

Housing Conditions of Construction Workers in Ahmedabad

Renu Desai
Sachin Soni
Uchita Vaid
Manthan Mevada

December 2014

Study sponsored by:
Prayas Centre for Labour Research and Action



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About Centre for Urban Equity (CUE)

CUE was established at CEPT University in 2009, evolving from the Urban Poverty Alleviation (UPA) Cell established in 2008. CUE advocates a human-centered and equitable urban development paradigm. CUE undertakes research and advocacy; conducts training and capacity-building; imparts education; and networks with stakeholders on various aspects of human settlements. CUE is recognized as a National Resource Centre (NRC) by the Ministry of Housing and Urban Poverty Alleviation (MHUPA), Government of India.

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The comments and opinions in this paper are of the author(s) and not of the Centre for Urban Equity or CEPT University.

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1. Introduction

1.1. Background

The Prayas Centre for Labour Research and Action has been working for unorganized labourers in Gujarat since 2006. These labourers, majority of whom are migrants, are engaged in multiple industries such as construction, brick kilns, cotton ginning and other factories, and agriculture work. Prayas has been involved in policy advocacy with the government on key issues related to these workers' welfare such as health and safety, livelihood and economic empowerment, education and child labour. In addition, Prayas has also started to focus on housing issues of construction workers. This impetus has come from the perspective of holistic welfare of construction workers. Prayas recognized that many of these workers live in the most vulnerable settlements of the city and while, on the one hand, these are excluded in city-wide slum initiatives, on the other hand, many are frequently subjected to eviction threats and displacement. In 2012, Prayas carried out a survey in 25 settlements inhabited by construction workers and wrote a brief note on the findings in order to throw attention on their housing issue (Prayas, 2012a). Following this, Prayas mapped out more such settlements and wrote a note on the status of this housing and for a pilot intervention to improve housing conditions (Prayas, 2014). Around this time, in September 2014, the Government of Gujarat released a press note stating that the Gujarat Building and Other Construction Workers' Welfare Board has allocated funds of Rs.200 crore for construction workers' permanent housing under Nanaji Deshmukh Awaas Yojna and Rs.20 crore for their temporary housing. Seeing this as a welcome move by the State government, Prayas approached the Centre for Urban Equity (CUE), CEPT University, to assist it in developing ideas for the productive utilization of these funds. This study has been undertaken at CUE in this context, both to understand the current housing conditions of construction workers in Ahmedabad and the factors contributing to these conditions as well as to suggest possible interventions to improve these conditions.

By construction workers, this study means a "building worker" as defined in The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996. According to this Act, a "building worker" means "a person who is employed to do any skilled, semi-skilled and unskilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment be expressed or implied, in connection with any building or other construction work but does not include any such person (i) who is employed mainly in a managerial or administrative capacity; or (ii) who, being employed in a supervisory capacity, draws wages exceeding one thousand six hundred rupees per mensem or exercises, either by the nature of the duties attached to the office or by reason for the powers vested in him, functions mainly of a managerial nature." In this study, construction workers thus include all those carrying out the vast range of works related to building and other construction, be it in skilled, semi-skilled or unskilled capacity, from excavation and earth filling to masonry to RCC work to plastering to finishing to plumbing and carpentry.

India's vast construction industry is an important contributor to the national economy. There is a chain of backward and forward linkages that the sector has with other sectors of the economy. About 250 ancillary industries such as cement, steel, brick, and timber and building

material are dependent on the construction industry. A unit increase in expenditure in this sector has a multiplier effect and the capacity to generate income as high as five times. In 2011-12, the construction sector was responsible for 8 per cent of national GDP.¹ Furthermore, it is a highly labour-intensive sector and is the second largest employer after agriculture. According to the Planning Commission's Eleventh Five Year Plan document, employment in the construction sector in India observed a steady increase from 14.6 million in 1995 to more than double in 2005, that is, nearly 31.5 million personnel comprising engineers, technicians, foremen, clerical staff, and skilled and unskilled workers. Amongst this, the workers accounted for 93 per cent of the total employment in 2005, that is, about 29 million, with a predominance of migrant labourers (Planning Commission, 2008). Currently, the sector is estimated to employ a total of 40-45 million across India. This would include construction in both urban and rural areas since the sector spans both. There are no disaggregated figures for construction workers in urban areas but there are estimates for some metropolitan cities. The number of construction workers in Delhi was officially estimated to be 5-6 lakh in 2006 (DDA, 2006). For Bangalore, the number of construction workers was pegged at 3.5 lakh in 2009 (The New Indian Express, 2009).

In Ahmedabad, the construction industry sustains a large population of workers, with a 2009 study estimating this to be almost 100,000 (BSC, 2009).² The same study attempted a representative sample of about 1000 construction workers and found that almost 70 per cent were migrants. This included 8.6 per cent long term migrants (defined as working since more than 10 years in the city but still shuttling between Ahmedabad and native place, with majority of their work being in the city) and 60.1 per cent seasonal migrants (defined as those who migrate for stipulated periods during the year, excluding the monsoon) (BSC, 2009). Understanding the issues faced by construction workers and putting forward viable interventions to address these requires one to seriously take into account the dynamics of migration and its implications.

It is useful to take stock of the scale of migration in India more generally. Migrants constitute a large proportion of the country's total population. As per Census figures, in 2001, out of a total population of nearly 1.03 billion, their number was 309 million or 30 per cent of the population (Srivastava, 2012a; 2012b). As per the National Sample Survey Organization (NSSO), in 2007-08, their number was 326 million or 28.5 per cent of the population (Srivastava, 2012).³ Both Census and NSSO surveys are considered to be reasonably reliable in capturing permanent and semi-permanent migrants but unable to adequately capture seasonal and/or short-term circular migration (Srivastava, 2012a; 2012b). While Census has no definition for seasonal migrants, NSSO defines them as people who stayed away from their usual place of residence for one month or more, upto a period of six months (and for a minimum of 15 days in each spell) within the last 365 days. Using this definition, the NSSO 2007-2008 round estimated about 14 million short-duration seasonal migrants in India

¹ "Indian construction industry at a glance in 2011-12" <http://www.indianmirror.com/indian-industries/2012/construction-2012.html> (accessed on 17.11.2014)

² In 1991, as per the census, there were 51,000 construction workers in Ahmedabad (Sharma, 1996).

³ The Census defines migrants as persons residing in a place other than his/her place of birth or who has changed his/her usual place of residence (UPR). The NSSO definition is similar to the UPR definition. (Srivastava, 2012a; 2012b)

(NSSO, 2010: Table 15). However, this is considered to be a gross under-estimation. One reason for this is that the NSSO definition does not capture seasonal migrants who migrate for more than six months in the year but are still not permanent or semi-permanent migrants in the city. Estimates of seasonal migrants by scholars vary widely from 40 million (Srivastava, 2012b) to 100 million (Deshingkar & Akter, 2009). Thus, there is a lack of robust and credible data on these migrants even as it has become clear that this is an important migration pattern.

Internal migration occurs due to both push and pull factors and is greatly influenced by regional disparities in levels of development. Within internal migrants, seasonal migration for employment has become one of the most durable livelihood strategies for people living in rural areas. Current and prospective rates of job creation in Indian agriculture are poor and with unpredictable farming in large parts of the country, seasonal migration, with all its perils, offers better returns and better prospects for raising living standards than local employment in the villages. Studies have pointed out that seasonal and temporary migration is more prevalent among the socio-economically deprived groups such as Scheduled Castes and Scheduled Tribes and among the poor and landless households, and is often driven by distress (Bhagat, 2012). In cities, large numbers of rural-urban migrants work in manufacturing as well as in services, particularly in construction, textiles, small-scale industries, rickshaw pulling, domestic work, security services, small hotels and roadside restaurants / tea shops and street vending (Deshingkar & Akter, 2009). Many of them are seasonal migrants, with the number being particularly high in the construction sector. The NSSO 2007-2008 round estimated that 36.2 per cent of seasonal migrants were employed in the construction industry alone (Srivastava, 2012a).

Migrant workers, including seasonal migrants, are thus central to the national and urban economy and are major contributors to it. Despite this, their significance to economic growth continues to be unrecognised. Due to the perceived negative economic, political and social effects of migration, migrants face a variety of exclusionary processes. In many cities, they face discrimination due to “sons of the soil” movements which try to create vote banks along ethnic and linguistic lines. Market mechanisms and socio-economic processes also create a gulf between migrants and locals (Bhagat, 2012). The national government as well as State and urban local governments have remained hostile towards migrant workers, and have largely failed to provide legal or social protection to this vulnerable group, leading to their exploitation, underpayment of wages and lack of adequate housing and amenities. Employers also routinely disregard laws designed to protect their labour rights and their other needs (Deshingkar, 2005). Urban planning and housing policies have not made provision for them, forcing them to live in very dismal conditions, mostly in informal settlements commonly referred to as slums.

According to the United Nations, approximately 50 per cent of the global urban population can be classified as slum dwellers—individuals who face inadequate access to safe water, sanitation and other infrastructure; poor structural quality of housing; overcrowding; or insecure residential status. In the least developed countries, estimates of slum dwellers amount to approximately 78 per cent of the urban population (United Nations Human Settlements Programme, 2003). South Asia has the largest share, followed by Eastern Asia,

sub-Saharan Africa and Latin America. China and India together have 37 per cent of the world's slums (United Nations Human Settlements Programme, 2006). Between 2000 and 2010, the number of slum dwellers increased by six million every year globally (Cities Alliance, 2010). In India, the slum population increased from 75.26 million in 2001 to 93.06 million in 2011 (Government of India, 2011). Slums refer not only to inadequate housing conditions, but are also high concentrations of poverty and social and economic deprivation. This is a result of slum dwellers being a labouring class that is adversely integrated into the political economy. They work mainly in the informal / unorganized sector which is characterized by a lack of regulations, social protection, security of work, possibilities for collective bargaining, low wages, etc. They live in informal settlements, that is, slums, due to the lack of affordable formal housing for them in the city.

Over the past several decades, there has been increasing awareness amongst policymakers that slums keep the wheels of the city turning in many different ways by housing the labouring population. The informal economic activities that most of the labouring class is employed in often link up to formal-sector enterprises; these activities are often located within slum areas; and many slum dwellers also directly provide services to those who live and work in the formal sector. This awareness led to slum improvement policies and programmes. Unfortunately, in recent decades, rather than buttressing these policies with appropriate urban planning mechanisms, housing policies and governance processes, local urban authorities and State governments have evicted slum dwellers in many Indian cities. Rather than using urban policies and planning as instruments to realize the rights of low-income residents and migrants to the city and integrate them into the city in a more equitable manner, India often seems to be moving in the reverse direction. Thus, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) led to widespread slum evictions. While alternative housing was provided to evicted families under JNNURM's Basic Services to the Urban Poor (BSUP), this pushed them to the urban peripheries, impoverishing and excluding them further (see Mahadevia, 2011; Sivaramakrishnan, 2011, Desai, 2012). The Rajiv Awaas Yojana (RAY) is the most recent national programme targeting slum dwellers, and while it has the potential to be inclusive and equitable, it is not yet clear whether this potential will be realized.

Moreover, slum policies in India have many limitations as they are designed for only certain types of housing settlements of the urban poor and certain groups amongst them. For instance, they do not consider as "slums" the settlements of the homeless (who live on pavements, under flyovers, etc) which often include construction workers. Neither do they consider the vulnerable housing pockets that emerge on construction sites as "slums." Since slum policies require housing pockets to be notified / listed as "slums," the non-notified / unlisted pockets remain invisible and their inhabitants are denied state support (Prayas, 2014). In Ahmedabad, Prayas had approached the Ahmedabad Municipal Corporation (AMC) with a list of settlements inhabited by construction workers for their inclusion in the slum listing for RAY, however, AMC did not include them as it considers their residents as temporary (Prayas, 2014).

In fact, slum policies and other housing policies targeting urban poor and low-income groups are also designed keeping in mind only permanent or semi-permanent dwellers of the city.

These may consist of migrants to the city, however, they are at a stage where they have established themselves in the city in some permanent manner and for the long-term and are also owners in the informal housing market. Many poor migrants do not, however, follow this pattern of migration where the city becomes their main home and place where they invest in for their (and their children's) future. Instead, they are seasonal migrants. For them as well as for very recent poor migrants, many of whom are construction workers, establishing a foothold in the recognized slums of the city is difficult due to the rising prices in this informal housing type. This leaves them with no option but to settle down in more vulnerable informal arrangements: on pavements and street edges, under flyovers, along railway tracks or as tenants in the recognized slums. The existing planning, housing and slum policies are blind to those who resort to these housing options. As Khandelwal et al (2012: 200) observe, "the urban development discourse on shelter does not have a grounded perspective on seasonal migration. The perspective, if at all, is heavily inclined towards slum development, while most of the seasonal migrants are outside the slum population and hence invisible." In recent years, night shelters or *rain baseras* have been built in many cities, however, due to various reasons discussed later, these are not appropriate for all seasonal migrants.

