

An analysis of housing conditions in slums of Amritsar city, India

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Abstract

Amritsar is the largest city of Punjab, north India, quantifying on the basis of its slum population. Public planning agencies have failed to supply basic amenities to the economically weaker section of the society. The present paper attempts to study the housing conditions in Amritsar slums taking into consideration type of house, roof, wall and floor. This study is based on both primary and secondary data which was collected during the period of February- March 2019. In total, 614 households were selected for primary survey on the basis of the location of slums and data was collected using interview schedule. The analysis reveals that there are wide inter-slum differences in the housing conditions and material used for housing construction among various categories of slums on the basis of their location in city. In addition to Government efforts, there is need for strengthening the role of private sector in slum up-gradation, participatory planning for slum areas and other inclusive planning measures to ensure availability of houses to slum dwellers.

Keywords: Urbanization; Slum; Informal settlements; Housing; Basic Amenities.

Introduction

Rapid population growth and low investment in urban development have created a serious deficiency in the availability of houses in the towns and cities of the country. Public planning agencies have failed to supply developed land to the weaker section of society resulted in creation of slums in haphazard manner. The word 'slum' is used to describe informal settlements in cities that have inadequate housing and miserable living conditions. Slum is not a new phenomenon as they have been a part of the history of almost all cities. One billion people or one third of the world's population is estimated to be living in either slum or squatter settlements (UN-Habitat, 2003). In 1950, 30% of the world's population was urban, but by 2050, 66% of the world's population is projected to be in urban areas.

(WUP, 2014). It is clear that a large proportion of the world's urban population is going to be a part of urban space. The largest proportion of population living in slums in the world is in the Asian region, which is also urbanizing at a very fast rate. In 2001, Asia had 554 million slum dwellers, or 60% of the world's total. In South Asia, slum and squatter settlement population constituted 58% of total urban population compared to 36.4% in East Asia and 28% in Southeast Asia. In Southeast Asia, where urban population is 38.3% of the total population, 28% of this urban population is living in slums (Giok & Phua, 2007). Squatter and slum settlements have formed mainly because of the inability of city governments to plan and provide affordable housing for the low-income segments of the urban population. Hence, squatter and slum housing is the only housing solution for this low-income urban population (UN-Habitat, 2003). Many Slum related studies also focus on the expansion and proliferation of existing slums and emergence of new slums, particularly in the third world countries where rapid growth of slums is linked to the failure of urban planning policies of the government (Kuffer, Pfeffer, & Sliuzas, 2016). In India, approximately 1.37 crore households, or 17.4 percent of urban households lived in slums in 2011. Like other developing countries, India too faces the challenge of making the country slum-free in the coming decades. The new millennium development goal of the United Nations, to which India is a signatory, particularly identifies the need to improve the quality of life in the slums (Tripathi, 2015). In India, unplanned rapid urbanization has resulted in a large number of city dwellers taking up residence in urban slums. City authorities facing rapid urban development lack the capacity to cope with the diverse demands for infrastructural provision to meet economic and social needs. There are non-negotiable conditions for living but for last sixty years of planned development intervention, the Government has neglected this aspect without any substantial achievement even today. Unless these housing needs of the poor and the marginalized sections are not solved, it is difficult to ensure inclusive growth in the society. The long time negligence of the Government towards a section of people in a democratic setup questions our very concept of nationhood and the ongoing development process. The living condition of common people reflects the socio-economic, political and environmental development of a country. The poor and marginalized people living in slums and squatters are denied housing and basic amenities in spite of dedicated schemes and budgetary allocations.

Slums in Amritsar City

Amritsar is one of the largest cities of Punjab and has highest slum population accounting to the percentage of city population. Rapid growth of 8.13 percent from 2001 to 2011 in slum population is recorded in the city (Master Plan for Amritsar, 2010). The major part of the Amritsar city has been developed without proper planning and it is evident from the fact that 51 percent of the city area has been developed in a haphazard manner or in unplanned way. The unplanned development has been manifested in the form of walled city, slums and 158 unauthorized colonies in the city (Master Plan for Amritsar, 2010). As on 2011, there were 63 slums notified (All notified areas in a town or city notified as 'Slum' by State, UT administration or local government under any act including a 'Slum Act' - Census 2011) by Amritsar Municipal Corporation, which comprise 29.33 percent of population to the total population of the city. Slum population in Amritsar increased from 5.53 percent 1981 to 29.33 percent in 2011 (Sandhu & Sekhon 2017). With regard to ownership of the slum land, 89 percent of the slums in the city exist on the private land whereas in some cases the land has either been encroached or has been purchased from land owners and the remaining 11 percent of the slums exist on the Municipal Corporation lands which are mainly located on the southern part of the city. It is usually observed that majority of slums come up on government land but in case of Amritsar, most of the slums are on private land.

