

# In the Edge of the City: Understanding Peri-Urban Interface through a Case Study of Jagatpur in SAS Nagar District, Punjab

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*A dissertation submitted for the partial fulfillment of  
BS-MS dual degree in Science*



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April 2019

## Certificate of Examination

This is to certify that the dissertation titled “**In the Edge of the City: Understanding Peri-Urban Interface through a Case Study of Jagatpur in SAS Nagar District, Punjab**” submitted by **Mr. Parikshit Parihar (Reg. No. MS14036)** for the partial fulfilment of BS-MS dual degree programme of the Institute, has been examined by the thesis committee duly appointed by the Institute. The committee finds the work done by the candidate satisfactory and recommends that the report be accepted.

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## Declaration

The work presented in this dissertation has been carried out by Parikshit Parihar with Dr. Ritajyoti Bandyopadhyay at the Indian Institute of Science Education and Research Mohali. This work has not been submitted in part or in full for a degree, a diploma or a fellowship to any other university or institute. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due acknowledgment of collaborative research and discussions. This thesis is a bonafide record of original work done by me and all sources listed within have been detailed in the bibliography,

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In my capacity as the supervisor of the candidates project work, I certify that the above statements by the candidate are true to the best of my knowledge.

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*“The reasonable man adapts himself to the world: the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man.”*

George Bernard Shaw  
*Man and Superman, Biography(1905)*

*“People Live their Lives bound by what they accept as correct and true. That is how they define ”Reality” . But what does it mean to be ”correct” or ”true”? They are merely vague concepts... Their ”Reality” may all be a mirage. Can we consider them to be simply living in their own world, shaped by their beliefs?”*

Itachi Uchiha

*“Urbanization is not about simply increasing the number of urban residents or expanding the area of cities. More importantly, it’s about a complete change from rural to urban style in terms of industry structure, employment, living environment and social security.*

Li Keqiang

*Dedicated to My Parents, Brother, Sister, Close Friends  
and Budha Sadhu*

*For love, support and encouragement*

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## Abstract

The rapid urbanization brought about by unprecedented technical progress and the influx of rural populations from around the urban areas in search of better opportunities and amenities leads to the city exhausting its carrying capacity. This results in emergence of peri-urban areas surrounding the cities. The peri-urban area is basically a zone of convergence of rural and urban processes characterized by strong influences from both. These peri-urban areas have problems of several different kinds and magnitude mainly stemming from policy differences between the overlapping jurisdictions of governments involved in governing the peri-urban areas, unplanned land use and insufficient representation of the migrant population in such areas. Deforestation, pollution and poor sewage disposal became a major reason for the deteriorating health of the inhabitants. This study captures the socio-economic status of the residents of village Jagatpur by broadly exploring the issues such as migration, infrastructural facilities, economic status of the population residing in the village, and the informal sector. The cities in Punjab, like Mohali, have expanded under the current regime of neo-liberalism, rapid infrastructure and real estate growth. When such cities grow beyond their carrying capacity, the ecological foot-print of cities spills over into peripheries. While traditional approaches to rural development and urban planning have created a division between both areas, the notion of the peri-urban raises question about sustainability and equity dimensions of urban expansion.

# Chapter 1

## Introduction

In traditional urbanization theory, the city is treated as a spatiotemporal and cultural phenomenon. It is spatiotemporal as it occupies real estate and has its own chronological progress of development, and cultural since the residents are within a cultural and socio-economic context which dictates this development. The village, on the other hand, is in close proximity to its environment because of its dependence on survival. The village too can be treated spatiotemporally and culturally as the city.

“The word “peri-urban” could be used to denote a place, concept or process. As a place, it can refer to rural fringe areas surrounding cities. As a concept, peri-urban could be seen as an interface of rural and urban activities and institutions. As a process, it could be thought of as the two-way flow of goods and services and a transitional stage between rural and urban.” [1]

The dynamic nature of the city is one of main reasons leading to its expansion and encompassing surrounding area in its boundary. The surrounding countryside is thus gradually annexed. This process leads to the formation of a zone of contact between the urban and the rural where both of their features coexist.

The Peri-urban areas are themselves very dynamic and are subject to various transformations. As the city continues to expand its outer limits, the peri-urban areas also move outward into the countryside and transform the rural landscape into zones of mixed land use, and subsequently, to an urbanized zone.

Mohali town was initially conceived as an industrial town after the reorganization of Punjab in 1966. Today, Chandigarh and SAS Nagar are joined cheek by jowl with only the boundary of Punjab and Chandigarh UT separating the two from each other. The original plan of SAS Nagar (Mohali) town is, in fact, an extension of the architectural pattern of Chandigarh [2]. Since most cities in India have a long history like Delhi, Jaipur etc., their peripheral areas have grown unplanned. Unlike these cities, Chandigarh was the first planned city after the country’s independence.

For modeling of the Peri-urban areas of SAS Nagar (Mohali), Jagatpur has been chosen as areas of study. Jagatpur is the second largest village in the district with the population of 6,673 and Kandala and Kambala are adjacent villages to Jagatpur with populations of 1,309 and 1,519 respectively according to the census report of 2011.[2]

## 1.1 Statement of problem

The amalgamating force of development and socio-economic changes with each serving as a boost to the other, has made this world utterly different from what it used to be a century ago. Urbanization is an ongoing process and with its fast rate of development it has shown rapid economic growth and has done many changes in the socio-economic status of people as well as the worlds land reserves. In India, an increasing trend towards urbanization has been recorded since its independence and due to its adoption of a mixed economy, it has witnessed a huge development growth in the private sector. According to the 1901 census report population residing in urban areas was only around 11%. This number increased to 31.16% according to 2011 census. Recently published revised United Nations report on World Population Prospect estimates show that worlds urban population, which was just 15% at the beginning of the 20th century has increased to 55% as of July 2018. By the year 2050, around 68% of people will be residing in urban areas. [3]

The following chart represents the growth of the urban population and decline of rural population from 1950 to 2050.

