

A study to understand the livelihood issues affecting people resettled from slums to economically weaker section AWAS (dwelling) in Surat city

Saurabh R Parmar¹, Abhay B Kavishvar¹, MohhamedAnas M Patni¹, Hitesh Shah²

¹Government Medical College, Surat, Gujarat, India.

²GMERS Medical College, Valsad, Gujarat, India.

Correspondence to: Saurabh R Parmar, E-mail: drsaurabhparmar@gmail.com

Received October 18, 2015. Accepted February 4, 2016

Abstract

Background: Slum settlements have been a major cause for concern for urban planners of the city, which has the highest growth rate of over 13% in the country. A total of 6 lakh urban poor living in 1.15 lakh hutments in 406 slum settlements in the city need to be relocated by 2020 by Surat Municipal Corporation (SMC) in the economically weaker section (EWS) houses. This study, a kind of studying and documenting the process of resettlement of slum dwellers to newer sites and to newer styles, has surely raised a number of sociocultural, economical, managerial, administrative, and political issues as occurred elsewhere.

Objective: To study the effects on livelihood and related factors after resettlement from unacceptable and illegal slums to EWS AWAS constructed under JNNURM (Jawaharlal Nehru National Urban Renewal Mission) by SMC.

Materials and Methods: This cross-sectional study was conducted from June 2012 to March 2013. List of all beneficiaries available on website of slum upgradation cell of SMC was obtained. Using simple random sampling, 148 beneficiaries were interviewed using pretested semistructured questionnaire. Statistical analysis was done by using summary statistics such as proportion, mean, median, standard deviation, and range.

Result: Majority of the AWAS (dwelling) constructed were at distance from walled city area. Mean income of responsible respondent was Rupees 4,061. Mean distance to be traveled to reach the site of job has increased twice when compared with previous stay at slums, and expense to reach the site of job has increased more than thrice. Time spent for transportation to reach the site of job has also increased to more than half an hour. Expense toward annual electricity bill, house bill, rent/equated monthly installment, and maintenance has increased more than twice after resettlement.

Conclusion: Shifting to AWAS from slum of origin did not result into financial gain but an improved and dignified living for the whole family. Slum dwellers shifted to distant relocated sites required to pay more for commutation, spare more time for transportation, and have become dependent on shared auto-rickshaw system. These people with restricted income have started paying for authorized services such as electricity, drinking water, garbage and solid waste disposal, and legally constructed reinforce cement concrete structure for accommodation.

KEY WORDS: Economically weaker section AWAS, Surat Municipal Corporation, Jawaharlal Nehru National Urban Renewal Mission, Slum upgradation

Access this article online

Website: <http://www.ijmsph.com>

DOI: 10.5455/ijmsph.2016.18102015363

Quick Response Code:



Introduction

The world is rapidly urbanizing with over half the population now living in urban areas. As the urban population grows, the proportion of these persons living in slums also increases, where conditions are deplorable. This growing problem creates a unique challenge for policymakers and public health practitioners.^[1] In the last 10 years, India grew at an average

International Journal of Medical Science and Public Health Online 2016. © 2016 Saurabh R Parmar. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

annual growth rate of 2%, but urban India grew at 3%, mega cities at 4%, and the slum population rose by 5%–6%. Level of urbanization rose from 27.81% in 2001 Census to 31.16% (377.1 million) in 2011 Census.^[2]

With a population of 44,61,026, the textile hub of the country, Surat provides over 12 lakh jobs. About 65% of nation's total diamond export is from Surat. Such kind of units has brought rapid growth in economy, an economy dominated by labor intensive activities. A feature of Surat is its vast pool of migrant population (about 55% of the total population).^[3]

People here are a mix of different traditions and tribes as the industrial infrastructure that is encouraging corporate and business houses, varied industries to set up their base here which brings along the lot of cultural mix. The city boast of 0% unemployment, an envious feat achieved.^[4]

Being a city dominated by migrant population and a higher concentration of lower income households, Surat Municipal Corporation (SMC) thrust is to provide better quality living environment. The main approaches followed by SMC are slum rehabilitation, slum upgradation and redevelopment under SMC Housing Policy, and Jawaharlal Nehru National Urban Renewal Mission (JNNURM) submission for Basic Services for Urban Poor (BSUP).^[5]

Slum settlements have been a major cause for concern for urban planners of the city, which has the highest growth rate of over 13% in the country. Six lakh urban poor living in 1.15 lakh hutments in 406 slum settlements in the city need to be relocated by 2020 by SMC in the EWS houses.

