

# **Post Resettlement Dynamics of Socio-Economic Pattern: A Case of Ahmedabad**

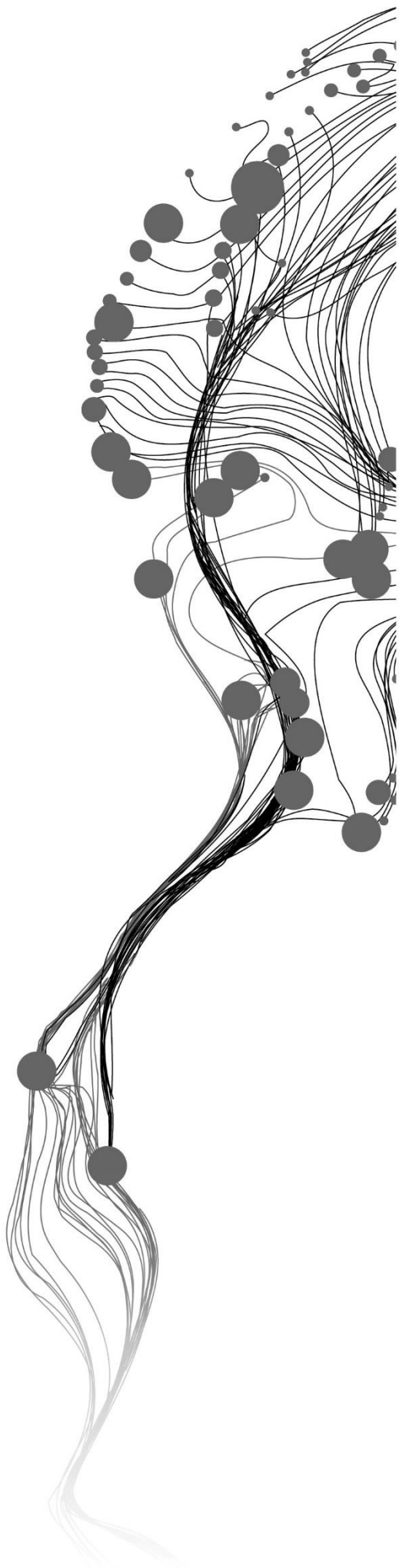
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March, 2016

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# **Post Resettlement Dynamics of Socio-Economic Pattern: A Case of Ahmedabad**

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Thesis submitted to the Faculty of Geo-Information Science and Earth Observation of the University of Twente in partial fulfilment of the requirements for the degree of Master of Science in Geo-information Science and Earth Observation.

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## ABSTRACT

In recent years, contemporary processes of urbanization have been largely focused on reshaping urban area through urban reforms in major Indian cities. The central government initiate to change physical and social transformation of the urban area. Urban transformation has been largely focusing on implementing urban infrastructure projects including existing redevelopment of urban units, such as water supply projects, construction of affordable housing units and modernising urban spaces and amenities. Ongoing urbanization and redevelopment of existing urban area have been become the main cause of involuntary displacement and resettlement of urban poor households.

This study is an attempt to investigate the change in resettled households socio-economic characteristic after resettlement in Ahmedabad. A study is focused on urban poor households who were displaced and relocated on resettlement area through Basic services for urban poor scheme in 2011. The focus of this study is to revisit the resettled households on resettlement site and investigate whether resettlement caused an improvement of displaced people's lives or whether the situation became worse after resettlement. The research also analyses and compare resettled household's socio-economic situation during 2011 and 2015.

Socio- economic surveys of seven resettlement sites of Ahmedabad were carried out to understand degree of impoverishment risk. In order to understand the change in resettled household's lives. A mixed approach was adopted to identify their perception and socio-economic characteristic. The methods involved were field observation, semi-structure interviews of resettled households, and focus group discussions with community leaders and resettle households members with mapping of settlement location through GPS. In order to identify the change in resettled households lives, resettled household's socio- economic parameters of 2011 and 2015 were analysed based on Impoverishment risk and reconstruction (IRR)'s eight parameters. It was found that resettled households lives further impoverished and he BSUP settlement sites have shown varying degrees of impoverishment depending on distance factor.

The research was concluded from research that resettled households need better socio-economic infrastructure to sustain their livelihood condition. The finding of this study intends to provide recommendations to strengthen slum relocation and resettlement policy and future development of resettled households

**Keywords:** Displacement and resettlement, impoverishment risk, Basic services for urban poor, slum relocation, slum

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## LIST OF ABBREVIATION AND ACRONYMS

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AMC	Ahmedabad Municipal Corporation
BRTS	Bus Rapid Transit System
BSUP	Basic Services for Urban Poor
DIDR	Development-Induced Displacement and Resettlement
IRR	Impoverishment Risk and Reconstruction
SRDF	Sabarmati Riverfront Development
TPS	Town planning scheme
RWA	Residential Welfare Association
SPSS	Statistical Package for the Social Sciences
ULB	Urban local body
UIG	Urban infrastructure and governance

# 1. INTRODUCTION

## 1.1. Background and Justification

Urban areas are experiencing rapid population growth and rural to urban migration. Poor people come to an urban area for better social and economic opportunity. Most often people cannot afford to live in the formal sector. Therefore, they are forced to live in slum area (UN-Habitat, 2011). In Asia, 30 % of an urban population are living in a slum. These slum settlements have no tenure security, cut off from basic services and amenities (UN-Habitat, 2015). In addition, often slums are situated in geographical and environmentally hazardous area that makes them more vulnerable to natural and man-made disaster.

Informal settlements are located on land that tended to unprotected such as vacant government land, prime developable land for infrastructure projects. Due to their locational condition, slum dwellers are more vulnerable to force eviction (Hooper & Ortolano, 2012; Weinstein, 2013). Also, slum dwellers have to face displacement through forced land acquisition for urban renewal infrastructure and development projects (S. Patel, Sliuzas, & Mathur, 2015; Sejal Patel & Mandhyan, 2014). Slum areas have very different socio-spatial character such as density pattern, morphology and socio-economical pattern. These processes of displacement affect livelihoods and socio-economic condition of urban poor (Davis, 2011; Muchadenyika, 2015; Otiso, 2002).

In general, urban area development projects have an aim to improve regional economy and people's livelihood. Yet such projects can have negative impact on some portion of the population. Development programs such as water supply (dam, reservoirs, irrigation, riverfront and lakefront development), transportation (road, highway canal), mining, power plant, parks and forest reserves cause development-induced displacement. For those affected people, these programs cause involuntary displacement and people have to resettle elsewhere (Cernea, 1997b, 2008; Jackson & Sleigh, 2000; Robinson, 2003).

M. Cernea (1997) found that development-induced displacement and resettlement (DIDR) processes are mostly affecting the weaker section of the society- the urban poor. Often forced eviction causes loss of assets, loss of livelihood and creates inequality among society. Even involuntary displacement and resettlement affect the physical-mental health, poor people becoming poorer than before displacement. In addition, often-displaced people do not receive compensation for their lost assets and proper assistance to restructure their livelihood. Displacement and resettlement without proper rehabilitation lead to increase the risk of impoverishment. Slum dwellers have to experience risk of impoverishment due to lack of reform and implementation of rehabilitation policy (Cernea, 2008; S. Patel et al., 2015).

## 1.2. Displacement and Resettlement in Ahmedabad

Ahmedabad Municipal Corporation has the vision to create Ahmedabad as a world-class city (Desai, 2014). For that, many large-scale urban development projects have been implemented such as Sabarmati Riverfront Development (SRFD), Kakariya Lakefront Development, Bus Rapid Transits System (BRTS) and Public Park. Land cost and availability of land is the major issue to an implementation of those development projects. Therefore, local authority reclaimed land to implement urban development projects that were inhabited by urban poor. This activity caused large scale of displacement of slum dwellers, around 29,000 houses in 67 slums were demolished, and slum dwellers had to relocate to the outskirts of the city (S. Patel et al., 2015).

This research focuses to investigate the change in household's lives after displacement and resettlement on Basic services for urban poor (BSUP) site in Ahmedabad. In order to understand the change in household's lives, this study is revisiting same households which were identified by S. Patel et al. (2015) during displacement and resettlement process in 2011. This research will be conducted based on S. Patel et al. (2015) research of impoverishment risk assessment in urban development-induced displacement and resettlement (DIDR) in Ahmedabad. The study was carried out based on primary and secondary data collection of displacement affected 396 households (10 % sample size) in 2011. As per research four categories of resettlement were identified: "direct resettlement on BSUP dwelling unit, resettlement in BSUP dwelling unit after a short stay on interim site, no resettlement and household continues to reside in demolition site, and prolonged stay on the interim site" (S. Patel et al., 2015).

S. Patel et al. (2015) used Cernea's impoverishment risk and reconstruction (IRR) model (Cernea, 1997b) to assess the socio-economic condition after displacement with specific contextual indicators (see Table 1, page-18). The theoretical framework of impoverishment risk and reconstruction (IRR) model was used in many development-induced displacement and resettlement (DIDR) studies in the context of rural displacement (Alexandrescu, 2013; Heggelund, 2006; Kaida & Miah, 2015; Muggah, 2000; Quetulia-Navarra, Niehof, Van der Horst, & van der Vaart, 2014). M. Cernea (1997) argued that displacement causes social disruption in their lives and social welfare; livelihood should be a central part of reducing impoverishment risk in the resettlement program. To protect and reconstructing resettled people's livelihood can be assessed through eight-impoverishment risk parameters (see Figure 1)

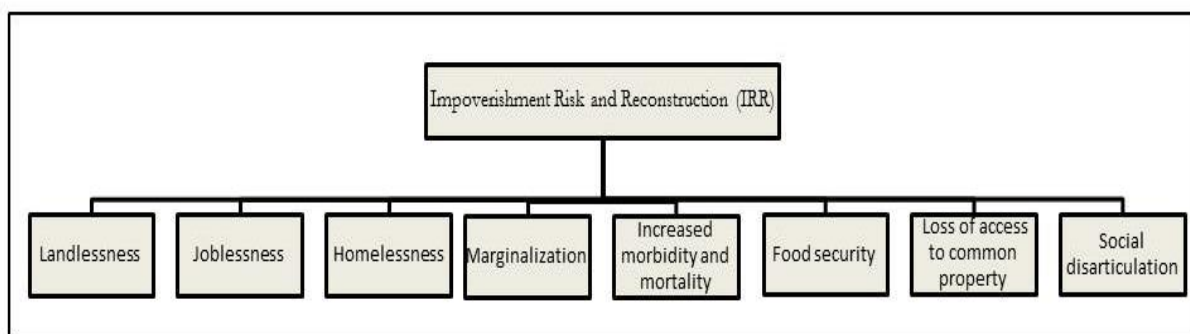


Figure 1 Eight parameters of Impoverishment risk and reconstruction (IRR)

According to S. Patel et al. (2015) in the context of Ahmedabad city, the process of displacement and resettlement of slum dwellers experiences various forms of impoverishment in 2011. The study showed that the BSUP policy focuses on providing shelter. However, landlessness, access to the community facility, health risk, social marginalization, and food security were completely ignored.

Moreover, the study showed that displaced households were relocated to the periphery of the city. No households were resettled within the same ward. This displacement activity caused 14 % displaced workers lost their jobs; slum dwellers lost their house assets and were denied to receive relief compensation for resettlement. In general, displaced households who resettled in BSUP sites had inadequate access to water, poor sanitation network, limited access to public transportation, education and health facilities. In addition, displacement caused increased transportation costs, increased monthly expenditure, loss of jobs, disparities between communities because of fragmented community relocation, loss of access to community places and uncertainty of their future development (S. Patel et al., 2015).

After resettlement, it is interesting to revisit those affected households to understand changes in their socio-economical characteristics. A favela slum resettlement study showed that slum dwellers livelihood affected by relocation. Slum dwellers had to rebuild their livelihood based on surrounding opportunity. Also, it took the generation to improve slum dwellers lives in favela (Feinberg, 2011). According to Feinberg (2011), improvement in resettled households lives depends upon available opportunity to sustain their livelihood after resettlement. Resettlement process could lead resettled households lives into positive or negative direction. Improvements in urban poor lives also depend upon various factor and policy implementation. After a certain period displaced households attempt to improve their condition (Cavalheiro & Abiko, 2015; Feinberg, 2011; Robinson, 2003).

### **1.3. Research Problem**

This research aims to determine whether slum resettlement caused an improvement of displaced people's lives or whether the situation became worse after resettlement. The focus of this study is revisit affected households which were identified by S. Patel et al. (2015) in 2011, to understand the reason behind a change in their lives during 2011 to 2015.

In the process of resettlement of urban poor in the Ahmedabad city, households are relocated irrespective of their livelihood and displaced households have to rebuild their lives according to the locational characteristics of relocated areas. S. Patel et al. (2015) found that relocation distance was a major cause of post-displacement impoverishment and have relation to the socio-economic parameters such as loss of jobs, health risk, education, access to public transportation and infrastructure. In addition, relocated site have a mixed community structure rather than having one social group. Common properties are not used and maintained properly due to community disparities.

Thus, there is a need to revisit those displaced households to investigate a change in an impoverishment of resettles household's lives. Therefore, it is necessary to study what are the factors responsible for the changes in resettled household lives. In addition, it is important to understand the role of NGOs, Resident welfare associations (RWAs) and Local authorities in the reconstruction of resettled urban poor lives.

Researchers mention that process of displacement and resettlement process changes physical and socio-economical character of slum dwellers (Adam, Owen, & Kemp, 2015; Feinberg, 2011). The main research problem is to understand changes in resettled household's lives after spending more than four years in resettlement areas. Researches have shown that improvement in resettled households always takes certain time(Feinberg, 2011). However, initial understanding of socio-economic characteristics of resettled households gives better direction for future development of resettled households.

## 1.4. Research Question and Objective

### 1.4.1. Main objective

The main objective of this research is to analyse change in resettled household's lives of resettled areas from 2011 to 2015 using qualitative and quantitative parameters.

To fulfil this objective, sub-objective need to be achieved as follow:

- To identify factors that are responsible to change in resettled household lives
- To analyse the degree of impoverishment in resettlement areas.
- To analyse the physical links between BSUP sites and their surrounding neighbourhood.

### 1.4.2. Specific Objective and Question

#### 1. To identify factors those are responsible to change in resettled household lives.

- How many of the original households shifted elsewhere and what were the reasons?
- Which households are worse off compared to 2011 and what are the reasons?
- What is the role of NGO and Social Welfare association to improve household's lives?

#### 2. To analyse the degree of impoverishment in resettlement areas.

- What are the main factors contributing to the impoverishment shift?
- Which settlements are worse off compared to 2011 and what are the reasons?
- What is people's perception about impoverishment since resettlement?

#### 3. To analyse the physical links between BSUP sites and their surrounding neighbourhood.

- Do relocated sites have accessibility to basic social amenities?
- Are the locations of relocated sites affecting household's lives?
- Do relocated sites have accessibility to health facilities?

## 1.5. Conceptual framework

Conceptual framework (see Figure 2) shows a schematic representation of the main components for the identification of a change in resettled household's lives. The framework has three main components: diagnostic and analysis of impoverishment risk framework, stakeholder analysis, and physical characteristic of BSUP site.

The focus of the study is to revisit affected households which were identified by S. Patel et al. (2015) research in 2011, to understand the reason behind a change in their lives during 2011 to 2015. Therefore, it is important to analyses resettled households socio-economic condition based on the impoverishment framework. This study is investigating the impact and changes in resettled household's lives during 2011 to 2015.

Furthermore, study is to investigate the degree and direction of an impoverishment of different resettled areas. In addition, the study investigates the role of different stakeholders such as NGOs, Resident welfare associations and Government to reconstruction of resettled lives. Another important element in the framework is to understand the physical character of BSUP site.

The Analysis of spatial characteristics such as accessibility to health, accessibility to public transportation, and surrounding neighbourhood can give a deep insight of resettlement areas. It can provide a comprehensive understanding change in urban poor's life after resettlement. Further urban poor's perception about improvement and stakeholder opinion are also important to investigate for future policy recommendation and development of resettlement areas.

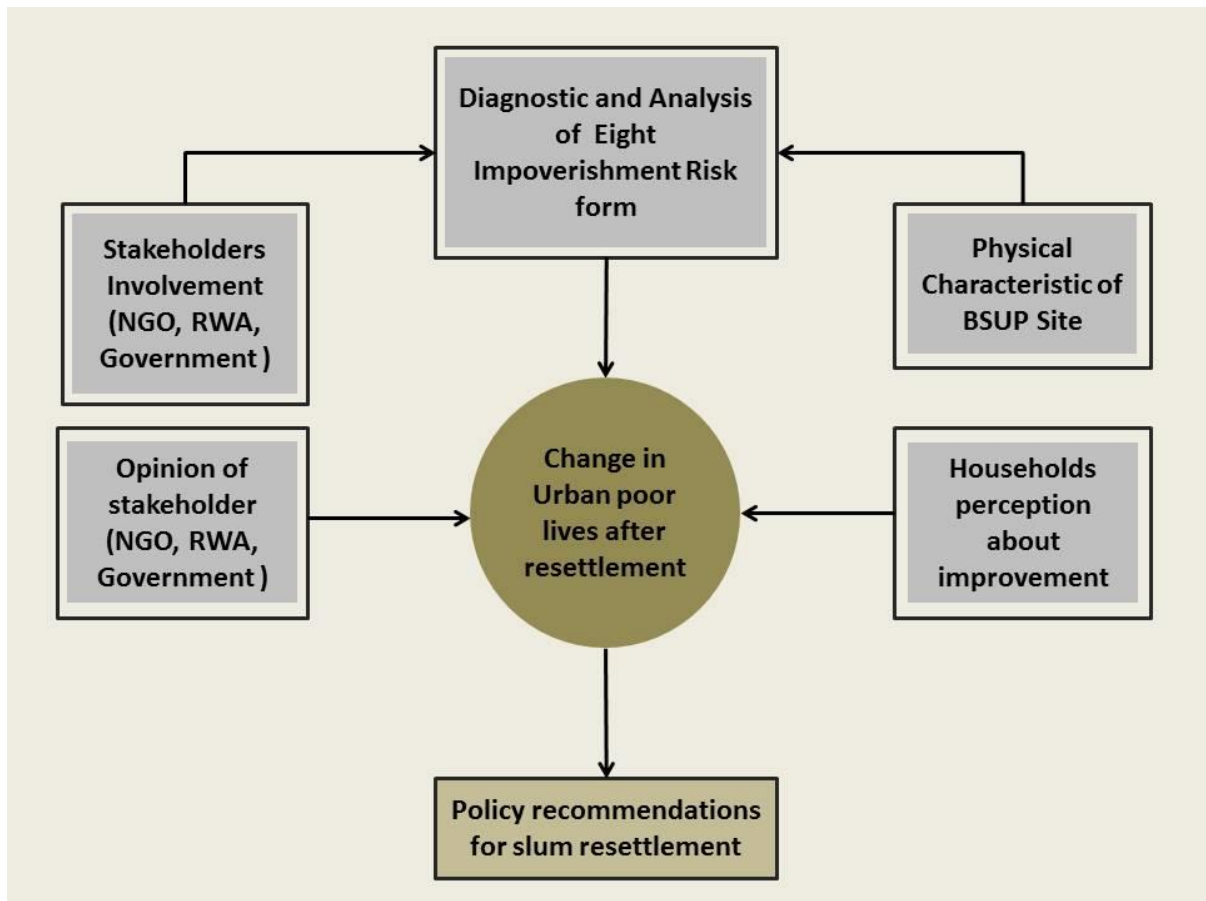


Figure 2 Conceptual Framework

## 2. LITERATURE REVIEW

### 2.1. Policy and programmes for urban poor

Recently, the Government of India has launched major policies to improve the city infrastructure and slum development in the city area. Among them JNNURM Mission, BSUP Housing and Rajiv Awas Yojna are major policy programs initiated by the Central government. In 2005, Ahmedabad city was declared a mega city under JNNURM Mission, which inspired the city government to implement large-scale infrastructure projects. The central Government JNNURM mission includes BSUP as sub-mission to provide housing and basic services to urban poor (MHUPA, 2009). The key feature of policies are discussed below

**Jawaharlal Nehru National Urban Renewal Mission (JNNURM):** the aim of JNNURM mission is to encourage reform and fast tracked planned development of identified cities. JNNURM mission is focused on improving an efficiency of urban infrastructure, services delivery mechanism, community participation and accountability of the urban local body (ULB) towards citizens. JNNURM has two sub missions: 1) Urban Infrastructure and Governance (UIG). The main focus of the sub-mission is on infrastructure projects relating to water supply and sanitation, sewage, solid waste management, road network, urban transport and redevelopment of old city area. 2) Basic Services to the Urban Poor (BSUP). The main focus of the sub-Mission BSUP is on integrated development of slums through projects for providing shelter, basic services and other related civic amenities for urban poor (MHUPA, 2005).

**Basic Services for Urban Poor (BSUP):** The main goal of the sub mission is to provide security of tenure, affordable housing and improve urban poor condition with basic services such as water supply and sanitation. Furthermore, the BSUP sub mission is focused on to ensure delivery of social services of education, health and social security to urban poor (MHUPA, 2009).