Table 1: Growth of city and slum population, Amritsar city (1981- 2011)

Years	City Population	Slum Population	Slum Population as % of city population
1981	589299	32632	5.53
1991	708835	123000	17.35
2001	966862	229603	23.74
2011	1132719	332274	29.33
Source: Census of India, 2011			

Methodology

Study Area

Amritsar, literally a pool of Nectar, derives its name from Amrit Sarover. The city of Amritsar lies at 31°07" and 32°03" North latitude and 74°29" and 75°23" East longitude with an average elevation of 234 meters (768 ft) on the Grand Trunk Road only 27 kilometers from the Indo-Pak International Border. The city is situated in a depression in

the middle of the Bari Doab, with a population of 1,132,761 persons (Census of India, 2011). Amritsar has been served by a Class I municipality since 1868, which was upgraded to Municipal Corporation in 1977. The Municipal Corporation of Amritsar is governed by the Punjab Municipal Corporation Act, 1976. The total area of the Municipal Corporation Amritsar is 139.58 sq. km, out of which 105.86 sq. kilometers is developed and 33.72 sq. kilometers is undeveloped. It is one of the 22 district headquarters of Punjab and is the second largest city in Punjab, after Ludhiana. The city lies on the main Grand Trunk Road (GT Road), also known as National Highway 1 from Delhi to Amritsar connecting Lahore in Pakistan, and therefore is very well connected to the road network. Amritsar is also very well connected by rail to almost all major cities in India.

Aims and Objectives

The present study attempts to evaluate the housing conditions in which slum dwellers are living and material used for house construction in notified slums in Amritsar city. So the aim of the present paper is simply to add to the existing knowledge base regarding the availability of houses and construction material in slums of Amritsar using latest primary data. The study was carried out in Amritsar city which is one of the most populated metropolitan cities of north India. Amritsar had a population of 1,132,761 according to census of India, 2011 among which 29.33 percent of population is living in slums.

Data Sources

The present study is based upon both primary and secondary data. The primary data has been collected with the help of a structured interview schedule and the schedules are administered personally by the investigator. The stratified random sampling method is used to achieve major objectives for this study and primary survey has been conducted in notified slums of Amritsar city during February-March 2019. Secondary sources of data includes data and publications from Census of India including Primary census abstract for slums 2011 and District census handbooks, Ministry of housing and urban poverty alleviation, Punjab urban planning and development authority (PUDA), Amritsar development authority (ADU), Municipal corporation of Amritsar, Town and country planning department, Punjab and other related government departments.