This study, a kind of studying and documenting the process of resettlement of slum dwellers to newer sites and to newer styles, has surely raised a number of sociocultural, economical, managerial, administrative, and political issues as occurred elsewhere.

Considering these day-to-day expenses toward internal commuting, increased travel time, added expenses toward household maintenance, and ease of transportation would be discussed here under the term issues related to livelihood.

Materials and Methods

This cross-sectional study was conducted from June 2012 to March 2013. Verbal consent of all participants was taken before the study. First list of all beneficiaries was procured from Slum Upgradation subdivision on web site of SMC.^[6] As per date, June 28, 2012 list of 14,828 beneficiaries were updated on the website.

Statistical Analysis

Sampling units were residential flats occupants of economically weaker section (EWS) constructed under JNNURM. One hundred and forty-eight households (1% of total beneficiaries) have been randomly selected using simple random sampling technique, and a responsible respondent was interviewed from each flat using pretested semistructured questionnaire. Data entry and analysis were carried out in Microsoft Office Excel 2007 and Epi Info software.^[6]

Result

A total of 148 beneficiaries resettled from slums to EWS AWAS were interviewed in this study. Only a little difference between monthly income of head of the family in previous slum and current AWAS was reported, with no change in median income for all dwellers who have been resettled in AWAS for more than 2 years [Table 1].

Mean distance to be traveled to reach the site of job from current AWAS was two times more than the previous stay at slums, but the expense to reach the site of job has increased more than thrice. With less difference in coefficient of variation for time spent for transportation to reach to job site, a resettled individual who used to take 8–28 min during his stay at slum has started spending 15–50 min after shifting to AWAS. Coefficient of variation is higher for all variables in slums when compared with AWAS [Table 2].

While stay at slum, the self-sufficiency for transportation was greatly reduced, a large number of commuters started using shared auto-rickshaw in place of using bicycle (bike) or walking down to the place owing to relatively longer distance from AWAS [Figure 1].

For a slum occupant who has shifted to resourceful AWAS, electricity bill, house bill, equated monthly installment (EMI), and maintenance for flat have become a financial liability

Table 1: Summary statistics of income at slum of origin and current AWAS

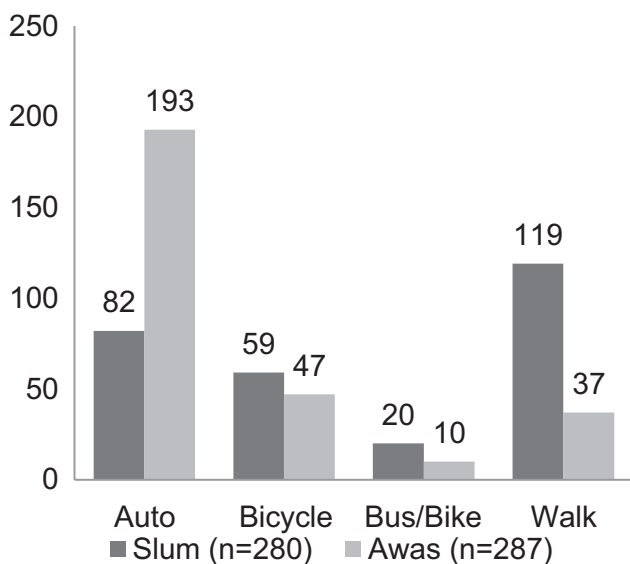
| Place of residence | Mean income (INR) | Standard deviation | Median income (INR) |
|------------------------------|-------------------|--------------------|---------------------|
| Slum of origin ($n = 147$) | 4,063 | 2,606 | 3,500 |
| AWAS ($n = 146$) | 4,061 | 2,703 | 3,500 |

Table 2: Features of difference related to livelihood issues between old slum and current AWAS in the study population

| Variable | Slum | | | AWAS | | |
|------------------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|
| | Mean \pm SD | Median | Coefficient of variation | Mean \pm SD | Median | Coefficient of variation |
| Distance to reach site of job (km) | 4.4 \pm 4.1 | 3 | 94.9 | 9.5 \pm 5.3 | 10 | 55.7 |
| Expense to reach site of job (INR) | 6.5 \pm 11 | 0 | 170.6 | 20.9 \pm 18 | 20 | 86.2 |