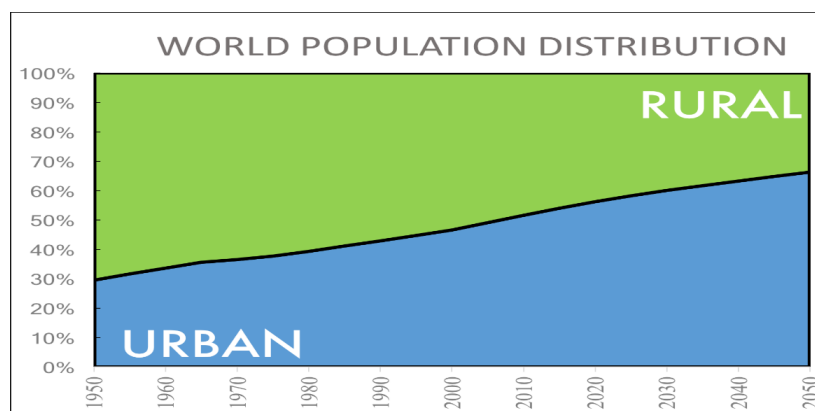


FIGURE 1.1: Historical global urban/rural population trends

Urban population is growing at a surprising pace and a time is imminent when income from agriculture is not able to sustain the poor. Already we find, as in the case of third world or developing countries, this unsustainable growth in population is spilling over

boundaries in search of better living conditions.

SAS Nagar, the area under study, has seen a high rate of population growth and urbanization in its area in the last few decades. The concentration of economic activities, socio-cultural practices and migration from different regions of Punjab have played a crucial role in this direction. According to the census report of 2001, Punjab had a total population of 24.36 million, which increased to 27.74 million an increase of 13.89% by 2011 [2]. This increase was more significant in the case of SAS Nagar where it increased from 0.74 million to 1 million with an increase of 33.15% [2]. This increase in population was a result of the newly carved district of SAS Nagar on 14th April 2006. The city of Mohali was renamed to Sahibzada Ajit Singh Nagar (SAS Nagar) in the memory of Sahibzada Ajit Singh, the eldest son of Guru Gobind Singh, the tenth Guru. As even, SAS Nagar district is relatively more urbanized than the state (37.5%), 54.8 percent of its population is in urban areas. Since the inception of SAS Nagar as a district people migrated from different regions to SAS Nagar because they believed that there is greater opportunity for employment in both formal and informal sector. Therefore, the urban population density of SAS Nagar has increased with time. Jagatpur has acted as the most active frontier of urban development because of its prime location at the border of SAS Nagar and Chandigarh.

When the population goes beyond the carrying capacity of the city, people tend to start settling in the peri-urban areas (Razin 1998)[4]. The census data depicts the overflow of population from metropolis to peripheral areas of SAS Nagar during 2001 – 2011. Also, overpopulation is not the only issue, people who migrate are financially destitute, and that is why they even migrate in the first place, which drives them to spread in peripheral areas of the city because they cannot afford to buy or even pay rent for the residence. So, this increases the pressure for conversion of the agricultural area to the residential plot. Speculators purchase land from the farmers in bulk and convert the same into residential plots. The process of agricultural sale in the informal market reduces the size of the land holdings and forces the farmers and others engaged in agricultural activities to change over to other occupations. Money received from the land sale improves the socio-economic level of the farming community.

Periurban areas are neither thoroughly urban nor rural instead form a blend of haphazard and mismanaged uses. They usually contain essential natural resources, remnant biodiversity, and significant landscapes, attracting diverse populations. However, these areas are under increasing threat from development and overuse. In the absence of strict regulation, the expansion of peri-urban areas is very haphazard and leads to many environmental problems. The unsorted and unplanned land use not only lays the agricultural land useless and uncultivable but rather also disrupts the local culture, economy, and occupations of the people as well the environs they used to thrive in.

At the same time, periurban areas lack infrastructural facilities and amenities which may

have helped the locals alleviate their problems. This lack of infrastructure to address the problems further aggravates it.

Policy makers have been addressing the fallout rather than delving deep into the causes. Thus they have been trying to minimize the agricultural land conversion, stop the ever-sprawling industries and discourage migration of labor; all this to stop the ever-increasing land demand. In short, the policy makers have been addressing the fallout without developing a structural understanding of the rural-urban migration. However, the past experiences have a different story to tell. The unregulated land conversion has been rising on a steep curve.

However, if we dig just a little beneath the surface, we get face to face with the real ordeal of the policymakers, i.e., lack of information and surveys regarding this unwanted land conversion in these areas. The solution to the problems of a disorganized sector like the peri-urban areas requires an organized and detailed study first to formulate any fruitful policies for land usage and conversions.

## **1.2 OBJECTIVES OF THE STUDY**

### **1.2.1 Objectives**

The following are the Objectives of the current study on Peri-urban areas.

1. To study the relationship between the parent city and its Peri-urban settlements.
2. To trace a history of Jagatpur Settlement as a site of peri-urban development in Chandigarh and Mohali urban continuum.
3. To understand the Socio-Economic condition of the residents in Jagatpur
4. To spot the extent of facilities available in Jagatpur and to identify the factors and their effect on quality of life in Jagatpur.
5. To highlight the connectivity pattern of peri-urban areas with their parent city.

## **1.3 Hypothesis**

The following hypotheses are contemplated with the study in view.

1. Populations of peri-urban area are primarily employed in the informal private sector.
2. Large plots of land remain uncultivated in the peri-urban areas due to the strong dominance of speculators in the land conversion process.

