



## Quality of Life in Informal Settlement: Jaipur

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**ABSTRACT:** With a growing number of people living in an increasing number of cities as well as urban centres in India, it becomes critical to understand in what manner the benefits of urbanization can be shared more equitably between the upper class of the society and the marginalized populations of the city. While cities offer a better quality of life, one in three urban residents still lives in under-serviced areas. The quality of life, on the other hand, has been widely used in a wide range of contexts, including the fields of international development, healthcare, political science, built environment, education, recreation and leisure time, and social belonging. The purpose of this paper is to apprehend the term urban quality of life in relation to informal settlements taking the case of Jagatpura Kachi Basti.

**Key Words:** Informal Settlements, Quality Of Life, Slum, Housing

### I. INTRODUCTION

In India, the extensive migration of population from the rural to the urban areas as well as from the smaller towns to the larger metropolis has been urged by a sequence of push and pull factors, but the crucial component has been opportunity cost of employment in urban informal sector, which has full-fledged swiftly in a two-way process – one, caused the reasonable destitution of urban economy which in turn has offered a large space for the informal sector. On the other hand, cheap labour market has fortified the growth of processing and service industry in the household sector. As a result, the limitations in land and housing markets have forsaken the underprivileged with nearly no substitute, with the exception to seek informal solutions to their housing requirements in burgeoning slums without access to basic bare minimum amenities of drinking water and sanitation. On the other hand, industrial and service centres, occasionally commissioning hazardous means, have originated in residential neighbourhoods in desecration of the rules and regulations. Such informal settlements in Jaipur City, along with many of state-owned land or ecological zones, supply virtually half of Jaipur's Housing [1]. This research paper focuses on Jaipur as the 'first world' encompassing a Third World inner-city in its hearts that has been striven with countless difficulties and the notion of quality of life followed by stimulating efforts for improvement of living conditions.

In the population of 1.21 billion, India still has 21% of the people living in poverty having a human development index (HDI) of 0.586. [2] A complex pattern of urban form has advanced, in which the 'informal' and the 'illegal' have established an elaborate and organic relationship with the 'formal' and the 'legal' system. Many constraints of the development plan and zoning regulations have principally become unconnected by these corresponding developments.

'Housing' is a social matter of ensuring that the members of a society have a home to live, whether it is a house or some kind of dwelling, lodging or shelter. [3]. A 'slum' is a compact settlement of at least 20 households with the collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions. It is rather a severely populated urban informal settlement characterized by substandard housing and squalor. [3] However, an informal settlement is a dwelling constructed usually without a formal design and standard specifications with regard to legal rules and regulations regulatory to urban developments in urban areas, and customarily of temporary structures. These settlements, by and large, would not have access to public utilities like power, clean portable water, sanitation, and drainage. Social services like schools, hospitals, entertainment, churches, mosques, markets are rare. They are common features in developing Nations and are a result of an imperative necessity for shelter by the urban poor.

**Definition of informal settlements** (as defined by UN)

- (i) Residential areas wherever a cluster of housing units has been built on land to which the occupants have no legal claim, or which they lodge unlawfully;
- (ii) Unplanned settlements, and areas where housing, is not in agreement with current planning and building regulations. [3]

Informal settlements happen when land administration and planning flops to deliver the essentials of the whole community. Henceforth, wherever there is an urban housing, there exists a need for the service class population, hence an informal settlement. It is a result of our poorly planned cities and expensive living in urban areas which provide no planned room for them leading to unplanned scattered locales in grime. Where sometimes it is the political concern of not providing a shelter, on the other hand, natural disaster results in forced migration. The dwellers may sometimes also have been a victim of social exclusion and upshots of economic stagnation.