The sample

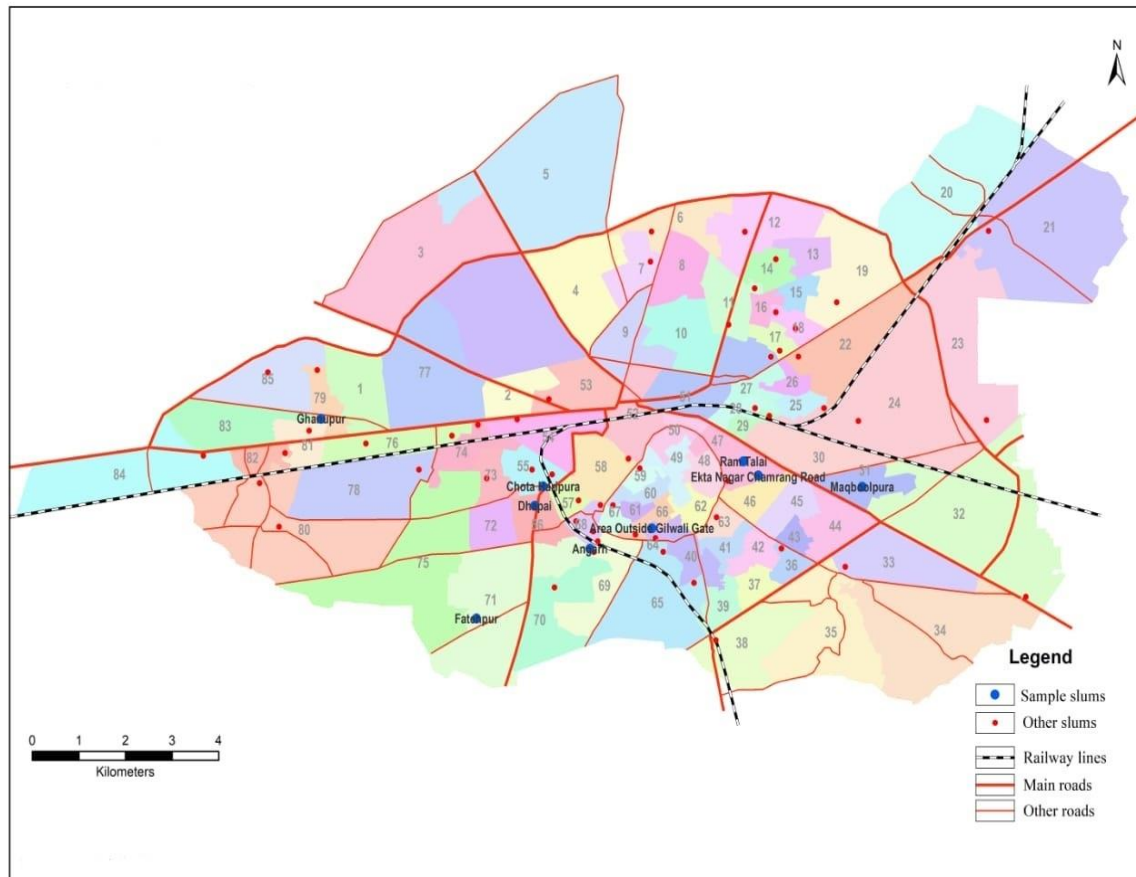
As the first step, six-fold classification of Amritsar slums on the basis of their location is taken up as the base. Secondly, slums from each category have been taken proportionally according to their percentage share in total slums. The nine sample slums in six major categories are included in primary survey: (1) Chhota Haripura (2) Angarh (3) Dhapai (4) Ekta Nagar (5) Ram Talai (6) Maqboolpura (7) A/O Gilwali gate (8) Fatehpur (9) Ghanupur. Lastly, 5 percent households were selected for primary survey in each slum and an in-depth survey of 614 households was conducted through interview schedule to achieve the purpose of this study.

Table 2: Selection of sample size

S. No.	Slum Category ⁽¹⁾	Name of the sample slum	Population	Total household	Sample household
1.	Slums along Railway line	1. Chhota Haripura	8300	1660	83
		2. Angarh	3850	770	39
2.	Slums along Major roads	3. Dhapai	8800	1760	88
		4. Ekta Nagar	2300	460	23
3.	Walled city slums	5. Ram Talai	3300	660	33
4.	Industrial slums	6. Maqboolpura	11000	2200	110
5.	Refugee slums	7. A/o Gilwali gate	1000	200	10
6.	Sporadic slums	8. Fatehpur	5550	1110	56
		9. Ghanupur	17160	3432	172
Total			61260	12252	614
Source: Municipal Corporation, Amritsar					
Note: ⁽¹⁾ Categorization of slums has been done by the researcher on the basis of location of slums in Amritsar city.					

Data collection and instruments

Information was collected from the heads of the families, using an interview schedule that covered house type and type of material used for wall, roof and floor. Informed consent was also obtained from respondents for using this data for research purposes.

