Issues of Slums in Bathinda City

Sandeep Kumar¹ and Shubhpreet Singh Sidhu²

¹G. R. D. School of Planning, Guru Nanak Dev University, Amritsar, India
²Haryana State Industrial and Infrastructure development Corporation, Panchkula, India

Abstract
Objective of the present piece of research is to study the issues of slums in Bathinda city. The paper stresses on the study of locational attributes of slums and issues related to physical development of slums. The scope of the study area is Municipal Corporation limit of Bathinda. Data from secondary sources is used for analysis. There has been upsurge in the number of slums and its inhabitants regularly due to influx of migrant with humble economic background. Most of the Bathinda city is unplanned and slums are mostly located near industrial areas due to work place relationship. Most of the slum dwellers own land and have a permanent house but the real cause of trouble is high land values, lack of basic services like drainage, sewerage, water supply, solid waste management. There is lack of land supply to the poor in Bathinda in informal housing supply sector.

Keywords: Slum, Solid Waste Management, Drainage, Sewerage Network, land use and land value.

1. Introduction

Bathinda city is the district headquarter located in the southern part of Punjab (India) in the heart of Malwa region. Bathinda is most fast growing city in Malwa region after Ludhiana and Patiala. It extends from 30°-4'-30" N to 30°-21'-20" N Latitude and 74°-47'-50" E to 75°-10'-00" E longitude. Its hinterland is fertile and rich in agriculture [1].

Bathinda has a strong industrial base with major projects i.e. Thermal plant and National fertilizer limited (NFL). Bathinda is well connected with the cities like Chandigarh, Patiala, Ludhiana, Sirsa, Mansa, Hanumangarh, Abohar, Faridkot, Firozpur etc. by the national highways and major roads.

The growth rate of total population of Bathinda has increased from 22.79% during 1991-01 to 26.96% during 2001 - 2011 decade, which is higher as compared to that of state of Punjab. Bathinda city had urban population of 2, 17,256 in 2001 [2] and the slum population was 40,602 which is 18.68% of the total urban population [1]. According to census 2011, population of Bathinda city was 2, 85,813, during the same period, there was an increase in the proportion of the slum dwellers in the city [1]. There were total 32,072 migrants during various times whereas 14, 757 migrants came to this city during last 10 years acting as major reason for the proliferation of slums in the city as most of the slum dwellers have humble economic background [2]. As per the data made available by Municipal Corporation Bathinda (MCB), there are 8 notified slums in the city, but other than notified slums, there are some areas in the city, which can be categorized as slum areas as per the definition given by census of India [3]. Such slums are Jogi Basti, Janta nagar, Subash Basti, Harbans nagar, Chandser Basti, Sanjay Basti, Amarpura Basti, Alam Basti etc. Bathinda has experienced sharp rise in the number of slums and its inhabitants during last decade posing a major challenge to the city.

2. Issues of slums in Bathinda city

2.1 Surrounding land uses

The issues related to location based attributes of slums deal with the impacts of major land uses and activities like industrial or commercial on the birth/establishment and growth of slums in Bathinda city. The analysis focuses on the ill effects of non-compatible land use with respect to slums. The surrounding land use development is a major factor for the emergence of slums in Bathinda. Different factors like land use compatibility and conformity in the surroundings of slums affect the physical environment of slums in Bathinda. It has been observed that 66.67% of the surroundings land use around slum pockets constitute industrial and commercial land uses which become a major contributor for emergence of slums in these areas by providing employment opportunities to the slum
dwellers and degrading the housing and infrastructural conditions in these areas, most probably people live here because of work place relationship and a decrease in transportation costs. The total area under industrial use is 974.46 hectares which is 14.36% of the total municipal area. The city has large and medium scale units like Thermal Power Plant, NFL, Bathinda, Milk Plant and Vardham Polytex etc. along with more than 500 small scale registered industrial units dealing with products like manufacturing of utensils, pharmaceuticals, cotton ginning. The latest trend is towards manufacturing of electrical transformers and production of electric motors, plastic pipes, electric wires etc. Besides this agro based industries are also concentrated in the city. It is evident from existing land use plan, that major industrial units i.e. NFL are located in the north of the city whereas the other planned Industrial Estate, Industrial Focal Point and industrial growth centre are situated in southern parts of the city. A few small scale service industries are seen scattered in other parts of the city. There is higher degree of unplanned and incompatible land use development in Bathinda due to nearness of slum area to the industrial establishments [4]. Clustering of slums near the industrial areas is incompatible development leaving the slum dwellers vulnerable to health hazards.