3. The first to migrate into peri-urban areas are found to be more engaged in various economic activities simultaneously.

## 1.4 Methodology

A study on land use dynamics in peri-urban areas would be meaningful only when the suitable information is obtained. So, information is divided into two categories, i.e., primary source and secondary source; primary source comprised of field surveys conducted through use of a questionnaire and secondary source comprise statistical information on the city to see trends over time and space.

### 1.4.1 Primary Source

The primary source of information was the pilot survey and comprehensive fieldwork of the area at two different levels.

1. **Village level:** It contains questions on infrastructural support, amenities and public utility services available in the village.
2. **Household level:** 80 households were surveyed. The household level data inquired about job opportunities, monthly/yearly expenditures, savings and access to household facilities.

### 1.4.2 Secondary Source

Census of India, a statistical handbook of SAS Nagar, Survey of India and much more government and non-government organization reports.



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## Chapter 2

# Review of the Literature

A literature survey is a revisit and an engagement with the ideas presented by various scholars from all over the world. It is essential to identify those contributions that form a foundation block for the research and hence also produces a justification for the research theme and research question. Its purpose is to summarize the various studies done, the methodology employed, results and findings and finally compare and analyze the different schools of thought, if any.

The growth of Peri-urban areas is being influenced by the city's impacts on its socio-economic conditions and cultural settings. An understanding of the patterns and processes of such organizations is essential for designing policies of social development and transformation. Therefore, it has allured many researchers and academicians from different disciplines to evaluate the features of Peri-urbanization. Some of the theories and models have been studied to describe the land use pattern in the periphery. **Griffin and Chatham**[1]: This study deals with the urban impact on agriculture in Santa Clara County, California. They found that the most fertile lands are the ones hosting the urban population growth and they suggest the need for conserving such landholdings. The responsible factors were population growth, conflict in urban-rural policies and the agrarian economy.

**UNEP**[2]: The rapid slum sprawl and increase in squatter settlements, unplanned and unorganized use of land along the city peripheries is leading to environmental degradation.

**Abiodun**[3]: The study of Nigerian peripheries and the problems related with urbanization reveal that the rural-urban migration resulted in 50% increase in the urban population. The readily available urban amenities, better employment opportunities and higher wages were cited as the main reasons for migration. He notes that cities are not able to cope up with this sudden migrant influx which consequently leads to the cities encroaching upon the peripheral country-sides.

**Phillips and others**[4]: define Peri-urban areas as zones on the periphery of cities where urban systems meet rural processes and interact. Its main characteristic strong urban influence, readily available goods and services, cheap supply of labor, however, relative land scarcity and pollution risks are the dark facets. The Peri-urbanization is a sequential process that follows urbanization. As the cities keep growing the Peri-urban areas migrate outwards along the city boundary.

**Ramachandran**[5]: defines the rural urban fringe as a zone of convergence of rural and urban population and their different land uses. These Zones extend from the point where agrarian land use is occurring near the city to the point where the countryside has distinguishing urban land use. It also include zones from which atleast some village individuals travel to the city daily for employment and other purposes.

**H. Lal**[6]: chose the city of Bareilly to study its impact on the fringe villages and examine its main problems. He demarcates the different peri-urban zones as a function of distance from the city. Different zones are differently influenced by urbanization. The points of study range from sex composition, ratio of non-agrarian workers, literacy and the density of the population which are expressed as a function of distance from the city.

**Nangia and Thorat**[7]: in their study on Delhi metropolitan region revealed that physical expansion of the metropolis is not in tandem with its proliferating population growth and crawling economic growth. As a result, its spillover effects are being borne by the settlements in the neighborhood, which continue to function for the city and accommodate its population and economic choices at a cheaper economic cost, though at a much higher social cost than the city.

**Vishal Narain**[8]: studies the peri-urban emergence in Gurgaon district of Haryana. He emphasizes on the transportation diversity; how it meets the different needs of such areas and sheds light on the influencing factors that decide the choice of transportation means for people of these areas. The land annexation results in the change of job opportunities but also gradual drainage of the village resources.

## 2.1 References

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## Chapter 3

# Nature and Transition of Peri-Urban Interface: A Case of Jagatpur, Mohali

### 3.1 History of Jagatpur

As already discussed, Chandigarh was developed in the aftermath of National Independence as a planned city, with Panchkulla in the north and Mohali in the south as two satellite urban frontiers in order to keep on absorbing a possible excess population that would, in course, try to inhabit Chandigarh. After the bifurcation of the state of Punjab into Punjab and Haryana, Chandigarh began to house two state capitals and its own union territory secretariat. Panchkulla was to become a prime city (and possibly in the unforeseeable future, the capital city) of Haryana while Mohali was given a similar role for Punjab. Panchkulla and Mohali began to expand and to take a city-like character in subsequent decades, starting from mid 1980s.

Chandigarh continued to host three secretariats, several government of India as well as state government installations, a very prominent defense setup and numerous social infrastructures such as the PGI, the Panjab university, many research institutes, schools and colleges. As a result, Chandigarh emerged as a city with a very strong public-sector middle-class, primary serving the government and government undertakings. As we reach 1980s, a large section of this middle class began to retire from services without going back to their native towns.

An interesting feature of the public sector middle class is that, thanks to the assurance of a permanent employment, this particular population can take long-term house-building loans in low interest rate to build massive houses outshining their salaries. In summary,

what we are saying is that real-estate land in Chandigarh remained firmly and exclusively in the hand of a particular class of people. In addition, owing to the presence of a defense installation and numerous public institutions, hectares of prime land in the tri-city area remained out of the speculative land market. The remaining land in the tri-city area became extremely expensive and eminently speculation-worthy.

