

# Proposal for Slum Rehabilitation in Anandwali: A Case Study of Nashik

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**Abstract:** *Rising population with immigration to urban area are one of the main reason to form a substandard, dingy houses of high density and congestion, overcrowding, absence of basic amenities like water supply, drainage, sewage line and disposal of garbage, in simple word it called as slum. Especially in large cities housing price has increased speedily, so it is very difficult for the people to buy a house with their own preference. Shortage of affordable houses and infrastructure respect to demands are responsible for formation of slums near to their working places. Slum dwellers are important contributors to the development of the city, by providing their services to the citizens and organisations like industrial workers, construction site labours, domestic savants, rag- pickers and small scale businesses etc. countries have help to slum dwellers in rising their standard of living and confidence level, increase healthy environment, hygiene and cleanliness.*

*The paper studied policies which area formed for slum upgradation, rehabilitation and redevelopment. It also analyse the slum scenario in Nashik city and prepared a proposal of Slum Rehabilitation of Anandwali, Satpur which is located in Nashik, it covered 24783.59Sq.m. area with population of 3435 souls.*

**Keywords:** *Rehabilitation, Basic Amenities, Anandwali Village, Present Scenario, In-Situ Development,*

## I. INTRODUCTION

In India, 377.11 million people out of total population (1210.19 milion) means about 31.16% percent population lived in urban areas and from this urban population 27% people lived in slums. This challenge is not only faced by India but also faced by world. China and India have the highest number of slum dwellers. The National Sample Survey Organization (NSSO), India, defines a slum as a “compact settlement with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions.”

There is gap between increasing growth of population and construction of affordable housing and thus creating housing shortage, Government of India is always trying to fill this gap and give a better living condition to all slum dwellers. Various schemes were launched in India for slum upgradation, rehabilitation and redevelopment. First Act, Slum Clearance and Improvement Scheme was introduced in 1956 which is one of the objectives of first five year plan to providing assured security of tenure, basic amenities and affordable housing for slum dwellers. Year by year lots of upgradation made in Schemes to overcome the weaknesses and to achieve a better results. In June 2015, Pradhan Mantri Aawas Yojana (PMAY) scheme was introduced with mission of Housing for All by 2022 in which is subdivided in four different verticals.

Nashik, the fifth largest city in Maharashtra on the basis of population. According to 2011 Census Nasik had 14,86,053 population and this city covers 2,681 Sq.Km. area and boundary of Nashik Municipal Corporation is within 267.48 Sq.Km. core area of Nashik, Satpur, Ambad are the main functional areas of city as industrial areas and second functional area. The M.I.D.C. Satpur estate is mainly responsible for Industrial & Commercial growth of Satpur area.

### A. Problem Definition

Despite the growing economy, the number of slums dwellers in India is only rising. One of the reason behind this is the migration of people from village and small towns to urban area. However, this has led to the degradation of urban environment and puts a damper on sustainable development of the cities. Slums are considered to be a major issue in many urban areas; especially having an impact on Environment, population, health and safety.

### B. Objectives of the Study

- 1) To study the various policy measures and programs initiated by the government for Slum Rehabilitation.
- 2) To study the existing scenario of slums of Anandwali village of city Nashik.
- 3) To prepare a proposal for Slum Rehabilitation in Anandwali village.
- 4) To study and analyse the impact of slum rehabilitation on surrounding area.

## II. STUDY AREA

Nashik has been described as the wine capital of India. The city of Nashik is third industrial hub of the Maharashtra state, for highly the highly industrial development. Nashik has many government companies and undertakings, it also has a textile industry, to facilitate exports, a container fright station was started at MIDC Ambad by Central Government.

The study consists with Nashik City of Maharashtra have population 14.86 Lacs (Census 2011) and area 267.48 267 Sq.Km it includes 25 villages. Fig. No. 1.1 Shows the map of city which divided into six zones.