BSUP Housing has the following prime objective to ensure development of urban poor in cities:

- Access to basic municipal services such as water supply, toilets, wastewater drainage, solid waste management, power, roads, transport.
- Sustainable improvements in the quality of life of the urban poor through integrated and mainstreamed with municipal services and supply network.
- Better access to legal and affordable housing with in-house basic services
- Access to social services such as education, health and other social programmes of the government.
- Better education, improved health and access to sustainable livelihoods that in turn would help reduce poverty.
- Enhanced urban poor participation in political processes and city governance.

BSUP housing has following three main components to ensure improvement urban poor lives.

1. Housing: BSUP housing must be locate close to urban poor's work location and within the city limit. Houses must be planned with access to water connection, electricity connection, in house toilet and also in house toilet linked to the underground sewage system or septic tanks. The urban poor must be linked with formal banks for credit at low-interest rates for repaying the loan in easy instalment for houses and houses must be affordable.

2. Basic Municipal services:
  - Solid waste management with door to door collection and regular disposal from BSUP settlement to the waste collection site.
  - Underground proper sewage system connection with city drainage network for waste water disposal
  - Access to city road network with efficient public transport system
  - Access to legal/metered power supply with affordable tariff.
  
3. Social services: These include access to schools, health centres/hospitals, and social programmes for the poor.
  - Access to schools with good quality education facilities close to settlements.
  - Access to health care services close to settlement areas.
  - Social Security- Support for livelihoods (skill development, access to micro credit).

Source: (MHUPA, 2009)

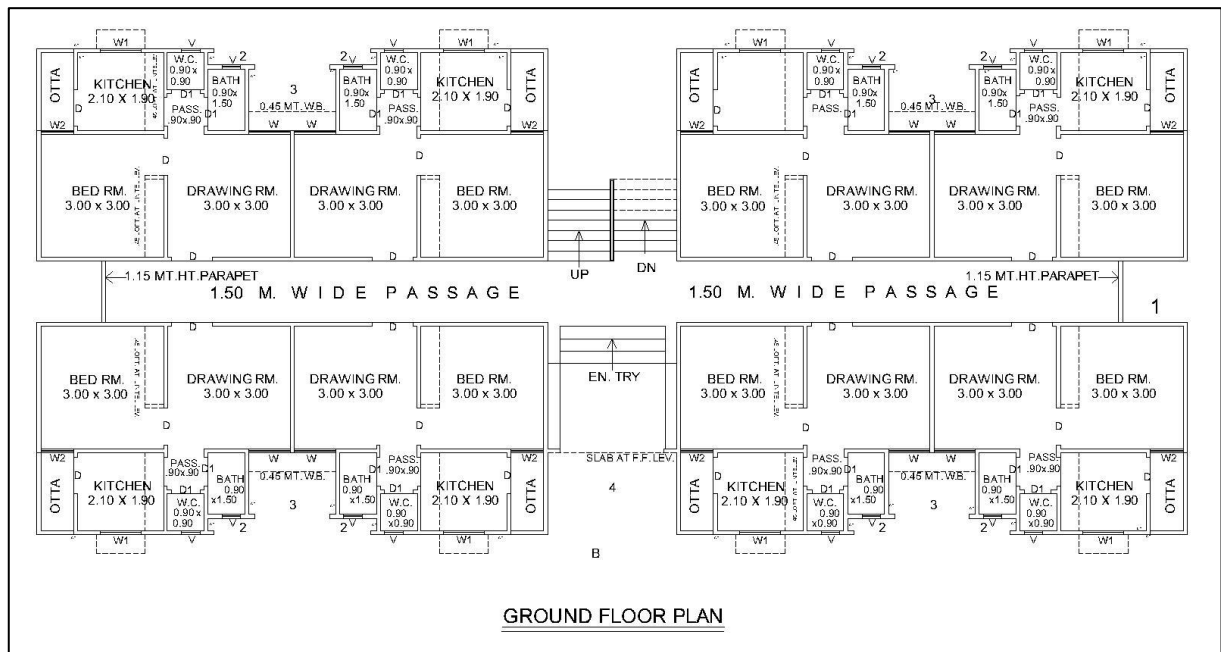


Figure 3 Typical layout plan of BSUP unit and BSUP Block in Ahmedabad

Source: (Ahmedabad Municipal Corporation, 2015)

## 2.2. Basic service for urban poor in Ahmedabad

In 2005, Ahmedabad was declared mega city under JNNURM mission. AMC and AUDA had initiated a slum development approach under the BSUP sub-mission (MHUPA, 2005). AMC constructed BSUP housing within corporation area limit while AUDA constructed BSUP housing outside corporation limit AMC and AUDA had constructed 32,842 dwelling units under BSUP mission across 25 sites by 2013. The dwelling units are of 28 sqm built-up areas (see Figure 3) and have been built as G+3 / G+4 buildings. Each dwelling unit is provided with water supply, sewerage and electricity connection and each BSUP site has been provided with an Aanganwadi (Primary education school) and health centre. Under BSUP's financing pattern for Ahmedabad, of the total project cost, the share of the Central government was 50 per cent, share of the State government was 20 per cent and share of AMC / AUDA and beneficiary was



30 per cent. The beneficiary share was not to exceed 12 per cent of the cost of the dwelling unit. The beneficiary share in Ahmedabad came to US\$ 1029 (INR. 66,900)<sup>1</sup> (Mahadevia, Desai, & Vyas, 2014).

The AMC used constructed BSUP houses to relocate displaced households from slum settlement. By 2011, there were 29,000 slum household displaced from various part of the city and relocated to BSUP sites (S. Patel et al., 2015). BSUP housing became resettlement sites and a tool for capturing prime location public land from urban poor. Most of BSUP sites are located in former textile mill areas and the eastern industrial periphery of Ahmedabad. Very few sites are located in the western part of Ahmedabad city, which have better social amenities than the eastern part of Ahmedabad city (Mahadevia et al., 2014). After spending more than four years on BSUP housing

Most of the displaced household are relocated far from their original location, created negative impacts on their livelihood (S. Patel et al., 2015). Mahadevia et al. (2014) mention that resettlements have taken place very fragmented and scattered manner without any clear guidelines. These large-scale displacement and resettlement were created negative impact on every household's lives and their occupation. Many are unable to continue their previous occupation due to increasing travel distance and cost. Also scattered displacement of slum households has affected their social network (S. Patel et al., 2015).

S. Patel et al. (2015) research shows that most of the households were relocated very far from their original displaced place. This increased travel distance to school, public transportation and public hospital. In 2011, 14% of people lost their employment. Other resettled people had to travel more to their work location. It was caused an increase in travel expenditure for the households.

As per S. Patel et al. (2015), there was a major impact on education. Almost 18% student dropped out from school and 11% student had a lower school attendance, travel distance to school increased by an average of 1.2 kilometre and travel cost increased by 50% due to inadequate public transport system on the resettlement sites. In addition, access to public health had a similar situation like other social amenities. Even at resettlement sites, infrastructure services like solid waste management and sewage network did not function properly. Households disposed of solid waste in open spaces. All sites had basic services but the quality of services was compromised that leads to poor hygienic condition on BSUP settlement. Lack of residential welfare association and fragmented resettlement caused social disarticulation within resettled households (S. Patel et al., 2015).

### **2.3. Theoretical conceptualization of development –induced displacement and resettlement**

In recent years, contemporary city making process and urban transformation have been largely focusing on implementing urban infrastructure projects including existing urban units, such as water supply projects, construction of affordable housing units and modernising urban spaces and amenities. Ongoing urbanisation and redevelopment of existing urban area have become the main cause of development –induced displacement (DIDR). Displacement of people on a large scale is become consequences of the implementation of large scale urban projects (Robinson, 2003; Terminski, 2013).

According to Cernea (1997a) improvement of living standard and economic expansion in urban areas caused massive investment on urban infrastructure projects. Such urban investments are inevitable and lead to further land acquisition and involuntary displacements. Many researchers found that displaced people experienced issues of social-economic injustice and equity, political and culture consequences and are unable to build their livelihood in resettled area. Those affected people are exposed to multiple

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<sup>1</sup> As per exchange rate of 1USD= INR 65 prevailing in October 2015 when the field work conducted (<http://www.xe.com/currencytables/?from=INR&date=2015-10-08>)

impoverishment risk (Cernea, 2008; Choi, 2015; Follmann, 2014; Johnston, 2014; S. Patel et al., 2015; Robinson, 2003).

### **2.3.1. Impoverishment risk and reconstruction**

Cernea (1997b) developed Impoverishment risk and construction (IIR) model to understand the effect of displacement and resettlement on people's socio-economic condition. This model analysed consequences of development projects, largely in the context of rural displacement and resettlement. IIR model has the following eight parameters to understand people's lives after displacement and resettlement.

**Landlessness:** Location of land is an important factor to understand social-economic characteristics of resettled households. Most often, change in resettled household's livelihood depends upon the location of land. Land becomes a key factor to access to new income opportunity in surrounding areas, public infrastructure, school and health facilities for resettled households. In addition, monthly income, expenditure and cost of transportation have very strong relation with land location.

**Joblessness:** Resettled people experienced great difficulties in finding jobs due to loss of income. The displacement and resettlement process caused loss of job, reduction in working days and can lead to an increase in transportation cost. After relocation, households have to find new jobs to reduce their monthly expenditure. It could be possible that they cannot find a job with their previous skill. Also at the new location, women have more challenges to find new income opportunity.

**Homelessness:** Most often people who resettled in new location came from slum areas. Resettlement caused loss of cultural space and sense of community, loss of social network, the cost of redeveloping new house. After resettlement, it is important to understand how they are rebuilding their social lives with new people. Even resettlement causes increased distance to previous education and health facilities, which is resulting an increase of monthly expenditure. In addition, at resettlement sites, it is important to have sense of social and economic security to restructure resettled household's lives.

**Marginalization:** displaced people experienced marginalization in three category: economic, social and psychological. It is important to understand how resettled people are coping with economic and social status after resettlement. After resettlement, resettled households need better accessibility to financial facilities, accessibility to social welfare programmes.

**Health risk (Morbidity, Mortality and Food security):** After displacement and resettlement, health risk is consequences of malnutrition, inadequate sanitation network, lack of access to water supply and lack of access to subsidized food.

**Loss of access to common property:** The use of local shared resources is an important economic and cultural activities in many communities. Displacement and resettlement process caused loss of access to common property.

**Social disarticulation:** Displacement affects social and community fabric. Most often after relocation, households have to re-built their community fabric in the different location. Resettled households find difficult to maintain community harmony due to social disparities also become difficult to practice cultural festivals and religious beliefs.

#### **2.4. Post resettlement socio- economic characteristic**

Relocation changed social, economic and physical characteristic of urban poor peoples. Relocation directly affects the transportation cost of getting to and from the workplace, school and health institution. Distance location increases transportation cost, especially those associated with longer commute distances. Most researchers have demonstrated that relocation has a negative impact on resettled livelihood (Cao, Hwang, & Xi, 2012; Cavalheiro & Abiko, 2015; Cernea, 1997b; Chimhowu & Hulme, 2006; S. Patel et al., 2015).

Baud, Sridharan, & Pfeffer (2008) mention that urban poor livelihood framework has strong relation with human capital (accessibility to health, education and skill development), financial capital (accessibility to financial institution), re-built household's assets (capital goods), physical capital (accessibility to basic infrastructure) and social capital (community structure, community networks), which is also important to sustain livelihood of resettled households life after resettlements.

Resettled are more vulnerable to access public transportation, formal job, health and other public services. Women and youth have to face new challenges as they have to commute longer distance and have difficulties to travel in the night due to the unsafe environment in surrounding areas. After relocation, resettled households had to spread in distance location, it is very difficult to maintain their valuable social relationship which was build format the previous settlement. Also at new location, resettled households may face rejection from the host community. Furthermore, improvement of resettled households depend upon the opportunity to public services and coping strategy, which is a help to stable their livelihood conditions (Cernea, 1997a; Chimhowu & Hulme, 2006; Choi, 2015; S. Patel et al., 2015).

### 3. RESEARCH METHODOLOGY

The research methodology aimed to achieve research objective, research question and an overview of research design. The research methodology has four-phase; formulation of research and concept development, fieldwork, analysis, discussion and conclusion, shown in Figure 4 and described in the subsequent section.

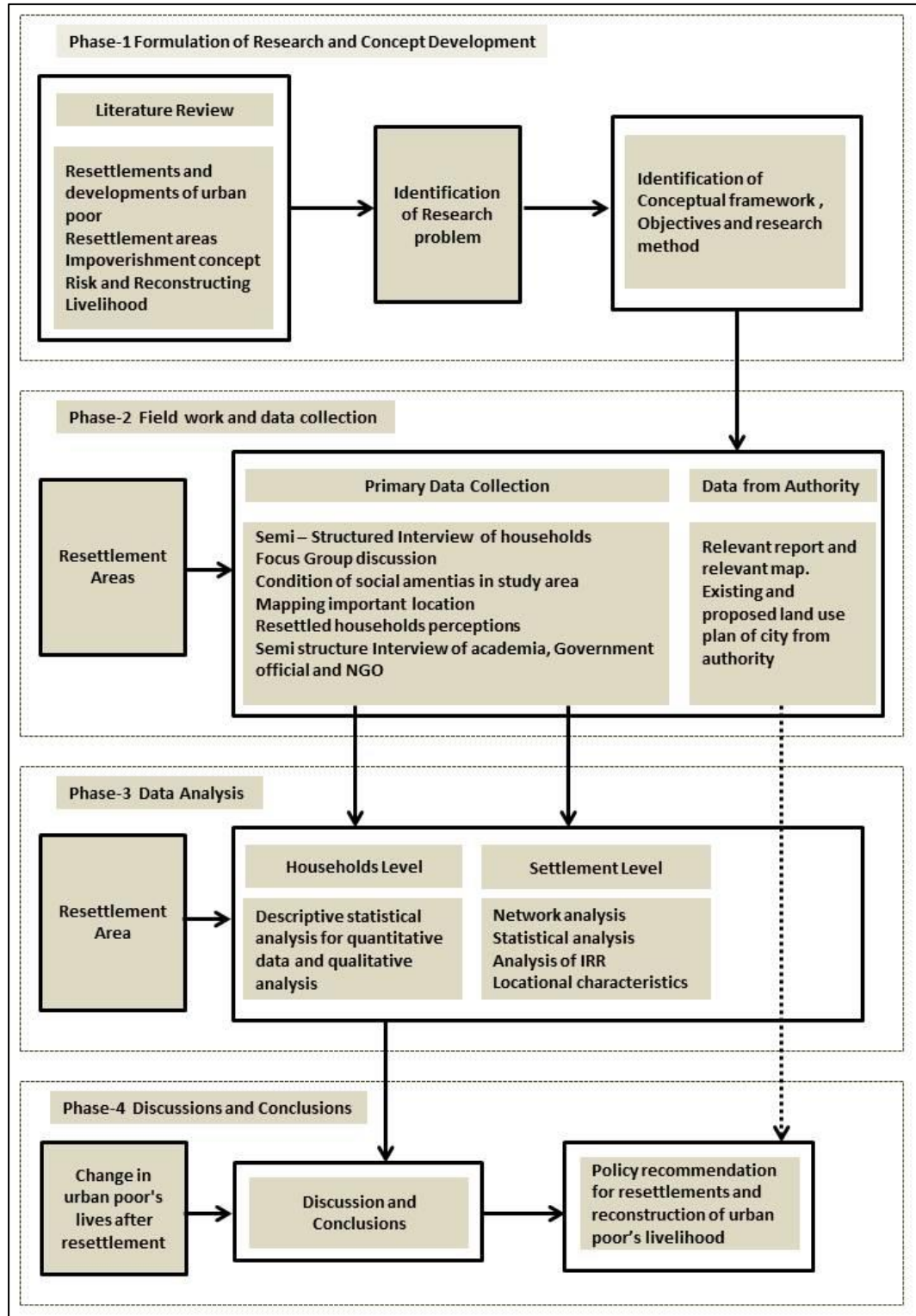


Figure 4 Research Methodology

### 3.1. Formulation of research and concept development

To formulate conceptual framework, Phase-1 focused on the understanding of the theoretical framework of impoverishment risk and reconstruction model (IRR) (Cernea, 1997b) and study of development-induced displacement and resettlement (DIDR) (S. Patel et al., 2015) in Ahmedabad. Table 1 shows, to understand the change in resettled household's lives, the specific indicator was identified based on indicators used by S. Patel et al.(2015) in 2011. S. Patel et al. (2015) used indicators to assess impoverishment risk on four different kinds of resettlement; direct resettlement on BSUP site, displaced households relocated on interim site for a short stay, households resettled on BSUP sites from interim sites, households continuing to living on demolished slum sites in the makeshift shelter. In 2011, indicators used to assess the effect of displacement and resettlement process on households lives. To conduct research, we focus on same indicators to understand the change in resettled household's lives. In 2011, some of the indicators were focused to assess displacement effects such as loss of assets, cost of transporting assets and cost of reconstruction on new plot which area not relevant to assess change in resettled household's lives in 2015. In principle, S. Patel et al. (2015)'s indicators were used to assess change in resettled households lives in 2015.

Table 1 Specific indicators for assess resettled households

<b>Impoverishment Form</b>	<b>Specific indicators used by S. Patel et al.(2015) in 2011</b>	<b>Specific Indicators to revisiting resettlement in 2015</b>
<b>Landlessness</b>	Loss of land interpreted as distant relocation leading to increased distances to livelihood, social amenities, marketplace, etc., as well as loss of access to opportunities, etc.	Land interpreted as distant relocation leading to distances to livelihood, social amenities, marketplace, as well as access to opportunities
<b>Joblessness</b>	Sustained loss of job Loss of working days Increased distance to work and associated transport cost Increased monthly expenditure as percentage of income Increased debt	Employment Working days Distance to work and associated transport cost Increased or decreased monthly expenditure as percentage of income Debt
<b>Homelessness</b>	Loss of assets Cost of transporting assets Cost of reconstruction on new plot Loss of group's cultural space, resulting in sense of placelessness	Group's cultural space, resulting in sense of community building
<b>Marginalization</b>	Lower socioeconomic status in new location Coercive displacement Deliberate subjugation of vulnerable groups, i.e. women and minority communities Hostility from host community Loss of standing in community	Socioeconomic status in new location after resettlement Coercive resettlement Deliberate subjugation of vulnerable groups, i.e. women and minority communities Hostility from host community
<b>Health risk (Food security, morbidity and mortality –health risk interpreted as combination of two categories)</b>	Lack of access to safe drinking water and sewerage Inadequate solid waste management Decreased access to fair price shops (public distribution shops that provide subsidized goods to poor) Decreased access to primary and higher-order health facilities	Access to safe drinking water and sewerage Solid waste management Access to fair price shops (public distribution shops that provide subsidized goods to poor) Access to primary and higher-order health facilities

<b>Impoverishment Form</b>	<b>Specific indicators used by S. Patel et al.(2015) in 2011</b>	<b>Specific Indicators to revisiting resettlement in 2015</b>
<b>Loss of access to common facilities</b>	Decreased access to education and health services School dropout ratio and loss of school attendance days Increased distance, travel cost and monthly cost for education vis-à-vis income Decreased access to hospitals in emergencies	Access to education and health services School dropout ratio and loss of school attendance days Distance to school, travel cost and monthly cost for education vis-à-vis income Access to hospitals in emergencies
<b>Social disarticulation</b>	Fragmentation of social units Dissatisfaction and discord with new community Loss of community institutions Application for transfer to reunite with kin Alienation and abuse of common resources	Community restructuring Dissatisfaction and discord with new community Role of community institution Maintaining community property Application for transfer to reunite with kin Alienation and abuse of common resources

### 3.2. Fieldwork and Data collection

In Phase -2 (see Figure 4), the field visit focused on collecting quantitative and qualitative socio-economic data of urban poor in BSUP sites in 2015. BSUP sites location, sample size, primary and secondary data collection methods discussed in subsequent sections.

#### 3.2.1. BSUP sites and Location

In 2011, Ahmedabad has 5.6 million populations in the municipal area and 6.3 million populations in agglomeration area in 2011, is the largest city of Gujarat state and seventh largest metropolitan in India. The city situated at Sabarmati river and lies between 22° 56' & 23° 08' North Latitude and 72° 30' & 72° 42' East Latitude. The Municipal area administrates by Municipal Corporation, which has 466 sqkm area in 2011. The city limit has been extended time-by-time once peripheral area developed by Ahmedabad urban development Authority (AUDA). AUDA is planning authority and largely cover the Ahmedabad urban agglomeration area, which has 1,866 sq km area (Mahadevia et al., 2014).

There are seven BSUP sites identified based on S. Patel et al. (2015) study. From 2003 to 2011, out of 29,000 displaced household, 3275 displaced households were relocated on various seven BSUP site's location shown in Figure 5. Among them, 609 households were relocated first to an interim site and then again relocated to the BSUP Vatva (S. Patel et al., 2015).

Out of all these sites, only the Vadaj BSUP site was located in western part of the city, all other sites were located in the eastern periphery of the city. All BSUP sites have very different kind of neighbourhood and locational characteristic.