Furthermore, the construction workers are amongst the most vulnerable of the informal / unorganized labourers since they are adversely incorporated into labour markets, with middlemen and contractors maximising their own profits. This creates further difficulties for them, both at their workplaces in terms of occupational safety, fair wages and welfare facilities, and with regard to their housing and access to basic services and amenities in the city. These difficulties are greater for the seasonal migrant construction labourers. Despite the contribution made by them to national and urban development, most therefore remain on the margins of society without political voice, contributing cheap labour and doing dangerous jobs but unable to influence their pay, working conditions or living conditions. In fact, far from being a burden on the city, these migrants' cheap labour subsidizes the fruits of development that middle and elite classes of society enjoy. With construction work being one of the most important sources of livelihood and these workers being a significant contributor to the national and urban economy, support for them should be seen as an essential investment for India's development trajectory.

1.2. Objectives of the study

The objectives of the study are:

1. To understand the current conditions of construction workers' housing in Ahmedabad by mapping their existing access to land for housing, the physical condition of their shelters and settlements, their access to basic services and amenities, and the set of actors and institutions that have a bearing on these conditions.
2. To understand the factors that influence housing choices and housing mobility amongst construction workers such as location of *nakas*⁴ and construction sites, affordability, social networks, duration of stay in the city and migration patterns.

⁴ *Nakas* are informal labour markets where construction workers gather in the mornings to find employment.

3. To develop a framework for interventions that could improve construction workers' housing and a schematic proposal for a pilot intervention for improving construction workers' housing.

1.3. Methodology of the study

The study is based on a three-pronged methodology:

1. Literature review to understand the dynamics of labour in the construction sector in Indian cities, the migration dynamics amongst construction workers, and the impacts of these on the conditions in which construction workers live and work in the city.
2. Collection and analysis of secondary data with regard to construction workers and their settlements in Ahmedabad as well as policies and legislations relevant to this labour and housing sector. This included a discussion with Prayas to draw upon its knowledge of the settlements in the city.
3. Case-study approach, with primary data collection through qualitative research methods (in-depth interviews, group discussions and observation and mapping) so as to gain an in-depth understanding of both current housing conditions as well as the factors shaping them.

The case-studies were selected after developing a typology of construction workers' housing based on the available secondary data (Prayas, 2012a) and discussions with Prayas (See Table 1). Given the constraints of time, approximately two case-studies were selected for each type. The primary data for the case-study settlements was collected between October 11, 2014 and November 13, 2014 (excluding the week of Diwali). A few follow-up field visits were carried out between December 2-6, 2014 to fill in some gaps in the primary data collection.

Each case-study involved three methods to gather primary data: group discussion with a loose group of construction workers, semi-structured interviews with two residents per settlement (except at construction sites where residents did not have the time to spare for both group discussion and individual interviews), and spatial mapping and observation of existing living conditions both at settlement level and individual household level (the latter was done for the households of the two interviewed residents). Where possible, some discussions or interviews were also carried out with labour contractors and site engineers.

To organize the group discussion we gathered a group of people in each settlement (number of participants varied in each settlement) through one of the older residents. All participants were provided with information relating to the study. A group discussion guide was developed based on the research objectives, and covered questions relating to demography of the settlement, migration history, land tenure, history of internal migration in the city, type of shelter, vulnerabilities of housing, access to basic services and amenities, attitudes of relevant institutions and actors, and housing preferences (refer to Annexure 4). The same group discussion guide was used for all case-studies, although this operated as a flexible guide rather than a structured protocol. We chose group discussion as the technique for our research given the limited time for completing the study. Moreover, group discussions have proven to be particularly popular in housing research as they explore a predefined topic, yet are open and flexible (Morgan, 1993). They also offer the opportunity to collect data from group interactions and explore issues that individuals in a one-to-one interview may not raise. Limitations of the group discussion method include the statistically non-representative sample

Table 1: Typology of construction workers' settlements and selection of case studies

No	Typology of settlement	Case study selected	Reason for selection
Off-site settlements			
1	Shelters / settlements on pavements & street edges, under flyovers & bridges	Beneath Shreyas flyover	<ul style="list-style-type: none"> • Location: Centre of the city, western Ahmedabad • Migrants from Dahod district, Gujarat
		Street edge near Parin Furniture showroom, S.G. Highway	<ul style="list-style-type: none"> • Location: Towards the urban periphery, western Ahmedabad • Migrants from Dahod district, Gujarat
2	Shelters / settlements on government or private land (not recognized slums) ⁵	Behind Vasna Police chowky	<ul style="list-style-type: none"> • Location: Between centre and periphery • Migrants from Banswara, Rajasthan; also permanent migrants from nearby districts
		Opp. Sabarmati crematorium, near Acher Gaam	<ul style="list-style-type: none"> • Location: Between centre and periphery • Migrants from Dahod district, Gujarat
		Near railway tracks next to Durganagar, Vatwa**	<ul style="list-style-type: none"> • Location: Periphery of the city, eastern Ahmedabad • Migrants from Dahod district
3	Rental housing in slums on government or private land ⁶	Manav Mandir Chali, Gurukul	<ul style="list-style-type: none"> • Location: Centre of the city, western Ahmedabad • Tenants from Banswara, Rajasthan
		Thakore Vas, Chamundanagar, Odhav	<ul style="list-style-type: none"> • Location: Periphery of the city, eastern Ahmedabad • Tenants from Ahmedabad city
On-site settlements			
4	Shelters / settlements on private-sector construction sites	IET Ahmedabad University campus, Navrangpura	<ul style="list-style-type: none"> • Location: Centre of the city, western Ahmedabad • Private institution • Medium site in its last stage of construction (400-500 workers living on site during peak of construction)
		Amarnath Business Complex (ABC), near St. Xavier's College	<ul style="list-style-type: none"> • Location: Centre of the city, western Ahmedabad • Private commercial site • Small site in its initial stage of construction (20 workers living on site)
5	Shelters / settlements on public-sector construction sites	IIT Gandhinagar new campus, near Palaj village (the case-study settlement includes only one of the 4 settlements at the campus)	<ul style="list-style-type: none"> • Location: Just outside Ahmedabad • Public institution • Medium site at mid-way stage of construction (more than 500 workers living on site)
		Flyover construction site near Narol circle	<ul style="list-style-type: none"> • Location: Periphery of the city, eastern Ahmedabad • Flyover construction site • Medium site with workers scattered along the road where construction is occurring

⁵ Although the landownership of government versus private land has significance for tenure, we have not categorised them separately since we have not been able to confirm the precise landownership for these case-study settlements. It also seems that in the settlement near Acher Gaam, the landownership might be a mix of government and private.

⁶ This settlement was added as a case-study later to cover workers living in open plots, who get recruited from their village as a group and work for public/private infrastructure projects such as laying pipelines or road construction.

of respondents. Another limitation of the method is that vocal participants try to dominate and shy participants avoid responding, however, we attempted to achieve an in-depth interaction with most of the participants of each group.

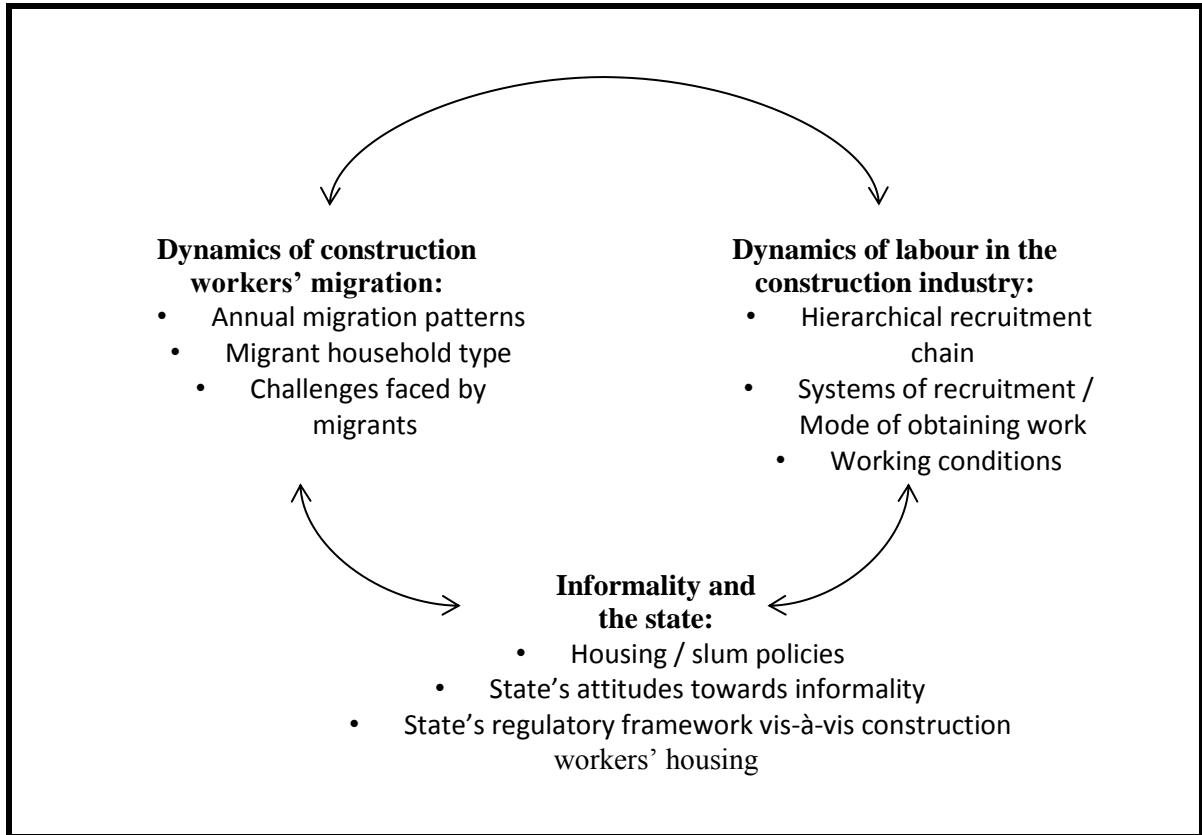
Individual interviews were conducted in each settlement with the motive of corroborating the information received in the group discussions and to further probe the issues on a one-to-one level. We developed an interview guide and the interview questions evolved based on the issues raised by the participant (refer to Annexure 5). Snowball technique was used to identify the participants. Given the scope of the study, only two residents were interviewed from each settlement. The interviews were conducted in Gujarati and Hindi, as preferred by the participant.

Spatial mapping and observation involved sketching out a schematic plan of the settlement to document numerous aspects. A checklist was prepared to guide this documentation (refer to Annexure 6) and included site context, basic services and amenities and settlement-level vulnerabilities. We also sketched out the spatial layout and schematic sections of the houses of the residents with whom individual interviews were conducted. This documentation of the individual-house-level conditions was also guided by a checklist (refer to Annexure 6) and included structural conditions, materials, layout, use of the space and storage of belongings, and location of basic services.

1.4. Structure of the report

The report focuses on the research component of the study. The next three sections are a discussion of three themes that are important for understanding the construction workers' sector and that provide a background to the issue of their housing (see Figure 1). The first theme, the dynamics of labour in the construction industry, is discussed in Section 2. This discussion includes the hierarchy structure in the industry, systems of recruitment or modes of obtaining work in the industry, and working conditions. Section 3 delves into the second theme, the dynamics of construction workers' migration. It discusses the types of migration, both in terms of migration patterns and the migrant household types. It also discusses challenges faced by migrants and the effects of migration for workers' rights in the city. Section 4 discusses the third theme, which is state policies, legislative provisions and shortcomings, and attitudes with regard to housing informality in the city and construction workers' housing. The discussions in these three sections are based on a combination of existing literature and our primary research for the case studies. Factors related to the above-mentioned three themes are key in shaping existing housing conditions and choices of construction workers at a systemic level (see Figure 1). Certainly, individual households' conditions also influence housing conditions and choices, and we discuss this in the case studies, however, given the time constraint, the sample size of individual interviews was small and therefore did not allow us to develop a comprehensive understanding of this. We do not therefore consider this as a key theme for broader discussion. In any case, the purpose of this study is to focus on the systemic issues since individual households' socio-economic conditions and choices can be as diverse as the number of individual households. Following the discussions of the above-mentioned three themes, Section 5 discusses each of the case studies in detail. In Section 6, we present and discuss the main research findings.

Figure 1: Framework showing the systemic aspects that influence construction workers' housing.



2. Dynamics of labour in the construction industry

Despite the importance of the construction industry to the national economy and employment share, its driving force, the construction workers are one of the most vulnerable sections of society. Here, we describe the industry's structure with respect to its labour, the different systems of labour recruitment and wage payment, and we also consider how this creates vulnerable and exploitative conditions for the labour. It is important to understand this as it has impacts on the question of their housing as discussed later in this report.