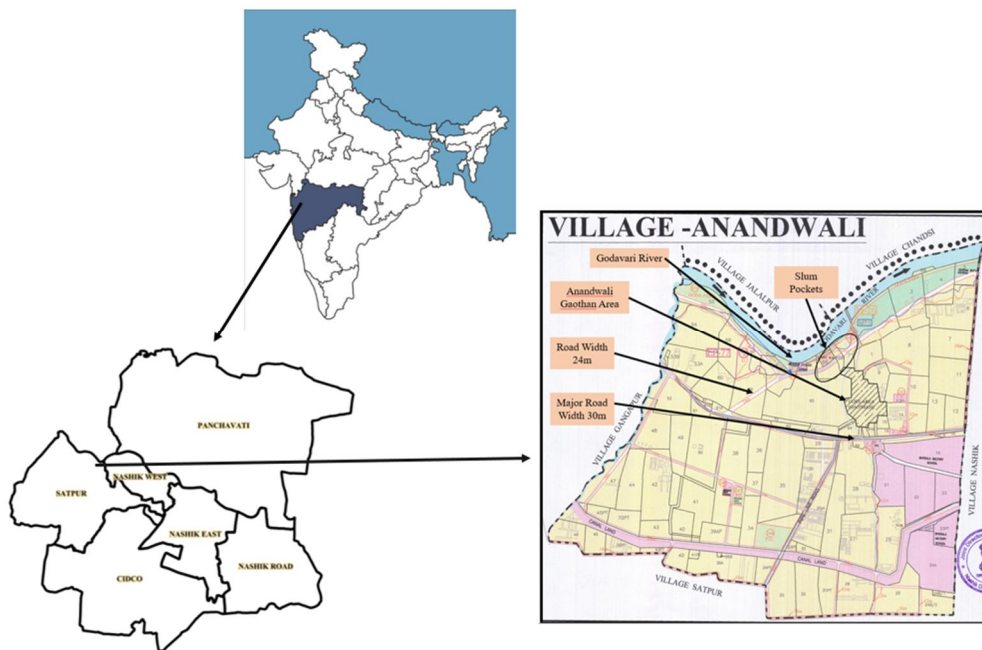


Fig. 1 Location of Nashik on Map of Inia

### A. Slum Scenario of Nashik City

The total number of slums are 168 in Nashik Municipal corporation out of which 56 slums are declared and remaining 112 slums are undeclared (Municipal Records 2014). This number of slums are increased by 14.44% than previous decade. The area of Nashik Municipal Corporation is divided in six divisions are- Nashik east, Nashik west, Panchavati, Satpur, Cidco and Nashik road. Slums present in different zones are listed below.

TABLE I  
ZONE-WISE SLUM DETAILS OF NASHIK

Sr. No.	Division	No. of Slums	No. of hutments	Slum Population	Status	
					Declared	undeclared
1	Nashik East	25	6479	32395	9	16
2	Nashik West	16	3686	18520	6	10
3	Panchavati	46	10390	52193	15	31
4	Nashik Road	44	8150	41554	18	26
5	Cidco	19	6252	31260	2	17
6	Satpur	18	7785	38847	6	12
	Total	168	42742	214769	56	112

( Source: NMC Records 2011 )

**B. Slum Present in Anandwali Village**

Anandwali village comes under Satpur division of Nashik. According to census 2011, approximately population of 21,369 souls and area of this village is 396.15 Ha. Three slums are presented in Anandwali village namely, Bajrang Nagar, Shiv Nagar, Joshiwada and population of this slums are 2250, 975, 210 respectively.



Fig. 2 Slums of Anandwali village

TABLE II  
DETAILS OF SLUMS LOCATED IN ANANDWALI VILLAGE

Sr. No.	Name of Slum Pockets	Area (Sq.m.)	No. of slum dwellers	Population	Land Ownership
1.	Bajrang Nagar	19361.62	510	2250	MIDC
2.	Shiv Nagar	3359.63	195	975	Private land
3.	Joshiwada	2062.34	42	210	Private land
	Total	24783.59	747	3435	

**C. Slums Survey and analysis**

Data collected for study by two methods, first is preliminary survey, it also called as visual survey and second is detailed survey, in this survey list of questions are asking to slum dwellers to understand the situations and conditions of faced by them. For detailed survey Random sample type was used and the size of sample was 140 out of which 48 persons belongs to 18 to 30 years age category, 44 persons belongs to 31 to 45 year age group and 48 persons of 46 to 60 age category.