First all BSUP sites were visited during fieldwork to get an overview of the settlement and its surrounding area. After visiting all seven BSUP sites and a primary level observation, a settlement level checklist was carried out for all location. After a primary level observation of all sites, households were identified to conduct the household level survey. During the households survey settlement level interviews were carried

out to get a better understanding of resettled households. The details of all sites and comparison of the factors are worked out in chapter 4 and chapter 5.

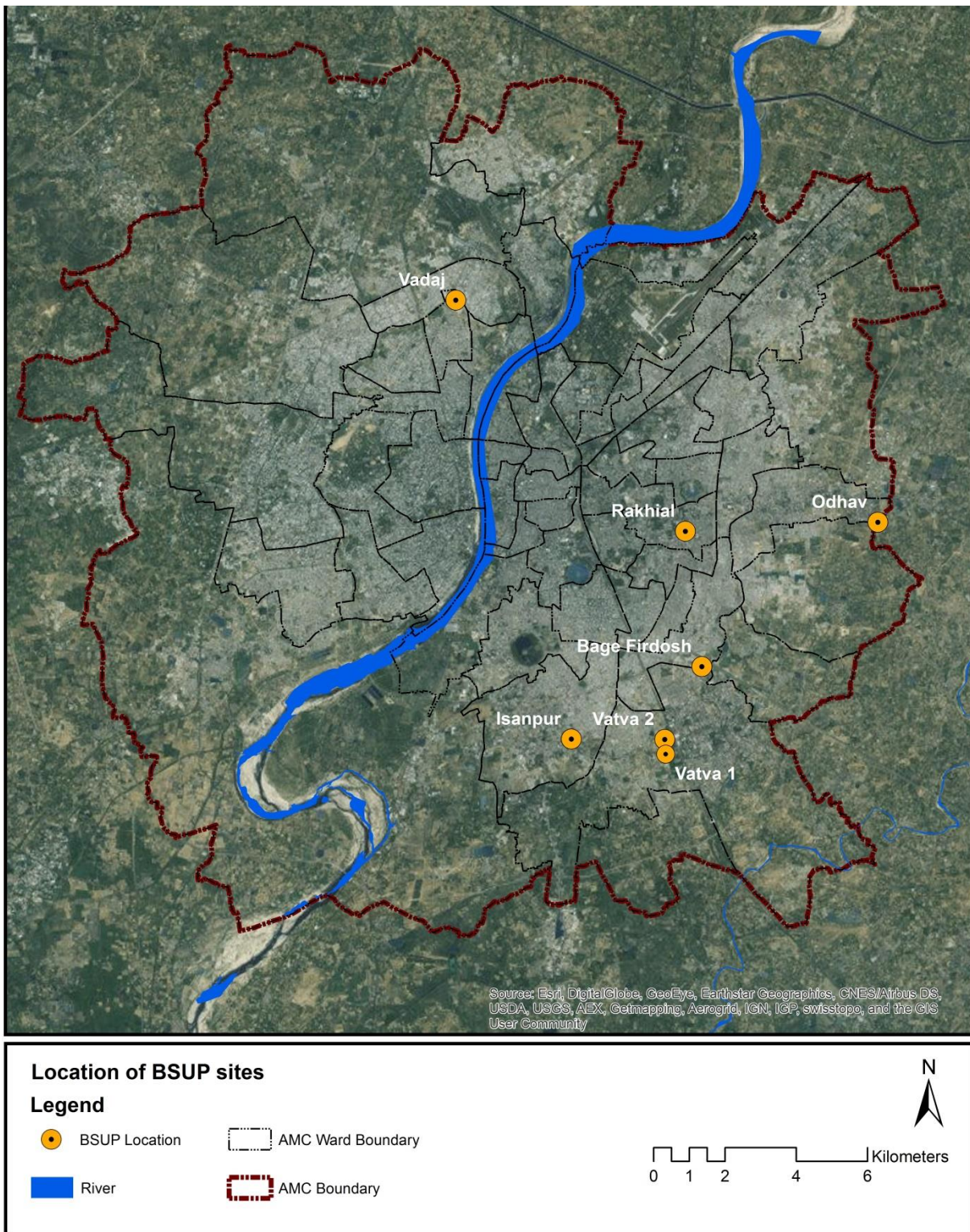


Figure 5 Location of BSUP sites

### 3.2.2. Sample size

The objective of this field work was to revisit resettled households which were already studied by S. Patel et al.(2015). S. Patel et al. (2015) assessed the change in resettled household's lives by a 10% survey of resettled households (396 households of total 3996 households). In their study, out of 396 households, 269 households (10% of 2771 households) resettled in BSUP sites, other 60 households (10 % of 609 households) resettled on interim sites for long duration and 67 households (10% of 670 households) continued to stay on slum demolished site (S. Patel et al., 2015). The focuses of this research to revisit to resettled households relocated on BSUP sites. To access change in resettled households lives need to do 10 % survey or 269 households of total 2717 households (see Table 2) which were resettled on BSUP sites and studied by S. Patel et al. (2015) in 2011.

Table 2 Sample size for household's survey, October 2015

Site	Dwellings constructed	Dwellings allotted	Dwellings occupied	Sample no (10%)
BSUP Isanpur	384	197	172	17
BSUP Vadaj	576	465	395	39
BSUP Rakhial	704	479	422	42
BSUP Bage-e-firdosh	672	472	459	46
BSUP Odhav	320	164	121	12
BSUP Vatva	2768	674	533	51
BSUP Vatva 2	2224	824	615	61
<b>Total</b>	<b>7648</b>	<b>3275</b>	<b>2717</b>	<b>269</b>

Sources: (S. Patel et al., 2015)

### 3.3. Data collection Methods

#### 3.3.1. Primary data collection

Table 3 shows that details of primary data collected during fieldwork. Primary data collection is divided into three parts: 1) Semi-structured interviews of dwellers in all sites. 2) Semi-structured interviews of RWAs members, community leaders and community members 3) Semi-structured interviews of stakeholders such as Government Officials, Academia and NGO's which are working in these settlements.

After visiting all BSUP sites, it was realized that tracing back the same household was very difficult without help of NGO's members and Sejal Patel. Households were identified based on S. Patel et al. (2015) research data with help of NGOs and community leaders. All BSUP site had list of allotted households, we could able to found back resettled households based on Sejal Patel's 2011 household's survey list. Also some of households were missing on BSUP sites list those households traced back with help of local community leaders and NGOs members.

For household's interview, a questionnaire was prepared based on S. Patel et al.(2015) study and modified according to research objectives. S. Patel et al. (2015) households' questionnaire was focused on displacement and resettlement effect on household's lives. In households questionnaire, all question were modified relate to understanding resettled households life after resettlement. Also, market accessibility, economic security (before and after) and household's perception for spending four years on resettlement sites were incorporate in household's survey. Household's questionnaire shown in Appendix A. The questionnaire started with quantitative questions such as ward no, location, house no, household size, education health, income and ended with open-ended question related to perception about the settlement,



change in their lives. In addition, there were qualitative questions asked in between quantitative question such as perception about health and education opportunity in BSUP Sites. It was mixed approach with qualitative and quantitative questions to understand the change in socio-economic characteristic of dwellers.

Table 3 Status of fieldwork survey, October 2015

Primary data collection	No of survey done	Detail description
Households interviews	222	222 households were traced back out of 269. Detail break of households interviews are mention in Table 4
Settlement level check lists	7	To understand condition of social amenities
Discussion with RWAs member and community leaders	7	Three interviews and discussions were carried out with RWAs member in Vadaj, Rakial and Bage firdosh BSUP site. Four interviews and discussions were carried out with community leaders and community members
Discussion with NGOs	4	Two discussions were carried out with Mahila Housing SEWA Trust (MHT) NGO's head and members for Rakhial, Bage firdosh and Vatva 1 BSUP sites. Other two discussions were carried out with SAATH NGO's head and members
Discussion with government Officials	6	Discussions were carried out with official of Housing and Slum networking project department of AMC; Additional city engineer, Assistant city engineer (BSUP projects), Technical supervisor, Assistance city engineer (BSUP finance department) Senior Town planner of AMC Additional engineer of Affordable Housing Mission, Government of Gujarat
Discussion with academia	2	Associate professor, Faculty of Planning, CEPT University, Ahmedabad Anthropologist, PhD candidate, University of Jyvaskla, Finland

To get a complete impression of each BSUP sites, semi-structure interviews with community leaders were carried out with qualitative and open-ended question (see Appendix C). The aims of these interviews were to understand their perception after relocation. Furthermore, NGOs were interviewed, this include also NGOs staff were who had actual ground knowledge of sites and peoples. Government officials were interviewed for understanding the process of BSUP housing and general development of BSUP sites. In addition, settlement level checklists were carried out during fieldwork to identifying the condition of physical infrastructure and status of social amenities with the help of community leaders in BSUP sites. Details of settlement level checklist are shown in Appendix B.

Table 4 shows, detail of household's survey were done during fieldwork. Out of 269 Households, 222 Households could be found back and were willing to participate in this second survey. In total, Rest of 47 households were missing. Among them, 18 household rent out their dwelling unit to other people, 14

households were migrated back to the previous location and another part of the city, 9 households were not willing to participate and 5 households were not available during the survey period. Out of 222 households, 167 household has permitted a recording their interviews. In addition, photos were captured for actual sites situations and household's activities to support analysis.

Table 4 Detail of Households survey, October, 2015

BSUP sites	Households in 2011	Households survey done in 2015	Rent	Migrated	Not willing to participate	Not available	Total missing households
Isanpur	17	17	0	0	0	0	0
Vadaj	39	28	3	3	2	2	10
Rakhial	42	36	2	1	1	2	6
Bage firdosh	46	42	3	1	0	0	4
Odhav	13	9	2	2	0	0	4
Vatva 1	51	42	5	2	2	0	9
Vatva 2	61	48	3	5	4	1	13
<b>Total</b>	<b>269</b>	<b>222</b>	<b>18</b>	<b>14</b>	<b>9</b>	<b>5</b>	<b>47</b>

### 3.3.2. Secondary data collection

Resettled households socio- economic data of 2011 were collected from Sejal Patel. Report documents related residential welfare association (RWA) were collected from NGOs. In addition, spatial data such as infrastructure layer, existing land use of Ahmedabad city, proposed land use of Ahmedabad city and related maps were collected from AMC and AUDA for spatial analysis (see Appendix D).

### 3.4. Data analysis

In phase-3 (see Figure 4), Data analysis was done in two parts: analysis of quantitative and spatial data to investigate the change in households lives, qualitative data analysis to investigate role and influence of different stakeholder. The descriptive statistical analysis was used to interpret interviews and socio-economic data of resettled households.

Resettled household's socio-economic data were coded into Excel and SPSS format for statistical analysis with reference to 2011 household's socio-economic data. Resettled household's perception, stakeholder's discussions and settlement level checklist were transcripts into excel file for detail analysis. The GPS points of BSUP location were converted into point shape file for spatial analysis with.

Figure 6 shows, methods used for analysis of data. Qualitative data, the perception of resettled households and stakeholder's opinion were identified to understand the change in resettled households lives. Further to assess distance to a workplace, public transport, distant to school, distance to the marketplace, monthly income and expenditure, travel cost were identified to understand the degree of impoverishment in BSUP sites using mean, median, mode and frequency tool in SPSS and Microsoft Excel. Network analysis tool and spatial locations were used to understand accessibility to health facilities and locational characteristics of BSUP sites. Furthermore, the analyses finding were compared with the previous socio-economic condition of households to understand the change in resettled household's lives.

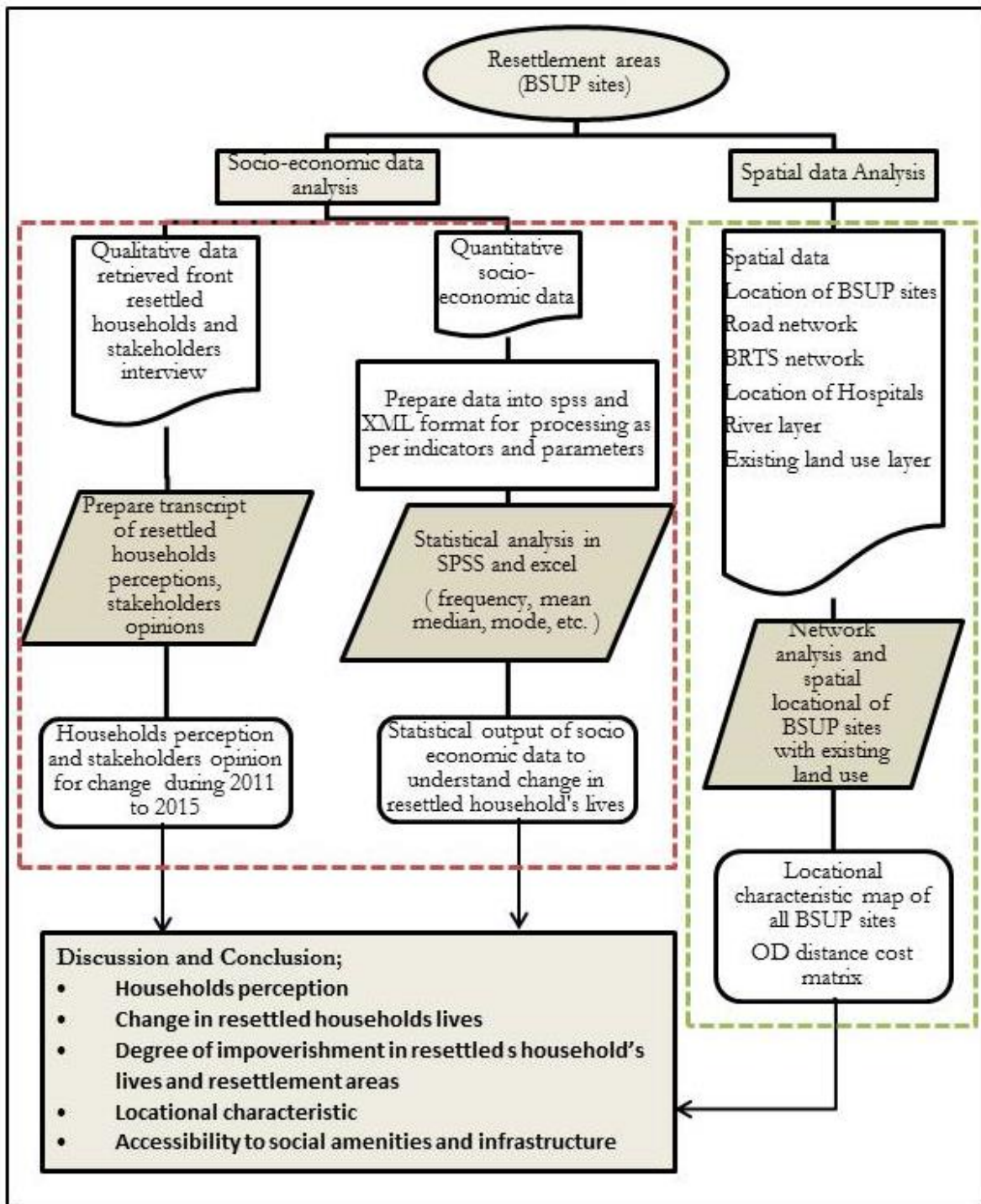


Figure 6 Research Method

### 3.5. Result and discussion

In this phase, the results were discussed in the form of socio-economic condition of resettled households with reference of previous socio-economic condition at household’s level, settlement level and neighbourhood level. Furthermore, locational characteristic and analysis of impoverishment form were discussed to understand the change in resettled household’s lives (see Chapter 4 and Chapter 5 ). The findings were used to derive policy recommendation for resettlement policy (see Chapter 6 and Chapter 7).

## 4. CHARACTERISTIC OF BSUP SITES

This chapter includes a discussion about characteristics of BSUP housing with respect to their surrounding land use and the location of BSUP housing within the AMC ward boundary. Ward Boundary is a smallest administrative unit, which can provide a good understanding of the distribution of land use and accessibility to city infrastructure.

In addition, locational characteristics give a good understanding of changes in resettled lives after resettlement. During household's interview, we found that resettled households had positive perception about BSUP site location, which was located near residential area than other BSUP sites.

This chapter includes discussion about the distribution of different community in BSUP sites. Households perception about change in their lives, change in occupation activity, perception about accessibility to basic infrastructure and perception towards RWAs after spending 4 years on BSUP sites. Furthermore, this chapter includes the initial observation of each BSUP site and discuss with the current socio-economic situation.

Change in occupation is discussed with five occupation activities; 1) Employer 2) self –employment 3) salaried 4) Wage labourer 5) Non-worker.

- 1) Employer means people who own small-scale business or organisation and employees other people such as food stall owner, tea stall owner.
- 2) Self-Employment means an individual person, who works for himself instead of working for employers such as auto Driver, tailor and garment trader.
- 3) Salaried means a person getting periodic payment from an employer, sometimes it may be specified in the employment contract or mutual understanding between an employee and an employer such as factory worker, domestic helper, mechanic and salesman.
- 4) Wage labourer means a person involve in formal or informal. Also, getting employment based on an availability of works such as construction labour, a factory worker.
- 5) Non-worker means a person who is not engaged in paid employment such as retired person, widow.

### 4.1. BSUP Isanpur

BSUP Isanpur site is located near the Isanpur village, in the eastern periphery of Ahmedabad city. There were 12 blocks constructed in the BSUP site. Each block has 32 houses. Out of 384 houses, 383 houses were allotted to slum dwellers and displaced people from the slum. The Hindu community occupied all houses and majority of them are 'other backwards class' (OBC).

Figure 7 shows that the Isanpur settlement is surrounded by an industrial area, underdeveloped residential area commercial area. However, it was located at the periphery of city boundary so infrastructure development was limited and focused on only industrial use. Due to high industrial activity and lack of basic infrastructure (streetlight), women and children experienced unsafe travelling during the night. During field visit, we found that some of the internal roads were not constructed, households are not happy with the location and social composition of BSUP site. Furthermore, resettled households experienced difficulty to access workplace, school and health facilities due to lack if public transportation in surrounding areas

In addition, access to social amenities has become an important factor to improve resettled households. In 2011, none of the households had the 'Below poverty card' (BPL) and 'Adahar card' (Social Support card), which are important social security card to get subsidies food grains from the public distribution

centre and direct benefits transfer of funds into their bank accounts. So far, after resettlement, 53 % of Households had BPL card and 94 % household had Adahar card.

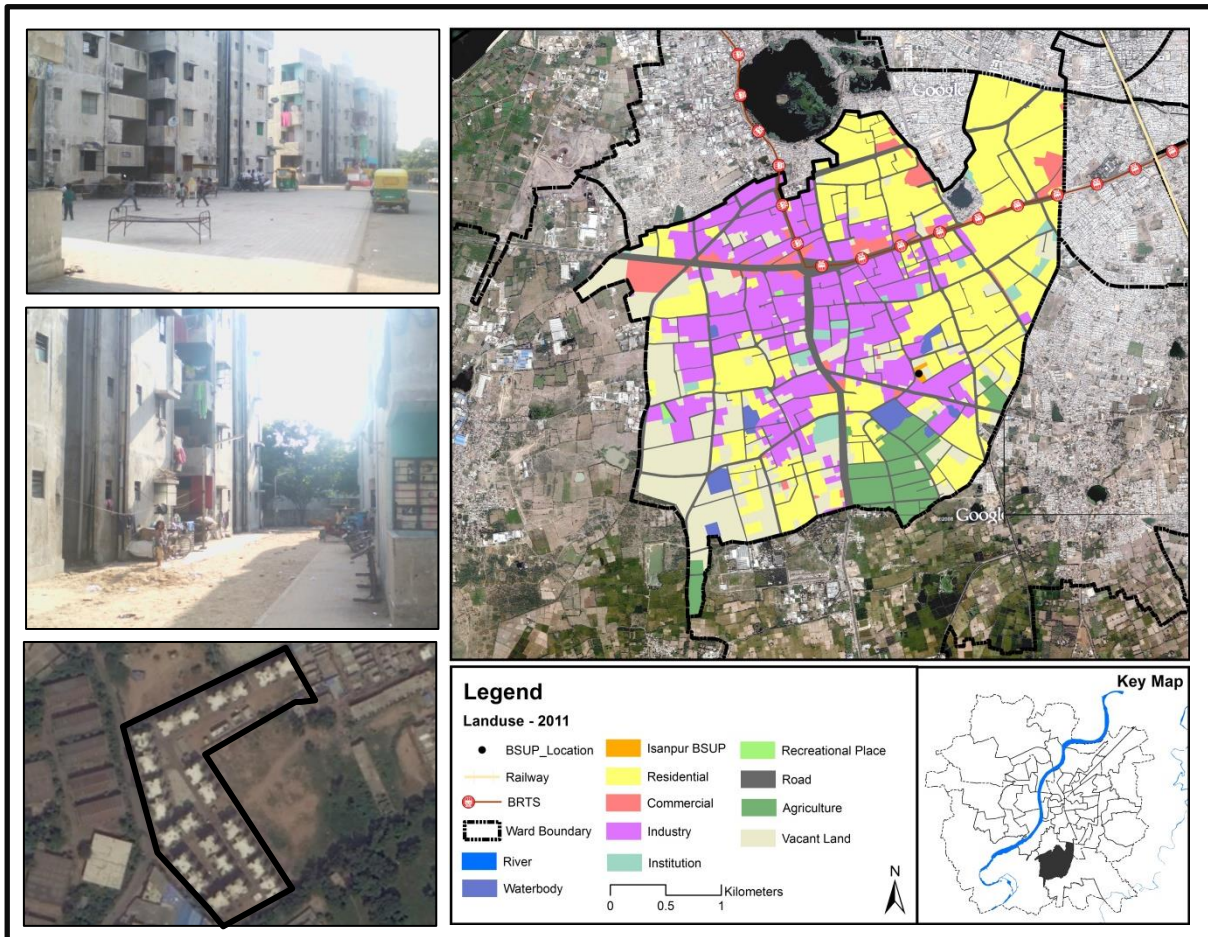


Figure 7 Characteristic of Isanpur BSUP and surrounding area

From 2011 to 2015, many people had to change their occupation activity from daily wage labour to self-employment. In 2015, only 33 % households are currently involved in daily wage labour activity (see Figure 8). In addition, households were having trouble to find employment in surrounding industrial area due to lack of skill for the industrial worker. During field visit, we found that SAATH-NGO which was working in this BSUP site; tried to implement skill development program with the help of AMC. SAATH-NGO could not able to implement development program due to lack of finance and lack of basic infrastructure to start skill development program in BSUP site.