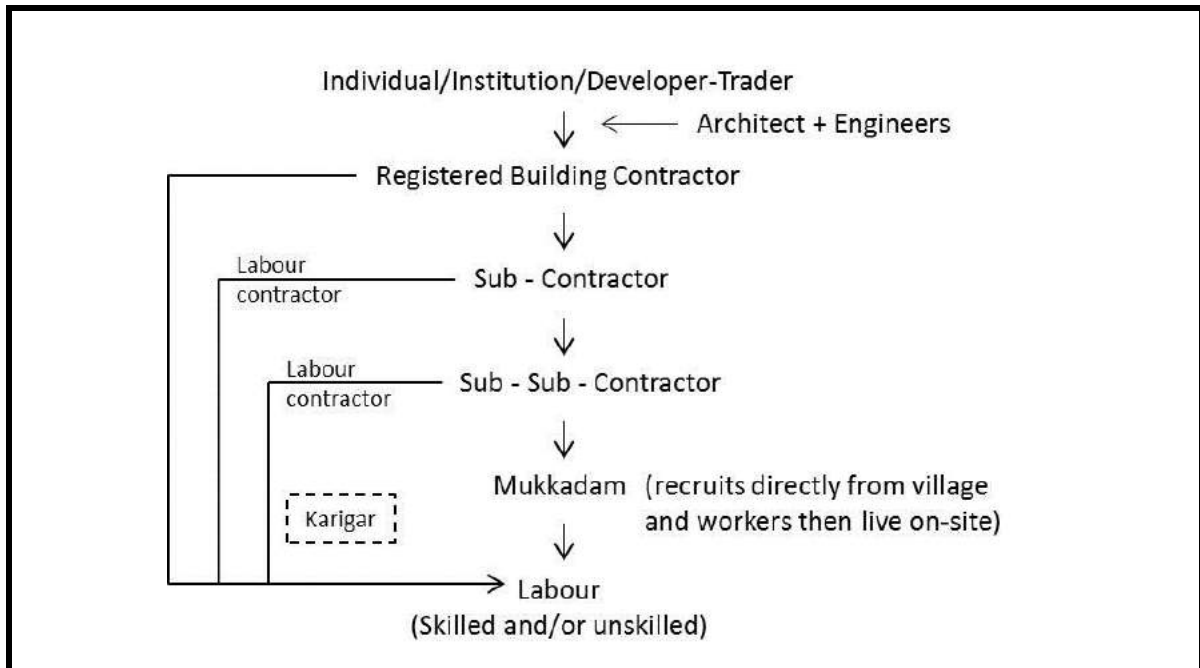
The construction industry functions through multiple rungs between those initiating a construction project (an individual-owner or institution or developer-trader) and labour. Generally, the former approaches a registered building contractor (this could be a large construction contracting company) who then hires sub-contractors for RCC work, plastering work, paint work, electrical works and other works. The labour is provided by the sub-contractor himself. Alternatively, the sub-contractor hires a sub-sub-contractor who provides the labour. The one who directly recruits the labour functions as the labour contractor. Sometimes neither a sub-contractor nor sub-sub-contractor directly recruits the labour, and instead this involves another tier of intermediaries—this could be a skilled worker or *karigar* in a particular type of work (e.g. plastering or tile laying) who arranges for a group of unskilled and skilled workers; or it could be a *mukkadam* or labour chief/broker who brings a labour gang from his village. If the *karigar* is arranging for a group of workers, he could also be in the process of climbing the hierarchy and becoming a labour contractor himself.

Thus, in the current industry structure, those who initiate a construction project and even the registered building contractors—the latter being considered as the ultimate employer of the labour force (Sharma, 1996)—do not generally recruit the construction labourers directly. Instead, they recruit them through a hierarchical chain that includes someone who functions as a labour contractor (see Figure 2). This has been referred to as a “partially invisible recruitment chain” (Ajeevika Bureau, nd). In their Ahmedabad study, BSC (2009: 29) mentions that there are some labourers who get work directly from someone initiating a construction project or from the registered building contractor, however, such labourers are very few and it is usually for short-duration work, that is, for a day or two and not more than a week. The study estimated that only 10 per cent may get work like this while the majority of workers get work through a labour contractor. However, another Ahmedabad study (Sharma, 1996) as well as our primary research for this study reveals that there are some registered building contractors / construction contracting companies who directly employ some workers after contacts are built up, and this employment is for long duration.

Construction workers include skilled and unskilled workers (*karigar* and helper, respectively) engaged in different works like masonry, centering work, RCC filling, plastering, plaster of paris (POP) work, colour work, flooring work, plumbing, carpentry, electrical work, and so on. Many unskilled workers, especially male, apprentice with a *karigar* and seek to finally become a *karigar* themselves. However, it is a difficult process to move up from unskilled to skilled labour because one needs regularity of work and a willing teacher to gain the required skills, both of which are often difficult to find. Unskilled workers are also involved in loading

and unloading and excavation and earth filling, and there is no possibility of their becoming skilled workers over time since the nature of this work is unskilled. Women also form an important part of the labour force and are mostly unskilled workers. Wages are related to level of skills, type of work, and market rates, although they also depend on workers' ability to negotiate wages and the mode through which they obtain work / are recruited for work.

Figure 2: Hierarchical labour recruitment chain in the construction industry



Labour contractors employ labourers through one of three systems of recruitment, which overlap with the three modes through which labourers obtain work.⁷ In the first, migrant labourers looking for work opportunities congregate at the informal labour markets in the city, known as *nakas*, from where they are recruited as daily wage labourers. In the second, labourers join a labour gang organized in their village by a labour contractor or a *mukkadam*; the labour gang then travels to the city to work on a specific worksite. In the third mode, labourers, either individually or as a kinship group, find work directly from their urban place of residence through the direct contacts they have with builders / contractors.

The workers who obtain work through the *nakas* are called *naka* workers or casual workers and are paid daily wages, while the workers who obtain work through the second and third mode can be called contract workers as they work under informal contractual arrangements extending for a considerable period of time and are paid monthly wages. We discuss each of these three modes of obtaining work in greater detail below since they involve variable degrees of security, dependence and exploitation for the labourer; have different impacts on wages; and also have implications for their housing as discussed later in this report.

Naka workers / Casual workers

⁷ The discussion on systems of recruitment / modes of obtaining work is written based on existing literature from Ahmedabad (mainly Sharma, 1996; BSC, 2009; and Ajeevika Bureau, nd), our primary research for this study and discussions with Prayas.

Nakas are informal labour markets where labourers congregate early in the morning in search of work. Generally, labour contractors approach the labourers at the *nakas* and hire them after negotiation of wages. This is for short-term work. The labourers get paid at the end of the day for the day's work. The labourers may be employed by a new labour contractor each day or may be re-hired by the same labour contractor. The labour contractor often pays them the fare to travel to the worksite. Individual owners initiating some small-scale construction work also approach the labourers at the *nakas* directly. In this system of labour recruitment, workers face uncertainty of employment and do not get work for all the working days of a month. A 2009 study observed that almost 80 percent of *naka* workers got work for only 10-12 days in a month, and that on a daily basis, about 20 per cent of labourers do not usually get work at the *naka* and have to return home or have to work for lower than market wages (BSC, 2009). As the study noted, these figures might have been due to the recession period at the time. Nonetheless, even today, most *naka* workers do not get regular work throughout the month. According to Prayas, they usually get work between 10-15 days in a month excluding the monsoon when work availability is extremely variable. *Naka* workers earn relatively higher wages than the workers in the other two systems of recruitment. The better and immediate pay through *nakas* must be therefore seen against the greater risk of unemployment and the absence of patronage and provision of housing. *Naka* workers who are skilled workers / *karigars* also often develop contacts in the industry over time and then contractors contact them directly (often by phone) to employ them. They may even organize a group of labourers (unskilled workers or helpers) for the contractor. Thus, some *naka* workers do not physically go to the *naka* always even though they are obtaining casual work. While there are informally fixed daily wage rates at the *nakas* in each city, ultimately the wages that workers earn depend on the negotiation skills of both the workers and the labour contractors.

While the dynamics of migration and type of migrants amongst the construction labourers will be discussed in detail in the next section, here we would like to note that most workers who find work on *nakas* are either locals / permanent migrants who do not want to deal with the perils and disadvantages of living on site and do not have other avenues for obtaining more regular work. Also among the *naka* workers are the seasonal and short-duration circular migrants who travel frequently to their villages and do not want a binding contract as in the second system of recruitment through labour gangs. There are also conflicts sometimes between the locals / permanent migrants and the seasonal and short-duration migrants at the *nakas* since the latter are often willing to work at below market prices.

There are an estimated 83 *nakas* in Ahmedabad; some are big, others medium in size and others quite small (see Annexure 1). Some *nakas* also specialize in a branch of construction. For example, construction workers specializing in marble fitting are found predominantly at the Raipur *naka* (Ajeevika Bureau, nd).

Labour gangs

In the second system of recruitment, labourers join a labour gang organized in their village by a *mukkadam* (a labour chief/broker, who is a former labourer turned supervisor) or labour contractor who then brings them to the city as a group to work on a specific worksite. These labourers are contract workers. Usually these *mukkadams* or labour contractors are from the same villages from where they recruit labour. Sometimes there are family and kinship ties

between the *mukkadam* and the labour group under him. *Mukkadams* act as intermediaries between contractors and labourers. In many cases, labourers have contact with contractors only through their *mukkadams*. A labourer might also have contacts with multiple *mukkadams* and may join labour gangs of different *mukkadams* over the course of his/her work-life. The *mukkadam* estimates the work; negotiates wages, weekly or fortnightly cash advances (*kharchi*) and conditions (shelter, water, etc); mediates larger advances from contractors (e.g. during the cultivation season); arranges travel for the labourers; and makes payments to them. Most critically, *mukkadams* provide assurances: to labour about reliable employers and to employers about reliable labour gangs. The *mukkadam* / labour contractor pays the workers on a monthly basis. They also give them weekly or fortnightly advances (*kharchi*), which is then deducted from their pay at the end of the month. Sometimes, workers do not collect their payments at the end of the month but take this from the *mukkadam* or labour contractor just before returning to their native place.

A labourer who works as part of a labour gang will move from work-site to work-site, living at each site, depending on the duration of the work he/she is engaged in. These workers are sometimes like bonded labourers since *mukkadams* also tie the workers with advances (loans) during the acute need of the monsoon season or family crises (such as illness and death). The workers then have to work for the *mukkadam* under any condition to pay off the debt, and are left in no position to negotiate their wages, working conditions or living conditions. According to Mosse et al. (2002), migration is a defensive survival strategy for migrant construction workers tied to a *mukkadam*. They migrate the furthest, for longest and with least reward. Their wages are lower than the wages of *naka* workers. This is the price paid for relatively greater security and regularity of work, and for protection and patronage offered by ties to a *mukkadam*.

Not all labour gangs live on work-sites. Some live off-site on open plots of government or private land, access to which seems to have been arranged informally by the *mukkadam* or labour contractor (or someone else up the recruitment chain such as work contractor or registered contractor). The latter arranges for daily transport from there to the work-site.

Regular contract workers

In this third system, labourers, either individually or as a kinship group, find work directly from their urban place of residence through the direct contacts they have built up with builders / contractors. If a kinship group, then only one person might have such contacts and gets work for the entire group, many of whom might even get recruited from the village directly. There is security of regular work for an established time period based on the scale of the project or the arrangement with the employer. The informal contract between the labourer and the employer could be for the duration of the project or a regular indefinite period. Besides the security of regular work, labourers get weekly or fortnightly cash advances (*kharchi*), and sometimes a place to stay. The contractor also arranges transport from their urban place of residence or a common meeting point to the work-site. Like in the labour gangs, the downside for these workers is that they receive lower wages compared to that of *naka* workers. Unlike in the labour gangs, they are not like bonded labourers. Only a small proportion of construction workers are regular contract workers.

Implications for construction labourers

There are clear advantages and disadvantages for workers in each of the different systems of recruitment. *Naka* workers do not get work on a regular basis like the workers in the labour gangs. However, they earn higher wages than them. *Naka* workers are also not provided with any shelter while the labour gangs are usually provided with some kind of shelter on site. However, living on site also often leads to more control over labour, often leading to longer working hours without commensurate pay. One of the *naka* workers during our case studies, when asked about his reasons for obtaining work from *nakas* stressed on the fact that working as contract labour binds them to a labour contractor or *mukkadam* who often exploits them through long working hours with lower wages. He said, “(Living on construction sites) is no life for a human being. They (contractors/*mukkadams*) make us work like animals and ask us to live on the site. If materials go missing from the site, they blame us and deduct amount from our wages. At the end we do not gain anything.” Many *naka* workers expressed such concerns. By obtaining work at the *nakas*, they are spared of the hassles that arise from living on construction sites.