The poor could not penetrate the tri-city, as they could, in prime Indian cities such as Kolkata, Bombay and Delhi in the postcolonial decades. The public transport system in the tri-city was deliberately kept inefficient and insufficient so that per-capita transport expenditure remains considerably high (when compared with cities with efficient mass public transport system). such a feature of the tri-city proved very effective to keep the original plan and layout almost intact as the poorer social classes could hardly afford to reside in such a revanchist city. The middle class of the city on the other hand needed to access cheap labour to maintain their lifestyle and standard of living. Villages such as Jagatpur, Kandala, Kambala etc., proved to be ideal locations to keep this low-cost service giving population. These villages are almost adjacent to Chandigarh and Mohali, yet they are virtually invisible to the city dweller thanks to the elevated rail track connecting Chandigarh and SAS Nagar rail stations. In late 1980s and early 2000s these villages witnessed a profound land use transformation as they began to emerge as the low-cost ghettos of migrant as well as displaced population from the tri-city. During our field work in Jagatpur we for instance found a rather interesting land use development. We found that some of the land- owning families recycled some of their agricultural land to build low- cost tenement structures and rented rooms to households earning their livelihood in various informal sector occupations in the tri-city. Many of them work as construction sector laborer, domestic help, transport sector laborers and are often employed throughout out-sourcing agencies to various institutions as security guards, cleaning staff and so on. From the early 2000s the government began to acquire land in the vicinity of these peri-urban neighborhoods for the expansion of the airport and for building faster connectivity between the prime neighborhoods of the tri-city and the airport. A huge parcel of land in adjacent villages such as Kandala are kept-in-waiting for acquisition by the airport authority. The primary occupation of the residents of these villages is still agriculture. However, these lands cannot be sold or bought. Thus, by 2010 neighborhoods such as Jagatpur emerged as an interstitial zone of poverty and blight being sandwiched between the railway track and the airport, which also hosts one of the mightiest installations of Indian Airforce. Our study on Jagatpur seeks to understand the life of the people in the margins of two big cities: Chandigarh and Mohali. Jagatpur is the second largest village in the district of SAS Nagar, comprising of 1,454 households and a population of about 6,673 people [2]. It is believed that the village was settled around 200 years ago with 15-20 households. The village constructed a Gurudwara with the support of and contributions from the local residents.

### 3.2 Demographic Transition

Jagatpur can be geographically divided into four sectors:

- a) Mini Market Place,
- b) Jagatpur Pind,
- c) Guru Nanak Colony,
- d) Amb Sahib Colony.

Both the colonies were relocated to Jagatpur in the year 2007 with each having population of more than 2,500 people. As evident from the name of the colonies, they were previously settled close to Amb Sahib and Guru Nanak Gurudwara located at Phase 8 Mohali. This migration strongly correlates with SAS Nagar getting the status of District in 2006. Due to this, the population density of Jagatpur increased in an instant which is visible when we compare the 2001(516 people) and 2011(6,673 people) census data (Figures 3.2 and 3.3). The immediate migration can thus be seen as a policy of gentrification of the well planned urban areas by removal of the unplanned settlements further to the periphery. But this kind of callous, unplanned migrations leads to a severe density of population as exemplified by Jagatpurs periphery hemmed in by railway lines, canal, and land reserved for future airport extension plans despite the population density necessitating expansion of its borders (Figure 3.1).

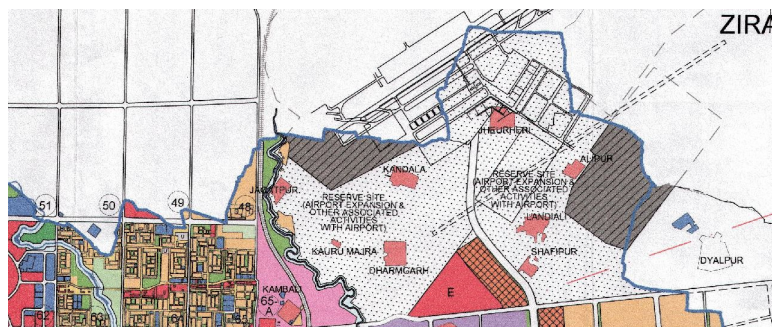


FIGURE 3.1: Masterplan of S.A.S Nagar showing Jagatpur's surrounding area for airport extension.

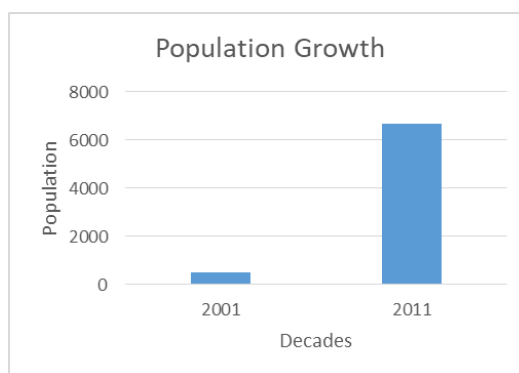


FIGURE 3.2: Population Growth (Over a decade)

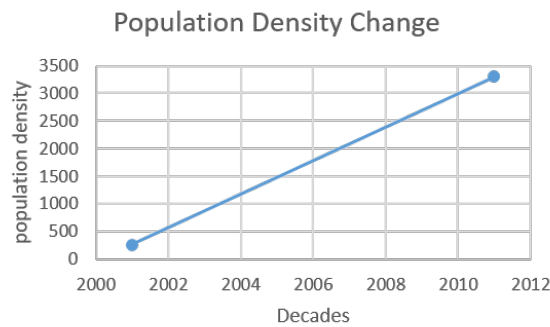


FIGURE 3.3: Population density change (Over a decade)

After the initial immigration of population from Amb Sahib and Guru Nanak Gurudwara colonies, half the population of Jagatpur comprised of locals of the state of Uttar Pradesh (UP) (Figure 3.4). The large percentage of UP residents have come to nickname Jagatpur as mini UP. This ensures that the culture of the migrants is acknowledged to be retained; this gave rise to a cultural clash between the local residents and the migrants. This resulted in the emigration of the local residents to other parts of the city and an inversion of the minority to majority ratio.