In addition, all households had positive perception related to the basic infrastructure such as accessibility to water, sewage network. Out of 17 households, 14 households were paying annual property tax to AMC for basic service. During household's interviews, a member of households mentioned, *"we got a good house with toilet and water connection. Now we do not have to face problems in time of rain and flood. The only problem is cleanliness and we have to pay property tax. Also, the quality of water is not good."* Interview IP1. All households are using untreated water from the common underground water source that is highly contaminated with industrial waste. The quality of water was not safe for drinking purpose and daily use; it increased risk of health issues in settlement

After five years of resettlement on this site, households had a different perception for change in lives, which was mostly related to livelihood. Households had to face drunken people and criminal people in and around the settlement. From household's interviews, we found that households often compare current residential location with previous location irrespective of infrastructure connectivity or quality of life. An interviewee mentioned, *"Nothing is good here. We were relocated from city to the area where everything is far from here. Still we are managing everything. What can we do, we do not have any option to go to another place. We do not want to live with a different section of society. We have to travel more than 20 km every day to work. In addition, we have to pay for everything. We do not have money how can we afford. We only got a good house but not good neighbour"* Interview IP11. In the settlement, many households came from different slums and communities. Due to different social network and belief, the system creates disparities between resettled households.

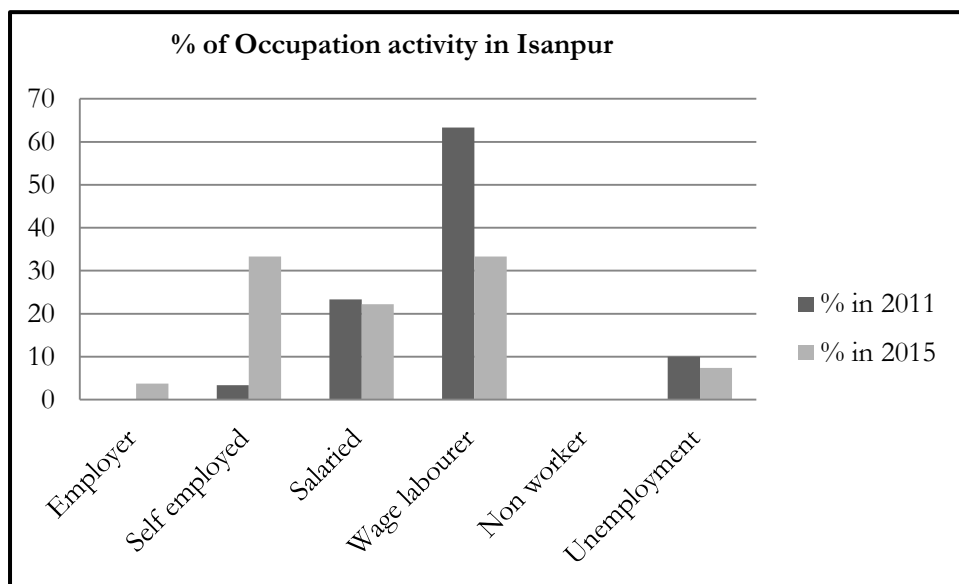


Figure 8 Occupation in Isanpur BSUP in 2011 and 2015

Some households expressed positive change after resettlement related to physical infrastructure and accessibility to basic services. *"This area is far from the previous location. Now we have our own house and do not have water problems. After coming here, our children are getting married. Only problems here are the community and it is not a good area, but life is better than before. Only thing is, government should do more for us and our families"* Interview IP7.

After five years of resettlement, AMC was not able to create Residential welfare association. Implementation of RWA is still under process, mainly of two reasons. 1) There were some of the households that did not want to pay 2.6\$ (250 INR) to the NGO which is working to formulate RWA. And 2) households were not properly aware of functions of RWA and responsibility of RWA members.

#### 4.2. BSUP Vadaj

Vadaj BSUP is one of few sites, which are located in western part of Ahmedabad city. There were 18 blocks and 576 house constructed. It was one of early resettlement site. Majority households were belonged to other back word cast (OBC) of Hindu community.

In Figure 9, Land use map shows that the Vadaj BSUP houses are located in a highly residential area. During fieldwork, we found that among all BSUP settlements, households were more satisfied with that relocation on this site (see Table 6, page-38). However, many households changed their occupation

because of better opportunities on this site. In addition, households believe that they have good accessibility to public transport, health and school compare to other BSUP sites.

In 2015, households have more accessibility to social amenities than 2011. In 2015, 46% households had BPL card, compare to 2 % in 2011. In addition, 61 % of households had Adhar card (Social support card). The increase in BPL cardholder shows that more households are getting access to the public distribution centre for subsidized food, grain, and getting other government social benefit through Adhar card. Also, 70 % of households paying property tax in 2015 compared to 10 % in 2011.

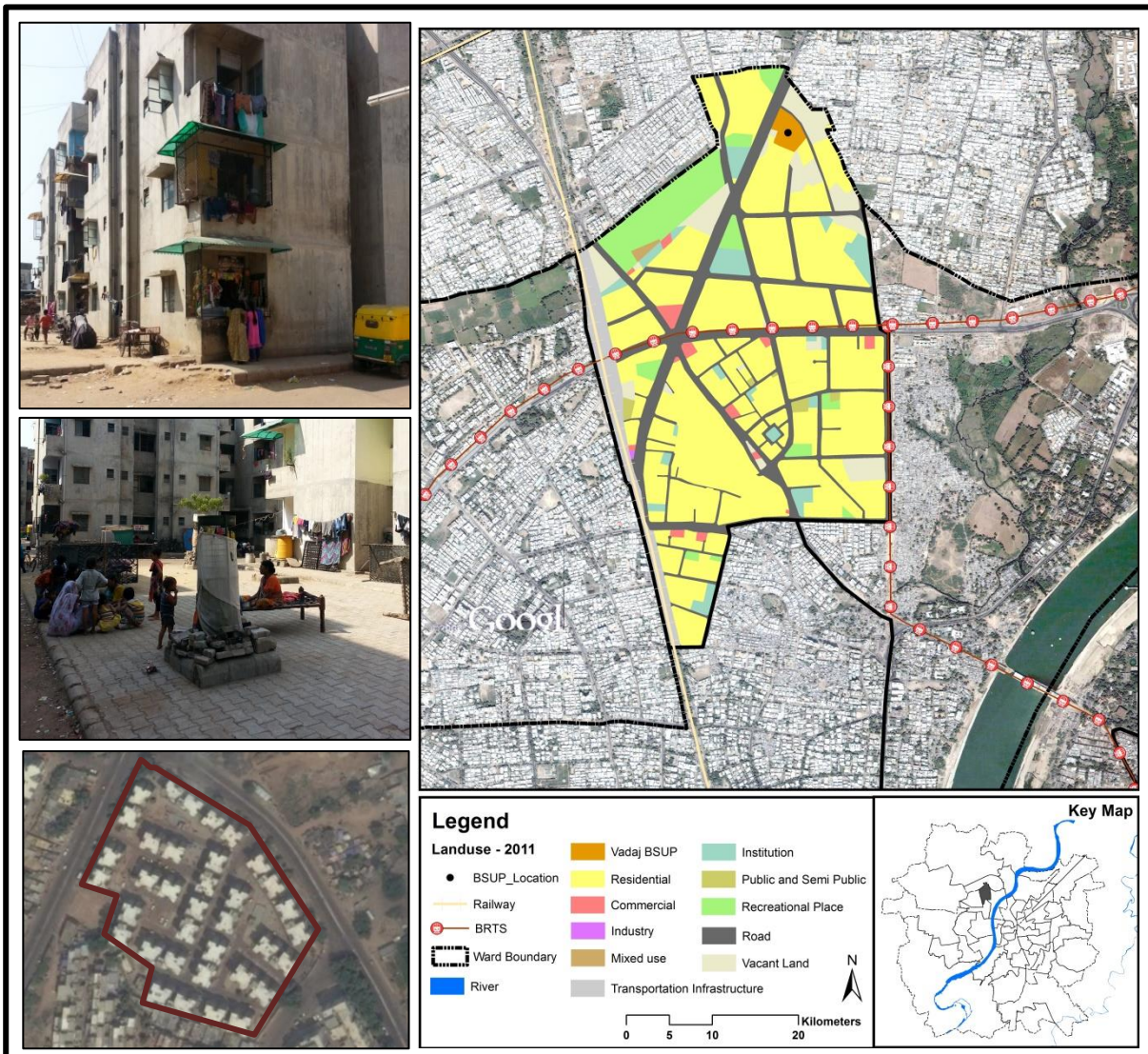


Figure 9 Characteristic of Vadaj BSUP and surrounding area

Many people changed their occupation from daily wage labour to self-employment during 2011 to 2015 (see Figure 10). In 2015, 18 % people were working as self-employed compared to 32 % in 2011. Change in occupation activities happened because of new opportunities in the surrounding of Vadaj BSUP site. The site is located in a new developed residential area so in this site households found lot of potential to engaged in new livelihood activities like opening a small shop, rickshaw driver, working in the surrounding area as domestic helper and also some households started small scale enterprise such as travel agency, tea stall, food stall, vegetable vendor. For example, some households who are living on the ground floor,

opened small shops on their balcony and community open space, to generate additional income for families (see a picture in Figure 9.).

During the focus group discussion with community leaders and resettled households, we found that households were very happy about their settlement location and physical infrastructure like school and public health centre. Even one of the household's member mentions that "After resettlement, our life become good here. I know we have a lot of problems in our lives but living here in this location our lives really improved and we had a better situation than in the previous location" (focused group discussion) Thus households have a good perception about their location and economic activity. Households had negative perception of the quality of infrastructure. An interviewee mentioned that "our house's condition and house infrastructures such as sewage line and water supply line are started deteriorating just after seven years of construction" ( during the discussion with RWAs members and resettled households). Therefore, some of the households were not willing to pay for maintenance of infrastructure because of uncertainty about getting the legal document of the housing unit from AMC.

Overall households were satisfied with getting a new house, accessibility of better infrastructure and a good opportunity for their children. Households were experienced negative perception related to their community from surrounding neighbourhood community. Vadaj BSUP housing is surrounding with middle-income group housing and find difficulty to synchronize with another income group of surrounding neighbourhood. One of community leader mentioned that "some of the nearby housing society look at as slum dwellers despite living in better condition. They are not accepting our community somehow." (Focused group discussion)

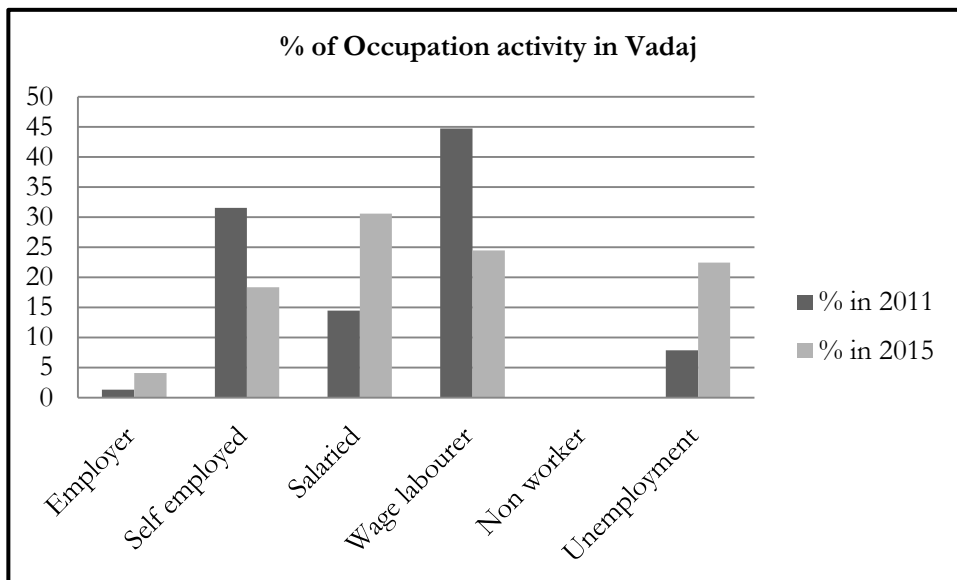


Figure 10 Occupation activity in Vadaj BSUP in 2011 and 2015

In this settlement, Residential welfare association was fully formulated and working as normal other housing societies. Households were aware of the role and responsibility of RWA. In addition, the residential association was taking care of all common infrastructures in housing. According to RWA members, they were working with AMC to resolve their due payment and getting funds for improving house infrastructure quality.

#### 4.3. BSUP Rakhial

Rakhial BSUP site is located near the city centre in the eastern part of Ahmedabad city. There were 704 houses constructed in 22 blocks. The majority of households were belonged to Muslim community that were displaced from the Sabarmati riverfront slum areas.



Figure 11 shows, Rakhial BSUP housing located in a small-scale industrial area and very few surrounding areas have residential landuse. Rakhial BSUP has good accessibility to public transportation. Households can access Ahmedabad Municipal Transport Service (AMTS) and Bus Rapid Transits Service (BRTS) within one kilometre from their location. Despite good public transport accessibility, households had a very negative perception about the spending of money on transport. An interviewee mentioned, “*Earlier work was nearby now we have to travel more than 10-12 km. So mostly, we used bicycle and sometimes we go to work that far if the contractor is ready to pay for shuttle rickshaw. If we use BRTS every day it would cost us additional US\$ 14.80 (1000 INR)<sup>2</sup> per months.*” (Interview R31, Construction worker).

After spending more than five years in this location, Households had very poor accessibility to the public distribution centre. In 2015, only 29% of households had a BPL card compared with 24 % in 2011. While 76% of households had an Adhar card in 2015. In 2011, none of the households was paying property tax while 83% of households were paying property tax in 2015.

The settlement is located near an industrial area; very few households were able to work in the surrounding industry. During 2011 to 2015, almost 20% of the resettled people changed their occupation activity from wage labour to self-employment activity (see Figure 12). The reason of this change in economic activity was long commuting time to work and lack of skill to work as industrial labour. Most of the households were shift from wage labour to rickshaw driver. Almost 24% of people were working as auto rickshaw driver. Also, Rakhial BSUP housing was located in industrial area so female workers who were working as domestic helper in 2011, had to involve in home based activities such as tailor and embroidery in 2015.

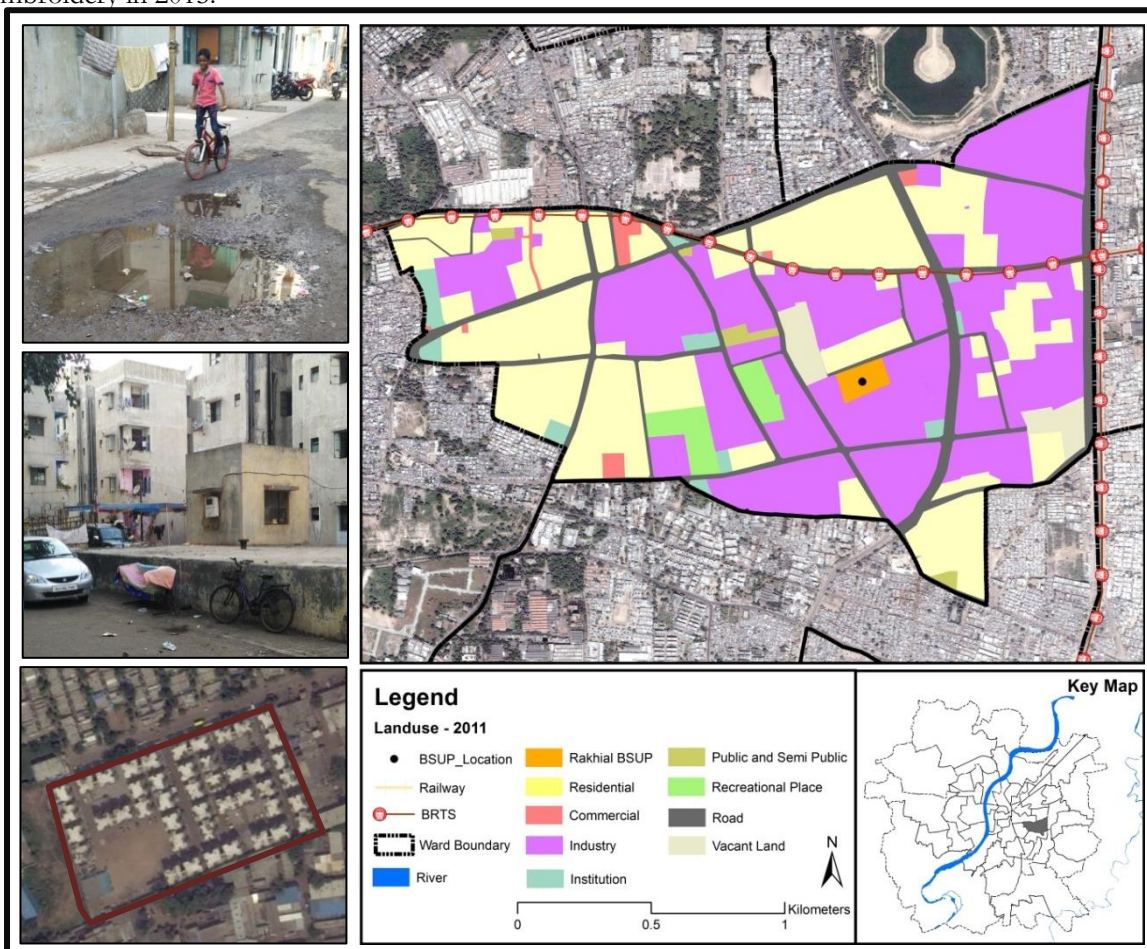


Figure 11 Characteristic of Rakhial BSUP and surrounding area

<sup>2</sup> In Rakhia BSUP, resettled households had US\$ 166 average monthly income and US\$139 average monthly expenditure in 2015. As per exchange rate of 1USD= INR 65 prevailing in October 2015, when the field work was conducted (<http://www.xe.com/currencytables/?from=INR&date=2015-10-08> )

During focus group Discussion we found that, after resettlement, in 2011, availability of water supply was irregular. AMC’s workers were not maintaining solid waste in the site in 2011. After formulation of RWA, RWA took the initiative to resolve issue of water availability and solid waste management with the help of NGOs and AMC. As per RWA members that all resettled households are participating in maintaining common infrastructure. Rakhial BSUP settlement has functioning primary health centre and primary school.

During fieldwork, we found that households had a mix perception about spending five years in the settlement. All household were happy about the physical infrastructure such as getting a house, water supply, sewage and accessibility to transportation. Households had a negative opinion related to the quality of drinking water they are getting and industrial area. In addition, the internal road was not in good condition and sewage system was not working properly because of poor construction quality.

An interviewee mentioned that” *we got a good house and have water availability for every day but we do not like the industrial pollution here. But we are happy because we don’t have any flood problems in monsoon*” (Interview R6). Still many households had a positive perception of this settlement because they believe that they have a better location than other BSUP sites and all people are belongs to the same community.

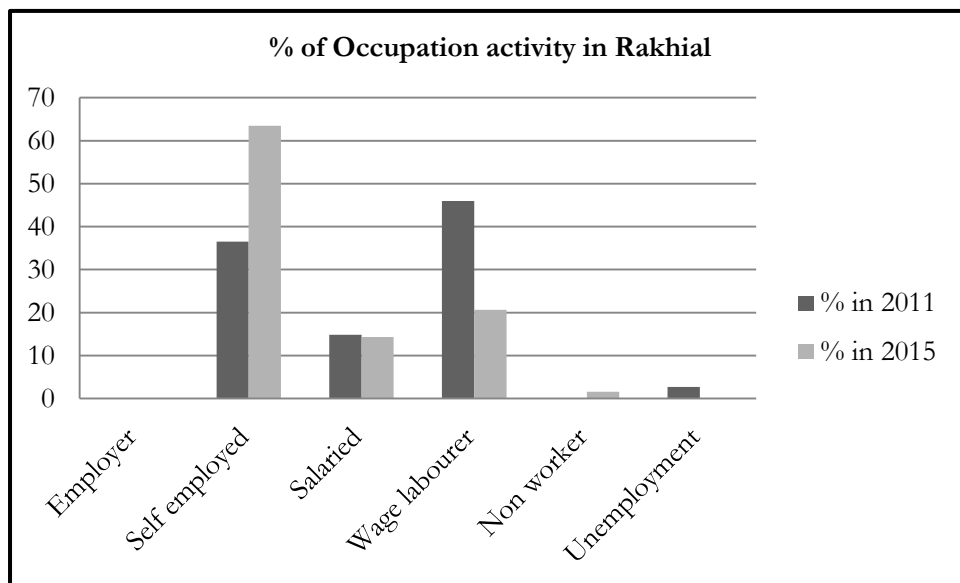


Figure 12 Occupation activity in Rakhial BSUP in 2011 and 2015

Also during the focus group discussion and interview, community leaders and households expressed uncertainty of infrastructure services after 4 years. Right now AMC is taking care of common infrastructure electricity cost and major infrastructure maintenance. Households did not pay any instalment after resettlement. Thus, households had no idea about how they are going to pay their beneficiary share to AMC because AMC could not able to finalized access to subsidized credit to repay resettled household’s beneficiary share.