1) Issues Identified by Visual Survey

- a) Solid waste and garbage are thrown into waterbody and in open drain which increases mosquitoes breeding.
- b) Overcrowded, substandard housing leads to spread of infection diseases, such as Dengue fever, pneumonia, Cholera and Malaria.
- c) Water supplied only for a few hours per day and household do not have a proper water tank to store water.
- d) Due to poor maintenance of public toilets and chambers, there is often blockage and back flow in soil pipe.
- e) Main roads of slum are concrete roads but it has a steep slope towards Godavari river and hence water logging issue has been raised in the rainy season.
- f) There are some huts near the Godavari river, they have to face floods during the rain.
- g) Poor ventilation due to lack of windows, congested houses and narrow internal roads.



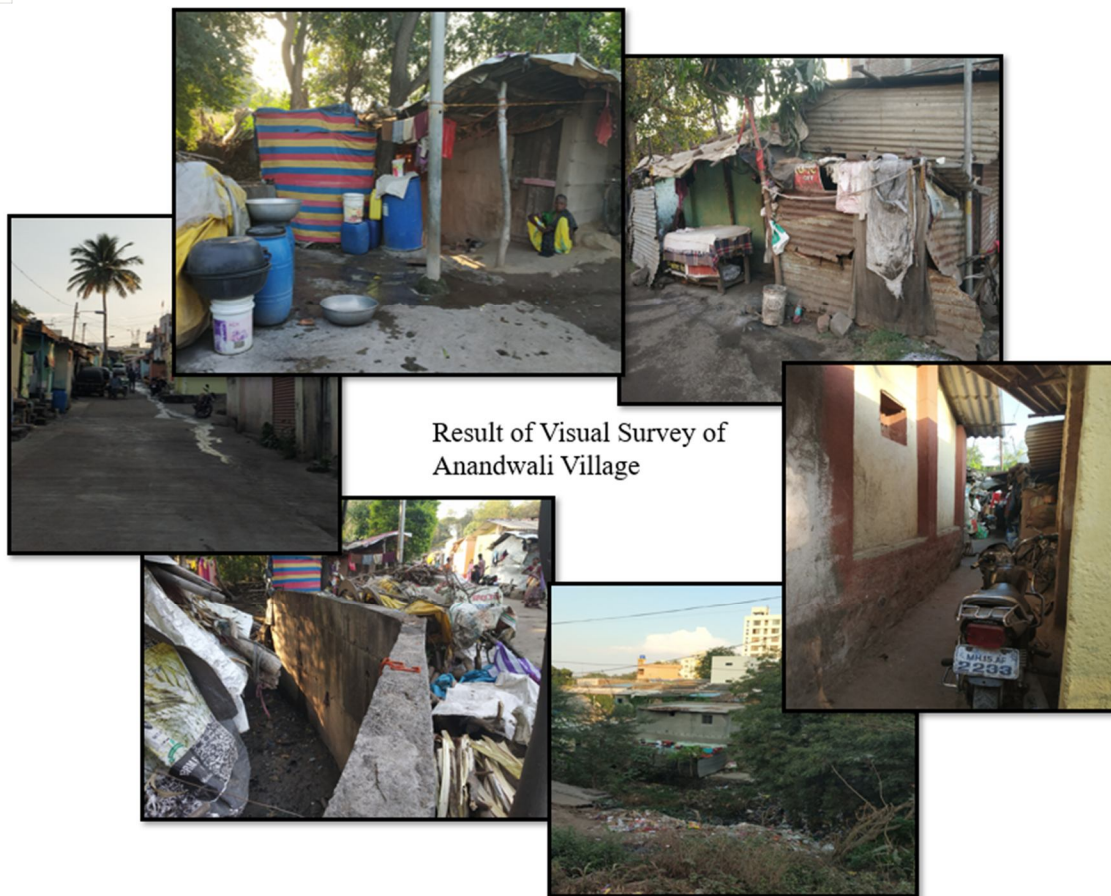


Fig.3 Problems faced by slum dwellers

- 2) *Questionnaire Survey*: Questionnaire survey of slum dwellers was conducted in Anandwali village slums by considering the following variables, such as income occupation, size of family, period of stay as slum dwellers, reason of migration, total monthly expenditure, agree to slum rehabilitation etc.
