from nearby urban areas. Around 17.38 per cent of the respondents moved within the city on the backdrop of eviction from government authorities and displacement due to development projects. Figure 11 show the migrating pattern of peoples in Lucknow city and from Lucknow city.
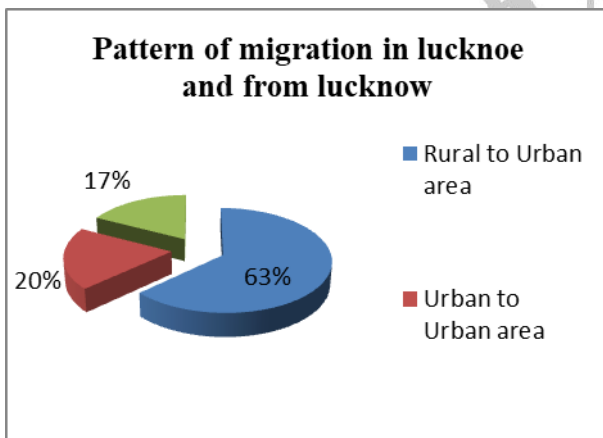

Fig 11: Pattern of Migration IN & OUT Lucknow

IV. CONCLUSION

Study of socio-economic condition of the migrating people in Lucknow city has provides a very transparent picture of the condition of migrating people of the city. The study based on the Census of India 2011show the demographic status of the

Uttar Pradesh reflects no. one populated state of the country. Density of the population is also highest in the state. From the study it is also found that growth rate of population of cities is increasing much faster rate as compare to rural areas. The reason of faster growth rate of cities in comparison to rural areas is the migration of peoples from rural areas in search of livelihood and better education facilities to their children. While the empirical study based on collected sample show that these migrating people are end becoming the daily casual wage earners or rickshaw puller and earning a very small amount to meet two end meals. It is also found that due to their identity crisis they are also not in the position to avail the benefit of subsidised scheme launched by government for these classes. Illiteracy and low level of income generate a vicious circle in their life and only remain to the curse for cities even of essential contribution made by them in the economic infrastructure of the cities. 21 century brought with new global trend of 'sustainable urban development' can't be achieved without taking concern for these classes of peoples. Our analyses to the living standard of migrating people indicate a scientific understanding to develop smart cities is very integrative with respect to discussion on the topic smart city.

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