**4.4. BSUP Bage Firdosh**

Bage firdosh BSUP site is located in the periphery of eastern Ahmedabad city. There were 992 houses constructed in 31 blocks. In this settlement, 95% houses were allotted to the Hindu community. Rest of the houses were allotted to Muslin and Christen communities.

Figure 13 shows the location of Bage firdosh BSUP site that is located 21 kilometres from the city centre of Ahmedabad. This area has good developed residential activity. Surrounding areas have middle-income group housing. From Bage firdosh BSUP, households can access to BRTS and AMTS bus service within one kilometre.

In 2015, 24% households have access to the public distribution centre while in 2010 only 7 % households had BPL card. Also, 70 % household have Adahar card. During a household interview, we found that many households had applied to get BPL card but AMC was not issuing more BPL card in this area. Some BPL cardholders are not able to access the public distribution centre at the current location because the card was issued at the previous location. Therefore, those households have to travel more than 15-20 kilometres to buy food and grains from the public distribution centre. Percentage of households who are paying house tax is increased from 4.3 % in 2010 to 71% in 2015.

Figure 14 shows that there is no major change in occupation activity in Bage firdosh due to lack of economic opportunity in the new location. Therefore, most of the households have the same occupation since displacement. There are few people working in the surrounding area. However, Bage fordosh is located in a residential area; there are opportunities to work as a domestic worker if they get support from NGOs and government.

During field visit, we found that despite located at the outskirts of the city, Households had positive perception about safety and security. Moreover, households had positive perception about basic infrastructure but had negative perception about the increasing cost of living in this settlement. During field visit, an interviewee mentioned that "My husband is working near V.S.Hospital. He has to travel everyday more than 30 km for work and it cost additional 22\$ (1500INR)<sup>3</sup> per month. In addition, here we have to pay electricity, water and everything. Everything is costly here. Before work was near our house" (Interview B16).

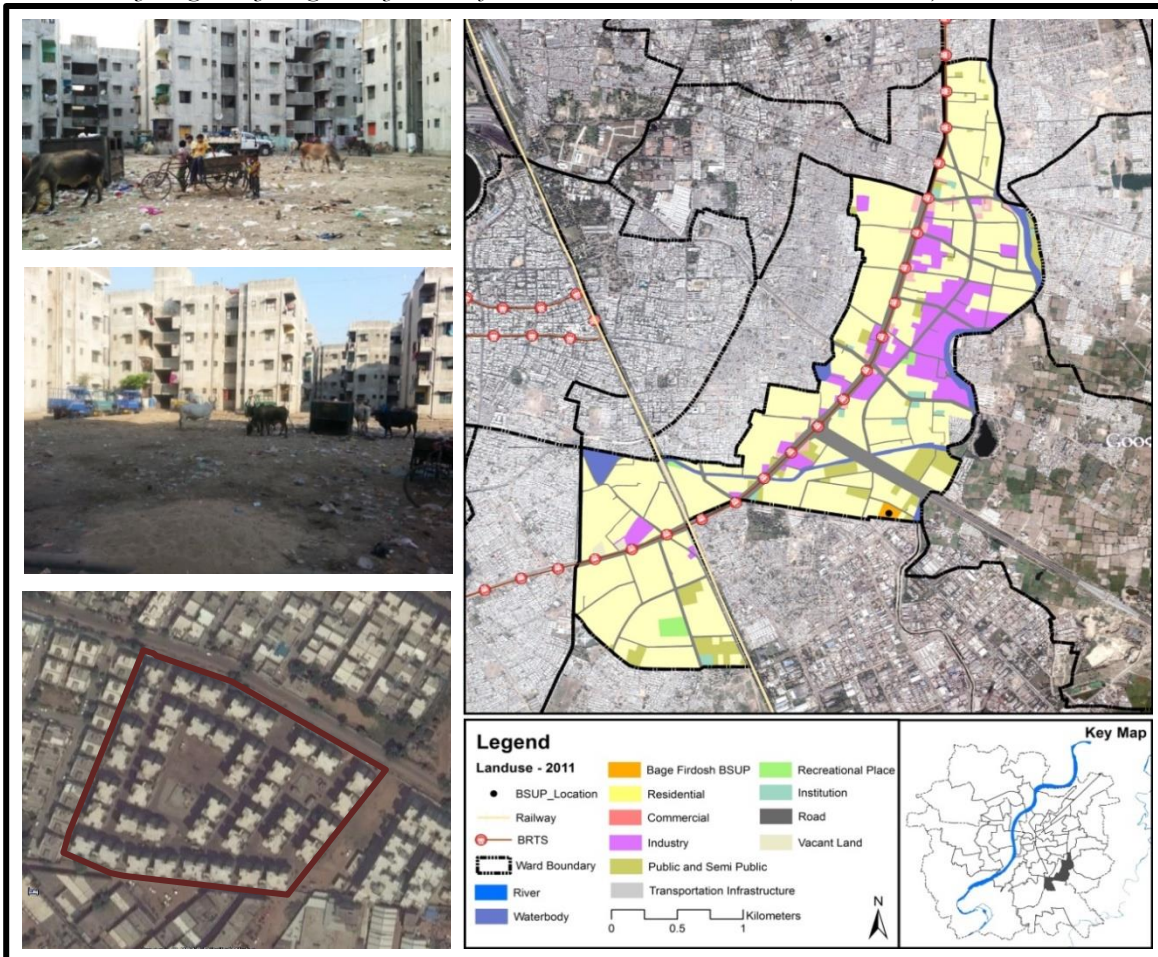


Figure 13 Characteristic of Bage Fordosh BSUP and surrounding area

<sup>3</sup> In Bage firdosh, resettled households had average US\$ 177 monthly income and average US\$ 132 monthly expenditure in 2015. As per exchange rate of 1USD= INR 65 prevailing in October 2015 when the field work was conducted (<http://www.xe.com/currencytables/?from=INR&date=2015-10-08> )

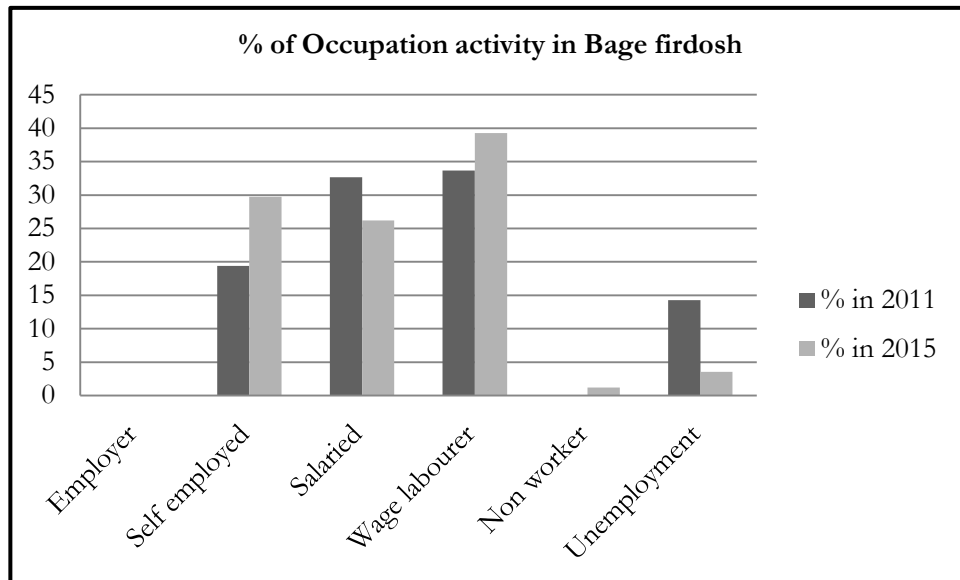


Figure 14 Occupation activity in Bage firdosh BSUP in 2011 and 2015

Most of the households mentioned during household interviews that there were big problems of solid waste disposal in the settlement. Most of households disposed of their solid waste in open space. Moreover, there was irregular collection of solid waste by AMC (see Figure 13).

In addition, RWA was formulated long time ago in this settlement but most of households were not aware of RWAs function and member of RWA. We found that RWA was inactive about some issue like maintenance of open space, disposal of solid waste, shown in Figure 13. The conflict between different casts was one of a reason for inactive RAW.

#### 4.5. BSUP Odhav

Odhav BSUP site is located in the outskirts of eastern Ahmedabad city. There were 320 houses constructed in 10 blocks for urban poor. In this settlement, 92 % houses were allotted to OBC and rest of the houses were allotted to the schedule cast (SC) households of the Hindu community.

In Figure 15 shows the location of Odhav BSUP sites, which is located in a heavy industry area on the border of Ahmedabad city. Because of the heavy industry, infrastructure development was limited to industry. Households have to travel more than average 2 kilometres to access public transportation. Households were frustrated because of lack of social facilities. During interview, many people mentioned safety and security the settlement. In addition, women and children are not safe to travel at night because of lack of streetlight in settlement and its surrounding area. Another major issue is travelling for work, school and health centre from this location. Even households had to travel on average more than 3 kilometres for buying food and vegetable for daily consumption.

In 2015, Almost 46 % households had the BPL card compare to 7 % in 2011. In addition, 46% households had the Adar card in 2015. Households had to travel on average more than 5 km to access the public distribution centre despite an increased number of BPL cardholder in 2015. In addition, 50 % households were paying property tax in 2015 compare to 0% in 2011. After 5 years of settlement, none of social and physical infrastructure was developed in and surrounding BSUP site.

After spending 5 years in this location, almost 15% people changed their occupation activity from self-employment and salaried to daily wage labour due to the distance to work location (see Figure 16). In addition, availability of the public transportation is one of major issue to change occupation activity in

Odhav BSUP. Currently, most of the people are working as construction labour and daily worker in the nearby area. During household's interview, an interviewee expressed that "There is no work here, before I was vegetable vendor, after coming here I started paddle rickshaw for some time in V.S.hospital area. Now I am working in packaging industry as daily labour and sometime I worked as construction labour." (Interview O10).

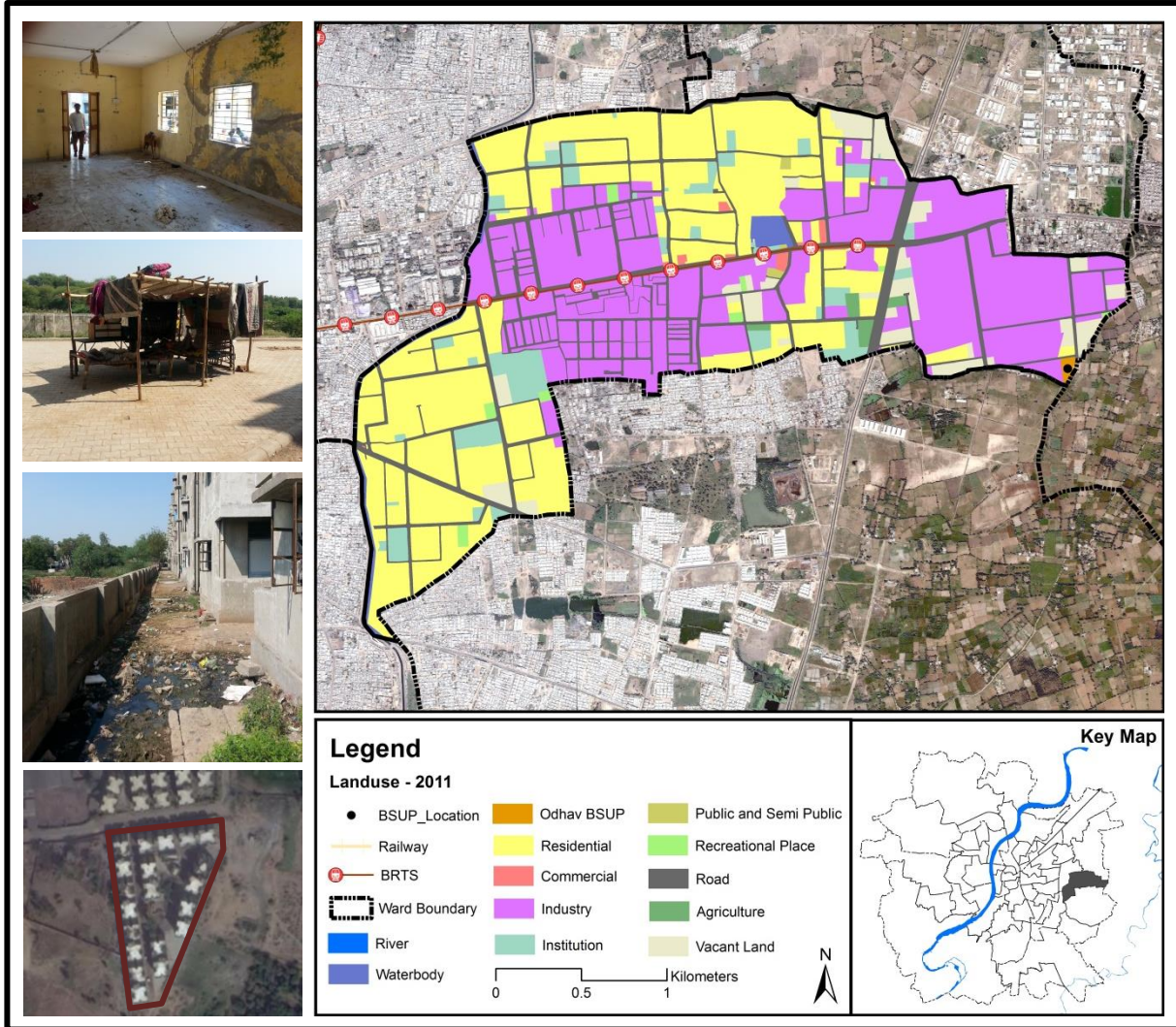


Figure 15 Characteristic of Odhav BSUP and surrounding area

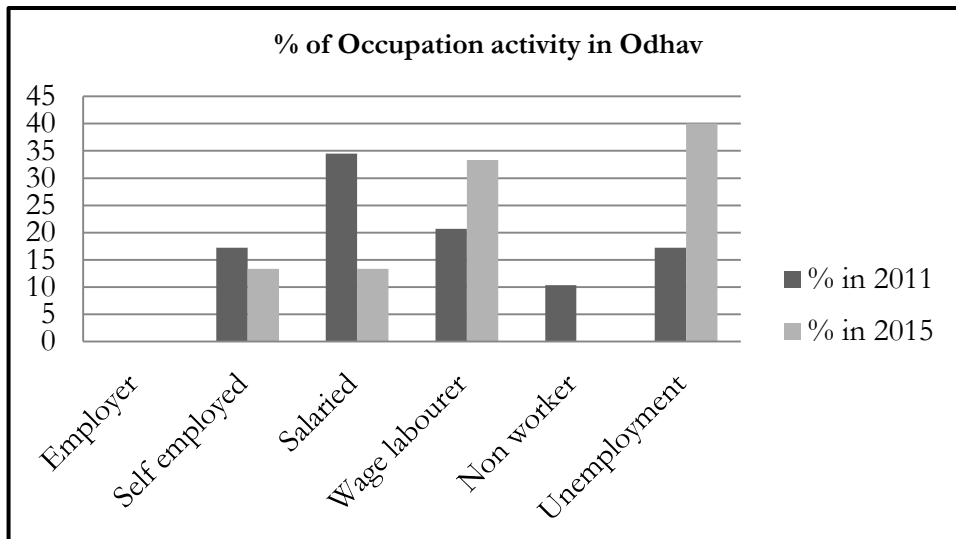


Figure 16 Occupation activity in Odhav BSUP in 2011 and 2015

Households had negative perception about basic services in the settlement, mostly related to availability of water supply and quality of water. As per households, many people are suffering from waterborne diseases such as typhoid fever, gastroenteritis, and jaundice. Ground water is polluted because of industrial waste and chemical. Moreover, high levels of air pollution adversely affected people’s health and trigger greater health risk to children and old age people in the settlement. In addition, old age people had to live in open space because their allotted house was on the fourth floor and was difficult for them to climb staircase every day (see Figure 15).

Figure 15 shows that, primary health centre and primary school was constructed. Currently without functioning, both amenities buildings are abandoned and not maintained by the community or AMC. One of the reasons is that the formulation of RWA is still under process because of distrust within the community, no one wants to take the initiative to be part of RWA and took responsibility to maintain of common infrastructure. Even settlement had an irregularity of disposal of sewage and solid waste problems by AMC, it is creating an unhygienic condition in settlement.

**4.6. BSUP Vatva**

Vatva BSUP site is located in the periphery of eastern Ahmedabad city. AMC constructed the largest BSUP site in the Vatva area. The entire site is divided into three large clusters of BSUP housing; 1) Sadbhavna nagar, 2464 houses in 76 blocks (Vatva-1). 2) Ushabhao Thakre nagar, 960 houses in 30 blocks (Vatva-2). 3) Vasant gajendra gadkar nagar, 1568 houses in 49 blocks (Vatva-3). There were two more clusters constructed by AMC. Currently, those clusters were not allotted to any of slum dwellers.

Household who were displaced from Riverfront, BRTS and Kankariya Lake development projects area, were directly relocated to Vasant gajendranagar and Sadbhavna BSUP housing. The Muslim community was relocated to Vasant Gajendra nagar housing while Sadbhavana nagar has mix religion community Muslim and Hindu. Households who relocated to the interim site after displacement, some households resettled in Ushabhav Thakre nagar and rest of them resettled in Sadbhavna nagar. The majority of them belong to the Hindu religion community.

Vatva BSUP is located 12 kilometres from city centre. Figure 18 shows the characteristics of land use of surrounding Vatva BSUP housing. Vatva area is in the transition phase of rural to urban area. This is one of reason to have residential, industrial and agriculture land use in the same area. In addition, it has better economic opportunity than other BSUP sites. This is only BSUP site where AMC built a higher secondary school and common water distribution plan for entire settlement.

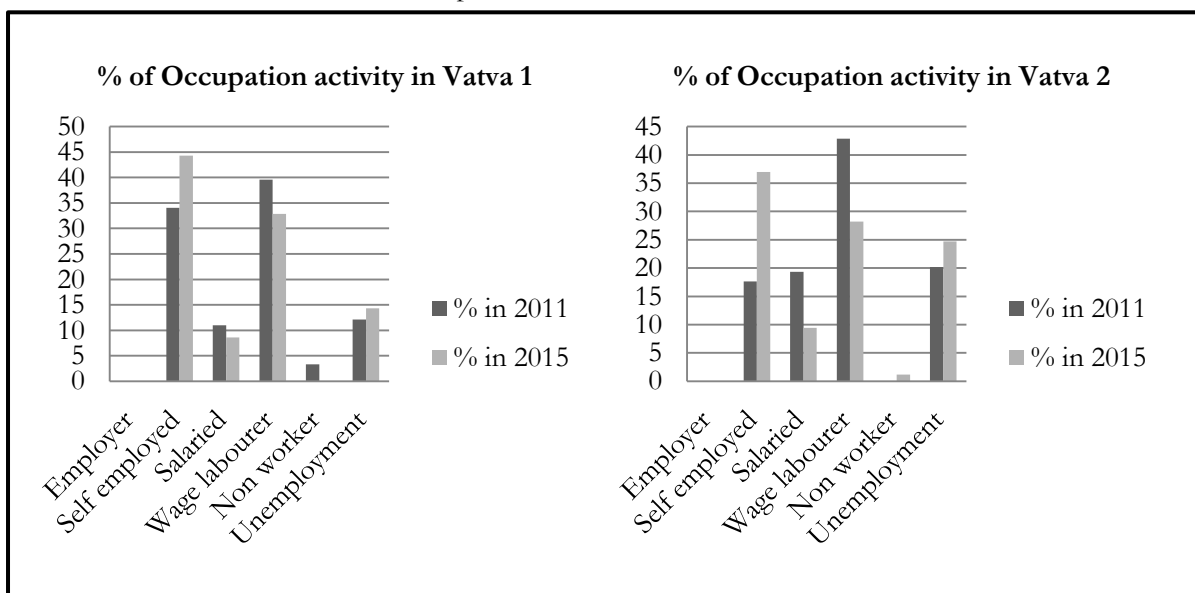


Figure 17 Occupation activity in Vatva BSUP in 2011 and 2015

Figure 17 shows, occupation activity of households from 2011 to 2015; compare to 2011, people who had fixed salaried income activity is decreased to less than 5% in Vatva 1 and less than 10 % in Vatva. During interview, we found that change in economic activity had mainly two reasons 1) increasing travelling cost to work location 2) no increase of income. In addition, more households are engaged to self-employment activity in vatva 2 sites such as vegetable vendor, house painter, flower vendor, and food stall in surrounding area.

