

Physical, Social and Economic Conditions in Slums of Gurugram- A Comparative Study

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Abstract— According to the census, India's slum population surged from 27.9 million in 1981 to 65 million in 2011 over a three-decade period. Slums are overwhelmingly concentrated in and around these areas. Economically less developed nations' urban centers are urbanizing at a faster rate than those in more developed nations. India's Haryana state is one of the most advanced in terms of economy and industry. Out of 154 municipalities in Haryana, 75 have slums, totaling 1265 slums in the state, which house 3.2% of India's total slum population. In order to have a more comprehensive picture of the current situation in Gurugram, a primary study has been done, with a particular focus on the social-economic, political, and physical infrastructure of the chosen city. Additionally, an analysis of the information gathered was done, and recommendations were provided.

Keywords— *Political issues; physical infrastructure; urbanization; socio-economic*

I. INTRODUCTION

For census purposes, a slum is defined as a residential area where housing is unfit for habitation due to deterioration, overcrowding, poor building layout and design, crowded or poor street layout, insufficient ventilation, light, or sanitary facilities, or any combination of these factors that are harmful to safety and health.

377 million people (31%) of India's population resided in cities in 2011, yet of them, 65 million (or 27% of the urban population) were housed in slums and endured abject poverty. There are 863 million people living in similar squatter communities globally, therefore this problem is not exclusive to India [1].

The term "slum population" simply refers to those who live in slum areas and are below the poverty level. Many people in India live in poverty since the country is still developing. In most cases, these people reside in urban slums.

Government sources claim that India has more people living in slums than Britain does. Over the previous two decades, it has doubled. India's economy has grown significantly over the last four years, averaging 8% yearly, but a sizable portion of the population—nearly 1.1 billion people—continue to live on less than \$1 (about INR 46) every day.

The population of the slums has increased as a result of the rise in Indian immigration over time. Despite the government's efforts to build new houses and other basic infrastructure, most people living in slums do not have electricity, water and cooking gas [2].

A. Causes that create and expand slums

There are several reasons that increase the slum population such as rural urban migration, urbanization, lack of developed land for housing, rural immigrants to the city for work, poverty and lack of facilities and equipment, informal economy, politics, social conflicts and natural disasters etc. All these factors play an important role in increasing the slum population [3].

B. Identification of slums in census

For the purpose of Census, slums have been categorized and defined as of the following three types:

- Notified Slums
- Recognized Slums
- Identified Slums

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'

Recognized Slums-

All areas recognized as 'Slum' by State, UT Administration or Local Government, Housing and Slum Boards, which may have not been formally notified as slum under any act.

Identified Slums-

A compact area of at least 300 population or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities (Identified) [4].

II. LITERATURE STUDY

A. Definition of slum

1. The word "slum" is often used to describe informal settlements in cities that have inadequate housing and ugly, miserable living conditions. They are often overcrowded, with many people crammed into very small living spaces. Slum represents the most important and persistent problem of urban life. They exist in almost every metropolitan city in the world. Rapid urbanization, migration of the disadvantaged from rural areas to urban centers and acute housing shortages are the main attributes in the creation of slums. They are observed in various patterns, forms and shapes, occupying the urban recesses, wherever it is possible and possible to build a shelter. Squatting and pavement dwelling is another form and is common in metropolitan areas. Slums are created and grow on public and private land.

2. The definition of "slum" varies from country to country. In India, The Slum Areas Improvement and Clearance Act of 1956 defines 'slum areas' as places where buildings: are in any respect unfit for human habitation; and are by reason of dilapidation, overcrowding, faulty arrangement and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light, sanitation facilities or any combination of these factors which are detrimental to safety, health and morals.[5]

3. The Census of India defines a slum as "a compact area of at least 300 in population or about 60-70 households of poorly built, congested tenements in an unhygienic environment usually with inadequate infrastructure and lacking proper sanitary and drinking water facilities".[6]

4. The United Nations agency UN-HABITAT, defines slum as "a run-down area of a city characterized by substandard housing and squalor and lacking in tenure security".[7]