Map 1: Location of slums in Amritsar city

Source: Prepared by Researcher

Results and discussion

There are three basic needs of human beings, which are food, clothing and housing. Housing is the fundamental requirement of man where not only physical shelter is provided but it also provides all the services and facilities for the human welfare. According to WHO 1961 housing is "the residential environment, neighborhood, micro districts or the physical structure that mankind use for shelter and the environs of that structure, including all necessary services facilities equipment and devices needed for physical health & wellbeing for families and the individuals". People's standards of living are indicated by its economic condition, their housing conditions and the healthy and hygienic environment of the area where he or she lives. Due to rapid increase in population worldwide, many developing countries are facing the problem of housing shortage. A poor housing condition is seen in

slum areas where mostly temporary houses are made with inadequate water supply, lack of proper sanitation, very poor ventilation and overcrowding due to limited space, very often leading to many diseases such as Tuberculosis, Hepatitis, Typhoid, Jaundice, Skin infection and other respiratory as well as stomach related diseases, which are mainly due to poor housing conditions. It has become disastrous and this becomes still worse because of increasing population burden in the cities.

In this section, percentage wise type of houses and construction material used in slums of Amritsar city has been shown (Table 3). Basically, three parameters are chosen to assess the housing conditions and material used for houses in different slums of Amritsar city. Three parameters that are used to determine housing conditions are type of roof, floor and walls.

Type of house

There are basically three types of houses in the slums of Amritsar city i.e. Pucca, Semi-Pucca and Kutcha. As indicated in table 3, almost 45 percent slum dwellers live in pucca houses made up of bricks and cement. 41.69 percent people in the slums live in semi-pucca houses and 13.84 percent slum population live in Kutcha houses. 58.33 percent people in sporadic slums live in pucca houses whereas 60 percent of slum population in refugee slums and 24.24 percent people in slums along old walled city live in semi-pucca houses. 40 percent people in slums along the old walled city live in Kutcha houses. 8.77 percent people in the slums spread sporadically also live in Kutcha houses. A good proportion of people live in the pucca houses in the slums of Amritsar.

Floor type of house

In the slums of Amritsar, the floor in the houses is made up of using various kinds of material like mud/dung, bricks, cement plaster and tiles. It is usually observed that houses are constructed using material available locally. 17.42 percent people in the slums live in the houses whose floor is made up of mud/dung. Two fifths of the slum population lives in houses whose floor is made up of bricks. Around one quarter slum population lives in houses where the floor is made up of cement plaster. 17.10 percent slum dwellers live in houses whose floors have tiles. 40 percent people in refugee slums live in houses whose flooring is done by mud/dung whereas 46.92 percent people in sporadic slums live in houses whose floor is made up of bricks. However, 38.73 percent people in the slums along

major roads line in houses whose flooring is done using cement plaster. Less than one third percent population in slums along old walled city lives in houses whose floor is made up of tiles.

Wall type of house

The single most common material used for wall in India is usually bricks. The walls in the slum houses are also usually made up of bricks but sometimes in slums other materials can also be seen like stone with mud, thick plastic and metal sheets. Three fifth percent of population has made their houses using brick. 12.86 percent people live in houses whose walls are made of stones with mud. 13.02 percent people in slums live in houses with thick plastic walls. While 13.68 percent slum population lives in houses with walls made of metal sheets. A large proportion of slum population in slums i.e. 66.66 percent along major roads live in houses with walls made up of bricks whereas 30 percent people in refugee slums live in houses whose walls are made up of stones with mud. 18.18 percent of slum population in slums along old walled city lives in houses with walls made up of thick plastic. While 40 percent people in refugee slums live in houses whose walls are made up of metal sheets.

Roof type of house

The roofs in the houses are basically made up of various materials like metal sheets, bricks, bamboo straw and thatched. In slums, it can be usually observed that roofs are made up of boards, tins, timber, grass, thatched material etc. In case of Amritsar city, 14.33 percent people in slums have roofs made up of metal sheets whereas 53.09 percent people in slums have roof made up of bricks. 13.35 percent people in slums live in houses whose roofs are made up of bamboo straw while 19.21 percent slum dwellers have thatched roofs. 30 percent people in refugee slums live in houses with roofs made up of metal sheets. There are variations of material used for construction of roof according to the location of slums on the basis of geographical phenomena. Three fifth slum dwellers in industrial slums lives in houses with roofs made up of bricks. 21.21 percent people in slums along old walled city live in houses whose roofs are made of bamboo straw. 60 percent population in refugee slums lives in houses with thatched roofs. These observations clearly indicate that status of slum dwellers varies according to their location in city.