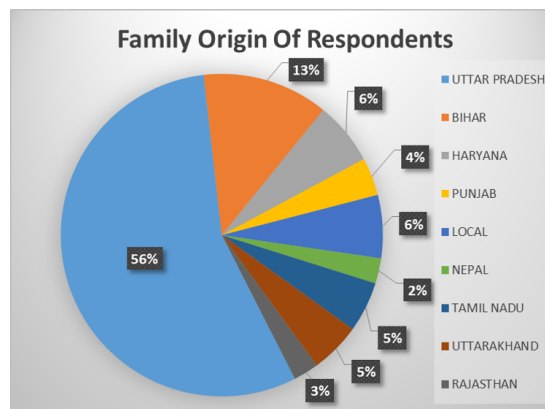


FIGURE 3.4: Family Origin of Respondents

### 3.3 Basic Amenities

Basic Amenities of electricity, water and sanitation were found to be present. Water is drawn from the government provided pipelines by charging a nominal amount from Municipal Corporation. But the large population of users coupled with the limited number of taps and low frequency of supply creates tension and quarrels among the users. Thus many households, who can afford it, have a private bore well to cater to daily water needs. But for the rest of the population this problem still persists. Amenities such as



toilets, piped water and electricity are present in all the houses. (Box 1)

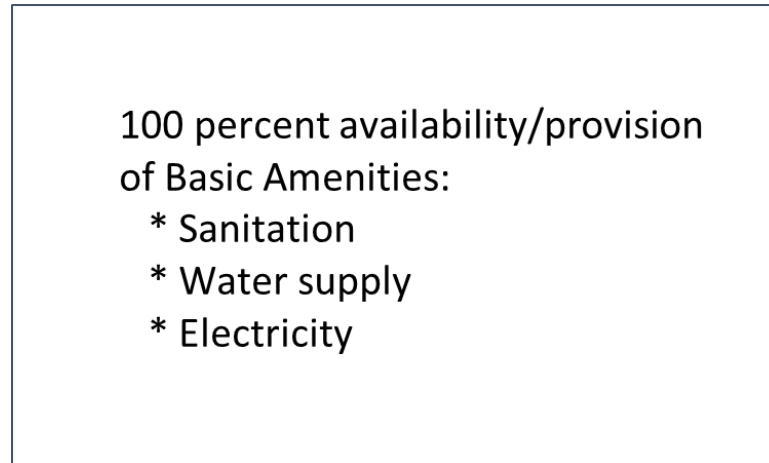


FIGURE 3.5: Box 1

### 3.4 Education

Majority of the children are enrolled in government schools in Jagatpur and Mohali (Figure 3.6). According to the sample data out of 80 households, 154 children were getting education, and nine children dropped out of school. Out of 154 children, 65 go to a private school, and 89 go to the local government school. (Table 1) Jagatpur has only one primary government school and for higher education children travel to phase 11 to Government model senior secondary school. As a matter of fact, in Punjab education is free till the eighth standard. Apart from the primary school few Anganwadi centers also operate in the village which extends the government schemes at the rural end and facilitates vaccination programs operated by the government over the years. Anganwadi center in the village engage kids in the age gap of 1.5 to 3 years in learning activities.

<b>Features</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>
Population	6,673	3586	3087
Literacy Rate (%)	56.04	64.3	46.45

TABLE 3.1: Literacy Rate in Jagatpur (Source: GOI Census 2011)

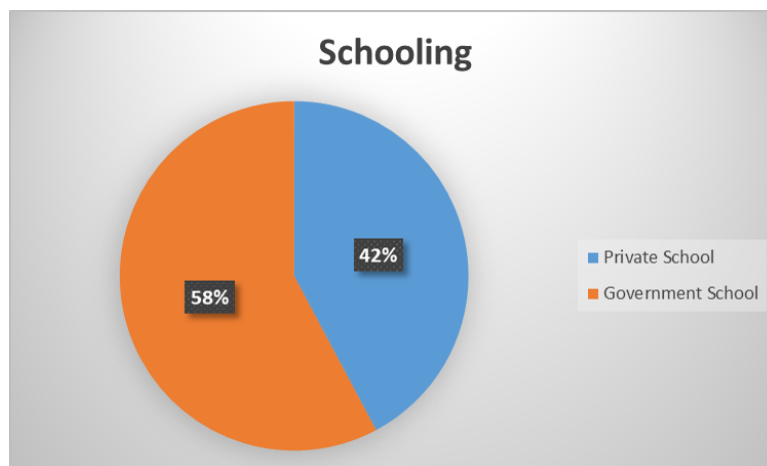


FIGURE 3.6: Children enrolled in Government and Private Schools

### 3.5 Transport and Connectivity

People travel from Jagatpur to the neighboring towns (Mohali and Chandigarh) to work. While the village is strongly dependent on the urban areas for markets, dairy and agricultural produce, it is hindered by the condition of the interconnecting roads. The multiplicity of organizations involved in the task of rural road development add to the problem. As Jagatpur is a peri-urban area, the road development infrastructure falls under the jurisdiction of two different levels of government. Jagatpur bypass is connected to the village via an unpaved road which falls under the authority of the state government. The village road on the other hand falls under the panchayats authority. Absence of transport and unavailability of affordable means of transport to neighboring towns is a major concern for the inhabitants. A paved route to the highway is a need constantly expressed by the inhabitants because it will reduce the time, effort and cost for commuting to town which is integral to their daily life.

