

# Women Health And Sanitation Issues In Delhi Slums, Case Study Of Harijan Camp

Pl. Arundhati Mishra<sup>1\*</sup>, Ar. Shagufta Irshad<sup>2</sup>

<sup>1</sup>*Assistant Professor, Faculty of Architecture & Planning, AKTU, Lucknow.*

<sup>2</sup>*PG Student, Faculty of Architecture & Planning, AKTU, Lucknow.*

## ABSTRACT

Delhi is the capital of India and is considered as one of the most urbanized states of the nation. There are tremendous opportunities for employment and livelihood in this capital of the country. Due to this reason, people from rural areas all over the country are forced to migrate to this state in search of jobs and livelihood. This has created a pressure on the living conditions of this state. This paper will be focusing on the development of squatter settlements in Delhi slums. The living condition, health and sanitation practices will be the major area of research in this study and it also focuses on health, sanitation and security problems and its negative effects on the female population of these settlements. One of the very old settlements in the JJ clusters of Delhi state is the Harijan camp. This paper will be aimed at focusing the consequences of worst conditions of livelihood and standard of living in context with the female population of this place.

**Keywords:** Delhi, Urbanised state, Livelihood, Migration, Uncontrolled population, Health, Sanitation, Harijan Camp.

## 1. Introduction

Women play a significant role in the progress of any country as they can guide it towards development (Bhat, 2015). Women's needs are not universal; they vary depending on the location, time, space and community. Universally, sanitation implies promotion of people's health in a community by providing a clean environment and breaking the disease cycle. This depends on several factors such as hygiene and behavioural pattern of the people, availability of resources, legislative measures implemented by the government, and socio-economic development of the nation. Studies related to the sanitation conditions in several parts of India reveal appalling results even today. (Pandve, 2008) Most Indian cities are plagued by overcrowding, inadequate water supply, lack of provision for disposal of human excreta, solid wastes and wastewater. Inadequate sanitation facilities pose various health problems, such as increased occurrence of diarrhoea, stunting and respiratory diseases. However, various factors such as caste, status and gender make some people more susceptible to these health risks than others. Due to biological differences, women have specific sanitation needs related to their personal hygiene

(Koonan, 2019). Indian women face several gender biases, and hence experience more difficulties in their life.

## 2. Need of the Study

Delhi has the distinction of being the most urbanised state in the country, with 93% (12.81 million) of the population living in urban areas. The increasing rate of urbanisation is putting pressure on urban resources to provide for women's needs in squatter settlements. 76% of Delhi lives in unplanned areas with sub-standard housing conditions and a lack of proper basic services. The lack of basic amenities and below-standard living conditions make the residents of the informal settlements more vulnerable to health issues.

The UN declared in 2010 that access to water and sanitation are human rights, but billions of people around the world are a long way from realizing these rights. "Women and girls disproportionately face risks of sexual violence when they have to walk long distances to sanitation facilities, especially at night," argues Catarina de Albuquerque,

UN expert on the human right to safe drinking water and sanitation. (<http://www.ohchr.org>)

### 3. Methodology

The methodology used for the study area includes (1) Identification of notified slums: First of all, notified slums have been identified for study area. (2) Identify basic services: Basic services have been analyzed within this particular slum. (3) Data Collection: Data collected through primary and secondary sources. (4) Primary sources: Primary sources include different stakeholders such as slum dwellers, NGOs, different authorities' officials etc. Household surveys, pilot surveys, personal interviews, and one-on-one discussion have conducted to analyze the existing issues and problems in this slum and to find a better solution to all the issues faced by slum dwellers. A personal interview has been conducted for females to know the issues of females related to health and sanitation, in which it is analyzed that women faced a lot of issues due to open defecation. The primary survey was done in December, 2019 by first author. (5) Secondary sources: Secondary data have been collected from different websites, research papers and official documents. (6) Analysis of data collected: Analyzing primary and secondary data based on existing scenario and (7) Conclusion: finally providing the conclusion.

### 4. City Profile of Delhi

Delhi is also known as the National Capital Territory of India is a metropolitan region in India. With a population of 16 million in 2011, it is the world's second most populous city and the largest city in India in terms of area.