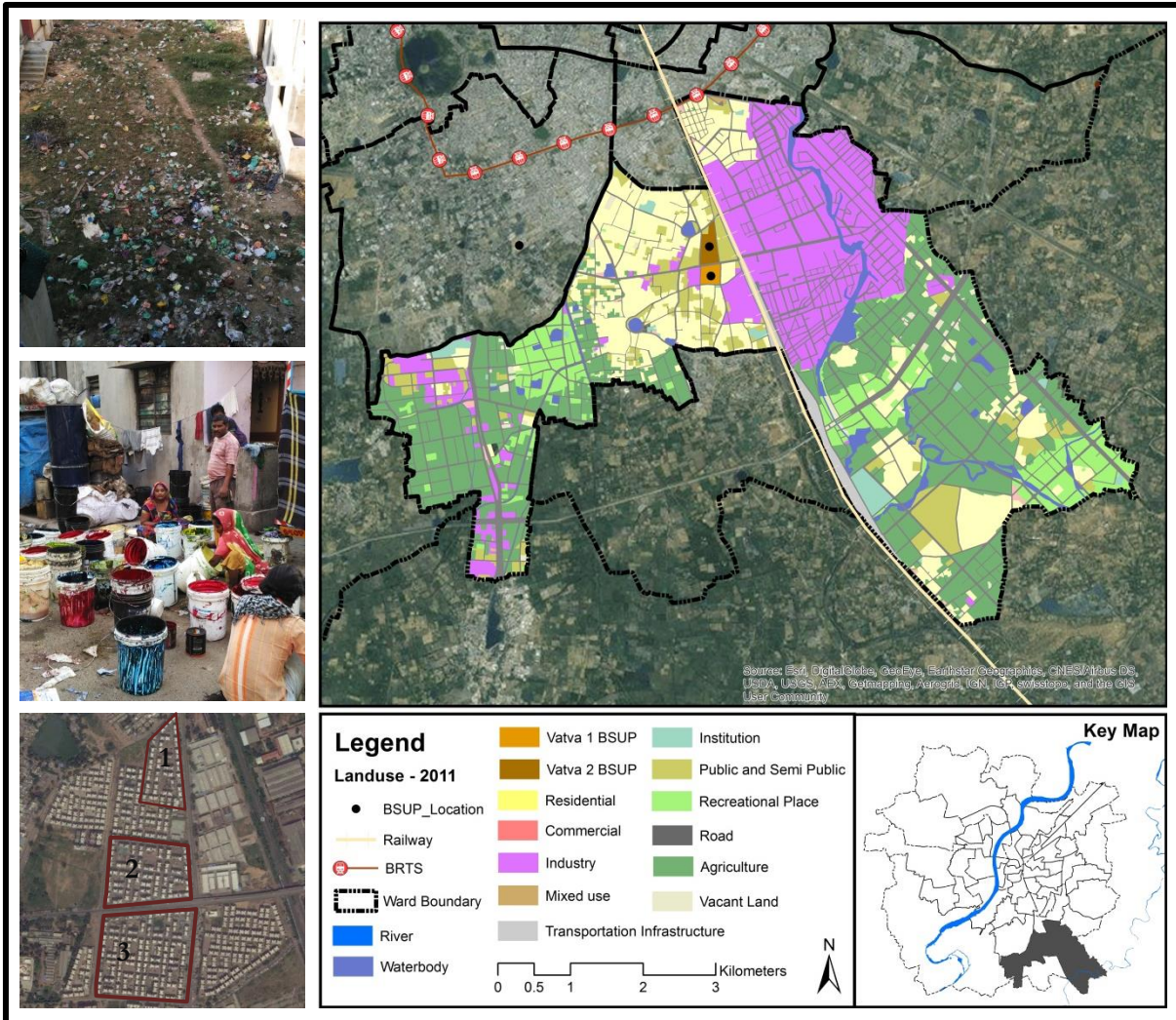


Figure 18 Characteristic of Vatva BSUP and surrounding area

All Vatva BSUP site was unclean and common infrastructure was not maintained by AMC and as well community. Households were disposed solid waste on common open space. Some of internal road was not in good conditions. There were water loggings throughout year in both sites. Primary school and health centre was not in use and abandoned since resettlement. In addition, households had problems with each other to use common open space for economic activity (see Figure 18).

Households were experiencing robbery, eve teasing, criminal activity and communal tension in daily life. In addition, there is prohibition to build religious structure on site. Households were unhappy with unsafe environment and no permanent job availability surrounding settlement.

Vatva 1, Formulation of RWA is still under process. NGO is working to formulate RWA but some of households are not willing to be part of RWA. There are various issues such as community and religious differences, distrust and not willing to pay RWA amount to NGO.

Vatva 2, Formulation of RWA is not started yet. AMC have not identified NGO to mobilized community to form RWA. Community leader wants to form RWA as soon as possible but AMC is not co-operating with community. Therefore, community are trying to maintain their common infrastructure by themselves and with help of local political leaders.

#### 4.7. Summary

Table 5 shows that there were 34 (12 % of total study data) resettled households who shifted from BSUP settlement during 2011-2015. Out of 34 households, 18 households sublet their houses to other people and 12 households not living in allotted houses and two household sold<sup>4</sup> their houses to other people. Migrated resettled household can be identify into three category 1) resettled households rented their house to other people and migrated 2) resettled households have house on BSUP sites but they are living at different location in the city. 3) Resettled households sold their houses and migrated. Table 5 shows that Odhav, Vadaj and Vatva BSUP sites have higher percentage of migration from resettlement sites during 2011 and 2015.

There were various reasons for shifting elsewhere. Households migrated because of long distance to work, increasing travel expenditure, cost of living and no work opportunity in or close to resettlement sites. Also households sublet their houses to other slum dwellers to earn additional income. We found that households sold their houses and migrated to their village because of loss of employment and loss of earning member of family.

Table 5 Number of Households shifted elsewhere during 2011-2015

BSUP Sites	Households in 2015	Households shifted to elsewhere during 2011 to 2015			% of Household shifted to elsewhere during 2011-2015
		House on Rent	Migrated	Sold	
Isanpur	17	0	0	0	0 %
Vadaj	28	3	3	0	16%
Rakhial	36	2	0	1	7%
Bage Firdosh	42	3	1	0	9%
Odhav	9	2	2	0	31%
Vatva 1	42	5	2	0	14%
Vatva 2	48	3	4	1	13%
<b>Total</b>	<b>222</b>	<b>18</b>	<b>12</b>	<b>2</b>	<b>12%</b>

Households' perception about improvement in their lives after resettlement is related to location of each BSUP sites. We found that households have positive perception where BSUP sites located in better residential area such and good accessibility to infrastructure.

During household's interview, More than 40% households said their lives are improving after resettlement in Vadaj, Rakhial and Bage firdosh BSUP (see Table 6). Most often, households compare their BSUP site with Vatva, Isanpur and Odhav BSUP sites that is located near industrial area and periphery of city. Isanpur households has mix opinion , 76% of household stated that their lives are the same as before

<sup>4</sup> Sold houses in BSUP' –Household cannot sold allotted BSUP house until 10 years. Therefore, households transfer property rights to other persons until they get ownership of house from AMC.



relocation and 24% households stated that lives become worse. In Odhav and Vatva 2 BSUP, 78% and 46 % of households stated that life become worse in 2015 (see Table 6). A main reason of the negative perception is the lack of social amenities, unstable income, and unsafe living environment on both sites.

Table 6 % of Household's perception about improvement in their lives during in 2015

BSUP Sites	Got worse	Same as before relocation	Improved after resettlement	Improved to very good
Isanpur	24	76	0	0
Vadaj	7	18	64	14
Rakhial	3	36	50	11
Bage firdosh	14	12	71	2
Odhav	78	22	0	0
Vatva 1	19	36	45	0
Vatva 2	46	8	46	0
Overall	23	26	48	4

#### Role of RWA and NGOs in BSUP sites and households lives.

Residential welfare association is medium to transfer BSUP settlement into a formal housing society. Main role of RWAs are to maintain the community infrastructure and strengthen the community after resettlement. AMC identified two NGOs, Mahila Housing Trust (MHT) and SAATH to mobilize the community and formulate RWAs in all BSUP sites except Vatva 2 site, where households resettled from interim resettlement sites.

In 2015, only Vadaj, Rakhial and Bage firdosh BSUP sites have functioning RWAs. Vadaj and Rakhial BSUP sites have strong RWAs while Bage firdosh BSUP site's RWAs members had finding difficulties to strengthen community. However, the study shows that in these three BSUP sites have better situation of infrastructure and social amenities than other BSUP sites (see Table 14). Without RWAs, Community leaders are finding it difficult to collect money for infrastructure maintenance from households every month. In addition, it has been difficult to take any decision for housing without RWAs.

As per MHT and SAATH NGOs, have very limited role to provide a concept of maintenance of basic services and payment towards their maintenance, and other social and community development activities through RWAs. Currently, they are working on forming RWAs in other BSUP sites. In addition, NGOs are finding difficulty to form RWAs in rest of settlement mainly of two reasons 1) not willing to pay money for RWAs and 2) distrust between households. As per NGOs, it could have been prevented if AMC engaged them at an earlier stage of displacement and resettlement process. However, NGOs tried to implement skill development programme in Isanpur, Vatva and Odhav BSUP housing. The skill development centre was located at AMC civic centre in the city centre. The program was not work out due to travel expenditure of households and unavailability of space in BSUP settlement. Households have very limited dependency on RWAs and NGOs for improving livelihood activity. However, in some settlement NGOs are also working on improving basic infrastructure and health situation with help of community leader. RWAs and NGOs have a role to create a sense of community and strengthen social fabrics in settlements.

## 5. ANALYSIS OF IMPOVERISHMENT RISK FORM

This chapter includes analysis and discussion of change in resettled households lives in resettlement sites during 2011 to 2015. The statistical analysis<sup>5</sup> comparing the data of S. Patel et al. (2015) collected in 2011 with the data collected from this field work in 2015. Analysis focuses on understanding and identifying important factors that are affecting resettled household's lives. This chapter also includes a discussion about important parameters that are contributing to the impoverishment shift.

### 5.1. Landlessness

Land is an important factor to understand the impoverishment risk after displacement-resettlement. Restructuring of resettled livelihood also depends upon contextual opportunities for education, livelihood and social amenities. Table 7 shows that 75 % of students in 2011 were commuting for education within 2 km from their resettled location except for Odhav BSUP. In Odhav BSUP, 60 % of students were commuting more than 10 km for education in 2011. Student travelled longer distances in Odhav, Bage firdosh and Vatva 1 BSUP sites compare to other BSUP site in 2011.

Table 7 Distance and Travel to school from BSUP sites in 2011

BSUP Sites	Less than 2 km	2 to 4 km	4 to 10 km	More than 10 km
Isanpur	92%	-	8%	-
Vadaj	90%	7%	-	3%
Rakhial	83%	9%	8%	-
Bage firdosh	51%	30%	17%	2%
Odhav	20%	20%	-	60%
Vatva 1	69%	-	-	31%
Vatva 2	80%	15%	5%	-
<b>Overall</b>	<b>75%</b>	<b>12%</b>	<b>6%</b>	<b>7%</b>

Table 8 Distance and Travel to school from BSUP sites in 2015

BSUP Sites	Less than 2 km	2 to 4 km	4 to 10 km	More than 10 km
Isanpur	50%	20%	30%	-
Vadaj	81%	14%	5%	-
Rakhial	59%	24%	14%	3%
Bage firdosh	44%	21%	33%	2%
Odhav	50%	25%	-	25%
Vatva 1	40%	3%	28%	29%
Vatva 2	58%	24%	18%	-
<b>Overall</b>	<b>56%</b>	<b>19%</b>	<b>19%</b>	<b>6%</b>

Table 8 reveals that travel distance to school increased in every BSUP site in 2015. Only Vadaj BSUP site has relatively better accessibility to education compare to other BSUP sites. In Vadaj BSUP, 81 % of

<sup>5</sup> The statistical analyses were done per settlement and overall. For the overall analysis, as settlement sizes vary, all resettled households' socio-economic data were analysed as a single group.

students are commuting for educations within 2 km. 29 % and 25 % of students are commuting more than 10 kilometres in Vatva 1 and Odhav BSUP sites in 2015. In addition, 19 % students are commuting more than 4-10 km for education in 2015, compared to 12 % in 2011. Students were primary school in 2011, are now in secondary and higher secondary school. Students had to travel longer distance in 2015 due to lack of secondary and higher secondary school in the surrounding BSUP areas. After 2011, AMC constructed a public school in Vatva BSUP where students can get education until seventh standard.

Table 9 shows that 44% households in Isanpur BSUP and 100% households in Odhav BSUP have to travel more than 2 km to access a market to meet their daily consumptions. In Vadaj BSUP site, 44 % households have to travel 4 to 10 km to access a market and the public distribution centre for buying subsidised grain and food. Overall 75 % households have market accessibility within 2 km from their location. Access to public hospital and work place have similar situation due to inadequate public transportation.

In 2015, increased travel distance to education institution caused higher monthly expenditure of resettled households. Due to distant location and lack of social amenities, 12% households moved back to previous location during 2011 and 2015.

Table 9 Distance to market place in 2015

BSUP Sites	Less than 2 km	2 to 4 km	4 to 10 km	More than 10 km
Isanpur	12%	44%	44%	-
Vadaj	51%	3%	41%	5%
Rakhial	92%	3%	5%	-
Bage firdosh	100%	-	-	-
Odhav	-	100%	-	-
Vatva 1	92%	3%	5%	-
Vatva 2	98%	-	2%	-
<b>Overall</b>	<b>75%</b>	<b>9%</b>	<b>15%</b>	<b>1%</b>

## 5.2. Homelessness

Table 10 shows that 83% households have a permanent shelter and individual water connection and toilet in 2015. In 2015, households have better infrastructure compare to slum areas. During field visit, we found that after 5 years of resettlement. None of households has ownerships of BSUP houses. Households will get ownerships after paying US\$ 1044 (67,860 INR). As per AMC, households would have to pay around US\$ 120 (7,860 INR) initially after resettlement as first instalment. Households can repay US\$ 923 (60,000 INR) remaining amount through loan from bank, as decided by AMC. During fieldwork, we found that many households had paid only US\$ 50 (3,260) as initially contribution. Few Households of Vatva and Vadaj BSUP had paid US\$ 120 (7,860 INR) for initial contribution.

Table 10 Physical characteristic of Households in 2011, 2015 and before resettlement

Households	Permanent house	Water Connection	Toilet
Household in Slum	8%	32%	17%
Household in BUP 2011	76%	88%	88%
Household in BSUP 2015	<b>83%</b>	<b>83%</b>	<b>83%</b>

After four years of resettlement, it is not clear that how and when resettled households have to pay their remaining amount to AMC. During field visit, we found that none of the households started paying the remaining amount to AMC. AMC did not identify banks where households can get a loan to pay the remaining amount. In addition, Households cannot get loans from any other bank due to an inappropriate document of house ownership. After four years of resettlement, households still lives in fear of another displacement if they are not able to pay the remaining amount.

### 5.3. Joblessness

Table 11 shows, after four years of resettlement; overall unemployment ration is increased from 12% in 2011 to 14% in 2015. Our finding shows that households who resettled in Odhav, Vadaj, Vatva 1 &2 BSUP sites are experienced a higher rate of unemployment during 2011 to 2015. Among them, Odhav BSUP site has 40 % unemployment in 2015. Isanpur and Bage firdosh sites have relatively low unemployment 7% and 4% in 2015 compared to 10 % and 14 % in 2011. In Rakhial, none of the households experienced loss of employment between 2011 and 2015.

Table 11 Unemployment in 2011 and 2015

BSUP Sites	% of workers who experienced unemployment in 2011	% of workers who experienced unemployment in 2015
Isanpur	10%	7%
Vadaj	8%	22%
Rakhial	3%	-
Bage firdosh	14%	4%
Odhav	18%	40%
Vatva 1	11%	14%
Vatva 2	20%	25%
<b>Overall</b>	<b>12%</b>	<b>14%</b>

Households who were working as daily labour suffered most. Lack of skill development programme in resettlement sites and inability to find suitable work are main reasons to increase unemployment after 2011. During field visit, we found that households who changed their occupation are more vulnerable to loss of employment. In Vatva 1 BSUP, an interviewee mentioned that *“Before I had fast food stall at law garden and was earning enough for family. After resettlement due to travel cost, I cannot travel more than 20 km to work every day so now I am working in surrounding area as construction labour and work is not stable specially in monsoon”* (Interview V1\_31). We found that households had difficulties to cope with surrounding work opportunities without proper skill and most of the time they had to change their work occupation.

To sustain their livelihood, households are travelling more in 2015. Overall, distance to work increased by 2 % in 2015. Average distance to work is 7.5 km in 2015 compare to 7.2 km in 2011 (see Table 12). Table 12 shows that distance to work decreased by 4 % in Isanpur, 3% in Rakhial, 3% in odhav and 6% in Vatva 2 BSUP sites in 2015, while the distance to work increased 8 % in Vatva 1, 7% in Bage firdosh and 4 % in Vadaj BSUP site in 2015.

Table 12 shows, many workers shifted from public mode of transportation to private mode of transportation. Almost, 32% worker shifted from public mode of transportation in 2015 compare to 2011 while 13 % workers shifted to private mode of transportation in 2015. All BSUP sites have shown decreased use of public transportation due to insufficient and irregular service. Rakhial and Bage firdosh BSUP sites have a 129 % and 138% changes towards to use private transportation. This it is also reflected by the increased monthly expenditure of households (see Table 12 and Table 13).

Table 12 Change in distance to work and mode of transportation in 2015

BSUP Sites	Average distance to work in 2015 (km)	Average change distance to work in 2015	% of work trips change to public mode of transport in 2015	% of work trips change to private or motorized mode of transport in 2015
Isanpur	7	-4%	-20%	0
Vadaj	6	4%	0 %	-56%
Rakhial	5	-3%	-58%	129%
Bage firdosh	7	7%	-47%	138%
Odhav	9	-3%	9%	-67%
Vatva 1	10	8%	-38%	15%
Vatva 2	8	-6%	-27%	0%
<b>Overall</b>	<b>7.5</b>	<b>2%</b>	<b>-32%</b>	<b>13%</b>

Table 13 Income and expenditure of Households<sup>6</sup>

BSUP Sites	Average income per households in 2011 (USD)	Average expenditure per households in 2011 (USD)	Expenditure / Income ration in 2011	Average income per households in 2015 (USD)	Average expenditure per households in 2015 (USD)	Expenditure / Income ration in 2015
Isanpur	149	78	53 %	185	124	67 %
Vadaj	157	82	52 %	143	100	70 %
Rakhial	123	78	63 %	166	139	84 %
Bage firdosh	158	83	53 %	177	132	74 %
Odhav	137	73	53 %	179	110	61 %
Vatva 1	130	82	63 %	154	126	82 %
Vatva 2	127	84	66 %	166	115	69 %
<b>Overall</b>	<b>138</b>	<b>81</b>	<b>59 %</b>	<b>165</b>	<b>123</b>	<b>74 %</b>

Table 13 shows that ration of expenditure/income of households is increased by 74% in 2015 compare to 59 % in 2011. Despite of increase in income, household's lives do not shows signs of improvement due to large family size (Avg. household size is 5.6) and stable monthly income. BSUP sites, Odhav, Isanpur and Rakhial located near industrial area have relatively good improvement in income.

<sup>6</sup> In 2015, income and expenditure calculated based on exchange rate of 1USD= INR 65 in October 2015 when the fieldwork was conducted (<http://www.xe.com/currencytables/?from=INR&date=2015-10-08>).

In 2011, income and expenditure calculated based on exchange rate of 1USD= INR 50 in March 2012 when the research and analysis concluded (<http://www.xe.com/currencytables/?from=INR&date=2012-03-12>).

Expenditure vs Income ration is calculated based on expenditure and income in 2011 and 2015.

#### 5.4. Loss of access to common property (Education and Health)

We found that a primary health centre and a primary education centre were constructed in all BSUP sites after 2011 (see Appendix E). However, few BSUP sites have functioning primary health centre and primary education centre in 2015 (Table 14). In Isanpur, Odhav and Vatva 2 BSUP sites, Primary health centre building became deserted due to not functioning. After four years of resettlement, primary education centre was not functioning in Isanpur and Odhav sites. According to AMC, they could not able to start primary health centre and primary education in Isanpur Odhav, Vatva 2 due to lack of medical staff and teacher BSUP sites. Without use of these building facilities, some households have started using the health centre and educational building for illegal activities such as gambling, drinking alcohol and storing their personal belongings in Vatva 2 and Isanpur BSUP site.