### 3.6 Economic Transition

#### 3.6.1 Income and Occupational Changes

The occupation profile of Jagatpur shows that the percentage of tertiary occupation holders is higher in the village. (Figure 3.7). The percentage of people engaged in activities like business, shop keeping and other categories of activities is high.

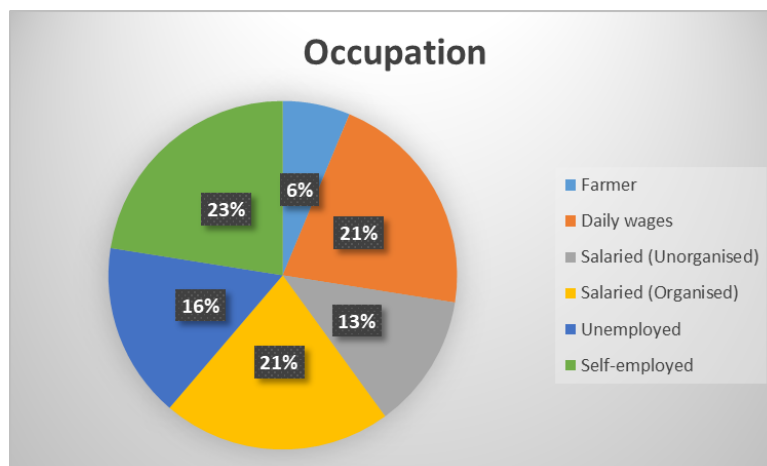


FIGURE 3.7: Occupation Profile of Jagatpur

The income profile of the households shows that the percentage of middle-income groups is higher. (Figure 3.8). Most of the households surveyed have their monthly incomes in the Rs10000 to 20000 band. However, as per the information from informal interviews it was learnt that there are also households with income of more than Rs. 40000 per month.

Out of the 80 households surveyed, one was rejected because of a lack of information bringing the total count to 79. The data collectively refers to 363 residents, with an average family size of 4.5949.

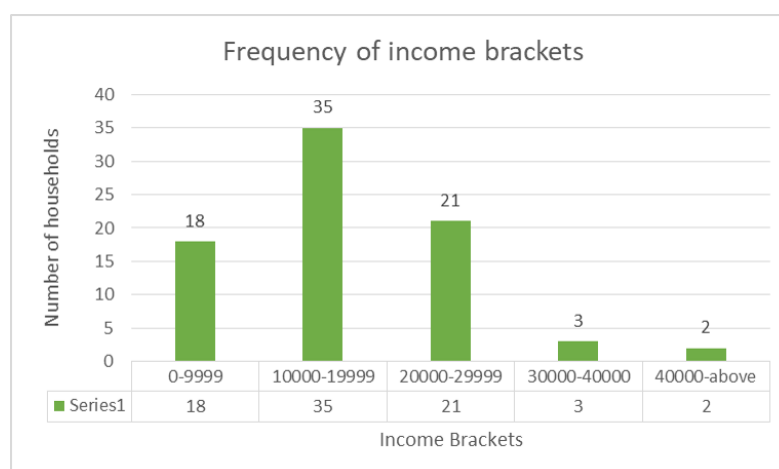


FIGURE 3.8: Frequency of income brackets

The 79 households reported an income of less than 40000 per month having 308 individuals altogether. This means that per head the earning in these 79 families ranges from Rs. 2792 per month to Rs. 5292 per month.(Figure 3.8) With 4.5 members per household on the average, this puts a representative of these 79 families in the income

bracket: 10886-20633. If the median of each group is taken as representing the family income, then the average family income is Rs. 15759.

### 3.6.2 Minimum Wage

Minimum wage in India is defined as the level of income of a worker that not only guarantees a minimum subsistence and preserves efficiency but also provides for education, medical requirements and comfort. “The Minimum Wages Act 1948 is an Act of the Parliament concerning Indian labour law that sets the minimum wages that must be paid to skilled and unskilled labours.

The Minimum wage profile of Jagatpur shows that only 16 percent of the population gets the Minimum wage. (Figure 3.9).

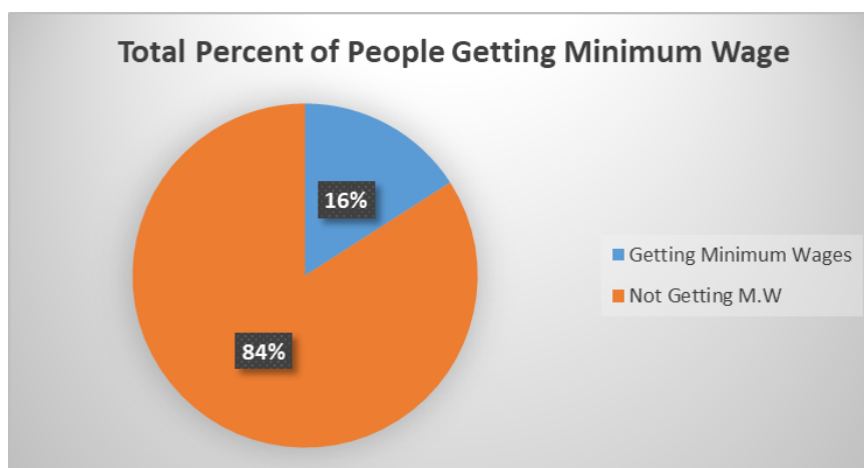


FIGURE 3.9: Total Percent of People Getting Minimum Wages

People who are engaged in activities like farming, small business (shopkeepers, street vendors) and auto drivers were excluded. Residents coming under the category of Daily wagers are mostly workers employed in the construction and/or maintenance of roads, airport runways, buildings.