- a) *Literacy Rate of Respondent's Household*: Majority of respondent's family literate 100%. But unfortunately 0% and 25% members of family are still illiterate. The graph shows Literacy rate of respondent's household.

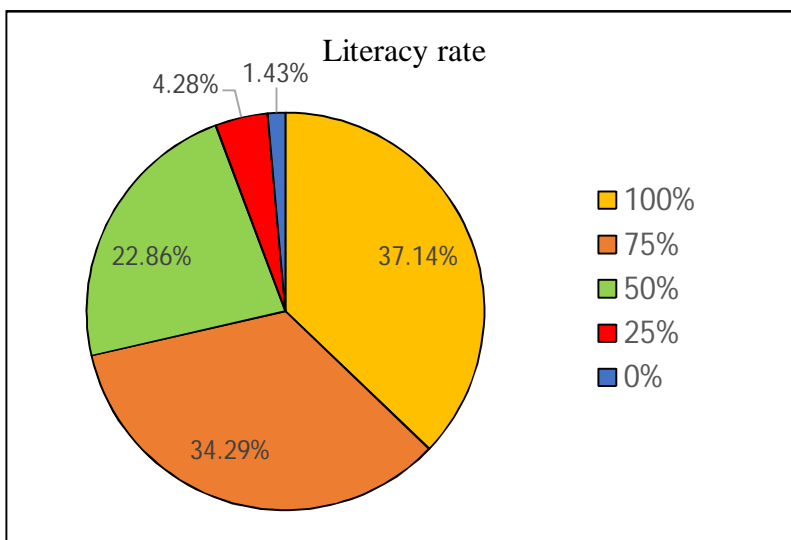


Fig 4 Literacy Rate of Respondent's Household

b) *Stay Period of Slum Dwellers:* Majority of respondents were stay about last two to three generations. People came to particular area (study area) in search of new opportunities as industrial area is near from this area so it is convenient to reach their working places and hence this people settled on the study area.

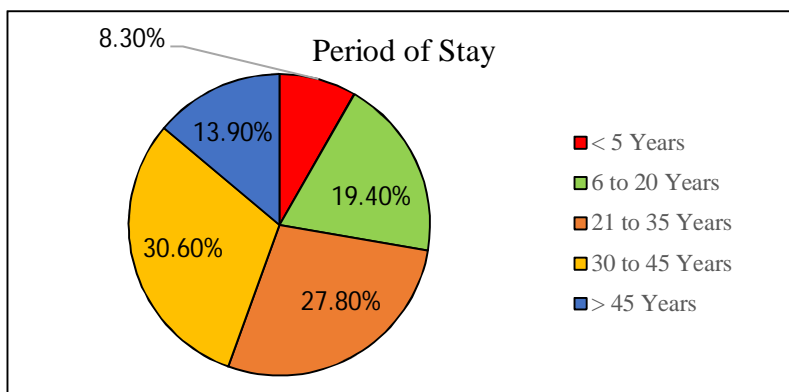


Fig 5 Stay Period of Slum Dwellers in slum area

c) *Monthly Family Income:* Income parameter have been consider to categories type of family class, on basis of family income scheme beneficiaries are identified. Two or more than two members are working in family, the observation could be made from survey is that majority of families have their income between 10,000 to 15,000 per month which comes under economically weaker section.