Table 14 Status of community facilities on BSUP sites in 2015 (primary survey, September 2015)

BSUP Sites	Residential welfare association formed	Primary health centre Constructed	Primary health centre Functioning	Primary education centre Constructed	Primary education centre Functioning	Primary school centre Constructed	Primary school centre Functioning
Isanpur	Under process	Yes	No /Mobile health van	Yes	No	No	No
Vadaj	Yes	Yes	Yes	Yes	Yes	No	No
Rakhial	Yes	Yes	Yes (doctor visit for 2 hrs/day)	Yes	Yes	No	No
Bage firdosh	Yes	Yes	Yes (doctor visit for once a week)	Yes	Yes	No	No
Odhav	Under process	Yes	No	Yes	No	No	No
Vatva 1	Under process	Yes	Yes	Yes	Yes	Yes/ Common for all Vatva BSUP sites	Yes/ Common for all Vatva BSUP sites
Vatva 2	No	Yes	No /Mobile health van	Yes	Yes		

(Dark colour shows change in status of community facilities in 2015.)

Table 15 shows that in 2015 13% of students dropped out of school compare to 14 % in 2011. The Change in dropped out ration is decreased to 45% in 2015. All BSUP sites have shown decreased per cent of student drop except Vatva-1 BSUP. In Vatva-1, majority of dropouts are girls due to safety reason and lack of ability by parents to send children to school. One interviewee mentioned, “Father doesn’t want to send our daughter to school. School is not safe for girls due to criminal activity. We don’t have money to get admission in private school.” Another interviewee expressed that “after resettlement I lost my job if I had money I would like to send my son to school but to earn money for family he has to work so end of a day we can fulfil our basic needs .“

Table 15 School dropout during 2011 to 2015

BSUP Sites	No. of student dropout in 2011	No. of student dropout in 2015	% of change in dropout in 2011
Isanpur	5	0	-100%
Vadaj	6	6	0%
Rakhial	11	4	-64%
Bage firdosh	12	7	-42%
Odhav	20	6	-70%
Vatva 1	11	14	27%
Vatva 2	2	0	-100%
<b>Overall</b>	<b>67</b>	<b>37</b>	<b>-45%</b>

Table 16 shows that Travel distance to school increased by an average of 1.2 km, and cost increased 192% in 2015. Monthly travel expenditure increased by US\$ 9 in 2015 compared to US\$ 3 in 2011 (see Appendix F ). Average distance to school is 4 km in 2015 compared to 2.3 km in 2011. Students have to travel longer distance due to lack of higher education institute in the surrounding area.

In all BSUP sites, the cost of transportation is considerably increased since 2011. Only in Isanpur, travel cost decreased to 29 % in 2015. 38% of student shifted to a private mode of transportation during 2011 to 2015. Isanpur, Rakhial and Odhav BSUP sites have very high per cent of shift to the private mode of transportation due to lack of access to public transportation and insufficient frequency of public transportation. Overall, all BSUP sites show sign of improvement in dropped ration but for better education student have to travel more. It has led to increased households expenditure.

Table 16 Distance to school and travel to school expenditure during 2011 and 2015

BSUP Sites	Average distance to school in 2015 (km)	% of change in distance to school	% of school trips shift to private or motorized mode of transport	% change in travel expenditure to school
Isanpur	3	84%	500%	-29%
Vadaj	2	79%	0%	10%
Rakhial	3	75%	700%	61%
Bage firdosh	4	48%	29%	88%
Odhav	6	92%	100%	138%
Vatva 1	7	51%	-100%	17%
Vatva 2	3	102%	-40%	124%
<b>Overall</b>	<b>3.5</b>	<b>57%</b>	<b>38%</b>	<b>192%</b>

After for years of resettlement, access to health facilities is not improved. Although, primary health centre were constructed in all BSUP sites. Only two BSUP site have fully functioning primary health centre in Vadaj and Vatva. The other sites have partial working health centre. Doctor visited once in a week Bage firdosh (see Table 14).

Figure 19 shows, the accessibility to AMC multi-specialist hospital from BSUP location, which are on average 5.7 kilometres far from each BSUP site and only three BSUP site have proper connectivity to the hospitals. These hospitals are run by AMC and urban poor people can get free medical treatment. During field visit, we found that most of resettle households visited AMC multi-specialist hospital because of almost free medical treatment and medicine.

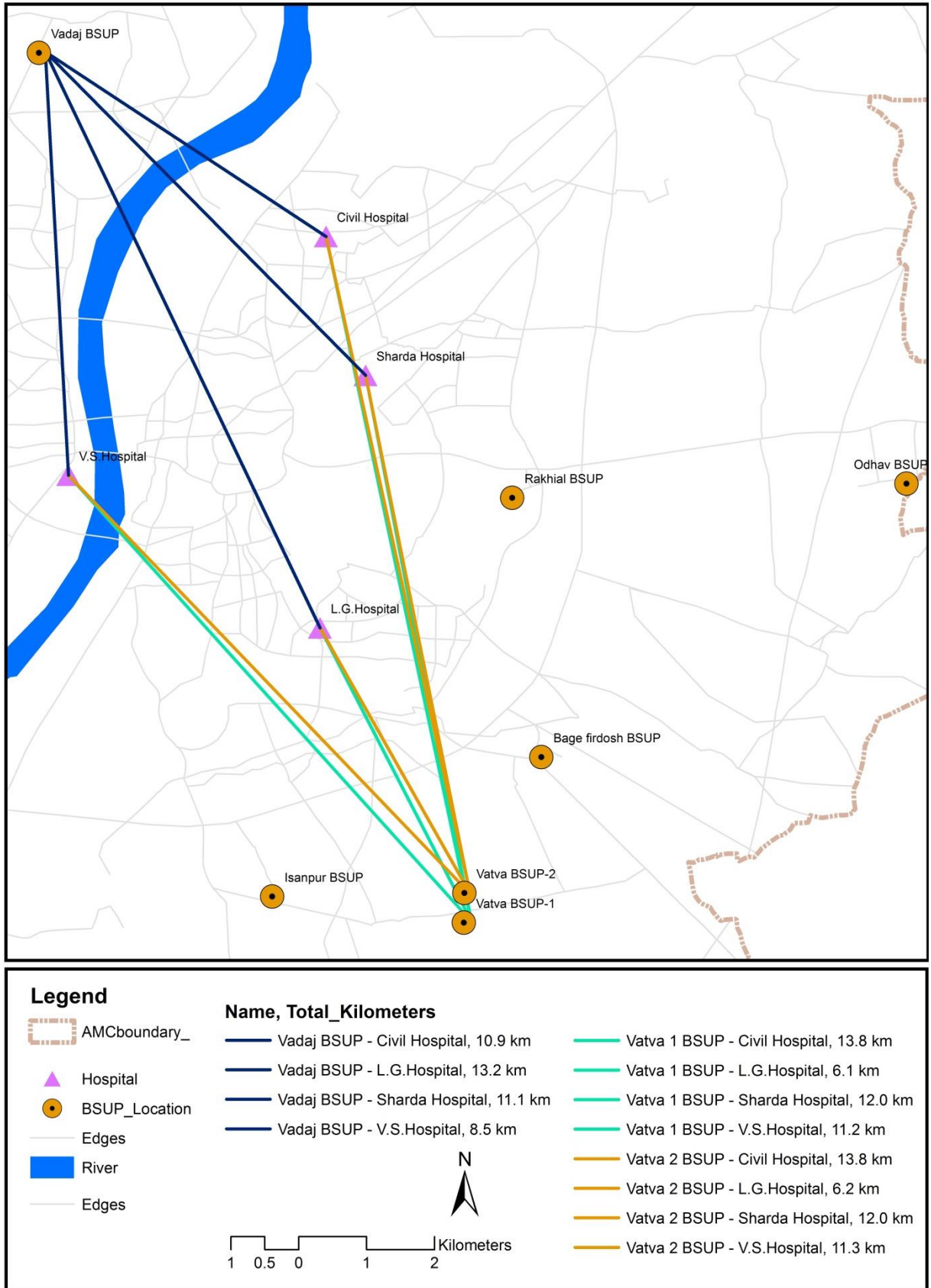


Figure 19 OD distance cost matrix map for BSUP site and Hospital



**5.5. Health risk (Morbidity, Mortality and Food security)**

Table 17 shows, the percentage of Households that had a ‘Below poverty card’ (BPL) in 2011 and 2015 for access to get subsidised food ration from fair price shops. In 2015, 36 % households have BPL card compare to 14% in 2011. After 2011, BPL cardholder’s number is increased. Many households, which have BPL card based on their previous residential address; could not access fair price shop in the surrounding of the BSUP site. Thus, in 2011 cardholders had to access fair price shop at the previous location. In addition, we found that 56 % households have a social security card (Adhar card) to access cooking gas and other financial benefits. Many households had to buy cooking fuel and gas from market price due to not having BPL or social security card. This has a direct impact on their monthly expenditures. Sometimes, households have to compromise their nutrition to meet other expenses in daily life.

Table 17 Access to BPL and social security card

BSUP Sites	BPL Card in 2011	BPL card in 2015	Adhar card (Social security card )
Isanpur	0%	52%	94%
Vadaj	3%	31%	82%
Rakhial	24%	36%	89%
Bage e Firdosh	7%	26%	88%
Odhav	8%	44%	78%
Vatva 1	18%	45%	81%
Vatva 2	21%	33%	88%
<b>Overall</b>	<b>14%</b>	<b>36%</b>	<b>56%</b>

Table 18 shows, the household’s perception about the sewage infrastructure condition during 2011 to 2015. After four years, the condition of sewage infrastructure did not change much. More than 60 % of the households had positive perception in 2015 but 31% households find chocking of sewage networks nearby their units blocked. Lack of maintainers of sewage the network is the main reason of compromised quality of services.

Table 18 Households perception about sewage infrastructure

BSUP Sites	Sewage infrastructure in 2011			Sewage infrastructure in 2015		
	Over flowing	Chocked	No issue	Over flowing	Chocked	No issue
Isanpur	-	-	100%	-	65%	35%
Vadaj	-	-	100%	-	17%	83%
Rakhial	100%	-	-	2%	6%	92%
Bage firdosh	4%	2%	94%	-	19%	81%
Odhav	92%	8%	-	-	67%	33%
Vatva 1	77%	2%	21%	-	64%	36%
Vatva 2	11%	2%	87%	-	19%	81%
<b>Overall</b>	<b>36%</b>	<b>3%</b>	<b>61%</b>	<b>0.5%</b>	<b>30.5%</b>	<b>69%</b>

Table 19 shows, the condition of solid waste management in BSUP sites. During field visit, we found that AMC clearing common dustbins once in 15 days in Odhav, Isanpur, Bage firdosh and Vatva BSUP sites that area located in outskirts of city. While in Vadaj and Rakhial, AMC is clearing dustbins once in a week. We observed that households disposed of solid waste in open space due to lack of bins in all sites. In total, 52 % households said AMC workers come for sweeping and collection of solid waste in 2015 which have not much changed since 2011 (46%). After four years of resettlement, condition of basic infrastructure is not improved. These factors have led to poor hygienic condition in Odhav, Bage firdosh and Vatva BSUP sites. In Odhav BSUP, almost all households reported increased insect bites.

Table 19 Households perception about solid waste management

BSUP Sites	Solid waste management in 2011			Solid waste management in 2015		
	Everyday	Irregular	No collection	Everyday	Irregular	No collection
Isanpur	100%	-	-	35%	65%	-
Vadaj	-	100%	-	28%	59%	13%
Rakhial	-	100%	-	86%	14%	-
Bage firdosh	96%	4%	-	76%	24%	-
Odhav	No data	No data	No data	89%	11%	-
Vatva 1	-	100%	-	40%	60%	-
Vatva 2	89%	3%	8%	29%	71%	-
<b>Overall</b>	<b>46%</b>	<b>52%</b>	<b>2%</b>	<b>52%</b>	<b>46%</b>	<b>2%</b>

For portable water, all households have an underground bore well. In 2011, the study showed that quality of water was unfit for drinking and daily usage (S. Patel et al., 2015). In 2015, only Vatva BSUP site has a water distribution plan and recently households were getting water connection from that plan. The Odhav and Isanpur BSUP site located near the industrial area, have the worst quality of water. In absence of other sources, households have to use contaminated water. During field survey, many households mentioned that typhoid, gastroenteritis, and hepatitis were common disease in Isanpur and Odhav BSUP.

## 5.6. Marginalization

In 2011, displaced households experienced marginalization through loss of economic capital and social capital during displacement and resettlement process (S. Patel et al., 2015). Our study shows that after four years of resettlement, resettled households lives become more vulnerable due to the location of the site in periphery of the city.

We found that households resettled in proximity to relatively good neighbourhood's experienced negative social interaction from the surrounding community. After living in comparatively good condition compared to slums, BSUP housing is still referred as "Ganda Vasvato" (Slum area) or sometimes refers as "Maftiya para" "(an area where people do not want to pay anything for houses and the municipal services.). During fieldwork, an interviewee expressed that "*Whenever AMC workers comes to distribute books or medicines for children. They treat us like beggar and AMC just leave us here to die.*" Households had a lot frustration about loss of employment and lack of basic service in BSUP sites.

Table 20 shows the per cent of households have accessibility to formal financial institution. During 2011 to 2015, Number of bank account holder is increased by 36% to 64 % and number of insurances holder is increased 14 % to 23% due to the Central Government finance and insurance scheme. Although, number of households participating in community saving<sup>7</sup> decreased by 6 % to 4 % during 2011 and 2015, due to increased monthly expenditure and loss of income after displacement and resettlement process.

Table 20 Economic security and accessibility to economic institution

BSUP Sites	Bank account in 2011	Bank account in 2015	Community saving 2011	Community saving in 2015	Insurance in 2011	Insurance in 2015
Isanpur	41%	47%	0%	0%	6%	2%
Vadaj	41%	66%	3%	17%	14%	28%
Rakhial	17%	42%	2%	3%	3%	17%
Bage firdosh	49%	81%	7%	2%	20%	34%
Odhav	56%	78%	11%	11%	11%	22%
Vatva 1	43%	50%	5%	2%	21%	17%
Vatva 2	25%	83%	13%	0%	13%	27%
<b>Overall</b>	<b>36%</b>	<b>64%</b>	<b>6%</b>	<b>4%</b>	<b>14%</b>	<b>23%</b>

### 5.7. Social disarticulation

Table 21 shows that 65 per cent of households had a positive perception about their community composition in 2015. Only Households of Vatva 2 BSUP site showed a more negative perception comparative to other BSUP sites. Application to transfer to other BSUP sites is increased from 11 % to 23% during 2011 to 2015. Among them, BSUP Odhav, 89% of BSUP households want to shift to other BSUP sites.

During field visit, we observed that the community leaders tried to resolve different community issue. In addition, community leaders were working on to promote the formulate RWA within their communities. In some BSUP sites, households were able to form a RWAs after resettlement with help of NGOs and AMC. In BSUP sites, where RWAs are not formed yet, households have problems to upkeep common property and community harmony.

In addition, households, who have house on ground floor, started encroaching common property for personal use. The fights between neighbours are frequent over common property issues and common property maintenance funds. In the BSUP site, the situation became worse where community members belong to a different religion (Vatva 2). Due to religious conflicts, the place became unsafe to live for women and children.

<sup>7</sup> Community saving group is small umbrella is set up by NGOs in urban poor area to strengthen their financial condition by saving small amount of money every month. Also urban poor people can get loan at very low interest rate. Mostly community saving group is run by women's group in settlement. In Ahmedabad, Mahila housing trust working to improve urban poor's financial condition through community saving (D'Cruz & Mudimu, 2013; Obino, 2013).

Table 21 household's perception of community composition and households applied for transfer to other BSUP sites in 2015

BSUP Sites	Positive perception about community composition in 2011	Positive perception about community composition in 2015	Applied for transfer to other BSUP site in 2011	Applied for transfer to other BSUP site in 2015
Isanpur	18%	59 %	12%	12%
Vadaj	8%	48%	-	7%
Rakhial	5%	62%	7%	3%
Bage firdosh	2%	85%	15%	24%
Odhav	39%	100%	100%	89%
Vatva 1	31%	86%	10%	33%
Vatva 2	8%	35%	1.6%	33%
<b>Overall</b>	<b>13%</b>	<b>65%</b>	<b>11%</b>	<b>23%</b>

## 5.8. Summary

During 2011 and 2015, improvement in households' lives limited to only certain factors such as getting better infrastructure, decreasing student drop ration in school, increased accessibility to BP card, access to bank, insurances facilities and staying in formal housing settlement. During fieldwork, 60% households stated that they had a good quality of house after resettlement.

The analysis also shows the trend towards greater impoverishment risk as a result of lack of social amenities and income opportunities in BSUP locations. During 2011 to 2015, travelling distance is increased for workers and students, which have led to increased monthly expenditure. Workers had to change their occupation due to inability to find employment in the surrounding area.

Absences of basic infrastructure institution facilities such as RWA, primary health centres and primary schools are an important factor of higher risk of impoverishment. In addition, lack of adequate access to water, sewage and solid waste management have led to further deprivation. However, the analysis also shows some level of improvement where basic facilities are available such as Vadaj, Rakhial and Bage firdosh BSUP sites.

After four years of resettlement on a BSUP sites, 23 % households stated that after resettlement lives became worse and showed their frustration towards AMC for not helping them out to reach a basic standard of living. However, households were trying to cope with its surrounding area and available opportunities.

Ultimately, change in household's lives also depends upon the location of the BSUP site. Households who resettled near an industrial location have more issues than inhabitants on other BSUP sites. In addition, they are more exposed to further impoverishment like joblessness, lack of access to community facilities, health risk and social disarticulation.

## 6. DISCUSSION

Our research shows that all resettled households experienced all forms of impoverishment and increased risk of impoverishment after spending four years on resettlement sites. Our study indicates that changes in resettled household's lives were affected by location, accessibility to basic facilities and inability to sustain their livelihood in surrounding area of BSUP settlements. Our study clearly indicates that distance is still a major factor causing impoverishment in all BSUP sites. The BSUP sites have shown varying degrees of impoverishment depending on distance factor. Households who resettled near industrial area have shown more risk of impoverishment compare to other BSUP sites due to increased distance to work, education facilities and lack of primary health centre and primary educational facilities in BSUP sites.

Many households have experiences high level of uncertainty after spending more than four years on resettlement sites. Also, S. Patel et al.(2015) have found that displaced households had experience "uncertainty", as additional form of impoverishment, in displacement and resettlement process without any participation of community leaders and affected households in 2011. Our study shows that resettled households having difficulties to pay their remaining beneficiary share for BSUP unit. As per BSUP policy, it is role of urban local body (ULB) to provide easy access to financial institution to resettled households for repaying their remaining amount. Due to lack of access to the financial institution and unclear policy of monthly instalment, resettled households have not started paying their remaining amount. Many resettled households do not want to contribute to maintain their common infrastructure because the fear of another displacement if they cannot able to pay remaining amount of BSUP unit.

All resettled households are travelling longer distance to access school, work location and health facilities. Some of BSUP sites have better infrastructure condition after four years. Lack of access to higher secondary education near BSUP sites have led to increase travel distance to school. In addition, many student shifted from primary to secondary school in 2015. Therefore, students have to travel longer distance for higher education. The health facilities have similar situation. Almost all BSUP sites have primary health centre but very few health facilities are functioning.

In addition, our study shows that 12 % households migrated to other part of city from BSUP site due to inability to cope in surrounding areas. Even we found that 23 %-resettled households want to shift other BSUP sites to improve their livelihood condition. Resettled Households have shown more frustration toward AMC for not improving basic infrastructures after resettlements.

During 2011 and 2015, in all BSUP sites, resettled household's changes their occupation pattern due to increased travel expenditure. Households who were involved in wage labourer activity suffered most during 2011 and 2015. We found that resettled households had more income opportunity near industrial area, which led to increased income in 2015. An increased travel distance to school, health and market place, which have led to an increase resettled household's monthly expenditure. In addition, we found that Odhav and Vatva 2, located near heavy industrial area had higher unemployment 40% and 25% in 2015 compare to 18 % and 20% in 2011. In addition, Vadaj BSUP site which is located near residential area, had unemployment 40 % in 2015 compared to 8 % in 2011 because resettled households experienced difficulties to find economic opportunities as per their skill. Therefore, Vadaj resettled households had to change occupation activities related to their surrounding areas. Overall, the study shows that due to the uncertainty of finding stable income in surrounding areas of BSUP sites, unemployment percentage increased to 12 % in 2011 to 14% in 2015.

BSUP housing policy has clear specification to provide all basic amenities such as primary educational centre, health facilities and residential welfare associations in BSUP sites. Although, in all BSUP sites, AMC constructed infrastructure for basic amenities but only Vadaj and Rakhial BSUP sites have fully functioning amenities. Due to lack of basic amenities in BSUP site, households have to access distance amenities, which have led to an increase in monthly expenditure and more frustration in their lives.