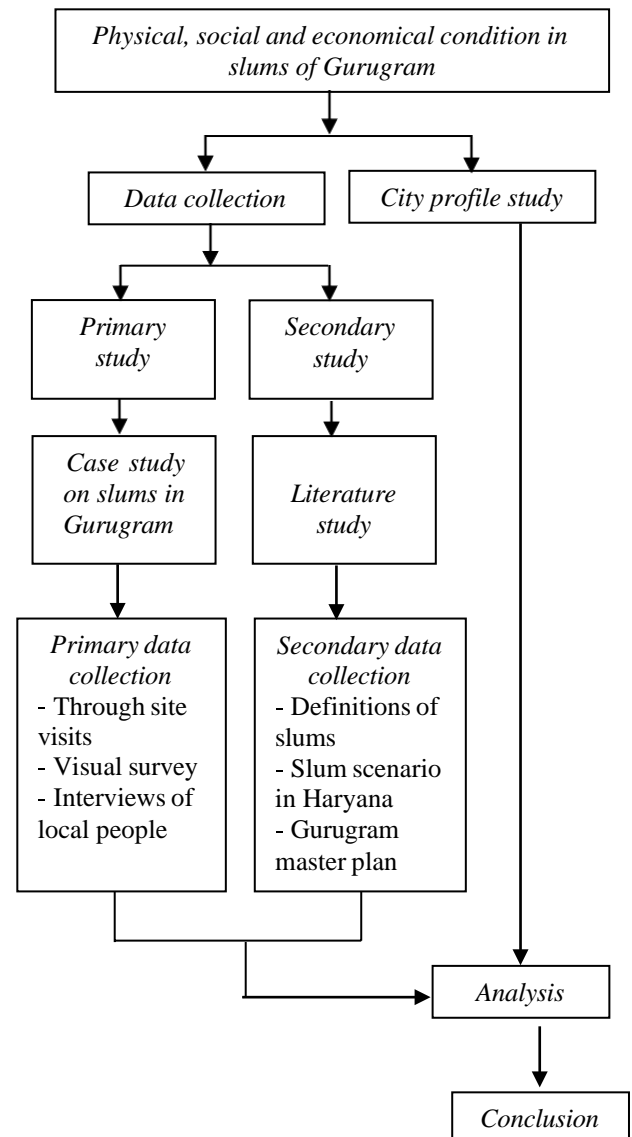
B. Slum scenario in Gurugram

• Total 43 slums in the Gurugram city, compiled by the Municipal Corporation of Gurugram (MCG).

On an average about 150 households in a notified slum.

- 100% of slums were built on public land, owned mostly by local bodies.
- About 72% slums were surrounding by residential area.
- About 14% of slums, the majority of the dwellings were pucca.
- About 57% of slums the majority of dwellings were semi- pucca.
- For 57% slums, the major source of drinking water was tap.
- 100% slums have electricity connection.
- About 57% slums did not have any latrine facility.
- About 43% slums did not have any drainage facility.
- Government agencies collected garbage from 29% slums. About 57% slums did not have any regular arrangement for garbage disposal.
- In 86% slums, primary schools exist within 1 km. and in 43% slums, government hospital exist within 1 km.
- About 71% of the slums were not having any association for improvement the condition of the slum [8].

IV. METHODOLOGY



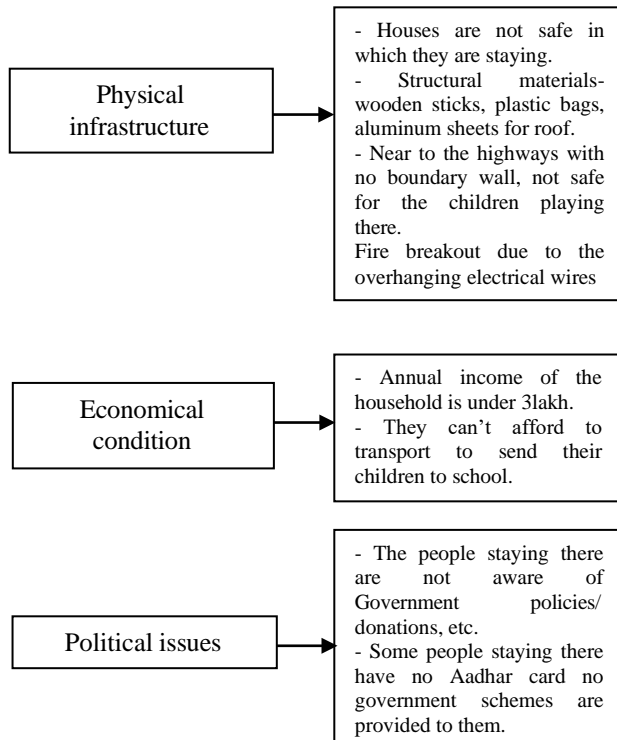
III. NEED OF STUDY

As per the 2011 Census, the level of urbanization in Haryana increased from 28.92 (2001) to 34.80 and out of 80 statutory towns 75 towns are reported with slums. There are total 14,912 notified and 16, 47,393 identified slums in Haryana.