Many workers join labour gangs rather than going to *nakas* even though the wages are lower in the former. One reason is the regularity of work it secures for them. When we asked one of the workers living on site brought there by a *mukkadam*, about his reasons for not going to the *nakas* to look for work, he said, “You can never be sure if you will find work or not (at the *naka*). What if you do not find work? Then you have to spend from your own pocket for living expenses. You go into loss. Then there is added cost of housing as well. If we work with a *mukkadam* then we can live on site.” For migrants with no toehold in the city, being part of a labour gang not only gives them regular work but also poses the least burden in terms of arranging for housing.

The perspective of the large builders who recruit directly through *mukkadams* is also noteworthy. A site engineer working for a large developer said, “We do not want the headache of dealing with *naka* workers. They ask for higher prices and want details of work that has to be done. It is much easier for us to hire a labour contractor who gets labour from villages. They come, live on the site, work as instructed and do not create any issues. We pay the labour contractor and he pays the labour so we do not have to deal with that either.” This reflects the fact that developers are suspicious of wage labour at *nakas* and prefer the more vulnerable migrant population who would come through a *mukkadam* and live on site.

An important point to be noted is that a labourer might shift between the above-discussed three types of obtaining work over the course of his/her work-life. For instance, when a certain *naka* worker is directly recruited by a contractor repeatedly, over time this *naka* worker might become a regular contract worker with that contractor (Sharma, 1996: 25). *Naka* workers are sometimes also recruited for short-term contract work (1-1.5 months) when there is shortage of labour at construction sites during / after festivals when labour gangs go back to their villages. Sometimes labour from labour gangs also come to find work at *nakas* when the work at site halts for some reason or during the monthly day-off on *amavas*. The labour gangs who live off-site are sometimes recruited as daily-wage labour by contractors

from other sites who need additional labour for a night shift. There are also *naka* workers who, through contacts with labour contractors, join a labour gang for a period of time and go to live on site.

Wages of workers depend on the mode of obtaining work, workers' skill level and negotiation capacity. Workers living on site in a labour gang are paid less in comparison to *naka* and contract workers. A skilled worker on the *naka* or in regular contract work could be paid anywhere between Rs.500-600 per day, depending on the kind of work and skill level. A skilled worker in a labour gang is usually paid Rs.400 per day. Unskilled workers at the *naka* are paid Rs.300 per day while in labour gangs they are paid Rs.200 per day. Due to gender discrimination in the construction industry, women unskilled workers are paid less: Rs.250 at the *naka* and Rs.180 in labour gangs. Furthermore, *naka* workers are able to get work for only 10-15 days in a month while workers in labour gangs work for 20-22 days. Moreover, wages at *nakas* tend to be more variable and depend on the worker's contacts and negotiation skills. If a *naka* worker does not obtain work by a certain time in the morning, he/she will often take up work at a lower wage than usual. Wages may also depend on the time of the year as November to April is the peak construction season and workers may get paid more during this time.⁸

More generally, construction workers' exploitation and vulnerability comes out of factors intrinsic to the way in which they are integrated into the industry structure. Firstly, there is an absence of any enduring relationship between those who initiate a construction project and the workers. This is because for the former, the work is only of a temporary nature since workers move on to another work-site when the construction activity is completed. As a result, they perceive no long-term interest in improving the working and living conditions of workers, and attempt to escape from their responsibilities and obligations towards them. One of the sub-contractors from Ranchi, Jharkhand who had brought a group of labourers with him to Ahmedabad, when asked about the attitude of the developer they were working for, said, "(Developers) do not provide many facilities to us because we will only be here for part of the project. There will be a new group of workers to do the next phase of the project. They also have to keep the project costs down to make profits so they cannot provide us with good living facilities. We manage with what they give us."

Registered building contractors are also involved in exploitation of workers and try to escape from their responsibilities and obligations. Since they employ labour through intermediaries (labour contractors or *mukkadams*) rather than directly, this impacts wages. This is because they pay a total wage bill to the intermediary as per their agreement on the type and scale of work that the workers would do. This wage bill is higher than the wages of the workers by a factor that will account for the intermediary's margin. An interview with a site engineer revealed the implication that this has for workers' wages: "We hired a sub-contractor who got labour for us. We decided on a total labour price for the amount of work to be done. We provided them with all the materials. We do not pay the sub-contractor separately; we only

⁸ Wages discussed here are based primarily on discussion with Prayas representatives. Since the primary data from our case studies is based on a very small sample, this is used only to corroborate the information obtained from Prayas.

pay him the total wages for labour. His profit is through the leftover margin from the wages. It is up to him how many labourers he uses to get the work done and how much he pays them. If he can get fewer labourers to finish the work and pay them less, his profit will be higher.” This clearly reflects how the industry practice of middlemen leads to suppressing the lowest rung (the labourers) to increase profit margins, resulting in a low-paid and vulnerable labour population. This multi-layered structure thus results in exploitation and denial of workers’ rights in numerous ways. The registered contractors, whether big or small, have no incentive to bring any change in the existing system of contract and sub-contract as they are the primary beneficiaries of these practices. Not only do they not want any changes, but they actively work to prevent workers from uniting and improving their condition. The workers are therefore unable to challenge the status quo to demand better wages and facilities.

As a result, construction workers face diverse problems and vulnerabilities on a day-to-day basis. *Naka* workers do not have any regular employment and as daily wagers they live in continuous insecurity. Workers in labour gangs are paid low wages and face harsher working conditions. Both types of workers have no health insurance. They are often not provided with minimum safeguards at work sites, although this is gradually changing, and so they usually work under extremely hazardous conditions. In case of major or fatal accidents, if compensation is paid, it is much lower than legal provisions. Few workers go in for legal complaint or action for better compensation, and this too is a long drawn battle. In both the *naka* and the labour gang modes of obtaining work, there are stories of cheating and non-payment of wages. Large numbers of women construction workers, majority of whom are unskilled / helpers, face sexual harassment and exploitation. Most work-sites are also not provided with basic amenities such as clean drinking water or toilets for the workers (BSC, 2009). There are also no provisions pertaining to proper housing, crèche and educational facilities for their children and retirement benefits.

3. Dynamics of construction workers’ migration

Migration has become an essential and inevitable component of the economic and social life of the country, given regional imbalances and labour shortages. It has been increasing with the growing uncertainty in agriculture and unequal growth in India, characterised by industry in the developed states such as Gujarat, Maharashtra and Punjab drawing labour from agriculturally backward and poor regions such as eastern Uttar Pradesh, Bihar, southern Madhya Pradesh, western Orissa and southern Rajasthan. Gujarat is one of the top destinations for inter-state migrant labour (Deshingkar & Akter, 2009). Labour mobility has grown and will probably continue to grow in India. The employers also prefer to hire the migrant workers even when local workers are available because the former often agree to work for lower wages and lesser benefits. Understanding the nature of labour migration is going to be crucial in thinking about development interventions, including on the housing front in cities.

Migration is of diverse types. It may be rural-rural, rural-urban, urban-rural, or urban-urban. Rural-urban migration is the fastest growing type of migration as more migrants choose to work in supposedly better paying non-farm occupations in urban areas and industrial zones.

Migration may be intra-district, inter-district, intra-state, inter-state, and international. With regard to types of migration patterns, this comprises of at least three categories: permanent migration, seasonal / cyclical / circular migration, and temporary short-duration migration. At the individual household level, seasonal and temporary short-duration migration is often linked to indebtedness (of land or from taking loans at exorbitant rates) or the need to earn more money for one-time high expenses such as a marriage, expensive medical treatment, etc (Sharma, 1996). However, there is no robust data on the numbers of construction workers engaged in each of the above types of migration patterns. One report estimates that most are seasonal migrants (Deshingkar & Akter, 2009).

Migration also involves different types of households. The migrant household in the city may comprise of the entire family, part of the family (i.e. with only some of the children), only the husband and wife, a single male, two adult males of the family, etc. Moreover, migrants may move to the city as individual households or in groups. Kinship and community ties play an important role in migration as they provide social support systems (Srivastava, 2012a). These different migration patterns, migrant household types and the role of kinship and community ties in migration are important for understanding construction workers' experiences and needs in the urban areas to which they migrate for employment.

Permanent migrant labourers / Local labourers

Permanent migrant labourers are those with no landholdings or strong livelihood ties to their villages. The rural push due to absent or miniscule employment opportunities is the reason for migration. They permanently migrate to urban areas from rural areas along with their family and try to establish their foothold in the city by looking for more secure work and established housing conditions. Most permanent migrants and locals start off as construction workers by going to the *naka* daily to search for work. Many try to build contacts with builders / contractors over time so that they may get work directly from their home and do not have to deal with the insecurity and hassle of physically going to a *naka* daily to search for work. The work they get through such contacts is still casual daily-wage work. Only some get regular contract work for short or long duration, and while this is preferable in terms of security of regular work, the wages are generally lower than what can be negotiated at the *naka*.

Permanent migrants consist of households comprising the entire family. As per the few existing studies in Ahmedabad, such permanent migrant labourers are mostly from within Gujarat (many from Saurashtra) and Uttar Pradesh, and are settled in Ahmedabad since more than 20 years (BSC, 2009). It is likely that most permanent migrants come to the city as individual households; here, kinship and community ties influence the locations where the household first comes to live in the city and often, though not always, also influences their subsequent housing locations in the city.

Seasonal / cyclical / circular migrant labourers

Seasonal migration refers to short-term, repetitive movement without any intention of long-term change of residence (Sharma, 1996). According to Oberai (1987), "seasonal migrant labourers are those who combine activities in several places according to seasonal labour requirement and availability of seasonal work opportunities." Seasonal migration is a known phenomenon from rural to urban. It is the rural push more than the urban pull that attracts the

migrants to cities. Most of the villages in Gujarat and southern Rajasthan are rainfed and hence have one or at the most two cropping seasons which occupy residents for 4-6 months. The effective working on the farm is a maximum of 3-4 months, including the harvesting time. The remaining year has no or less work, thus people come to cities like Ahmedabad in search of work. It is a cyclical process each year. These migrants choose to retain strong links with their villages because of social ties and a long-term intention to build a better life in the village itself (Bhagat, 2010).

A study in 1977 on construction workers in Ahmedabad stated that they were mainly locals and permanent migrants and there were hardly any seasonal migrants in the sector (cited in Sharma, 1996: 131). At the time of a 1996 study, this had already changed with large number of seasonal migrants working as construction workers in Ahmedabad (Sharma, 1996). Today also, this remains the case, however, there is no data that can clearly show us the proportion of seasonal migrants amongst the construction workers in Ahmedabad. The seasonal migrant workers are mostly employed by *mukkadams* or labour contractors from their villages, although many also move to the city and then go to the *nakas* to search of work.

The migrant household type amongst the seasonal migrants are mainly families with some of the children, husband and wife without children, and single males. It is less common to see families with all the children migrating as seasonal migrants. Furthermore, amongst the seasonal migrants, some migrate as individual households and some come to the city as part of a group. Kinship and community ties significantly influence their housing locations in the city, except for the groups who come directly to construction sites through *mukkadams* or labour contractors. However, even for them, kinship and community ties are important since the group is based on kinship or community ties. These groups, moreover, may migrate to different cities each time they return to the city; in other words, seasonal migration for them may or may not involve coming to the same city each time.

As per the existing studies in Ahmedabad (see BSC, 2009), seasonal migrant labourers are mainly from five states: Gujarat, Rajasthan, Maharashtra, Madhya Pradesh, Uttar Pradesh and Bihar. Those who are from Gujarat are from the districts of Panchmahals, Dahod and Banaskantha. Many are adivasis / tribals. Most are unskilled labourers. From Rajasthan, they are mainly from the districts of Banswada, Dungarpur and Jalor. Many of them are skilled, and their skills are furthermore linked to the migration source. For instance, there are marble fitters from Jodhpur and Udaipur, tile layers and polishers from Udaipur and plaster and masonry workers from Dungarpur (Ajeevika Bureau, nd). From Madhya Pradesh, they are from districts like Jhabua. The migrants include many from the Scheduled Castes and Scheduled Tribes since they are generally landless and poorest in rural areas and are thus more likely to migrate due to economic conditions. According to organizations like Prayas and Bandhkaam Majur Sangathan, who have been working with construction workers since long, the adivasi migrants are the most vulnerable of the construction workers.

The seasonal migration pattern varies. According to Sharma (1996) who studied seasonal construction workers from Panchmahals and Dahod district, migration patterns are formostly linked to the crop calendar. Thus, many come to Ahmedabad around October and stay through till Holi (March) since the winter months are the slack season for agriculture. Then

they return to their villages, with many staying back for 15-20 days and returning to the city to stay on till the monsoon when they leave again for their village and stay there from July to September. In all, they spend 7-8 months in the city and are in the village for festivals and the sowing and harvesting season. There are others who stay in the city for longer duration or shorter duration (some stay back in the village after Holi till after the monsoon if they have cultivable land) (BSC, 2009: 26). Most also return to the village for 15-30 days for Diwali.