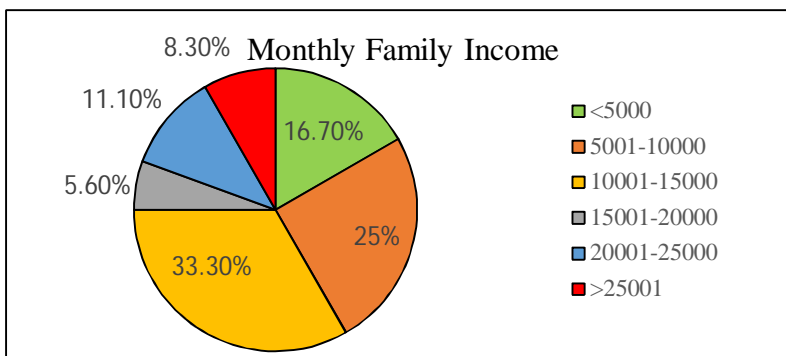


Fig. 6 Monthly Family Income of slum dwellers

### III. PLANNING PROPOSALS

From study it was seen that, the services like public transportation facility, education facility, health services and most importantly working places of slum dwellers are near to present living area so they have to invest less money and time to reach their places. keeping this in mind, proposal for slum redevelopment has been prepared for slum dwellers in Anandwali village. PMAY- Housing for All are reference guidelines for preparation of this proposal out of which In-Situ Slum Rehabilitation vertical is linked.

TABLE III  
Details of Single Dwelling Unit

DU Elements	Size of Element (Sq.m.)
Living Room	4.00 X 3.50
Bed Room	2.90 X 3.50
Kitchen	2.00 X 1.70
Washing Place	2.10 X 1.0
Bath Room	1.8 X 1.0
Toilet	1.0 X 1.0

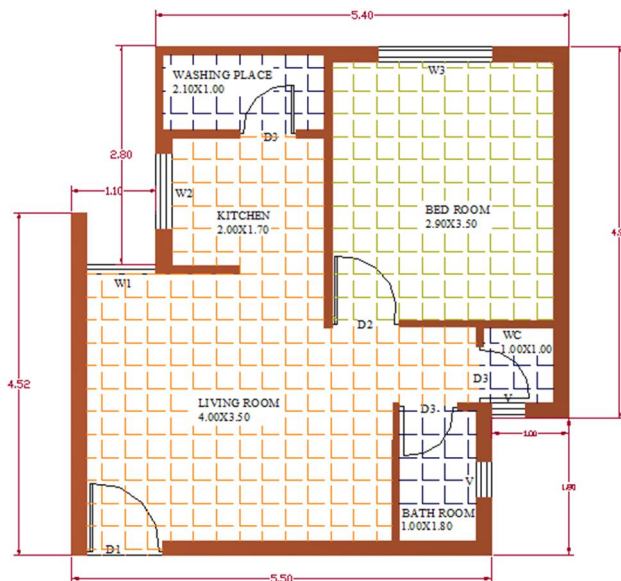


Fig. 7 Plan of Single Dwelling Unit

Proposed Carpet area- 32.96 m<sup>2</sup>

Proposed Built up Area – 37.84 m<sup>2</sup>

Wall area – 4.88 m<sup>2</sup>

12 buildings of 8 storey are proposed with 32.96 Sq.m. of carpet area of a dwelling unit. Water supply, sewage line, electricity facility etc are also proposed.

TABLE  
Details of Proposed Ground Converage by Slum Redeveloped Area

Planning Elements	Area used in Sq.m.	Percentage of Area
Building Unit Coverage	5326.14	21.5%
Marginal space	4289.40	17.3%
Area covered under roads	2974.00	11.8%
Garden area	2478.30	10.2%
Remaining Area used for future development	9715.17	39.2%
Total Area	24783.59 Sq.m.	100%

#### IV. CONCLUSIONS

The shortage of affordable housing is a major problem in urban areas, especially in large cities. To overcome this problem government takes initiatives by introducing schemes for EWS and LIG people, In this study such different government Schemes and policies for slum upgradation, rehabilitation and redevelopment were studied. To identified requirements of basic services and problem facing by slum dwellers, a questionnaire survey was conducted in study area and a proposal prepared to study area with refence of In-Situ Slum Rehabilitation which is one of the vertical of PMAY scheme, to improve healthy environment, cleanliness and standard of living of slum dwellers.

#### V. ACKNOWLEDGMENT

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