Figure 1 shows that most of the slums in Bathinda are near industrial area. Another fact highlighted is that most of the residential development in Bathinda is unplanned which leads to formation of slums. Yet slum areas can be traced in Bathinda in both planned and unplanned areas of the city.

2.2 Land ownership

The land ownership pattern for the slum development in Bathinda is an important factor for the development of slums. The higher land values in the planned labor housing colonies of Bathinda city like NFL, Thermal plan housing colony etc. are the major reasons for the encroachment of private lands by slum dwellers. Slums are located on encroached private land in the form of unplanned residential areas, industrial housing areas and the areas around the railway crossings of the city which encourage slum like conditions in these areas. All slums in Bathinda city are regarded as tenable slums as they are not located hazardous sites [4]. However, more than 85% of the households living in slums own the land where they have built their house whereas 15% of the households have encroached mostly on Government land for housing. On the positive side MCB needs to provide basic sanitation facilities and necessary infrastructure like paved roads and electricity to the slum dwellers as most of them already own land. However, it needs further enquiry.

![Figure 1: Location of slums in Bathinda city (2015)](https://example.com/f1.png)
in research that how can MCB proved both land/tenure rights and basic facilities to the slum dwellers who encroached on Government land. MCB also needs to prepare a list of vacant government lands as well.

2.3 Issues related to physical attributes of slums

The physical attributes related to slum deal with the study of the physical characteristics of slums like the type of dwelling units and land value pattern and infrastructure development in Bathinda. It also focuses on the degradation of the physical environment of Bathinda due to various factors like poor sanitation condition, poor infrastructure facilities, unhealthy living areas etc.

2.4 Type of dwelling units

The type of dwelling unit is a direct implication of the income levels and affordability patterns of slum dwellers for the better housing and infrastructure provision in the slums. At city level 93% of the houses in Bathinda city are permanent structures which is healthy sign, 4% of the houses are semi-permanent whereas serviceable and non-serviceable houses are 2% and 1% respectively [1]. So the real problem in Bathinda city is not the temporary serviceable or non-serviceable structures but lack of sanitation infrastructure which will be discussed later. There are congestion like conditions in slums. Mukand Hari area of the city has kucha housing as it houses maximum squatters and Government has not provided funding for repairs of housing in this area. No water supply is provided by MCB. Sewerage system is also provided in some of the slums but Amarpura and Sanjay Basti don’t have any sewerage network. So, these slums lack access to basic sanitation infrastructure.

2.5 High land values

The high land values have a direct implication on the emergence of slums in Bathinda city. The areas proposed for industrial worker housing in Bathinda like NFL, Thermal Plant, Railway Colony etc. provide land with a high price tag which is out of the reach of the poor. The price of land in residential areas ranges from Rs. 25, 000- 40, 000 leading to non-availability of affordable housing stock for slum dwellers. The prices of land in planned areas are very high forcing the poor to live in unplanned informal housing market without basic services. Revised circle rates, speculation in land markets, high stamp duty and registration fee cause rise in land values. Moreover, it is observed that MCB, Punjab Urban Development Authority (PUDA), Bathinda Development Authority (BDA) have not concentrated on Lower Income Group (LIG)/Economically Weaker Sections (EWS) sections of the society. These are the section where 99% of the housing shortages lay stale. Similarly private sector also has ignored affordable housing for these people ultimately such people resort to unplanned housing in low lying, peripheral disadvantageous sites sand basic infrastructure. So, lack of supply of developed land for the poor leads to formation of slums in Bathinda.