The slums for this study are located in Gurugram, in which the city has a slum population covering about 10.2 percent of Haryana's slum population.

V. SELECTION OF STUDY AREA

Parameters considered for the selection of site



Gurgaon, India - April, 26, 2022: Smoke billows from a site where a massive fire

Fig. 9. Article showing the fire break out happened in IMT Manesar [9]

MAPPING OF THE AREAS

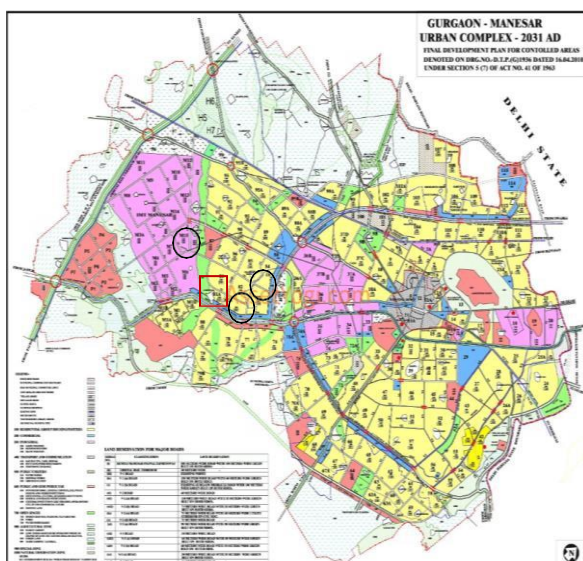


Fig. 1. Gurugram- Manesar Master Plan showing areas of case- studies and Rehabilitation of that area people [10]

Case-study-1 – IMT Manesar, Gurugram

Case-study-2 – Sector-84, Gurugram

Case-study-3 – Sector-83, Gurugram

VI. CASE-STUDIES

A. Case-study-1

A.A Introduction-

The selected slum is located in IMT Manesar, Gurugram. IMT Manesar is a large industrial area which has several large multinational companies, such as Maruti Suzuki, Jaguar, and Toshiba Eco City. The main reason they have shifted is cheap living cost when compared to residences in city.



Fig. 2. Site area of 11 acres in IMT Manesar, Gurugram

- Ownership of the land where the slum is located- Maruti Company
- Slum population- 400-450 people
- Total number of households- 100
- Age of slum in years- 6-7years
- Location of the slum- Core of the city
- Type of area surrounding the slum- Industrial zone
- Physical location of the slums- Along the Highway.
- Dwelling units structure- Semi- pucca
- Land tenure status- Encroached Public land (rented)
- Electricity to this area- Dakshin Haryana Bijli Vitran Nigam (DHBVN)
- The slum area is not prone to any flooding due to rains.

A.A Access to physical infrastructure

- Source of drinking water- No drinking water supply provided to this area, buy water tins
- For domestic use there is a private tank for water supply, they store water in plastic tins/ drums.
- Duration of water supply- Daily 2 hours
- Drainage and sewerage facility- No drains, and not connected to any sewer/ Digester

A.C Occupation-

- Many of them are employed in ware houses nearby like plastic/ rubber machinery and furniture companies.
- Some of them work as labor.

- Most women work in hospital as labor.
- Child labor was less.

A.D Cultural homogeneity-

- Multi religious nature of population exist, in which Hindus and Muslims are present.
- There is a temple in 1km radius which they visit.
- Most people staying here are migrated from Kolkata and others are like Bihar, Orissa.



Fig. 3. Katcha houses built with (Wooden sticks, plastic bags, aluminum sheets for roof) - September 2022

A.E Persons interviewed-

- Most of the people migrated from Kolkata.
- Ownership- Encroached public land
- Population- 400-450
- Occupation status of household- Regular- wage (220-250/-)

A.F Education-

- As we know that education can enhance the earning capacity of persons.
- Most of the family educate their children.
- Mostly children in this area study in Government school khoh up to 8th standard.

A.G Expenditure-

- Monthly income- 7500 to 9000/-
- Water charge- 5 liters tin cost 20/-
- Electricity bill- No electricity bill
- Education fee (Primary education) - Free

A.H Health issues-

- Dependency on government hospital
- Maximum health problem is because of improper drainage.
- Unhygienic environment make their life prone to diseases like Malaria, Typhoid, etc.