*Reasons for upcoming informal settlements*

The pace and scale of the development have surpassed the capability to safeguard adequate standards of public health, physical infrastructural development, environmental safety and sustainable economic advancement in the urban areas, consequently sinking the housing value and in a broad spectrum, the quality of life. The term 'Quality of life' is used to estimate the conventional comfort of people and societies but its implication being manifold and broad varies with time and the person's opinions. It is affirmed that the quality of life has to do with the way people live, feel and comprehend their day-to-day lives. This take account of characteristics such as health, education, housing, employment and involvement in assessments. [4]. The quality of life settles on by immediacy of conveniences, time to travel to adjoining commercial areas, rate of living, neighbourhood and affordability of customary services.

*Indicators of Quality of Life*

Quality is an outcome of idiosyncratic judgment which starts from the macro level insight which the discrete embraces towards what is perceived as the substantial elements at a specific point over a period of time. In calculating the quality of life, social indicators, for instance, health plus levels of crime, biased welfare procedures (evaluating people's responses to their lives and societies), cultural and economic directories are very vital. According to [5] Indicators of quality of life can be classified as follows: land use and infrastructure, natural environment, health and wellness, economic well-being, education and lifelong learning, public

wellbeing, arts and cultural strength, community level engagement, enhancement and advancement.

*Measurement of Quality of Life*

Two first-hand scientific methodologies to determine the quality of life have been presented as 'objective' or social indicators, and the amount of subjective well-being (SWB). [6]. Verdicts in social indicator and subjective wellbeing examination have unswerving relevance to the elementary apprehensions of societies and people. For that reason, Social indicators and subjective well-being methods are grounded on altered characterizations of the quality of life. Social indicators are mutual procedures that imitate public's objective situations in a given cultural or geographic unit. The representation of social indicators is that, they are centred on palpable, quantifiable statistics instead of on characters' idiosyncratic discernments of their social surroundings. Housing contentment is a critical indicator of the quality of life. Objectivity is one of the powers of social indicators. These indicators habitually can be more or less straightforwardly outlined and computed without being dependent comprehensively on individual discernments. In the same way, power of social indicators is that, they time and again replicate the normative ethics of a society. Social indicators, on the other hand, grieve with more than a few flaws. First of all, social indicators are fallible, even though social indicators are believed to be 'objective', they are often adulterated by measurement glitches. An additional constraint of social indicators is the inescapable part of subjective pronouncements in choosing and gauging the variables. Contrariwise, Subjective welfare comprises of three interconnected mechanisms: life contentment, pleasurable effect, and disagreeable effect. Life contentment talks about an intellectual wisdom of fulfilment with life although affect denotes agreeable and disagreeable moods and sentiments. SWB takes account of mutually positive and negative affective understandings of the discrete. The most important benefit of subjective well-being measures is that they seize experiences that are imperative to the individual. Furthermore, an asset of subjective well-being measures is that when recognized insufficient, they are a lot uncomplicated to amend than objective indicators. Third, SWB measures can be with no trouble associated from corner to corner territories by gauging the experience of comfort on conjoint dimension. Subjective well-being methods also have innumerable flaws. [4]

*Quality of Life in Informal Settlements*

Existing in informal settlements every so often yields chief health, education, and well-being hazards.

Contact to health and added services may be scarce; overpopulation can be a measure of the source of stress, cruelty and intensified crises of drugs and further social nuisances. Social infrastructure, like water supply, sanitation, electricity, roads as well as drainage; schools, health centres, market dwellings are worse than least possible levels. Water supply, for example, to discrete households may be vague, or municipal standpipes may have been outfitted, by measures of either the city networks or a hand pump itself. Informal networks for the supply of water may also be in place. Analogous engagements may be equipped with electricity, drainage and toilet conveniences with diminutive dependency on public establishments [4] According to Hamam Serag El-Dina, (Volume 9, Issue 1, April 2013), the urban quality of life does not only depends on the palpable aspect however, is divided into following aspects as well:

#### *Environmental Urban Quality Of Life*

This includes the approach to hygienic air, water, and land and non-hazardous supplies; with the intention of protecting individuals and preserving biodiversity as well as minimization of energy request by engaging in energy saving machinery. One should be open to appreciate natural scenery by making available a range of green areas contained by the neighbourhood and opting for suitable conducts to regulator wastes.