Temporary short-duration migrant labourers

These migrant labourers travel to cities for employment with no regular pattern and for short durations. They travel short distances, mostly from rural to urban. They are often driven to urban areas for supplemental income to pay off debts or overcome distress or cover expenses related to festivals, marriages, etc. They spend 2-3 months at a stretch in the cities, employed in the casual labour sector. At times, they may have to even return to villages with spare earnings. In case of construction workers, little is still understood of their dynamics, including from this study which is one of its main limitations. However, we do know from discussions with Prayas and at the case-study settlements that this temporary migrant segment is unskilled and usually obtains work through the *nakas*, and therefore are daily wagers. The migrant household consists of either a husband and wife who migrate without the children, only a single male, or a group of male members of a family. Some seem to migrate as individual households while others come to the city as part of a group.

Implications for migrant labourers

These migration patterns have consequences for migrant labourers. While all sections of the urban poor are denied the status of full citizens in the city, seasonal and temporary short-duration migrant labourers are even more marginalized than the locals and permanent migrants. They become easy prey to problems related to lack of credible proof of residence in the city. They do not have voting rights in the city. As a result of lack of a ration card in the city, they do not have access in the city to subsidized food and fuel under the Public Distribution System (PDS) (Prayas, 2012b).⁹ They also face discrimination more generally

⁹ To get a ration card in the city, a migrant worker has to remove his/her name from their family's ration card in their native place. After getting proof of deletion of name, they have to get a notarized affidavit stating that they have removed their name from the previous ration card and have relocated to the respective city where they would like to obtain a ration card. With proof of deletion of name and the affidavit, they have to then apply for a new ration card in the city (discussion with Prayas, December 2014). However, there is also the question of willingness of the migrants to transfer their documents from native place to the city. Many seasonal migrants, even if they spend 6-9 months in the city, consider the native place as their permanent base and may not be willing to transfer the documents permanently. This demands a policy mechanism that allows this migrant population temporary access to public entitlements while they are in the city without permanently forfeiting their entitlements in their native places. An interesting solution for this was implemented by the Maharashtra State government in November 2000 (Khandelwal, Sharma & Varma, 2012). A Government Resolution (GR) made possible PDS portability where a migrant can get a temporary PDS card for a time period of 4 months (upto 12 months) with relaxed documentary requirements. This card enabled them to access subsidized grain and fuel in the city. The migrant was required to cancel his/her temporary PDS card on departure from the city so that his/her entitlement to PDS at the native place could be renewed (Khandelwal, Sharma & Varma, 2012). This solution acknowledged the problems migrant populations face in obtaining and producing documentary proof of their identity and residence. There is a need for more of such solutions to address this issue.

because they often belong to historically disadvantaged groups such as the Scheduled Castes or Scheduled Tribes who are more likely to be illiterate.

Devoid of literacy, critical skills, information and bargaining power, seasonal and temporary short-duration migrant workers are usually embedded in exploitative labour arrangements. They are often employed in risky jobs, with industrial accidents, long working hours and unhygienic conditions at their workplaces being the norm (Deshingkar, Khandelwal & Farrington, 2008). With poor legal protection, migrant workers become easy victims not only of harsh work conditions but also non-payment of wages. The hardships of migrant workers are especially magnified when state boundaries are crossed and the distance between the “source” and “destination” increases. Those who seek work at the *nakas* often face hostility by the local and permanent migrant labourers since they are willing to work at lower wages than existing market rates.

While the urban poor are usually regarded as illegal residents of the city due to their informal housing spaces, the locals and permanent migrants amongst them are often able to establish an informal claim to these spaces over time. They are able to do so with the help of city-based documents such as ration cards and election cards. Since seasonal and temporary short-duration migrants do not have these documents for the city, they are unable to stake a claim to their informal housing spaces in the city. They are often subjected to frequent eviction threats and police harassment (Prayas, 2014). As a result of insecure housing spaces, they are fully denied basic entitlements of drinking water, sanitation and electricity. They also generally lack access to public healthcare and public education for their children. Thus, they work and live in poor conditions devoid of social security and legal protection.

In addition to the migration patterns, the type of migrant household (family with all or some children, only husband and wife, single male, etc) also have consequences for the conditions in which migrant labourers work and live in the city. Many households that seasonally migrate with their family (i.e. with some or all children) and where only the husband and wife migrate seasonally or for temporary short-term duration get work at the *naka*. Both these migrant household types end up living in the most dismal housing conditions—such as squatting on pavements and street edges, under flyovers and bridges, or on government or private lands which do not get recognized as slums—because housing options such as renting a room or informally buying a house in the recognized slums of the city is not affordable to them on the earnings of two family members. Households where only husband and wife migrate also have less inclination to improve their living conditions in the city since they would want to maximize their remittances to the village for their children’s benefit. This exposes the women to vulnerabilities such as lack of sanitation, but the most vulnerable are the children in the migrant families living on pavements and street edges since they are prone to accidents and injuries. Single male migrants are the third main migrant household type. Those who find work at the *naka* live in rental housing in the city’s slums. They can afford this since they split the rent with other single male migrants sharing the accommodation with them. Since sharing the rent is what makes the housing affordable, they often live in crowded conditions. All three migrant household types also come to work directly at construction sites through labour contractors and *mukkadams*. The shelters on-site may or may not be of better

condition than off-site, and in this case too, it is the children of the migrant families that are the most vulnerable due to living on hazardous construction sites.

4. Informal housing, the state and construction workers

For the urban poor, one of the key problems is shelter. The urban poor live in the city through various informal arrangements as they are more affordable than the land and housing options currently provided in the formal sector through the activities of private-sector developers and state authorities. This informal sector is both large and diverse, and includes squatter settlements on public lands and private lands;¹⁰ settlements formed through the informal subdivision of agricultural lands on the urban periphery; informal rental arrangements in both types of settlements; informal renting in urban villages that are usually in contravention of existing planning and building norms; and squatting on pavements and street edges, under flyovers and bridges. While some of these settlements come to be recognized as slums by local authorities, others—such as settlements on pavements and street edges, under flyovers and bridges—are not. Similarly, while some informal arrangements come to be recognized as establishing an informal claim on the state, others—such as renting—are not.

Construction workers are to be found in all these informal settlements and arrangements. Completely missing from the picture of housing informality so far are the housing arrangements for workers on construction sites in the city. These are also informal since no planning or building norms are followed in the construction of these arrangements, and neither are there any formal agreements through which the workers occupy this land / shelter. Large numbers of construction workers are found in the most vulnerable of the informal settlements and arrangements.¹¹ This is due to their migration patterns and more crucially, because of the implications that their migration patterns have for them given existing state policies towards migrants, especially non-permanent and recent migrants.

The vulnerability of these housing arrangements deepens because these non-permanent migrant workers are unable to build up proof of residence and identity in the city due to lack of state policies to address this pattern of migration and the lack of documents that are required for obtaining these other documents. This turns out to be one of the biggest barriers to their inclusion. Many are not included in the voters' lists of the city and do not have ration

¹⁰ While squatting is often understood as the free occupation of land by people who do not legally own it, in reality it often involves undocumented payments to individuals with no legal claims to that land and therefore lacking legal rights to transfer that land. These are transactions in the informal housing market.

¹¹ A survey of 970 workers (780 from *nakas* and 190 from construction sites) in Ahmedabad found that the workers were living in three types of housing arrangements: *chawls*, worksites and open areas/footpaths (BSC, 2009). The sample was drawn to be as representative as possible of the construction workers in the city. 56 per cent of labourers were found to be renting rooms in *chawls* – according to the study, these had the highest level of basic services amongst the different housing arrangements with drinking water, bathroom and toilet and electricity (p. 23-24). (*Chawls* correspond with the slums in our study where workers are living on rent). However, some of the *chawls* in this study did not have any basic services in spite of high rents. 20 per cent of labourers were found to be living on the worksites in temporary shelters, with only drinking water and electricity. They lacked toilet and bathroom facilities. 24 per cent of labourers were found to be living in open areas / footpaths without any shelter and having no facilities (water, toilet/bathroom or electricity) at all. Although this study claimed to be representative of construction workers, it is not clear if this distribution of workers by housing type is actually representative.

cards in the city since they have these for their villages. Lack of residential proof in the city also leads to various forms of exclusion such as inability to open a bank account or obtain a driving licence. These are very important documents because they give access to the benefits of different government programmes in the city. Some important identity proof documents such as the recent UID (Unique Identification) or Aadhar Card also hinge on having documents of residential proof. The denial of political rights to migrants is crucially linked to the denial of right to housing in the city. Because of lack of identity and residential proofs in the city, migrants become noncitizens in the city.

We classify construction workers' settlements on the basis of the settlement being located off construction site or on construction site (see Table 1). Within the former, we further classify the settlements based on ownership of occupied land (state-owned or private land ownership). The latter are regulated by legislations, but we further classify these settlements based on whether the construction work is public-sector or private-sector since the former is sometimes also regulated by guidelines of the public authority commissioning the work. Each of these types of settlements varies in their security of tenure, availability of basic services, etc; There are also links between certain types of settlements and the type of migration and mode of obtaining work as well as household type, etc.

Here, it is useful to briefly consider the existing land and housing policies and what they tell us about the attitudes of the state towards informal settlements and their urban poor and low-income residents, many of whom are migrant workers and many construction workers. Studies note that the national and local governments tend to follow a threefold policy to increase the supply of housing for the urban poor (Mahadevia, 2009; Batra and Mehra, 2008; Mahadevia and Brar, 2008). The first involves slum resettlement schemes through which persons evicted from slums are rehabilitated on the urban periphery. Then there are schemes for in-situ development of slum areas, where part of the land under slums is sought to be developed for the slum residents with cross subsidies obtained from the remaining land development, which is made more profitable for builders by raising the Floor Space Index (FSI), and non-transferable land tenures. Finally, there are the schemes for slum improvement. These schemes have made little progress and have covered only a small proportion of the existing slum population. A National Housing Policy was developed in 1992, under which housing for the Economically Weaker Sections (EWS) was sought to be augmented by making land available to private builders, and by providing them further incentives through raising FSIs. The latest policy with respect to housing is the National Urban Housing and Habitat Policy 2007, which is also based on the Public Private Partnership (PPP) model. The policy provides direction and guidelines to states and local bodies to augment supply of housing for the poor (Mahadevia, 2009).

Around this time, the major programme instrument for urban development was the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) which had two sub-missions, one devoted to urban infrastructure and the other to basic services to the urban poor (BSUP). Analysis of the JNNURM and BSUP experiences shows that the overriding objective of creating global and world-class cities imitating western models has led to large-scale evictions, reversing the trend of enhancing tenure security and in-situ slum improvement, and leading to further increase in insecurity of poor urban residents (Mahadevia and Mathew,

2008; Mahadevia, 2009). These schemes have been able to provide shelter security to only a miniscule proportion of urban poor dwellers (Mahadevia, 2009).

This attitude towards urban informality and the urban poor is combined with a more hostile socio-political environment towards migrants in many cities and less secure work arrangements. Urban local authorities refuse to accept the migrant construction workers as permanent city residents and enumerate their settlements as slums (Prayas, 2014). As a result, their settlements do not qualify for slum improvement programmes. Since no viable arrangements have been made for them to access basic services, amenities and subsidised food, they are denied the public services that permanent urban residents, even amongst the poor and low-income groups, might take for granted. Not just this but many of their settlements face frequent eviction threats and harassment from the municipal body and the police. In most cities, either there is no master plan or it is obsolete or inadequate that it is unable to address the needs of the city inhabitants in general and of the urban poor, particularly migrants. Planning has therefore not moved in the desirable direction of accommodating the needs of rural-urban / urban-urban migrants for shelter, basic services and social protection (Mahadevia, 2009). As a result, poor migrants face greater barriers and higher insecurity in meeting shelter and other basic amenity requirements.

Night shelters / Rain baseras

One housing intervention which has considered migrant construction workers is the provision of night shelters or *rain baseras* by urban local bodies for the city's homeless population. Since January 2010, the Supreme Court of India has passed several milestone orders related to the setting up of around 1,900 permanent 24-hour shelters across India to tackle the issue of homelessness. The major guidelines provided by the Supreme Court (2010) are:

1. All cities covered under JNNURM and with more than 5 lakh population should have one 24-hour homeless shelter with a capacity of 100 persons for every one lakh population.
2. There should be basic amenities provided in the shelters, which should include mattress, bed roll, blanket, portable drinking water, functional latrines, first aid, primary health facilities, de-addiction and recreation facilities etc.
3. 30 per cent of these should be special shelters (women, old and infirm, recovery shelters).