Table 3: Comparison of basic expenses in slums and AWAS

| Expense per year (INR) | Place of residence | | | | % rise |
|------------------------|--------------------|--------|-----------------|--------|--------|
| | Slum | | AWAS | | |
| | Mean \pm SD | Median | Mean \pm SD | Median | |
| Electricity bill | 2231 \pm 1672 | 1800 | 5130 \pm 2482 | 4800 | 167 |
| House bill | 391 \pm 443 | 300 | 1008 \pm 1314 | 800 | 167 |
| Rent/EMI | 184 \pm 1551 | 0 | 480 \pm 1424 | 0 | 167 |
| Maintenance | 0 | 0 | 962 \pm 934 | 840 | 840 |

**Figure 1:** Comparison of mode of transportation of earning members of family to site of job at previous slums and current EWS.

forcing him to make monetary provision for all such amenities largely on monthly basis [Table 3].

Improvement in basic amenities such as reinforced cement concrete (RCC) construction for house and floor, drinking water source, garbage and solid waste disposal, personal toilet, and electricity have been reported by most of the families resettled at AWAS provided under JNNURM scheme by Municipal Corporation. The structure and the services here were legalized and required financial maintenance [Table 4].

Discussion

Information from responsible individuals or head of the families from 148 relocated different families revealed that reported mean income was Rupees 4,063 with SD of 2,606 when they were at slum of origin. After shifting to AWAS, these values became 4,061 \pm 2,703. At both the places, median income of Rupees 3,500 remained the same. Only

Table 4: Comparison of amenities of study population at their previous slums and at present AWAS

| Characteristics | Variables | Slum of origin | Current AWAS |
|-----------------|------------------|----------------|--------------|
| Type of house | Pucca | 44 | 148 |
| | Semipucca | 38 | 0 |
| | Kaccha | 66 | 0 |
| Flooring | RCC | 107 | 148 |
| | Mud | 41 | 0 |
| Water source | Tap at home | 105 | 148 |
| | Common tap | 42 | 0 |
| | Hand pump | 1 | 0 |
| Electricity | Present | 123 | 148 |
| | Absent | 0 | 0 |
| Waste disposal | Polythene bag | 87 | 58 |
| | Dustbin | 39 | 88 |
| | Throw outside | 22 | 2 |
| Use of toilet | Personal | 94 | 148 |
| | Community toilet | 36 | 0 |
| | Open air | 18 | 0 |

10% of the employees in this study reported a kind of self-employment in and around their previous hutments. Hence, a larger group of employees were not troubled because of relocation. In a study conducted by Kapse *et al.*,^[7] it was found that relocation of slums exhibit high degree of negative impact on livelihood of the slum dwellers. There is less job opportunity because of nonavailability of industry, commercial area, and residential area near to new location. Sheth *et al.*^[8] reported that resettlement provided more work opportunity and increased monthly income for some. Studies referred here showed that self-employed people showed impact on their earning opportunity owing to inappropriate resettlement site. Such kind of disturbance did not occur in this study population owing to low proportion of self-employed persons in comparison with high proportion of laborers and not very much increase in transportation and its cost.

Surat being a relatively smaller and densely populated city (area of 326 square km and has population density of 8812 persons per square km), issues related to remote resettlement, greatly increase transportation time and cost, are not a serious problem here. If one considers distances between slums of origin to resettled site, only 2.7% of the families were shifted to around 15 km of distance. Almost 50% were shifted to a new site 11–15 km away from slum of origin. Report on World Bank Funded Mumbai Urban Transport Project found that places of employment of resettled population was ranging from 8 km to 40 km.^[9] Kapse *et al.*^[7] also stated that the resettlers had to pay extra cost on transportation owing to long distance of work place. Report by Center for Urban and Regional Excellence stated that there is an average increase in 10.6 km distance to workplace after resettlement.^[10]