#### 4.1 Urbanization

Delhi's urban population grew from 1.4 million in 1951 to 12.8 million in 2001. Delhi has experienced urbanization in the form of urban sprawl, with the core area experiencing less population growth than the periphery, both between 1981 and 1991 and between 1991 and 2001 (Dupont, Tarlo et al. 2000; Sivaramakrishnan, Kundu et al. 2005). The core area's population grew at a rate of 3.59 percent from 1981 to 1991, while the periphery grew at a rate of 3.8 percent. The core and periphery areas grew at a rate of 3.09 and 4.08 percent, respectively, between 1991 and 2001. In short, the trend in population growth shows that Delhi was a growing city (Kumar 2006). Only 7% (0.96 million) of the population lives in rural areas, while 93% (12.81 million) lives in urban areas.

Delhi has the highest per capita income and income growth among Indian metros; a huge concentration

of wealth, resources, infrastructure and a relatively high quality of urban services, which leads to the growth of the city and immigration from other areas. Such growth and in-migration have led to the formation of slums in the city.

The key reasons behind the growth of slums are the migration of disadvantaged rural populations in search of jobs and livelihoods. These migrants often inhabit vacant government land and existing slums, increasing pressure on urban space because they find it difficult to afford dwelling in the city. 76% of Delhi lives in unplanned areas with sub-standard housing conditions and a lack of proper basic services. The lack of basic amenities and below standard living conditions make the residents of the informal settlements more vulnerable to health issues.

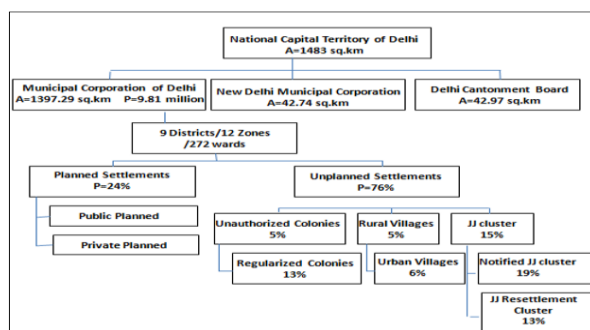
#### 4.2 Migration

It is estimated that about 75,000 persons per year are still migrating to Delhi (Economic Survey of Delhi, 2012-13). An assessment of the state-wise share of the population migrating to Delhi indicates that the incidence of migration is the highest from Uttar Pradesh i.e., 47% followed by Bihar i.e., 31%. The ratio of migrants & non-migrants is almost equal in the city. The highest percentage of migrants are of working age group i.e., 25.84% of 15-25 years and 54.95% if 26-60 years, seeking economic opportunities has enhanced the incidence of informal housing and exerted pressure on formal housing capacities in Delhi.

#### 4.3 Typology of Settlement

The settlements are differentiated on the basis of tenure security, dwelling conditions, infrastructure status and the degree of planning interventions. There are various studies which explicitly categorize the typology of settlements (Kundu 2004; Dutta, Chander 2005). The National Capital Territory of Delhi (NCTD), New Delhi Municipal Corporation (NDMC) and the Delhi Cantonment Board (DCB). The MCD is one of the world's largest municipal corporations. Its settlement pattern is broadly divided between planned and unplanned settlements. The unplanned settlements, which are the main domain of this paper, consist of seven different types with three subgroups, as shown in figure.

**Figure 1:** Typology of Settlements in Delhi



Source: Urban Settlements in Delhi - Sohail Ahmad, Mack Joong Choi - 2010

JJ clusters are either slum areas or places in which people from elsewhere have been resettled, hence the name "JJ resettlement colonies".

#### 4.4 Squatter Settlements - Accessibility to Services

The squatter of JJ Clusters settlements are considered as an encroachment on public or private lands. They are therefore seen as illegal. Unlike cities such as Kolkata or Mumbai, Delhi does not have slum settlements in certain specified areas instead they are scattered throughout the cities in small settlements as near railway tracks, roads, river banks, parks and other vacant.