As a result of this Supreme Court order, Ahmedabad Municipal Corporation (AMC) built 45 night shelters in Ahmedabad. The operation and maintenance of the night shelters is sub-contracted out to non-governmental organizations (NGOs). Despite the Supreme Court order stating that these should be 24-hour shelters, none of the shelters in Ahmedabad have this provision. This is one of the major hindrances for migrant construction workers. Workers, who depend on *nakas* to get work, do not get work on all days and need to come back on days when they do not find work. A joint inspection conducted by National Advisor to the Supreme Court Commissioners and the State government in 2012 found that none of the shelters in Ahmedabad are family shelters and instead have separate spaces for men and women (Supreme Court Commissioners, 2012). The shelters therefore do not work for migrant families or couples since they would not want to be separated from other family members based on gender. Furthermore, recent visits to the city's night shelters by the Human

Development Research Centre (HDRC), an Ahmedabad-based NGO, found that although those who come to take shelter in them are not supposed to pay any money, some of the caretakers were collecting charges.¹² Quite a few shelters also do not have the basic services as mentioned in the Supreme Court order. While each night shelter in Ahmedabad is supposed to provide a separate space for men and women, some of the caretakers allow only men to sleep in them. Some night shelters have also been occupied by anti-social elements and some are not operating at all. In addition, these shelters have not been well advertised to the population they are catering to and they also have governance issues with the caretakers being insensitive to the needs of the targeted population.

Regulatory framework for housing for construction workers

Besides the state's policies with regard to the informal housing sector, labour legislations and regulations applicable to construction workers include certain provisions for housing for them. According to a 1996 study (Sharma, 1996), there are more than 20 labour laws applicable to construction projects, making it difficult to enforce them. Here, we have studied only some of the main labour laws and their provisions and shortcomings with respect to housing of construction workers.

There are a number of legislations and rules at Central and State government levels that regulate employers of construction workers in terms of the housing / amenities they are required to provide to them at their worksites. According to the Contract Labour Act, 1970, employers of contract labourers must provide the following welfare facilities at the worksite: canteen, latrines and urinals, first aid facility, restrooms, clean drinking water, washing facility, housing and haltage at night (Sharma, 1996). The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, has provisions for providing migrant workers with suitable residential accommodation and medical facilities free of charge, home journey allowance and displacement allowance (Planning Commission, 2012). However, these legislations are rarely enforced.

With regard to construction workers specifically, the Central Government legislation "The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996" specifies the following amenities to be provided at construction worksites:

- Drinking water should be provided on construction sites and should not be located within 6 metres of toilets. (section 32)
- Sufficient toilet facilities (latrines and urinals) to be provided on site. (section 33)
- Free temporary accommodation to be provided on or near the site to all workers employed for the period of construction work. (section 34)
- Crèches with trained child care help to be provided where more than 50 female workers are employed. (section 35)
- First-aid facilities to be provided at the site. (section 36)
- Canteen to be provided in case of sites with more than 250 workers. (section 37)

¹² Based on data collected by HDRC in 2014 on the current status of the night shelters in Ahmedabad.

While the requirement of temporary housing provision exists in this legislation, there are no norms specified for this housing and thus the shelters that are built on site are of poor quality. Enforcement of these provisions is also inadequate. Furthermore, this Act presumes that all construction workers would want to live in temporary housing provided on or near the site during the period of the construction work. This does not take into account that some construction workers might actually prefer other housing types and not everyone wants to live in housing provided by the employer and work in the type of recruitment systems (usually labour gangs) that characterize those who live on site.

Moreover, the Gujarat State government legislation “The Gujarat Building and Other Construction Workers (Regulation of Employment and Condition of Services) Rules, 2003” specifies fewer amenities to be provided at construction worksites:

- Latrines and urinals to be provided on site with water facility. (section 59)
- Canteen to be provided at site with more than 200 workers. (section 60)

Unlike the Central Government legislation, there is no reference to housing provision in the the State government legislation. The provisions are thus clearly inadequate besides there being inadequate enforcement of these Rules. At the State level, Chief Inspector of Inspection of Building and Construction from Labour and Employment Department is responsible for effectively carrying out the provisions of this Act. Non-enforcement of the provisions occurs due to the indifferent attitude of both employers and state officials towards the welfare of construction workers. Government departments responsible for enforcement may also not have the capacity to monitor all construction sites.

The state at both Central and State government levels also undertake construction projects through government bodies such as the Public Works Department (PWD) and the Central Public Works Department (CPWD), both of which have their own guidelines to regulate the work conditions and housing / amenities provision for the construction labourers employed on these projects. The CPWD guidelines are more detailed than the previously mentioned legislations and specify the following provisions regarding housing camps for labourers:

- The contractor shall at his own cost provide his labour with a sufficient number of huts with minimum height of 2.10 m (7 ft.) and the floor area at the rate of 2.7 sq.m. (30 sq.ft.) for each member of the worker’s family staying with the labourer.
- The contractor shall in addition construct suitable cooking places having a minimum area of 1.80 m x 1.50 m (6 ft. x 5 ft.) adjacent to the hut for each family.
- The contractor shall also construct temporary latrines and urinals, and bathing and washing places for the use of the labourers at the rate of one unit for every 25 persons residing in the camp, separate latrines and urinals being provided for women. All the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local materials. Roofing material should be water-tight.
- There shall be kept an open space of at least 7.2 m (8 yards) between the rows of huts which may be reduced to 6 m (20 ft.) according to the availability of site.
- Water Supply - The contractor shall provide adequate supply of water for the use of labourers. The provisions shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes.

- Drainage - The contractor shall provide efficient arrangements for draining away sullage water so as to keep the camp neat and tidy.
- The contractor shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.

Once again, there is generally poor enforcement of the guidelines by PWD and CPWD.

Additionally, a Central Government legislation, “The Building and Other Construction Workers’ Welfare Cess Act, 1996” requires that a cess at the rate of 1-2 per cent of the cost of construction incurred by the employer is to be levied and collected from the employer and deposited in the State-level Building and Other Construction Workers’ Welfare Fund created under the State-level Building and Other Construction Workers’ Welfare Board. The funds collected are to be used for construction workers’ welfare schemes. The Gujarat Construction Workers’ Welfare Board (or Gujarat Bandhkam Shramyogi Kalyan Board) became active only around 2008. The Board prepared some welfare schemes for construction workers which included a housing subsidy scheme along with other schemes of education, healthcare and accident compensation. Under the housing subsidy scheme, any registered construction worker allotted housing under any government scheme can avail a subsidy of Rs. 20,000 for down payment by producing the allotment letter. However, no workers have availed of this scheme so far. This is likely due to lack of adequate information amongst workers about the scheme as well as the requirement that a worker must be registered with the Board in order to avail of any of the welfare schemes. By 2012, Rs. 374 crores had collected in the Board’s Fund in Gujarat with less than Rs. 0.5 crore being used for welfare schemes (Prayas, 2012b). Large unspent amounts were there in the Funds of most other States in India at this time.

Large numbers of construction workers continue to remain unregistered with the Board in Gujarat due to the difficult conditions that a worker has to fulfil to get registered. According to the Central and State Government legislations and rules discussed earlier, every building worker who is between the age of 18-60 and who has been engaged in any building or other construction work for not less than 90 days during the last 12 months is eligible for registration as a beneficiary of the Fund. This requires workers to prove their work duration accordingly through a certificate by the employer, however, employers are reluctant to give such certificates. Also, the workers are usually employed not by registered building contractors but by sub-contractors who are not registered, and thus the employers cannot issue a certificate. According to Prayas, there are currently only 7,000 registered construction workers in Gujarat.¹³ Recently, the State government put out a GR that allows for self-declaration as construction worker where a worker can give an account of his/her work in the construction industry and can get registered without a certificate for the employer. No worker has been registered so far in this manner. Until the registration issues are resolved, workers are unlikely to get the benefits of the welfare schemes, including the housing subsidy scheme.

To summarize, the role of the state vis-à-vis construction workers’ housing is primarily to regulate employers (through its different departments and bodies such as the Labour and Employment Department, Building and Other Construction Workers’ Welfare Board, etc) to ensure that they fulfil their responsibilities (as outlined in the above mentioned Central

¹³ Discussion with Prayas, December 2014.

Government and State government legislations and rules) towards the construction workers they employ. However, the state has failed in its role as regulator. In housing the urban poor, the state also plays the role of provider of housing, mainly through State-level bodies (such as the State Housing Boards) and urban local bodies which construct housing for the Economically Weaker Section (EWS) and shelters for the homeless. In this, the state has failed to provide for the housing needs of the vulnerable migrant labour population that makes up a large proportion of construction workers. Since the question of providing appropriate housing for construction workers encompasses issues of adequate land allocation in appropriate locations; construction of housing; provision of basic services such as water, sanitation and electricity; and governance on these aspects, there is a need for the different levels and departments of the state to coordinate with each other as well as with employers. However, currently this is completely lacking. Finally, where this population has resorted to informal settlements and arrangements to fulfil their housing needs, the urban local bodies have failed to extend their slum programmes for them, and have even evicted the residents with the repressive force of the police. Due to their seasonal and temporary short-duration migration patterns, they are non-voters in the city, leading political parties and elected representatives in the city to also ignore them.

5. Case Studies

5.1. Shelters / settlements on pavements and street edges, under flyovers and bridges

Under Shreyas Flyover

The settlement under the Shreyas flyover comprises of a group of 200-250 people. They live in *potla*-type arrangements, that is, they tie up their belongings with a tarpaulin in a heap during the day when away for work and open the heap in the evenings to set up a sleeping and cooking area. Most residents are tribals (Adivasi) who come from villages around the towns of Dahod, Jhalod, and Fatehpura in Dahod district of Gujarat. Some have migrated with their whole family and some have migrated with only the smaller children (below 10 years), leaving the older children back in villages. Most residents are seasonal migrants and they live in the city for 7-8 months. They go back to their villages every 2 months to take care of families (for 4-5 days), for farm work (for 3 months), and for festivals like Holi and Diwali (for about 15 days). There are some temporary short-duration migrants as well who live in the city for 4-5 months in a year and do not come to the city on a regular basis but come on a need basis. They come to the city when there is no work in the village and they are in need of money. They prefer to live in this settlement because they do not have to build any temporary structure as the flyover provides them shelter.

Most residents are construction workers and find work on nearby *nakas* of Ambavadi and Jivraj. Sometimes they find short-term regular contract work through contacts with contractors developed through *nakas* or through kin members. However, this kind of work is rare to come by as most people do not have many contacts with reliable contractors. At the *naka* payments are made daily at the end of the day. Most people are unskilled masons doing plaster work, RCC slab construction, and miscellaneous labour. Both men and women get work for 15-20 days in a month and earn Rs.300 per day at the *naka* and Rs.250 per day in regular contract work. There are very few skilled workers living here.

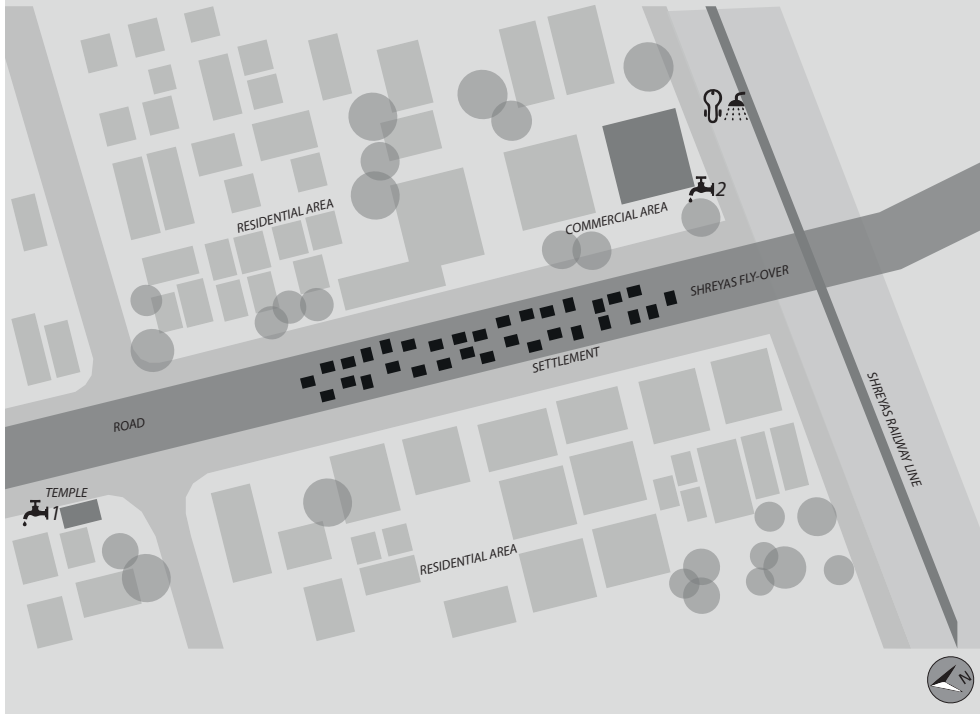
Residents have been living under this flyover for about 10 years. Some of the residents used to earlier live on railway land by the side of a nearby railway line. When this flyover was constructed they moved under it as it provided better shelter from rain and heat. At this location under the flyover, they face intermittent harassment by AMC. They have never been fully evicted but AMC/police come once in a while (3-4 times in last 8-10 years) with vans and take away their belongings while the residents are away at work during the day. However, they continue to live here as the flyover provides shelter and *naka* is nearby. In addition, the residents also pay protection money to a local gang to make sure the *goondas* or gang members do not harass them. They pay Rs.20-50 per family. However, some reported that they have support from the neighbourhood retail establishments. One resident explained that during AMC eviction drives, people from the surrounding neighbourhood appealed to officials to let them continue living there and not take away their belongings. The residents reported that they have no support from government authorities. They have no proof that they have been living on this land for 10 years. All of their identification documents such as ration card and election card are on their village addresses. Both seasonal and temporary short-