Inhabitants coming under the category of Salaried Organized are workers employed as Sweeping and Cleaning Staff and Security Guards at various institutes.

Category of worker	Rates of wages including V.D.A. per day (in Rupees)		
	A Area	B Area	C Area
Unskilled	523+61=584	437+50=487	350+40=390
Semi-Skilled/Unskilled Supervisory	579+66=645	494+57=551	410+47=457
Skilled/ Clerical	637+73=710	579+66=645	494+57=551
Highly Skilled	693+79=772	637+73=710	579+66=645

FIGURE 3.10: Table 2: Rate of wages of workers employed in Construction or Maintenance of Roads or Buildings

AREA	RATES OF WAGES PLUS V.D.A PER DAY			
	Basic Wages (Rs.)		V.D.A (Rs.)	Total (Rs.)
A	523	+	61	= 584
B	437	+	50	= 487
C	350	+	40	= 390

FIGURE 3.11: Table 3: Rate of wages for Sweeping and Cleaning employees

AREA	RATES OF WAGES PLUS V.D.A PER DAY			
	Basic Wages (Rs.)		V.D.A (Rs.)	Total (Rs.)
A	637	+	73	= 710
B	579	+	66	= 645
C	494	+	57	= 551

FIGURE 3.12: Table 4: Rate of wages for Security Guard (without arms)

People coming under the category of Salaried Unorganized are workers engaged in an occupation such as house servants, private drivers, and gardener. Since we do not know the Minimum Wages of this category, we will assume their Minimum Wage to be equal to employees of Sweeping and Cleaning.

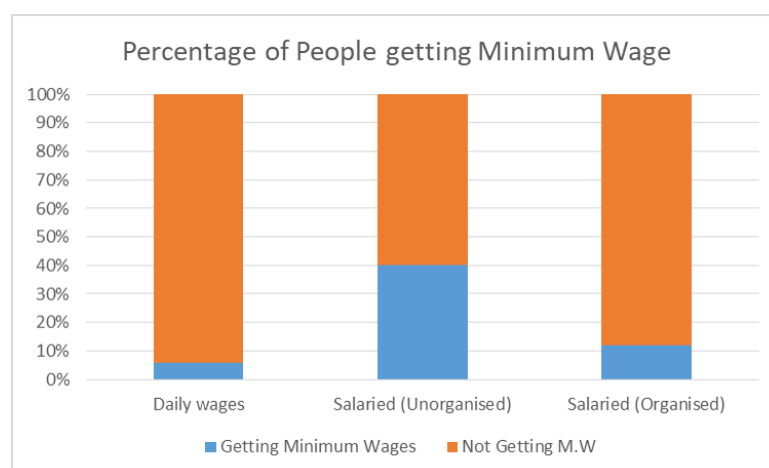


FIGURE 3.13: Percentage of People Getting Minimum Wages

Figure 3.13 shows that the Daily wages section consists of 17 inhabitants out of which only one person is getting Minimum wage. Salaried Unorganized category consists of 10 people out of which four people are getting their Minimum Wage. Salaried Organized category consists of 17 people out of which only 2 people are getting their Minimum wage.

### 3.7 Issues of Access to Services

Jagatpur is well connected to both Chandigarh and Mohali but only through auto-rickshaws since the frequency of buses is very low at around 2 buses a day. Besides, the presence of personal vehicles in the village also adds to the transportation facility; though this does not count as public transport.

For the purpose of entertainment, primarily cinema, the respondents travel up to Bestech Mall, which is nearest to them. Daily marketing is done chiefly from Mohali Phase 10 and 11. For medical facilities the residents have to travel up to Phase 11 (2.3 km) for the nearest government clinic. For education, especially schooling, the children go to Phase 11 (2.8). Jagatpur doesn't have its own post office or police station; residents have to travel to Phase 11(2.8 km), Mohali for police station and Sector 47D(3.2 km), Chandigarh, for post office. For inter-state travel the nearest bus stand is in Sector 43(5.5 km), Chandigarh and nearest railway station is in Daria(8.4 km), Chandigarh.

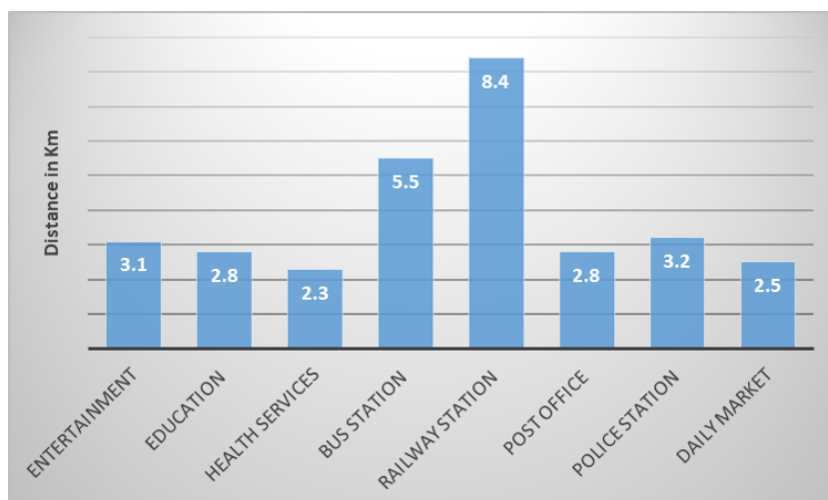


FIGURE 3.14: Connectivity Pattern of Basic Services from Jagatpur

### 3.8 Social Transformation

In Jagatpur, the biggest problem is that of roads. The condition of the roads are terrible, according to residents, making it extremely harsh for riders to drive properly which leads to accidents. The village also suffers from lack of proper Drainage and Sanitation. The canal running through the marketplace is used as a sewer and its banks as open dumps creating a very unhygienic condition for a region with bustling activity.