The population in slum-clusters in Delhi too does not have access to civic facilities such as sanitation, street lights, health care centres, schooling facilities, roads, open space/parks, and markets. These inadequacies in slum areas result in worsening conditions in their living conditions and its impact on their health & welfare.

##### 4.4.1 Drinking Water

Provisioning of safe drinking water is one of the most important duties of the government. Out of 477 slums, 455 slums (95.39 per cent) have one or the other provision of drinking water and only 4.61 per cent reported not having any such facility. People in such slum's clusters manage from adjacent localities. However, the provisioning of running drinking water is through common or share taps and there is no provision of household level supply. Delhi Jal Board is the main supplier of water.

##### 4.4.2 Regularity of Supply of Drinking Water

Another important issue with provisioning of drinking water is the regularity with which it is made available. Out of 477 slums, only 211 (44.23 per cent) reported regular supply. The maximum

number of slums reporting irregular supply varies between 66.92 per cent in West to 36.78 per cent in East Zone.

Only about 14.29 slum clusters have reported three times water supply in 24 hours; in 76.69 per cent of the slum clusters water supply is reported to be two times in 24 hours; and 3.38 per cent slum clusters get water only once a day. About 1.88 per cent slums get water alternate day and 2.63 uncertain about the arrival of water.

#### 4.4.3 Health-Medical Facilities and Interventions

The condition of slum clusters in general is poor in terms of medical facility. Out of 477 slums about 89 per cent are without any government dispensary inside the slum. Only 11 per cent have some form of government dispensary. The availability of dispensary facility varies between 24.14 per cent in East and only 2.94 per cent in North. In absence of this facility, the slum dwellers have to visit Private Doctors or unqualified quacks for minor ailment and have to pay high fees for consultation and medicine. However, in the absence of government dispensaries attempt is made to help the residents through specific camps for immunisation and health check-up.

In the surveyed households were canvassed for incidence of diarrhoea and diseases of the eye, skin, Typhoid, Malaria, Dengue and Polio.

The female child is reported significantly more vulnerable to skin diseases and typhoid. Eye disease are the most incident category, followed by typhoid, indicating the vitiation of both water and vector transmission pathways. The perceptions of solid waste disposal sites, their nuisance and the reportage on water quality seem to justify this. Malaria and Dengue are also dominant and higher amongst the male child. Malaria and Dengue are reported significantly more than the average in the South and North districts. Typhoid, skin diseases and eye diseases are reported more in the South and South-West districts and significantly higher than the survey average. Relative to other diseases reported, the incidence of polio is reported to a lesser degree.

#### 4.4.4 Sanitation and Solid Waste Management

##### 4.4.4.1 Common Toilet Facilities

Out of 477 squatter settlements, 354 squatter settlements (74.21 per cent) have common toilet facility inside the slum and the remaining 25.79 per cent reported no such facility. Clearly, a majority

of squatter settlement dwellers have to use open space for toilet and this situation can only be describes as pathetic. Even those slums where common facility is provided the number is not enough to meet the requirement. The greatest sufferers are women and girl children.

#### **4.4.4.2 Household Sanitation**

The Census of India, 2011 (Col, 2012) reports that 90% of household's resident in the NCT have access to latrines within their premises. Of the remaining 10% (0.35 million), 69% are reported to be accessing Public/Community facilities and the remaining (0.11 million) defecate in the open. The number of households without latrines varies from 6,727 in New Delhi to 111,737 in the North-West district. Open defecation is highest in the North-West district (0.038 million), followed by the South (0.03 million), South -West (0.02 million) and the West (0.01 million) district s. 66% of the latrines are connected to the sewer network, while the remaining has on-site treatment/ disposal systems, including septic tanks (28%).

In this baseline survey, of the 19,683 households canvassed, 66% of the households reported that the adult males use own latrine, while 23% are using the Public/Community toilet; leaving adult males in 11% of the households to use open spaces near or away from the house. The reportage for adult females varied slightly with 68% reporting use of own latrine, 22% using the Public/Community toilet and 1% using mobiles/ trailers, leaving adult females in 9% of the households to use the open space.