#### *Physical Urban Quality Of Life*

This includes the neighbourhood, services, buildings, streets and the likewise. The neighbourhood must be dense, pedestrian responsive and mixed use should cater to the access to sufficient services and facilities that content public's prerequisites.

#### *Psychological Urban Quality Of Life*

Encouraging an agreeable environment by improving urban-aesthetic appeal of the built milieu is a type of psychological urban quality of life

#### *Economical Urban Quality Of Life*

It caters to the job opportunities and promotion of the local business by associating owned stores in the vicinity and business as well as by promising mixed-use development.

#### *Social Urban Quality Of Life*

Promotion of social justice and even-handedness by delivering identical admittance to affordable housing, economic activities, services as well as facilities are the social aspects of urban quality of life. Street and building designs should lay emphasis on safe environs. The liveability of streets ought to be encouraged by offering safe, comfortable, thought-provoking streets coupled with squares to the pedestrian.

## II. CASE STUDY

The case study performed for the research is of Jagatpura Kache Basti, Jaipur. It is located 5.3 km from Malaviya National Institute of technology, Jaipur and has a total population of 1650.



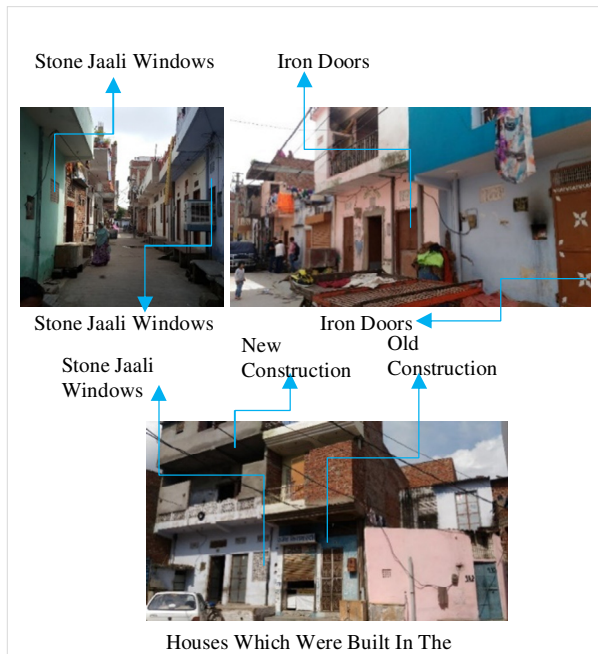
**Fig. 1.** Jagatpura Kache Basti Map.

#### *Housing Type*

Types of houses in the area includes row housing of pakka houses with brick and mortar construction, iron doors and stone jaali ventilators/ iron framed windows. The lower storey of many house were old and the upper ones were either new or being constructed if any.

#### *Site and Surroundings*

The west of the site is Amanishah Nala, originally known Dravyawati River which is proposed to be transformed to its original form from quite a while by Jaipur Development Authority [7]. Beside there is an ongoing construction of high rise apartment building to which the basti is expected to cater. The basti severely lacks vegetative cover except for the vegetation on either edges of the nala, although has a municipality water line catering to all houses. It is not adequate to meet the day-to-day prerequisites of the residents hence an everyday tanker service is opted.



**Fig. 2.** Photographs showing the present condition of the houses in the area.



**Fig. 3.** Road to West of Nala.



**Fig. 4.** High Rise Apartment to West of Kachi Basti across Amanishah Nala.

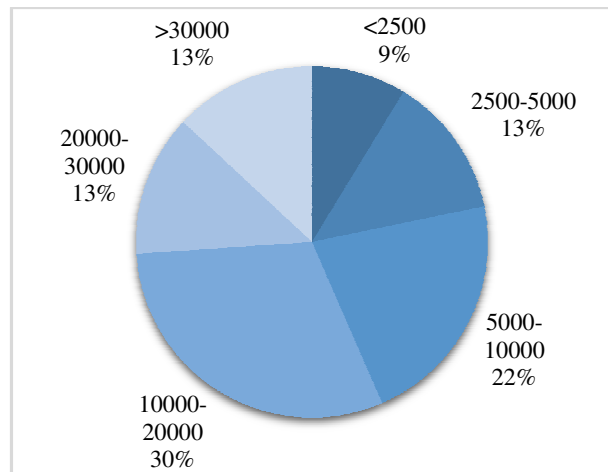


**Fig. 5.** Amanishah Nala.

**Statistics.** According to the houses studied in the random stratified survey conducted, the population percentage in the following age groups are:

Age (in years)	Percentage
0-4	4%
4-12	10%
12-20	21%
20-32	29%
32-40	8%
40-60	23%
>60	5%

Hence, the estimated working class population accounts to 60% of the total population taking the age groups as 20-60 years.



**Pie Chart 1** Income (INR)

Henceforth, taking the working population to be 60% the income distribution is given as above. Conversely, the household size in the area is ambiguous. Hereafter, as surveyed for instance, a family having a family income of 8000 INR a month has the family side of 8, on the other hand, another family having the same household size will have the family income of 30,000 INR or greater. Both the families receive identical benefits of living in the same recognized informal settlement, yet it becomes a meagre necessity for one family and a complementary profit for the other.

*Transportation Network*

The maximum road width inside the area is 6 M which narrows down in going from south to north. The main road is south to the area and the internal gully network road width is 4 M which narrows to 2 M – 2.5 M from south to northern edge. Hence, a four-wheeler is unlikely to go through the area. The local market is at a distance of 1.5 km.

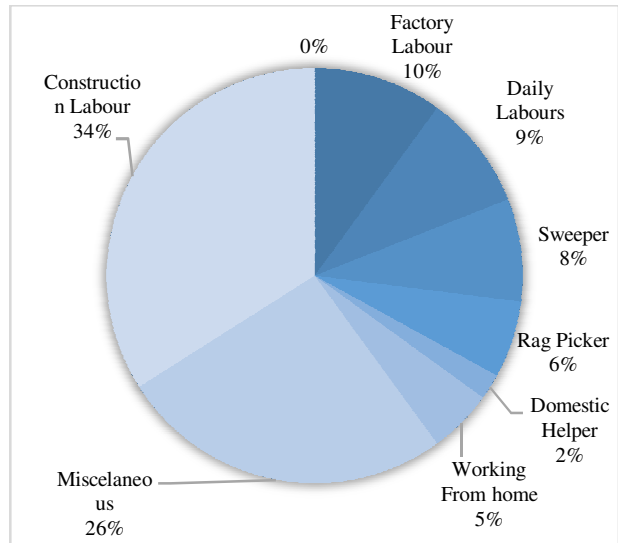
The only medical facility within the radius of 1 km is a dispensary which opens from 5-6 PM in the evening (as per survey) also being the only medical facility that the resident visit at all times during the year until unless there is a dire need of medication (operations and treatments).

**Cases from Primary Survey**

Case 1: The very first house surveyed had a family of 5 females (a mother and 4 daughters) living together on rent, out of which the youngest daughter studies in 3<sup>rd</sup> class and the second eldest was the earning member of the family earning 5000 INR a month. All other never went to school. The eldest got married and rarely visits, however they plan to educate the youngest till 8<sup>th</sup> class so that she can earn well in life.

Case 2: Another house in the same row had 10 members living in the same house with 3 couples and other children. The house has 3 small rooms and one unmaintained bath room, no living room or kitchen but a ‘chullah’ kept in a small 4.5 SQ M veranda, where they park their bike at night. They mostly use public transport as the family income is very less and doesn’t leave enough for them to pay for petrol. The rooms surely have a concrete roof although.