Availing government schemes (like food security)- Public Distribution system-No schemes provided to them, No Aadhar card.

B. Case-study-2

B.A Introduction-

The selected slum is located in Sector-84, Gurugram. IMT Manesar is a Sector 84 is one of the most rapidly developing areas in Gurgaon.

This slum is near to the Sapphire- 83 mall and DLF housing society.



Fig. 4. Site area of 9 acres in Sector-84, Gurugram

- Ownership of the land where the slum is located- Private landlord
- Slum population- 400 people
- Total number of households- 100
- Age of slum in years- 7-10 years
- Location of the slum- Core of the city
- Type of area surrounding the slum- Residential zone
- Physical location of the slums- Near gated housing communities.
- Dwelling units structure- Semi- pucca
- Land tenure status- Encroached Public land (rented)
- Electricity to this area- Dakshin Haryana Bijli Vitran Nigam (DHBVN)
- The slum area is not prone to any flooding due to rains.



Fig. 5. Semi- pucca houses built with bricks, mud mortar and aluminum sheets for roof- September 2022

B.B Access to physical infrastructure-

- Source of drinking water- No drinking water supply provided to this area, buy water tins.
- Underground water through bores (2 bores were present for domestic and drinking water use)
- Duration of water supply- Daily 2 hours.
- Drainage and sewerage facility- Connected to a drainage system.

B.C Occupation-

- Males mostly work in construction fields and Females are engaged in farming and working at different houses
- Child labor was less.

B.D Cultural homogeneity-

- Multi religious nature of population exist, in which Hindus and Muslims are present.
- There is a temple in 2km radius which they visit.
- Most people staying here are migrated from Bihar and Delhi.

B.E Persons interviewed-

- Most of the people migrated from Delhi.
- Ownership- Encroached public land
- Population- 400
- Occupation status of household- monthly salary- 12,000 to 15,000/-

B.F Education-

- As we know that education can enhances the earning capacity of persons.
- Most of the family educate their children.
- Mostly children in this area study in Government school in Sikanderpur (primary) at a distance of 3kms.

B.G Expenditure-

- Monthly income- 12k to 15k.
- Rent- 3500 per month with electricity and water
- Education fee (Primary education) - Free

B.H Health issues-

- Dependency on private/ government hospital
- Maximum health problem is because of improper drainage.
- Unhygienic environment make their life prone to diseases like Fever, TB, Cold& cough, etc.

Availing government schemes (like food security)-
Public Distribution system-No schemes provided to them.

C. Case-study-3

C.A Introduction

The selected slum is located in Sector-82, Gurugram. Located adjacent to Dwaraka express link road and Vaatika Signature Villas.



Fig. 6. Site area of 3 acres in Sector-82, Gurugram

Ownership of the land where the slum is located- Private landlord

- Slum population- 500 people
- Total number of households- 130
- Age of slum in years- 10years
- Location of the slum- Core of the city
- Type of area surrounding the slum- Residential zone
- Physical location of the slums- Along the Highway.
- Dwelling units structure- Semi- pucca
- Land tenure status- Encroached Public land (rented)
- Electricity to this area- Dakshin Haryana Bijli Vitran Nigam (DHBVN)
- The slum area is not prone to any flooding due to rains.



Fig. 7. In total population of that area 50% are children out of 20% are educated- September2022

C.B Access to physical infrastructure-

- Source of drinking water- No drinking water supply provided to this area, buy water tins
- Underground water through bores.
- Duration of water supply- Daily 2 hours
- Drainage and sewerage facility- Connected to a drainage system.

C.C Occupation-

- Men works in construction field
- Most women engaged in horticulture.
- Child labor was less.

C.D Cultural homogeneity-

- Multi religious nature of population exist, in which Hindus and Muslims and Christians are present.
- There is a temple in 1km radius which they visit.
- Most people staying here are migrated from Delhi.

C.E Persons interviewed-

- Most of the people migrated from Delhi.
- Ownership- Encroached public land
- Population- 450-500
- Occupation status of household- Monthly salary- 10,000-12,000 per month.

C.F Education-

They were not sent to school

C.G Expenditure-

- Monthly income- 10k- 12k.
- 3000 per month with electricity and water.

C.H Health issues-

- Dependency on government hospital
- Maximum health problem is because of improper drainage.
- Unhygienic environment make their life prone to diseases like Malaria, Typhoid, etc.
- **Availing government schemes** (like food security)- Public Distribution system-No schemes provided to them.