Most of the infants are also being made to defecate in the open spaces. The above reportage indicates a high health risk to the urban poor communities in the NCT.

#### **4.4.4.3 Solid Waste and Drainage**

Distribution of households by regular visits by MCD Sweepers for cleaning and picking up garbage from the slum. Out of 477 Slum clusters, only about 43.61 per cent reported regular visit by MCD sweepers. Thus, 56.39 per cent of slum clusters are not visited by MCD sweepers. At regional level, maximum attention is given to slum clusters in central zone where 70.49 per cent of slum clusters are visited by MCD sweepers and minimum attention is given to western region where only 16.54 per cent slums have reported visits by MCD sweepers.

In absence of support from MCD, the slum clusters have their own alternative mechanism, which

include private sweepers, disposal to nearest dustbin, throwing on roadside and other means. Among this disposal to nearest dustbin is most common, which followed with throwing the garbage by the side of roads.

A little effort by the local government with well targeted investment the situation can be improved further for all slum clusters.

#### **4.4.5 Security and safety**

Out of 477 slums, 220 slum clusters (46.12 percent) reported existence of one or other type of law-and-order problem in their respective slum. The same varies between 10.53 per cent in the West to as high as 67.65 percent in North, 59.02 in Central and 55.17 per cent in East Zone.

An important implication of such law-and-order problem is the cost and insecurity faced by the surrounding population in addition to the insiders. Often, those miscreants causing internal problems are also active outside the slums by indulging in theft, murder, snatching and other evils.

### **5. CASE STUDY ON HARIJAN CAMP IN JJ CLUSTER, DELHI**

#### **5.1 Location**

Harijan Camp is part of New Delhi district and is located near Jawahar Lal Nehru Stadium. On the North of the area is Lodhi Colony, on the South is Kendriya Vidyalaya, on the East is Pragati Vihar and JLN Stadium and on the West is Fifth Avenue Road.

It is a 42 years old JJ cluster settlement on an area of around 1.92 Ha with 536 jhuggies and a total population of 3206. It has a density of 280 DU's per Ha. The Delhi Urban Shelter Improvement Board owns the land.

#### **5.2 History**

People settled in the area in 1980 to work as a construction worker in JLN Stadium. After the construction was completed in 1982, men were left with no job & women step out of their house to work as domestic helper in nearby residential areas. Majority of the migrated population are from Bihar & Uttar Pradesh with 40% & 30% respectively.

#### **5.3 Land-Use of Harijan Camp**

Mostly the dwelling units are ground structure and are semi-pucca. On the main road majorly, the plots are commercial consisting of car repair shop,

general store etc. Open Space is used to dump garbage. Men & women use the open space to defecate in night. There is no community center in the area for the people to interact with each other or to organize training & skill development programs.

## 5.4 Typology of Structure

The plot size varies from 15sq.yd to 35sq.yd. 65% of the dwelling units have only one room which includes living area and cooking space. 50% of the H.H size is 4-6 persons. The living condition is very poor as 6-8 persons are mostly living in one room and none of the dwelling unit has attached toilets. Most of the houses are made of brick as the permanent material with top roof of asbestos sheets. Temporary materials used for construction are wood and plastics.

## 6. PROVISION OF SERVICES – Sanitation

### 6.1 Open Defecation

One of the most significant challenges faced by India is to provide women with safe and clean toilets especially in rural areas. Communities that practice open defecation as a norm comprise of a large number of women especially young girls who avoid going out for defecating during daytime and use strategies such as reducing food and liquid intake during the day to cope with this problem. It is very common for women to wait for sunset when they can defecate in a secluded place with no fear of being seen in the dark. Such practices can cause health risks such as chronic constipation, urinary tract infections and gastric disorders. Also, safety-related risks such as snake bite or being chased by a stray dog can occur as well. However, this safety linked risks are not gender-specific.

There is only one community toilet in the area with 12 seats for men and 6 seats for women i.e., 1 WC over 178 people. Mostly men & children defecate in open. 73% of the children (below 5 year of age) use open drain to defecate. The percentage of women defecating in night is quite high i.e., 24% as the community toilet remains closed from 7pm to 5am. Women prefer going in groups or to take their son along with them to use toilet or to defecate in night as they feel insecure in their area.