One of the critical problems of Jagatpur is the lack of good medical facilities. There are no hospitals in the village and there are no good doctors either. They have to visit Phase 11 for even their immediate medical crises.

The level of satisfaction of the residents on the various services present in the village has been studied and the following picture emerges (Figure 3.15): It shows that the villagers are satisfied with the electricity supply, which is considered to be good or satisfactory by more than 50% of the respondents. The respondents are fairly satisfied with the water supply.

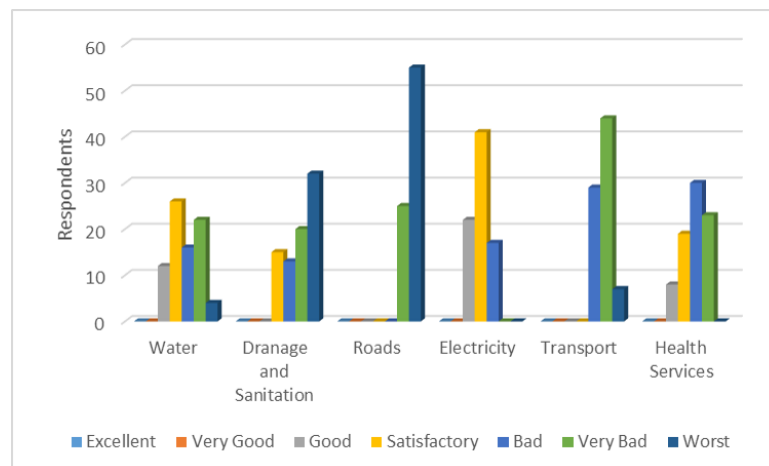


FIGURE 3.15: Satisfaction level of the residents on the various services present



FIGURE 3.16: No presence of traffic light and speed breaker on the Jagatpur bypass road



FIGURE 3.17: Plastic waste and garbage originating from the nearby human settlement





FIGURE 3.18: Cow dung Cakes is also used as a fuel source

### 3.9 Narratives

A few interviews of the residents regarding their lives in Jagatpura yielded visceral and heart rending narratives which highlight the socio-economic and lifestyle conditions in the village and how these impact the outlook and attitude of the residents.

*I havent seen my husband since 10 years. Even 10 years back when he was with me all he would do is come home drunk and beat me up good. One night after a big quarrel he left and never came back. For many years I thought he was dead until on day I saw him in Jagatpur main market. However, I had to raise my kids even in absence of my husband. While taking the survey at that house I saw those kids were studying and to my surprise using English medium book s(NCERT Chemistry, NCERT Commerce). This was quite an achievement on the part of the lady who raised her children to be educated in an area like Jagatpur.*

On enquiring about the educational expenses of another household incurred, this was the reply: *We dont spend anything on their education. Actually, we cannot. My kids used to go to school. But an unfortunate day my husband had a paralysis attack. We couldnt afford the treatment and it had us neck deep in debt. So we had to compromise on our childrens education.*

*I used to work as a security guard at Bestech Mall. One night while returning home I met with an accident. The road (Jagatpur bypass) where the accident happened lacks traffic signal and any speed breaker .It was a major one and I was almost sure that I will succumb to my injuries. However, I somehow survived. But I lost my job. Now*

*my wife earns and we somehow make our ends meet in that meagre salary.” I wish the government paid a little more attention to these accident prone zones so that more woeful incidents like these dont happen.*

While talking to a local farmer about his crops and farm this is what he had to say: *I grow rice mostly with some seasonal crops on rotation but not much. Earlier I used to grow vegetables and sugarcane too. However, these bhaiya log (UP people) used to steal my crops at night. So I had to resort to growing crops which arent readily consumable.”* This shows what kind of strained relationships exist among the natives and the migrants.

### 3.10 Conclusions

How does citizenship evolve in the margins of a planned urban setup? In 1950, sociologist T.H.Marshall talked about three core elements of citizenship: Civil, Political and Social. The Civil element referred to the rights necessary for the embellishment of individual freedom and liberty. The political element corresponded to the right to participate in the exercise of political power and the right to inclusion in civic institutions. According to Marshall, however, the most fundamental element of citizenship was the social component, which meant the whole range from the right to a modicum of economic welfare and security to the right to share to the full in the social heritage and to live the life of a civilized being according to the standards prevailing in the society(Marshall 1950, 8)[3]. In this thesis, through a pilot survey, we have tried to understand the nature of social citizenship in the margins of a planned urban establishment. Perhaps, one way to effectively evaluate the performance of democracy may be to see to what extent it enables the exercise of citizenship rights. The evidence presented in this thesis appears to suggest that we have a long way to go to consolidate democracy in any substantive sense beyond the statistics of voter turnout and macrolevel generalization about political participation(Gopal Jayal 2013, pg.4).[4]

A number of ethnographic works on urban slums have already shown how, “through everyday negotiations, squatter dwellers create, reconfigure and re-function materialities of infrastructures. In doing so, they periodically sidestep the bourgeois law of property, and appropriate infrastructures, and make infrastructures the focus of a collective existence” (Bandyopadhyay 2017)[3]. More often than not, “they demand concessions from the government as a matter of right to livelihood in the city. They place such claims not as a matter of rule, but, as acceptable exceptions to the rule of property. At the time of competitive electoral mobilization in cities, a number of such claims define the terms on which these groups are considered parties to the governmental negotiations” (Bandyopadhyay 2017)[5]. Our work may take this line of research in its more developed form.

### 3.11 References

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