Participants of this study reported traveling median distance of 3 km to earn livelihood, which has increased to median distance of 10 km after settling down to AWAS. The median travel time doubled from 15 min daily to 30 min in newer settlement. Range of daily expenses for reaching to place of work was from Rupees 0 to Rupees 17.50 while in slum of origin. It was increased to median expenses of Rupees 20 per day in AWAS. Coefficient of variation for distances traveled, time consumed, and fare spent was higher during stay at slum when compared with stay at AWAS. In absence of effective public transportation system till date in the city, a change in mode of transportation resulting into more use of auto-rickshaw took place after shifting to AWAS from slums [Figure 1]. While in slum, a sizable number of employees used to go and come back either on foot or using bicycle; AWAS being 1–20 km far from site of employment, use of auto-rickshaw was the only alternative left. The mean expense occurring to the individual employees to reach the site of job has increased to more than three times (Rupees 6.5 to Rupees 21) after resettlement. In Delhi resettlement, nearly 62% earning members in resettled sites experienced an increase in distance to work destination following relocation. As many as 75% of them started using city buses in Delhi. Additional expense toward daily travel was Rupees 15 in this study similar to that of CURE study.^[10] Implication in terms of time and transport facilities was comparable here. Sheth *et al.*^[8] in their study in Mumbai stated that the availability of the public bus services near the resettlement area reduces their travel time to work.

Enormous increase in electricity bill, house bill, and rent/EMI took place (more than 100%). The expenditure toward maintenance has increased from Rupees 0 to Rupees 840. In the absence of rise in income, such hikes in expenses create troubles to resettled individuals. Sharma^[11] and Bhide *et al.*^[12] in their independent studies reported that a high proportion of slum dwellers were required to pay such increment toward maintenance, house bills, and electricity. Large proportion of families have started using electricity, personal tap for drinking water, person toilet, waste disposal facilities, RCC house and flooring, with additional payment of out of their pocket.

Conclusion

Shifting to AWAS from slum of origin did not result into financial gain but an improved and dignified living for the whole family. Slum dwellers shifted to distant relocated sites required to pay more for commutation, spare more time for transportation, and have become dependent on shared auto-rickshaw system. These people with restricted income have started paying for authorized services such as electricity, drinking water, garbage and solid waste disposal, and legally constructed RCC structure for accommodation. Strengthening of Resident Welfare Association, Bus Rapid Transit System and measures to increase earning of occupants of AWAS are likely to take care of issues related to livelihood and resettled relocated slum dwellers in true sense.

References

1. Butala NM, VanRooyen MJ, Patel RB. Improved health outcomes in urban slums through infrastructure upgrading. *Soc Sci Med* 2010;71(15):935–40.
2. Government of India. *Census of India 2011*. New Delhi: Ministry of Home Affairs, 2011.
3. Available at: <http://www.suratmunicipal.gov.in/Downloads/citydevelopemain.aspx?SrNo=805005305405605405205404> (last accessed on 23 June 23, 15).
4. Available at: <http://www.suratmunicipal.org/Downloads/brochure.aspx?SrNo=905005305405605405005406> (last accessed on June 23, 15).
5. Available at: <http://www.suratmunicipal.gov.in/content/slumupgradation/main.shtml> (last accessed on June 28, 2012).
6. Available at: www.cdc.gov/epiinfo/7/ (last accessed on June 23, 2015).
7. Kapse V, Pofale A, Mathur M. Paradigm of relocation of urban poor habitats (slums): case study of Nagpur city. *World Acad Sci Eng Tech* 2012;6(11):2916–23.
8. Sheth AZ, Velega NR, Price ADF. Slum rehabilitation in the context of urban sustainability: a case study of Mumbai, India. Presented at the 2nd International Conference on Whole Life Urban sustainability and its Assessment; April 22–April 24, 2009; Loughborough, UK.
9. Ghar Bachao Ghar Banao Andolan (NAPM). *Connected Roads and Dis-connected Lives Tale of World Bank Funded Mumbai Urban Transport Project*. Mumbai: Ghar Bachao Ghar Banao Andolan (NAPM). pp. 29–30.
10. Centre for Urban and Regional Excellence. *Draft Final Report*. New Delhi: Centre for Urban and Regional Excellence, 2005.
11. Sharma RN. Changing facets of involuntary displacement and resettlement in India. *Soc Change*. 2010;40(4):503–24.
12. Bhide A, Shahjahan PK, Shinde S. *Utilisation of Slum Rehabilitation Scheme*. Mumbai: Tata Institute of Social Science, 2003.

How to cite this article: Parmar SR, Kavishvar AB, Patni MM, Shah H. A study to understand the livelihood issues affecting people resettled from slums to economically weaker section AWAS (dwelling) in Surat city. *Int J Med Sci Public Health* 2016;5:1859-1862

Source of Support: Nil, **Conflict of Interest:** None declared.