In night the open space is used by women & men to defecate. Women wake-up at 4:30 am in the morning to stand in the queue to use toilet. 80% of the women reported quarrel among them for the usage of toilet as they have to report to their work place by 6am-7am and before going to their work place, they have to finish their household duties.

They are charged Rs.2 for its usage every time and up to Rs. 5-10 for bathing and washing clothes. At an average 12-15% of the monthly income of a HH is spent on usage of toilet. The toilets are not well maintained.

## 6.2 Garbage Disposal

There is a dhalao in the area but mostly people throw garbage outside their houses or in the drains as there is no provision of dustbins within the settlement. Although there is a provision of cleaning the streets & drains within the clusters at daily basis but it's not regular which leads to unhygienic conditions.

## 6.3 Drainage

There is constant problem of flooding specially in the rainy reason which brings in lot of litter & garbage along with the dirty water in the houses. The open drains are cleaned once in a week. This leads to a lot of water borne diseases & pest infected sickness like dengue & malaria.

## 6.4 Access to Water

There are 14 common water taps in the area i.e 1 water tap over 229 people. 35% of women reported that they are not able to fill their bucket in water supply time as the duration of supply is only for 2 hrs (8-10am) and the no. of people filling water is high or they are at their working place when water is supplied. The women, who are not able to fill water, fetch water from Meharchand market because there is an availability of 24hour water supply. Almost all women are satisfied with the water quality and quantity supplied to them. For drinking purpose, people buy water of 20 lit per day. At an average 11-13% of the monthly income of a H.H is spent on water. Women have to be in queue from 7am to fill water & almost all women reported the incidence of quarrel among them over the usage of water.

## 6.5 Health

The disease incidence amongst the HHs is largely water-borne disease & due to poor maintenance of open drain. There is only Private clinic in the area. Nearest Govt. Hospitals are AIIMS and Safdarjung hospital located 4-5kms away. No health checkup camps organized in the areas. Majorly women have to suffer because they have to take care of the family and are not able to go hospital when they are ill.

## 6.6 Security

Due to the unceratin conditions of the toilet and to cut costs, many women chose to open defecate in the night time or early morning. This leads to incidents of “Eve Teasing” in the area. Many such incidents are commonly seen on a daily basis.

75% of women feel unsafe in the areas because of sexual harassment they have to face. Women reported that they have to think stepping out of their house in day time.

99% of women feel unsafe in the areas during night as there are no electric poles installed in the areas. Women prefer going in groups or to take their son along with them to use toilet.

## 7. ISSUES AND PROBLEMS AT CLUSTER LEVEL

### 7.1 Access to Sanitation

Inadequate number of community toilets. Community toilets are closed from 7pm to 5am. Community toilets are not well maintained. Inadequate number of toilets results in conflict among them in morning. Women have to suffer because of closing of toilets in evening. Women are left with no option but with to defecate in open which results in high risk of self-security. Toilets are not well maintained resulting in increase of skin diseases.

### 7.2 Access to Water

Inadequate number of water taps and short duration of water supply results in conflict among women & increases mental pressure. Poor quality of water increases percentage of water borne diseases.

### 7.3 Solid Waste Management

No provision of dustbins within the settlement and Mostly people throw garbage outside their houses or in the drains or in open space which results in unhygienic conditions

### 7.4 Health

Women are last to avail health facilities because the dispensary closes by 2pm and it is very difficult for the women to take out time from household work. Inadequate services provided in dispensary forces people to visit private doctors or to travel long distance to avail govt. facilities resulting in ignorance to health check-ups.

## 7.5 ISSUES AND PROBLEM AT HOUSEHOLD LEVEL

### 7.5.1 Security

Due to open defecation, women have to face the case of eve teasing and sexual harassment which makes them feel insecure specially in the late night and early morning hours.

### 7.5.2 Awareness

Women are not benefited from schemes launched as they are not aware of it and even do not know whom to contact and the process to avail such facilities.