All BSUP sites have access to water facilities and resettled households have individual water connection in 2015. Even though all resettled households, have to use untreated water from underground water sources, which are creating health problems in the settlements. In addition, BSUP sites located near the industrial area have worse scenario of air quality and water quality due to the industrial waste. Only in Vatva BSUP sites, households are getting portable water from a water distribution plant while the rest of resettled households have to depend upon untreated underground water source. In addition, condition of sewage infrastructure and solid waste management has not changed yet. It became worse in many BSUP sites. Only in Vadaj, Rakhial and Bage firdosh BSUP sites have RWAs. RWAs have the responsibility to maintain all common infrastructures. Due to absences of RWAs, most of BSUP site have an issue to maintain common infrastructure. Although, resettled households have better perception related to community composition. The study shows that Vadaj and Rakhial BSUP had very active and develop community due to RWAs. In rest of BSUP site, resettled households had strong relation to their neighbour and resettled households depended on community leaders to resolve their issue. In addition, lack of awareness about RWAs role and responsibilities, only three BSUP sites were able to form RWAs and still it is initial stage of functioning.

All resettled households showed negative perception after resettlement. Although, resettled households have positive perception related to shelter and basic infrastructure but they are not satisfied with quality of infrastructures and services. Also, in Vadaj BSUP site, which is represented as model BSUP site by AMC, one of the community leader mention that” *We know, we have a good house and access to the basic infrastructure. After resettlement, AMC are not willing to pay for our deteriorating houses and common infrastructures. We do not have any idea who is going to pay for repairing and maintenance. We do not want to invest our money because we do not have legal document of houses*” After spending more than four years on resettlement sites, households have very fuzzy impression of their future due to unclear AMC policy. Resettled households have very negative perception towards AMC for not helping to improve their livelihood in resettlement sites. In addition, resettled households were unhappy with defunct RWAs, condition of infrastructure and experienced unsafe to live in BSUP sites, which are located near industrial area. In addition, it has similar situation in all economic weaker section (EWS) housing and BSUP sites developed by AMC and AUDA which is mention in recent newspaper report. According to newspaper report, ” *EWS households mention that slum rehab needs job, not a new place*”.(Yagnik, 2016). The households expressed that AMC is not helping to improving their livelihood due to their poor social and economic condition.

Table 22 shows summery of impoverishment risk form based on the qualitative assessment. In general, all impoverishment forms have found in resettled household’s lives after resettlement. This study indicates that resettled household’s lives have shown great risk of impoverishment. Mostly, resettled households lives affected by landlessness, joblessness, access to infrastructure facilities and social disarticulation with distance factor. Also, S. Patel et al. (2015)found that distance become important factor caused impoverishment in displaced households lives in 2011. After four years spending on resettlement sites, household’s lives become more vulnerable due to increase distance of access to work, education and health. Even BSUP sites had similar mobility issue which was found by S. Patel et al. (2015) in 2011.

The basic aim of BSUP programmes was to improve the socio-economic conditions of slum dweller's lives. The BSUP programme also focused on improving the infrastructure conditions in urban poor's settlement. After resettlement, household's lives should have shown signs of positive improvement and the ability to change their socio-economic condition. Even though, getting basic infrastructure facilities, inhabitants of BSUP settlements face multiple deprivations in their lives. The study shows that improvement in urban poor's lives are not just based on getting access to basic infrastructure but also need to strengthen resettled household's socio-economic situation through sustainable livelihood conditions (Baud, Pfeffer, Sridharan, & Nainan, 2009; Baud et al., 2008; Paulo, Rosário, & Tvedten, 2007; Richards & Thomson, 1984; Sufaira, 2013; World Bank, 2007). Sometimes, resettled households experienced worse situation due to lack of social and economic environment in resettlement (Cesar De Queiroz Ribeiro & Olinger, 2009; Feinberg, 2010; Perlman, 2005). In principal, resettled household's lives become more impoverished after resettlement. It is very difficult for resettled households to cope with new surrounding situation and adjust to a new environment after resettlement.

Table 22 Summary of Impoverishment risk parameters

Impoverishment Form	Factors affecting resettled households in 2015	Effect in 2015
<b>Landlessness</b>	Distance to school	-
	Distance to Market	-
	Access to Public transportation	-
<b>Joblessness</b>	Unemployment	-
	Average distance to work	-
	Work trip to public mode of transport	-
	Work trip to private mode of transport	-
	Monthly Income	+
	Monthly expenditure	-
<b>Homelessness</b>	Uncertainty to eviction	-
	% of Migration	-
	Perception related to quality of house	+
<b>Marginalization</b>	Access to Bank facilities	+
	Community saving	-
	Access to insurance	+
<b>Health risk (Food security, morbidity and mortality –health risk interpreted as combination of two categories)</b>	Access to BPL card	+
	Access to fair price shop	-
	Access to social security card	+
	Sewage network	+
	Solid waste management	+
	Quality of water	-
	Access to primary and Higher –order health facilities	-
<b>Loss of access to common facilities</b>	Access to Social amenities, RWAs	-
	Access to Social amenities, Health	-
	Access to Social amenities, primary education	-
	School dropout	+
	Average distance to school	-
	School trips shift to private or motorized mode of transport	-
	Travel expenditure	-
	Access to hospital in emergency	-
<b>Social disarticulation</b>	Perception about community composition	+
	Applied for transfer to other BSUP sites	-
	Perception of resettled households related improvement	0
+ sign shows positive effect on resettled household's lives in 2015, - sign shows negative effect on resettled household's lives in 2015 and 0 sign shows no effect on resettled household's lives in 2015		

## 7. CONCLUSIONS

This study revisited resettled households to understand the change in their lives after resettlement. This research intended to understand whether resettled households lives faced more impoverished or resettled households lives improved on resettlement sites between 2011 and 2015. In order to understand the change in households lives three sub-objectives were identified. The first objective focused on understanding the change in household's lives at individual and households level. The second objective focused on understanding the degree of impoverishment at settlement level. The third objective focused on understanding the link between households or settlements and the surrounding area.

Resettled households lives are affected due to the different surrounding characteristic. The households, resettled near the residential area have shown less impoverishment risk than households resettled near the industrial area. In addition, location of BSUP sites played an important role to change household's socio-economic characteristic. It was found from the research that households who were not able to sustain their livelihood, migrated to previous locations in the city. We found from the research that old age people, children, women and daily wage labour were affected by lack of basic infrastructure and lack of work opportunities during 2011 and 2015. Moreover, in the BSUP sites located near industrial areas, women and children found it unsafe to travelling at night. Old age people lives became worse due to their house unit being located above the ground floor. In general, we found that fragment allocation of housing units and insufficient settlement level infrastructures caused more impoverishment risk at individual level during 2011 and 2015.

It was observed that RWAs and NGOs could have an important role to improve resettled households lives. BSUP sites where RWAs was formed, RWAs managed to implement basic amenities in the BSUP sites with the help of NGOs. We observed that these BSUP sites had relatively less social disarticulation issues than other BSUP sites. However, at individual household's level, RWAs was not affective improving the situation of resettled households (e.g. to increase economic opportunities). Resettled households had more dependency on community leaders than RWAs in all site. The research showed that even for NGOs, it was difficult to implement social development programme to develop a sense of community without absence of RWAs. Therefore, the social fabric became more vulnerable in BSUP sites during 2011 and 2015. Resettled households perception was positive about getting permanent shelter and access to basic infrastructure such as water supply, sewage and solid waste management. However, households had a negative perception about quality of services and deteriorating infrastructure in all BSUP sites. Although, it was observed that household's lives became worse due to lack of stable livelihood condition.

In 2015, households lives become worse than 2011. All forms of impoverishment risk have emerged with the distance factor. Distance became an important factor causing more impoverishment risk compared to 2011. We found that BSUP sites, located near residential area had less impoverishment than other BSUP sites. Even opportunity of job, access to basic livelihood and access to public infrastructure driven by distance, the distance became a major factor for further impoverishment, increased distance to all services caused higher monthly expenditures to resettled households.

The BSUP policy has focused on improving slums dwellers lives. After resettlement, all BSUP sites have been unable to show positive improvement for transformation into a formal housing settlement. Due to poor socio-economic environment in the BSUP sites, resettlement household's lives became worse in 2015. Therefore, resettled households need a better socio – economic environment to improve their livelihood condition for future development.



## 7.1. Recommendations

1. There is a need to develop comprehensive and robust resettlement programs, which can improve social-economic conditions of resettled households. During the relocation process, households and NGOs involvement in the decision-making process can make improvement in household's lives.
2. Urban poor's have very different social and economic characteristics. In addition, most of urban poor have very strong social networks in the community. Social and economic aspects should be incorporate in relocation and resettlement process.
3. Relocation and resettlement process should use a participatory approach where all stakeholders make decisions. In addition, households' allocation should take place based on the social fabric. Old age and disabled peoples should get houses on the ground floor. BSUP sites should have infrastructure, which can accessed by disabled people.
4. All basic amenities need to be developed with sufficient infrastructure in BSUP sites and surrounding area before resettlement. In addition, there is a need of skill development programs with the help of NGO for sustaining their livelihood after resettlement. There should be proper system for financial stability to reduce loss of income and access to formal financial institution for future development.
5. There is more need for the government and NGOs involvement with resettled households after resettlement. In addition, it is needed to develop participatory system between government and households that can take care of basic infrastructure for certain period of time.

## 7.2. Way forward

This research intended to revisit resettled households to understand changes in lives of inhabitants. It will be interesting to study in situ BSUP site to understand comparison of in-situ and off-site slum development. In addition, it will be interesting to revisit the same resettled households after one generation. Women and children are most neglected in the BSUP programs and have more risk of impoverishment in any kind of resettlement. It will be also interesting to study their lives in terms of gender equity in displacement and resentment process. In addition, BSUP programs implemented in another part of country, comparison of inter-state BSUP programs can give better understanding of development -induced displacement and resettlement effect on urban poor's lives.

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# APPENDICES

## A. Household level questionnaire survey detail

### Households Questionnaire survey

#### A. Respondent's details :

Name: \_\_\_\_\_  
 Mobile No. : \_\_\_\_\_  
 Digital Photograph in front of the House door  
 Date of interview: \_\_\_\_\_

#### DETAILS OF HOUSEHOLDS AFTER RESETLMENT ON BSUP SITE

#### B. General Information

1. Name of BSUP Site \_\_\_\_\_
2. Location- Ward No/Name \_\_\_\_\_
3. House/Flat/Door No. \_\_\_\_\_

#### C. Household Level General Information

4. Number of family members: Adult Male: \_\_\_\_\_ Adult Female : \_\_\_\_\_ Child: \_\_\_\_\_
5. Does the family possess BPL card? Yes  No
6. Does the family possess Adahar card? Yes  No
7. Does the family pay property tax? Yes  No  Don't know
8. If yes in 06, how much per annum in INR? \_\_\_\_\_
9. Dwelling unit tenure [Owned , Rented] Owned  Rented
10. Individual Water Connection [Yes, No] Yes  No
11. If no in 10, what are sources? [Specify] \_\_\_\_\_

#### D. Income-Expenditure Details of Households

12. How much monthly expenditure is incurred by the family related to housing on this location?  
 (INR)

  - Monthly instalments for this dwelling unit \_\_\_\_\_
  - Cost of Operation & Maintenance of common assets \_\_\_\_\_
  - Property Tax \_\_\_\_\_
  - Rent ( if tenant ) \_\_\_\_\_
  - Others (specify) \_\_\_\_\_

#### E. Education

13. Education and related expenditure (on this location)

**Type of primary / high school:** *Municipal, Government, Private, not enrolled*

**Mode of transport:** *Bus AMTS; BRTS; Rickshaw; Two wheeler; Bicycle; Walking*

Age (of school going children)	Type of School	Distance to School (Location or km)	Mode of Transport	Monthly Travelling Expenses to school (INR)	Loss of school days after relocation (days/months)	Specify reasons for loss of school attendance
<b>After Resettlement this residence</b>						

14. State with reasons changes in education opportunities for children after resettlement

15. Number of earning members in this location :

Male \_\_\_\_\_ Female \_\_\_\_\_ Total \_\_\_\_\_

**F. Occupation**

16. Occupation (on this location)

**Occupation:** Specify

**Activity Status:** Employer; Self-employed; Salaried; Wage Labour; Non-worker

**Mode of transport:** Bus AMTS; BRTS; Rickshaw; Two wheeler; Bicycle; Walking

Sex	Age (Year)	Occupation	Activity Status	Distance to Work Place (Location or Km)	Mode of Transport	Monthly Travelling Expenditure INR	Monthly Income INR	Changes in income after relocation (days & INR)	Specify reasons for changes in income
<b><i>In this residence</i></b>									

17. What is the average monthly expenditure of household on this location? (INR)

18. Debt outstanding as on date of survey (INR)(specify the purpose)

19. Are you involved in the same occupation after relocation?

20. If no in 19, what are reasons? Specify

21. After relocation, did you experience unemployment? Yes  No

22. If yes in 21, what are the reasons and which organization did support you to find new job? How?

**G. Health and related expenditure**

23. Health and related expenditure

**Health facilities:** Specify- Primary health center, Hospital. Multi specialist hospital, others

**Activity Status:** private, Government

**Mode of transport:** Bus AMTS; BRTS; Rickshaw; Two wheeler; Bicycle; Walking

Health Facilities	Activity of facilities	Distance to Facilities (Location or Kms)	Name/Location	Mode of Transport	Monthly Travelling Expenses INR	Monthly Health Expenses INR
<b><i>Previous residence</i></b>						
<b><i>On this residence</i></b>						

24. State with reasons the opinion of health facilities before and after relocation?

**H. Economic security**

25. Economic security related information (before and after relocation)

Type	Yes	No	Specify
<b>Previous residence</b>			
Bank account			
Community saving group			
Insurance			
<b>On this residence</b>			
Bank account			
Community saving group			
Insurance			

26. How do you manage your financial crises? [NGO, from neighbor, Relative, Community, others] specify

**I. Market accessibility**

27. Market and related expenditure

**Type of Markets:** public distribution centre, private store, super market, city centre, vegetable market

**Mode of transport:** Bus AMTS; BRTS; Rickshaw; Two wheeler; Bicycle; Walking

Market	Purpose of visit	Name	Location	Distance In km	Mode of Transport	Monthly Travelling Expenses INR	Monthly Expenses INR

**J. PERCEPTION AND ASPIRATION**

28. Specify with reasons your satisfaction with the quality of housing unit? ( better than previous, worse than previous, same as previous)

29. What is your opinion on availability of following on the site?[Good, Bad, Worse, specify reason ]

- Water supply (adequate supply hours and continuity) \_\_\_\_\_
- Sewerage (overflowing and choked sewerages networks)\_\_\_\_\_
- Solid waste disposal (onsite collection and disposal)\_\_\_\_\_
- Public transport (distance to bus stop and frequency)\_\_\_\_\_

30. If RWA is formed on this site, then how does it support you in issues related to services and facilities management, livelihoods?

31. If RWA is not formed, then how do you take care of such issues?

32. Are you happy with the composition of community here? Yes  No

33. specify reasons of 32

34. State reasons. How many of your family and friends households from previous slum have shifted here (as %)

35. Have you applied for transfer to another BSUP site? State reasons if yes or no.

Yes  No  Reason: \_\_\_\_\_

36. State with reasons the household's preference for relocation after spending 5 year in this location

- Relocation to alternative BSUP site (closer to previous slum, friends and family there, no friends and family here)\_\_\_\_\_
- Prefer to stay on this location, specify reason\_\_\_\_\_
- Any other, specify\_\_\_\_\_

37. Name three (3) positive and negative opinions how life has improved after 5 years on BSUP site
- |                         |                         |
|-------------------------|-------------------------|
| <b>Positive opinion</b> | <b>Negative Opinion</b> |
| 1. _____                | 1. _____                |
| 2. _____                | 2. _____                |
| 3. _____                | 3. _____                |
38. After staying some years on location, how would you like to asses improvement in your life? And give rank from 1 to 10 \_\_\_\_\_
- Got worse
  - Same as before relocation
  - Improving but not as much accepted
  - Improve /Good
  - Very good
39. Specify reason of 38  
\_\_\_\_\_
40. State opinion/perception of their lives before and after resettlement  
\_\_\_\_\_

**B. Settlement level questionnaire and check list**

BSUP Site:  
Date:

**A. General Information : Status of Community facilities on BSUP sites**

Amenities	Formed	Constructed	Under process	Functioning
Residential welfare association				
Primary health centre				
Primary education centre				
Primary school				

**B. Residential welfare association**

1. What is role and responsibility of RWA?  
\_\_\_\_\_
2. How RWA is involving to improving people's lives after resettlement?  
\_\_\_\_\_
3. How RWA is maintaining community infrastructure?  
\_\_\_\_\_
4. If RAW is not formed, how community is maintaining common infrastructure and their livelihood?  
\_\_\_\_\_

**C. Primary health centre**

Amenities	Infrastructure condition	No. of Doctor	No .of Nurse	Visiting Hour	No of Patient in month
Primary health centre					

**Infrastructure condition:** good, bad, worse

**Visiting hour:** every day, once in week, two days in week, other (how many hours)

**D. Education**

Amenities	Infrastructure condition	No. of Teacher	No .of student enrolled	No .of student drop out	Remarks
Primary education centre					

**Infrastructure condition:** good, bad, worse



**E. Physical infrastructure**

Common Amenities	Good	Bad	Worse	Remarks
Open space				
Internal road				
Street light				
Common water tank				
Dustbin				
Water supply line				
Sewage line				
Solid waste				

**F. Distance from BSUP site**

- BRTS Stand \_\_\_\_\_
- AMTS Bus stop \_\_\_\_\_
- Heath Centre \_\_\_\_\_
- Hospital \_\_\_\_\_
- Primary School \_\_\_\_\_
- University \_\_\_\_\_

**G. What are the improvements and what are the main problems in resettlements site?**

- Improvements : \_\_\_\_\_
- Problems : \_\_\_\_\_

**C. Questionnaire for NGOs members and community leaders**

**A. General Information : about role and responsibility to mobilized community to resettlement site**

- How they mobilized people?
- What problem did they experience during and after resettlement?
- How they resolved all problems?

**B. Discussion about after resettlement (social-economic conditions)**

- How they help the community to form RWA?
- How they are helping people to improve accessibility to health and education?
- How they are helping people to improve financial conditions?
- Are they helping people to individual level or community level?
- Are people having a better life after resettlement?
- What is NGOs point of view about people's life after resettlement?
- Are resettlements sites household become part of a new community or still people are facing disparities?
- What are new challenge peoples are facing after resettlement?
- Is government implementing all infrastructure projects to improve people's lives?
- Surrounding neighbourhood

**D. Data collection overview**

Data	Data type	Source
Existing and proposed land use surrounding BSUP sites	Shape file	AUDA
Infrastructure network (road network, river, railways network, BRTS, hospitals location)	Shape file	AUDA
Administrative boundary of AMC and AUDA	Shape file	AUDA
Administrative ward boundary of AMC	Shape file	AMC
Detail of BSUP sites ( Administrative zone, Ward area, Town planning scheme (TPS) no., Final plot (FP) no., allotted house, occupied houses,	Report	AMC
Work of MHT on Residential welfare association	Report	MHT
Households socio-economic data, 2011	XML	Sejal Patel
Households socio-economic data, 2015	XML	Manual, Field work
Settlement level check list, 2015	XML	Manual, Field work
Household's interviews recording	Audio	Manual, Field work
Stakeholder's interviews (NGOs and Government official)	.doc	Manual, Field work

**E. Status of community facilities on BSUP sites in 2011**

Table 23 Status of community facilities on BSUP sites in 2011(S. Patel et al., 2015)

BSUP Sites	Residential welfare association formed	Primary health centre Constructed	Primary health centre Functioning	Primary education centre Constructed	Primary education centre Functioning	Primary school centre constructed	Primary school centre Functioning
Isanpur	Under process	Yes	No	Yes	No	No	No
Vadaj	No	Yes	Yes	Yes	Yes	No	No
Rakhial	Under process	Yes	Yes (doctor visit for 2 hrs/day )	Yes	Yes	No	No
Bage Firdosh	Under process s	Yes	No	Yes	Yes	No	No
Odhav	Under process	No	No	No	No	No	No
Vatva 1	Under process	Yes	No/ Mobile health van	Yes	Yes	Yes/ Common for all Vatva BSUP sites	Yes/ Common for all Vatva BSUP sites
Vatva 2	No	Yes	No/ Mobile health van	Yes	No		

**F. Detail of distance to school and travel cost in 2011 and 2015**

Table 24 Detail of distance to school and travel cost in 2011 and 2015

BSUP Sites	Average distance to school in 2011	Average distance to school in 2015	% of Change in distance in 2015	Travel cost in 2011 (USD)	Travel cost in 2015 (USD)	% of change in travel cost in 2015	No. of school trips to private or motorized mode of transport in 2011	No. of school trips to private or motorized mode of transport in 2015	% of school trips shift to private or motorized mode of transport in 2015
Isanpur	1.74	3.20	84	14	10	-29	1	6	500
Vadaj	1.12	2.01	79	3	4	10	2	2	0
Rakhial	1.69	2.96	75	4	8	61	2	16	700
Bage Firdosh	2.52	3.72	48	3	7	88	14	18	29
Odhav	3.00	5.75	92	6	15	138	0	3	100
Vatva 1	4.37	6.60	51	6	7	17	5	0	-100
Vatva	1.25	2.53	102	3	8	124	15	9	-40
<b>Overall</b>	<b>2.23</b>	<b>3.50</b>	<b>57</b>	<b>3</b>	<b>9</b>	<b>192</b>	<b>39</b>	<b>54</b>	<b>38</b>