1

Shreyas, Under Shreyas Flyover

Housing Type : Settlement Under Flyover
 Land Owner : AMC
 Age of Settlement : 10 Years
 Rent/Cost : Rs. 20-50 (Sometimes)
 Tenure Security : Low

Settlement Layout



Demographic Info

POPULATION

• 200-250

NUMBER OF HOUSEHOLDS

• 40-50

HOUSEHOLD TYPE

• FAMILY WITH CHILDREN

PLACE OF ORIGIN

- DAHOD, GUJARAT
- JHALOD, GUJARAT
- FATEHPURA, GUJARAT

CASTE/COMMUNITY

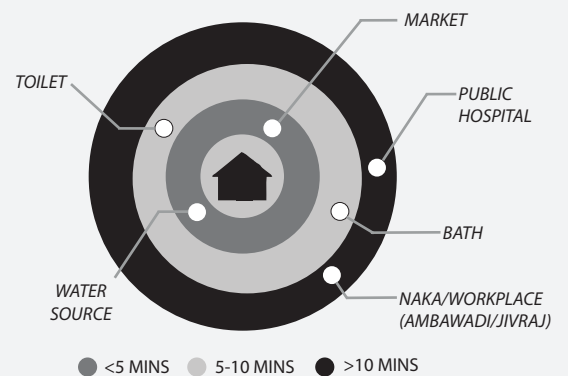
• TRIBAL

Legend

- WATER SOURCE 1- TEMPLE
- WATER SOURCE 2- TAP
- OPEN DEFECACTION- RAILWAY LAND
- OPEN-RAILWAY LAND
- INDIVIDUAL SHELTERS
- IMPORTANT BUILDINGS
- OTHER BUILDINGS
- TREES

Access to Basic Services

					COST SOURCE
1. TEMPLE 2. TAP	1. OPEN GROUND 2. PAY & USE	1. OPEN GROUND 2. PAY & USE	YES	1. SALVAGED WOOD 2. MARKET	
1. NO CHARGE 2. 20/- (SOMETIMES)	1. NO CHARGE 2. 10/-	1. NO CHARGE 2. F-3/- M-5/-	NA	1. NO CHARGE 2. 10/- PER KG	



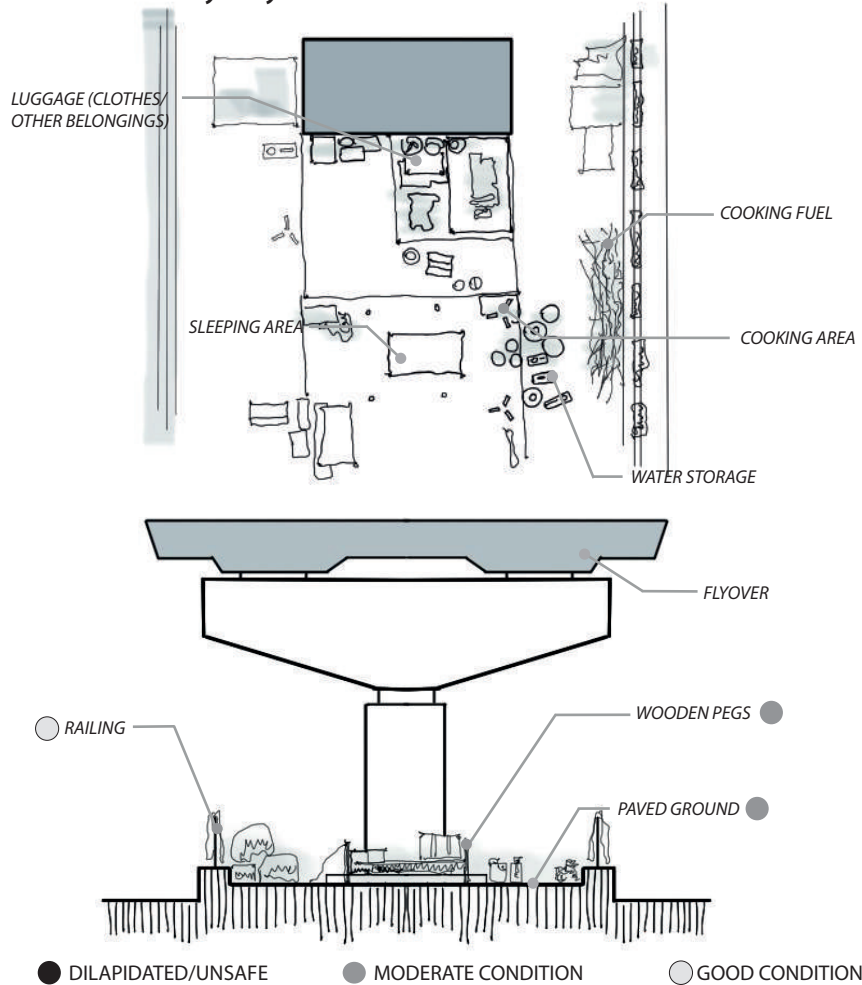


Gender: Male
 Caste/Community : Tribal-Bhil
 Place of Origin : Jhalod, Gujarat
 In Ahmedabad since : 20 Years

	Man	Woman
Occupation	Unskilled Construction Worker	House Wife
Wage	300/- Per day	NA

1A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS

OTHER VULNERABILITIES

- NO SHELTER, LIVING UNDER THE BRIDGE
- EXPOSED TO WEATHER
- RODENT INFESTATION
- STRAY ANIMALS EAT GROCERY/FOOD
- MOSQUITOES
- INSECURITY OF BELONGINGS
- VEHICULAR NOISE
- RAG-PICKERS TAKE THEIR BELONGINGS

MODE OF CONSTRUCTION

- POTLA DWELLING- THEY WRAP THEIR BELONGINGS IN THE TARPULIN/CLOTH

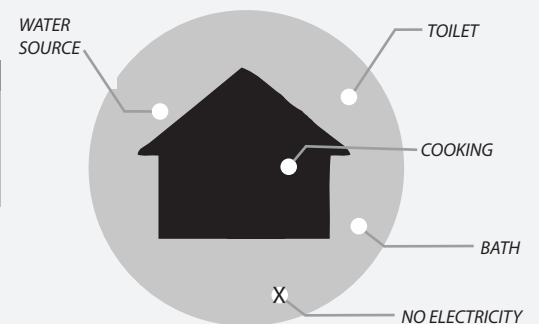
Annual Migration Pattern



○ AHMEDABAD 12 MONTHS ● OTHER (NATIVE)*

*FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



duration migrants reported that they do not want to transfer their documents to the city because they consider their village as their base.

There is no availability of basic services of water, sanitation and electricity at this settlement. The residents have to rely on informal arrangements to get access to water. There is a tap at a temple nearby and another tap outside a retail establishment from where they fill up cans of water for daily use. It is unclear whether the latter is a municipal or private tap. One of the residents reported that at times there is some harassment by the owner of the retail establishment. Sometimes he asks them to pay Rs.20 for water and in the past he has also removed the tap a couple of times which the residents managed to reinstall. The residents resort to open defecation near the railway tracks. The women have to wake up early, before the sun rises, to go and defecate in the open. There is a pay and use toilet nearby but residents find it expensive if they use it every day (Rs.5 for toilet, Rs.10 for bathing). They also bathe near the railway tracks in the open. Usually there is not enough water for bathing, and some reported that sometimes four people have to bathe from one can of water. At times if the employers are supportive, the residents even bathe on the construction sites where they work. Most seasonal migrants and temporary short-duration migrants leave the older school-going children back in villages. The children who are in the city do not go to school. However an interviewee who is a permanent migrant reported that his three sons go to public schools (Interviewee 1a). Most people go to the closest public hospital for healthcare services.

Due to the *potla*-type dwelling in this settlement, there is insecurity of belongings and safety issues. During the day when residents are away at work, stray dogs and cattle spoil their belongings. During the night there have been incidences of theft of money and valuables.

During one individual interview, a male resident who is a permanent migrant (Interviewee 1a) reported that he wants a *pucca* house with facilities of water, sanitation and electricity. He has a family of 10 and mentioned that a 20 feet x 20 feet room with kitchen and bathroom/toilet would be sufficient. Some other residents said that they would not mind moving to a different area as they can find work at another *naka*, provided there is one nearby. They said that they would like to move together as a group, reflecting their community ties. A male resident who is a temporary migrant said that they do not need *pucca* houses in the city as they stay here for a very short period of time. It will be difficult for them to maintain two houses, one in the city and one in the village.

In summary, this settlement under a flyover comprises of families (with children) from Dahod who are mostly seasonal or temporary short-duration migrants. Majority of residents go to *nakas* to find work. They live in *potla*-type dwellings and have no direct access to any of the basic services. There is high insecurity of tenure and various vulnerabilities such as exposure to natural conditions, insecurity of belongings, and rodent and mosquitoes infestation.

Street-edge near Parin Furniture Showroom, S.G. Highway

This settlement is located on the sides of the service road along Sarkhej-Gandhinagar (S.G) highway. It comprises of a group of about 35 houses and a population of 200-250 people. Most are tribals (*Adivasi*) from Dahod district in Gujarat except for one resident who is from Baroda. There are primarily three groups: one group has been living on this land for 15-20 years, the second group for 7-8 years and the most recent group since 5-6 years. Most residents are seasonal migrants who have migrated with smaller children and left the older children back in villages. They go back to the villages every three months for 5-10 days to take care of families and farms. They also go back for farm work and for festivals like Holi and Diwali. However, all members of the family do not leave the city at the same time (except for festivals) and therefore at least one family member is always living here.

Most residents are construction workers and find work on nearby *nakas* of Bootbhavani (Vejalpur) and Jivraj. Most are unskilled workers doing plaster work, RCC slab construction, and miscellaneous labour, and there are also some skilled workers. Sometimes they also get regular contract work on project basis, and after the completion of the project, they switch to *naka* till the time they can find regular contract work again. The contacts they have developed with contractors over the years helps them to sometimes get regular contract work. There are also a few skilled workers living here who act as petty labour contractors sometimes.

In an individual interview (Interviewee 2a), a family of seven reported that they earn a wage of Rs.300 per day as unskilled workers at naka and Rs 250 per day in regular contract work. Recently two of the family members started regular contract work where they get work for 25 days in a month while other two earning members who go to the naka get work around 15 days in a month. Their household income is around Rs 1100 per day (four earning members) out of which they spend Rs.250-350 per day on groceries, travel, and other expenses. In addition there are expenses of traveling between the village and the city, healthcare expenses, agricultural expenses, loan repayment etc. Also one of the family member sometimes works as a petty labour contractor and he earns Rs.800 per day if he hires 20 workers for the contractor and earns Rs.1200 per day if the number of workers provided by him is more than 50. Another family of five (Interviewee 2b) reported that their household income is Rs. 600 per day out of which they spend Rs.200-300 per day on groceries, water, travel and other expenses. But they do not get regular work at the naka so they are days when they do earn at all. They get work for 10-15 days in a month. So they cannot have any savings.