## 8. CONCLUSION

This research study has provided a detailed review of Harijan Camp in JJ cluster, Delhi. The locally taken interview and survey has revealed the worst conditions of people living here. The women of these areas are suffering at a great extent as they are unable to use toilets and basic services at a normal level. Due to this, the health condition of these females is deteriorating day by day. The schemes that are working all over India for the welfare of women are also not serving at these local slums all over the state of Delhi.

It has become very important to take a step forward to help these people through various interventions by the government as well as non-government organizations. It should be taken into consideration that the schemes and programmes which are specifically for females should be adopted and should be in action in these areas so that they do not lag behind in the race of development, empowerment, protection and welfare of women in the nation.

## 9. ACKNOWLEDGEMENT

I would like to acknowledge and give my warmest thanks to my supervisor Dr. Subhrajee Banerjee who made this work possible. His guidance and advice carried me through all the stages of writing my project. I would also like to thank my student, Shagufta Irshad who helped me in structuring this research paper. Each of the members of my committee has provided me with extensive personal and professional guidance and taught me a great deal about both scientific research and life in general

I would also like to give special thanks to my family for their continuous support and understanding when undertaking my research and writing my project.

## 10. Funding

This research was not financially sponsored or supported by any organization and the financial aid was taken care by first author.

## References

- [1]. (n.d.). Retrieved from Office of the High Commissioner for Human Rights : <http://www.ohchr.org>
- [2]. 1-SABLAScheme\_0.pdf. (2021, october 31). Retrieved from [http://wcd.nic.in/sites/default/files/1-SABLAScheme\\_0.pdf](http://wcd.nic.in/sites/default/files/1-SABLAScheme_0.pdf).
- [3]. (2011). Delhi Slum Study by CGRD.
- [4]. Dupont V, T. &. (2000). Delhi: Urban space and human destinies.
- [5]. Economic survey 2012-2013, Planning Deapartment. (2021, october 30). Retrieved from <http://delhiplanning.nic.in/content/economic-survey-2012-2013>.
- [6]. H.T., P. (2008). Environmental Sanitation: An ignored issue in India. Indian Journal of Occupational and Environmental Medicine.
- [7]. (2013). Human Development Report Delhi.
- [8]. Important Women's Health Issues in India. (2019, August 13). Retrieved from <https://www.news18.com/news/partner-content/important-women-health-issues-in-india-2268729.html>
- [9]. InsightsIAS. (2018, December 31). Retrieved from Ujjwala Sanitary Napkins initiative, INSIGHTSIAS: <https://www.insightsonindia.com/2018/12/31/ujjwala-sanitary-napkins-initiative/>
- [10]. M.J., A. S. (January 2011). The context of uncontrolled urban settlements in Delhi. Asien Hamburg, 75-90.
- [11]. National Health Portal of India. (2021, October 31). Retrieved from Janani Shishu Suraksha Karyakaram (JSSK): [https://www.nhp.gov.in/janani-shishu-suraksha-karyakaram-jssk\\_pg](https://www.nhp.gov.in/janani-shishu-suraksha-karyakaram-jssk_pg)
- [12]. Poor sanitation causes psychosocial stress among women. (2021, October 30). Retrieved from India Water Portal: <https://www.indiawaterportal.org/articles/poor-sanitation-and-psychosocial-stress-among-women>
- [13]. Proud Indian NGO. (2021, October 31). Retrieved from <https://www.proudindian.ngo/kyb-urban-women-self-help-programme.php>
- [14]. R.A., B. (2015). Role of education in the Empowerment of Women in India. Journal of Education and Practice, 188-191.
- [15]. S, K. (2019). Sanitation Interventions in India: Gender Myopia and Implications for Gender Equality. Indian Journal of Gender Studies, 40-58.
- [16]. (Col,2012). The Census of India, 2011.
- [17]. Women's sanitary health in India: A tale of social inequality and basic sanitation. (2020, September 18). Retrieved from <https://blogs.lse.ac.uk/socialpolicy/2020/09/18/womens-sanitary-health-in-india-a-tale-of-social-inequality-and-basic-sanitation/>