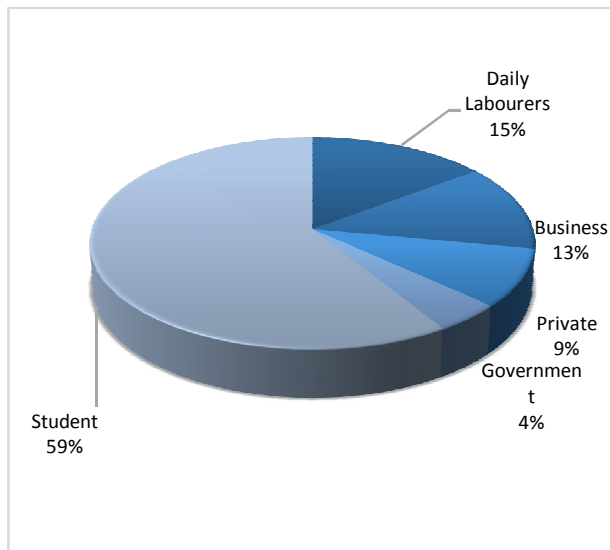
In the same area, percentage of people owning a 4-wheeler is 3% and that of owning a 2-wheeler is 63 %.



**Pie Chart 3** Occupation Distribution.

*Open Space Network*

The nearest park or recreational green space is Jawahar Circle being at a distance of 3.7 km from the basti. There was no specific community hall for the area but the temple was used for community functions (Rent was 1200 INR per day). Functions are held on the road itself. The ground north to the basti is an open space however, used as a dumping ground as identified in the survey.



**Pie Chart 2** Occupation Distribution.

Out of the remaining 41% the occupation distribution is given below.



**Fig. 3.** Hindered Skyline.

*Electrical Appliances*

The only Electrical Appliance most houses poses is an electric fan. A few of them have refrigerator, cooler, television and fewest would have a computer.

### III. OBSERVATIONS

- i) By the random stratified survey, conducted for 60 households, it is observed that the households do have adequate electricity supply despite receiving varied answers.
- ii) The main issue was the issue of parking space for every household. Another issue was no recreational area in the neighbourhood.
- iii) The basti lacks green spaces.
- iv) Since the municipal water supply was insufficient for the households, they were provided with government tankers.
- v) No particular municipal services are provided for garbage disposal.
- vi) The basti lacks community facilities such as community centres and parks.
- vii) The roads as approached from south were about 6 M wide and later narrowed down to 4 M moving towards north leaving no turning radius for cars or fire truck.

### IV. RECOMMENDATIONS

After studying the concept of urban quality of life and conducting a primary survey in the city of Jaipur, the following recommendations can be made for planning informal settlements ensuring quality of life:

#### Environmental

- The air, water and land around any urban area should be hygienic and non-hazardous in nature
- Waste regulation methods should be integrated with the settlements and green cover in the neighbourhood should be encouraged.
- Hence, either a recreational ground or a vegetative cover shall be proposed near to the basti. If this shall not be the case then, the dumping ground south to the basti shall be transformed in such a manner to create space for leisure activities.

#### Physical

- Pedestrian responsive tracks around settlements shall be incorporated as a part of urban planning for informal settlements
- Neighbourhood should provide access to sufficient services and facilities that content public needs.
- Therefore, houses as discussed in the case study may propose to be clubbed together to widen the existing road network to serve current need of space for parking existing vehicles.

#### Economical

- Job opportunities in and around the informal settlement shall be generated, promising mixed-use development to comply with the economic needs of the individual.

#### Social

- Street and building designs should highlight safe neighbourhoods. The liveability of streets should be enhanced by offering thought-provoking streets (stimulating pedestrian movement) coupled with squares to the pedestrian.
- The people of basti require educational institutions in the vicinity at walking distances that can deliver education at relatively affordable expense.

### V. CONCLUSION

As the city of Jaipur continues to develop, revolutionary policies and practices become vital for the growth to be unbiased and sustainable. From the research it is concluded that, the informal settlements in urban area shall certainly lack basic infrastructural facilities, yet, the development can be gauged not only substantially but also be assessed in a few intangible traits, termed as 'Quality of Life' as well and hence, is recommended for an efficient urban upgrading.

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