VII. COMPARATIVE STUDY

Aspects of comparison	Case study-1	Case study-2	Case study-3
Location	Manesar	Sector-84	Sector- 82
Area	11 acres	9 acres	3 acres
Land owner	Maruti company Encroached land and staying since 1 year	Private landlord Staying since 7 years	Private landlord Staying since 10 years
Occupation	Waste collection from houses and cleaning streets	Males mostly work in construction fields and Females are engaged in farming and working at different houses	Horticulture and men works in construction field
Rent		3500 per month with electricity and water	3000 per month with electricity and water
Population	350- 400 people	400 people	450-500 people
Migration	Kolkata	Bihar, Delhi	Delhi
Electricity	Dakshin Haryana Bijli Vitran Nigam	Dakshin Haryana Bijli Vitran Nigam	Dakshin Haryana Bijli Vitran Nigam
Water supply	No water supply through pipes (Water tank supply)	Under ground water through bores. (2 bores were present for Domestic use and drinking)	Private water tank supply
Government schemes	No schemes provided	No schemes provided	No schemes provided
Solid waste	All the waste collected by them are dumped nearby their site	Dumped nearby their site	Dumped nearby their site
Drinking water	Buys water tin	Bore water	Buys water tin
Structure	Only ground floor (Wooden sticks, plastic bags, aluminum sheets for roof)	Only ground floor (Brick, mud mortar, aluminum sheets for roof)	Only ground floor (Brick, cement, aluminum sheets for roof)
Education	No school	Government school in Sikanderpur (primary)	No school
	Women also work in hospitals in as sweepers.	Women also work in hospitals in as sweepers and houses.	Mostly people area engaged in horticulture.

VIII. PROPOSAL

Rehabilitation of the slum is done to improve the standard of living and to provide them with good physical and social infrastructure. The rehabilitation aims to give priority to health, livelihood, sanitation, and pucca houses for people and to rehab them in the radius of 2kms from their slum area which is in Sector-81.

Reasons to choose the site in Sector-81, Gurugram-

- Residential zone- The site chosen for rehabilitation is in residential zone, other areas which are surveyed some are in industrial zone and others are encroached public property.
- Based on the survey there is a need of institutional building like school as it is already available on site but it needs to be redevelop.
- The site chosen for rehabilitation is nearby where there employment cannot be disturbed due to the rehabilitation.

Fire accident occurred due to improper arrangement of electrical wires on the poles.



Fig. 8. Site chosen for rehabilitation which is in Sector-81

IX. CONCLUSION

Slums are neglected parts of city where housing and living conditions are appallingly poor. Few states like Maharashtra, Haryana, and Andhra Pradesh had shown high percentage of slum population than the national average.

From the areas of survey conducted observed that in overall population of the area 50% are children in which only 20% are educated. Though the Government offered primary or secondary schools to all children with minimal charge the areas where they are staying are 5 to 10kms away which they cannot afford to go. These areas are used as dumping sites and people living in that area rarely clean their site by themselves, making it unhygienic for the people staying there causing diseases like Malaria, Dengue and other skin diseases moreover some of these areas are in industrial zone making them to prone to various diseases. The women are facing problems due to the insufficient open toilets which are outside the slum.

These slums are located near the major roads and highways but there are no proper streets which connects to them, the placement of the houses are near to the electrical poles which caused the fire breakout in these areas made many people to lose their houses.

The people staying in slums are provided with any government schemes and they are not aware of them. NGOs are helping them by providing education to children and organizing various awareness programs.

Through the information gathered using the tools like surveys it is observed that the areas which they are staying are unhygienic, unsafe and inhabitable.

The poor living condition in slums affects the health of people mentally, physically and also create environmental issues. No slums can be removed or moved entirely from cities. However, full use of meager effort and state welfare policies may provide them with some relief or assistance their living conditions will improve slightly if they are honestly implanted. It is necessary to solve this situation in the long term sustainable development and prosperity of the city.

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XI. APPENDIX

Survey Questionnaire

1. Name of the Slum
2. Name of the district in which slum is located
3. Whether located in Core City/Town or Fringe area/border of the city
4. Since how many years they are staying in this area?
5. Why do they relocate to this area?
6. The land in which they are staying is owned or rented?
7. Where do they get drinking water from?
8. Where do they get fresh up?
9. What will be charges of electricity per month?
10. When will be the slum gets cleaned?
11. How many children do you have?
12. Are they going to government or Private School?
13. Do they visit Government or Private hospital if they are injured/ ill?
14. Do they want to relocate from that site?
15. Do they get any government schemes?



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