2.6 Lack of Sanitation Facilities- Drainage and Sewerage Network, Water Supply and Solid Waste Management

The provision of adequate drainage facility in the slums is a major parameter of concern for slum development in Bathinda city, depicting the physical conditions of the area. 66.6 percent of the slum area is not connected with drainage facility and sewerage network having problems like water logging leading to unhealthy condition of slum dwellers [4]. Due to no sewerage facility people living therein are using septic tanks, soak pits and open drains for disposal of sewage. The most challenging issue relating to sewerage system of the city is the disposal of untreated wastewater into the sullage carriers and ultimately into the natural drain called Lissara drains. In the absence of sewage treatment plant the water bodies which are being used to dump the waste water is a severe environmental threat considering the possibility of ground water pollution, unhygienic surroundings, health hazard etc. The disposal of raw sewage into ponds is creating many problems to the residents of surrounding areas. The rainwater is mostly discharged into the sewer network. This results in heavy load on the sewerage network, ultimately leading to choking of the pipes, overflow of the sullage and backflow of the sewerage water. No storm water drainage system exists in the city, which may independently collect and dispose of storm water out of city areas. However as per the information supplied by the Municipal Corporation a storm water main line has been laid along Guru KashiMarg from Tinkoni to power house road which collects the storm water of parts of Naibasti, Mall road and Power house road but the disposal of this storm main pipe is again through the sewerage network. People living in areas having no sewerage facility are using septic tanks, soak pits and open drains for disposal of sewage, which causes pollution [4].

In the existing status it has been observed that the drainage system of the Bathinda town is combined with the sewerage system, there is no separate system for drainage at present. The city has
developed on an uneven topography and a large number of railway lines exists in the city, several number of smaller storm water basins can be identified. These bowl type basins are encircled by physical feature like railway lines, canal, roads etc. which do not allow the rainwater of these basins to flow outside because of non-availability of required natural slope thus these basin areas many a times are flooded during rains. At present only 12 sq. km of area is under drainage which is served. The city has been facing the problem of flooding due to absence of effective storm water drainage system. The whole sewage of the town flows in the drain which is located on the Mansa road running parallel to the Bathinda distributary which is located in the south direction of the city. There are five ponds which are present in the city. One pond is there on the Bibi Wala road behind D.A.V school, one is present in sanjay nagar and one is located near Deep Singh Nagar and another two ponds are located in the urban estate. These ponds basically accommodate the rain water.

The water supply network of Bathinda cover 100 percent of the slum area but it does not ensure tap for individual household but public tap facility. The contamination of water is also prevalent which leads to poor health in slums [4].

There are some areas like Amarpura Basti, Lal Singh Basti, Udham Singh Nagar, Dillon Colony etc. where such quality of water is supplied which is not recommended for human consumption due to presence of high amounts of Fluorides, uranium and harmful substances. There is also the problem of a large number of illegal water connections in squatters of the city as they lack legal documents and get it by informal means. Bathinda is a major Railway Junction which poses serious constraints for laying water and sewerage networks in the city.

Open defecation in Bathinda is a serious environment threat. Lack of toilets within the premises of the houses, lack of public toilets and urinals make the problem grave. The disposal of raw sewage into the ponds creates problems. There is no sewage treatment plant in Bathinda. As there is there is also serious problems of solid waste collection and its untreated disposal in slums, solid waste is not segregated at source. Most of the waste of the city ends up in land fill.

3. Conclusions

There has been a continuous increase in the number of slums and slum dwellers in Bathinda city which happens due to influx of migrant population for better life. Most of land of Bathinda city is unplanned which leads to proliferation of slums. Slums are mostly located near industrial areas due to work place relationship. Most of the slum dwellers have their own land and have a permanent house yet the real cause of concern are high land values and paucity of supply of developed land both by public and private formal sector. Lack of basic services like drainage, sewerage, water supply, solid waste management etc. is the most worry some part of the story as it’s an administration failure.

References

[5]