Table 3: Type of houses and material used for house construction in slums of Amritsar city

Parameter	Indicators	Slums along railway	Slums along major roads	Walled city slums	Industrial slums	Refugee slums	Sporadic slums	Total
		% of HH ⁽¹⁾	% of HH	% of HH	% of HH	% of HH	% of HH	
House type	Pucca	38.52 (47)	35.13 (39)	57.57 (19)	31.81 (35)	0 (0)	58.33 (133)	44.46 (273)
	Semi Pucca	43.44 (53)	50.45 (56)	24.24 (8)	52.72 (58)	60 (6)	32.89 (75)	41.69 (256)
	Kutchra	18.03 (22)	14.41 (16)	18.18 (6)	15.45 (17)	40 (4)	8.77 (20)	13.84 (85)
Floor type	Mud/Dung	21.31 (26)	14.41 (16)	18.18 (6)	20.90 (23)	40 (4)	14.03 (32)	17.42 (107)
	Bricks	36.88 (45)	25.22 (28)	30.30 (10)	46.36 (51)	70 (3)	46.92 (107)	39.73 (244)
	Cement plaster	22.13 (27)	38.73 (43)	21.21 (7)	25.45 (28)	0 (0)	23.24 (53)	25.73 (158)
	Tiles	19.67 (24)	21.62 (24)	30.30 (10)	7.27 (8)	30 (3)	15.78 (36)	17.10 (105)
	Total	100 (122)	100 (111)	100 (33)	100 (110)	100 (10)	100 (228)	100 (614)
Wall type	Bricks	50.81 (62)	66.66 (74)	39.39 (13)	65.45 (72)	30 (3)	64.47 (147)	60.42 (371)
	Stone with mud	15.57 (19)	9.00 (10)	24.24 (8)	10.90 (12)	30 (3)	11.84 (27)	12.86 (79)
	Thick Plastic	15.57 (19)	9.90 (11)	18.18 (6)	8.18 (9)	0 (0)	15.35 (35)	13.02 (80)
	Metal sheets	18.03 (22)	14.41 (16)	18.18 (6)	15.45 (17)	40 (4)	8.33 (19)	13.68 (84)
	Total	100 (122)	100 (111)	100 (33)	100 (110)	100 (10)	100 (228)	100 (614)
Roof Type	Metal sheets	17.21 (21)	20.70 (23)	24.24 (8)	7.27 (8)	30 (3)	10.96 (25)	14.33 (88)
	Bricks	42.62 (52)	54.95 (61)	36.36 (12)	60 (66)	10 (1)	58.77 (134)	53.09 (326)
	Bamboo straw	16.39 (20)	9.00 (10)	21.21 (7)	13.63 (15)	0 (0)	13.15 (30)	13.35 (82)
	Thatched	23.77 (29)	15.31 (17)	18.18 (6)	19.09 (21)	60 (6)	17.10 (39)	19.21 (118)
	Total	100 (122)	100 (111)	100 (33)	100 (110)	100 (10)	100 (228)	100 (614)

Source: Primary Survey
Notes:
⁽¹⁾HH stands for Household.
All figures in the table are in percentile and the figures in the brackets are actual number of people surveyed.

Conclusion

In this study, it is clear that the type of house people own varies among different slums in the Amritsar city on the basis of their location in the city. In order to improve the socio-economic condition of slum dwellers, government must make efforts to improve quality of life in slums through services like tenure regularization. Slum upgrading should be adopted as a solution with presence of basic amenities in all houses as required especially after discussion and agreement with slum residents. This research clearly focus on the need of housing with presence of basic facilities so the new mission of Government of India , Prime Minister Awas Yojana (PMAY) may be successfully implemented with the involvement of all stakeholders. A number of non government organizations have been working to normalize the life of slums dwellers in Amritsar. There is also a need for strengthening the role of private sector in slum upgradation, participatory planning for slum areas, gender based planning and other inclusive planning measures. Finally, there is a need of holistic work to understand the above mentioned issues at the city level as well as to analyze linkage among proliferation of slums, ‘urbanization of poverty’ and ‘poverty in planning’. In principle, cities offer a more favorable setting for the resolution of social and environmental problems than the rural areas (UNFPA, 2007).

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