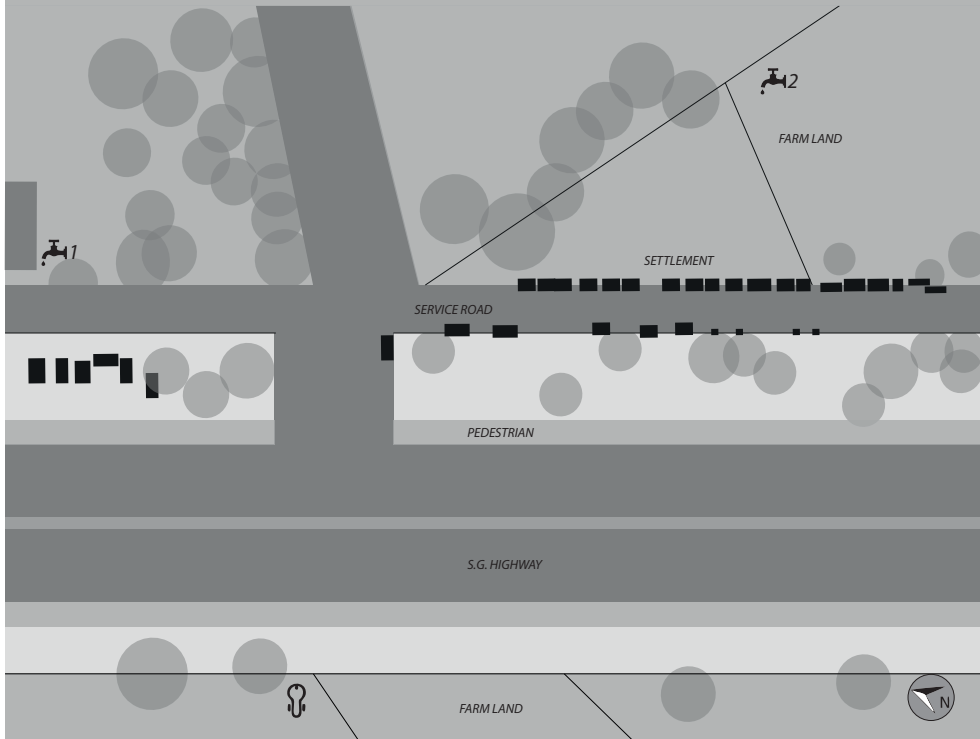
The residents mentioned that they used to live on the sides of S.G. highway in *kutcha* tarpaulin houses which were bigger than their current housing. They were evicted from there in February 2014 despite having lived there for about 15 years. The reason, according to them, was that a nearby influential farmhouse owner complained to AMC that their settlement was an eye sore and should be removed. AMC evicted them without a notice. They filed an application on the recommendation of Mr. Vipul Pandya from Bandhkaam Mazdoor Sangathan, at the Satellite police station stating that they have been living there for about 15 years and they should be given a transition period of 10-15 days to make other housing provisions. But none of the officials addressed their concerns and asked them to move. This is when they moved to the nearby service road and built *kutcha* tarpaulin houses at their current location. Since then there have been no evictions or threat of evictions. But this incident has

2

Parin Furniture, Off S.G.Highway

Housing Type : Settlement on Street edge
 Land Owner : AMC
 Age of Settlement : 15 Years
 Rent/Cost : No Rent
 Tenure Security : Low

Settlement Layout



Demographic Info

POPULATION

• 200-250

NUMBER OF HOUSEHOLDS

• 30 (ONLY ON THE SERVICE ROAD)

HOUSEHOLD TYPE

• FAMILY WITH CHILDREN

PLACE OF ORIGIN

• DAHOD, GUJARAT

CASTE/COMMUNITY

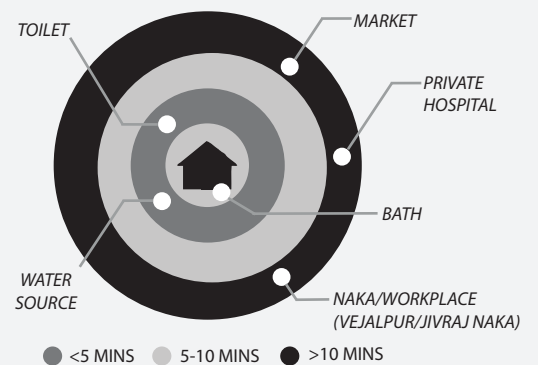
• TRIBAL

Legend

- 1 WATER SOURCE - COMMERCIAL BUILDINGS
- 2 WATER SOURCE - BOREWELL
- OPEN DEFECTION
- INDIVIDUAL SHELTERS
- IMPORTANT BUILDINGS
- TREES

Access to Basic Services

					COST SOURCE
1. TAP 2. BOREWELL	SEMI-OPEN TARPAULIN BATHS	1. OPEN GROUND 2. PAY & USE	YES	SALVAGED WOOD	
1. NO CHARGE 2. 300/- PER MONTH	NO CHARGE	1. NO CHARGE 2. F-3/- M-5/-	NA	NO CHARGE	



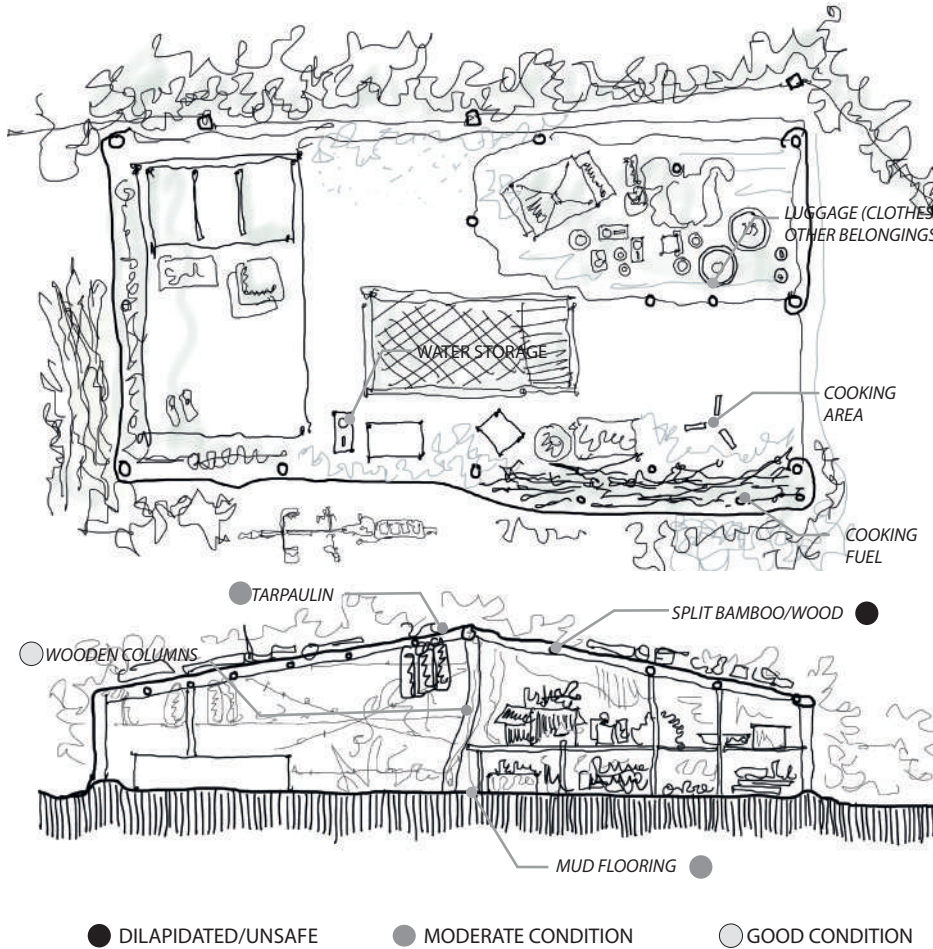


Gender: Female
 Caste/Community : Tribal
 Place of Origin : Jhalod, Gujarat
 In Ahmedabad since : 8-10 Years

	Man	Woman
Occupation	Unskilled Construction Worker	Unskilled Construction Worker
Wage	300/- Per day	200/- Per day

2A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS
- BED
- CYCLE

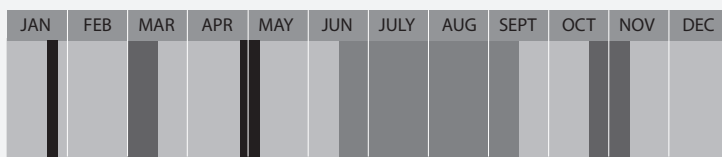
OTHER VULNERABILITIES

- CONSTANT VEHICULAR MOVEMENT
- SNAKES AND SCORPIONS IN THE AREA
- RAG-PICKERS TAKE THEIR BELONGINGS
- WATER LOGGING IN THE MONSOON
- RODENT INFESTATION
- MOSQUITOES

MODE OF CONSTRUCTION

- SELF BUILT WITH SALVAGED MATERIALS

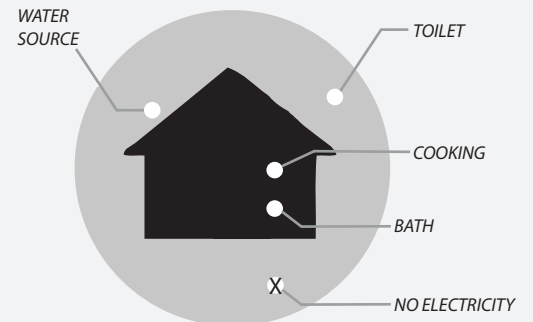
Annual Migration Pattern



○ AHMEDABAD 7 MONTHS ● FARMING (NATIVE) 3 MONTHS ● FESTIVAL (NATIVE) 1 MONTH ● OTHER (NATIVE)* 1 MONTH

*FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



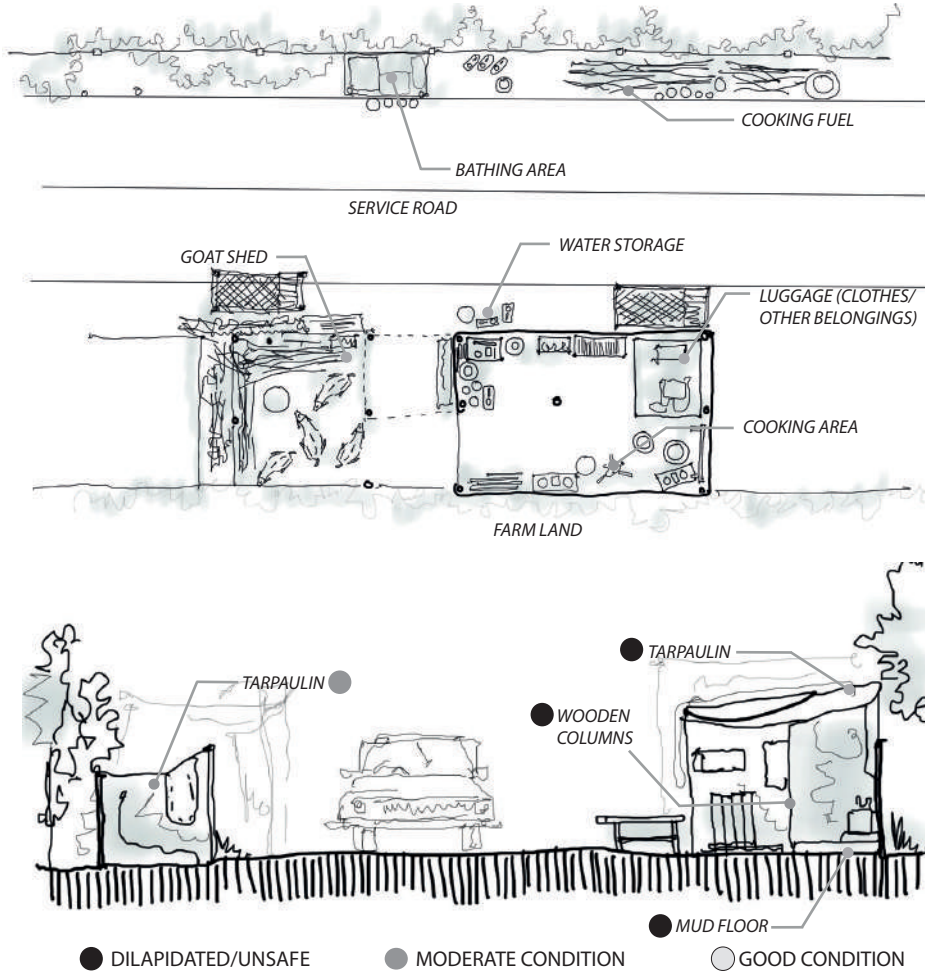


Gender: Male
 Caste/Community : Brahmin
 Place of Origin : Baroda, Gujarat
 In Ahmedabad since : Locals

	Man	Woman
Occupation	Unskilled Construction Worker	Unskilled Construction Worker
Wage	300/- Per day	300/- Per day

2B

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS
- BED
- CYCLE
- MOBILE PHONE

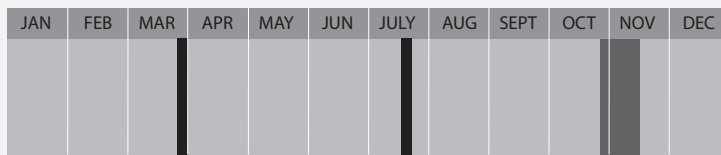
OTHER VULNERABILITIES

- HIGH TENSION ELECTRIC LINE PASSES FROM ABOVE
- CONSTANT VEHICULAR MOVEMENT
- SAFETY OF WOMEN
- SNAKES AND SCORPIONS IN THE AREA
- RAG-PICKERS TAKE THEIR BELONGINGS
- WATER LOGGING IN THE MONSOON
- RODENT INFESTATION
- MOSQUITOES

MODE OF CONSTRUCTION

- SELF BUILT WITH PURCHASED MATERIAL

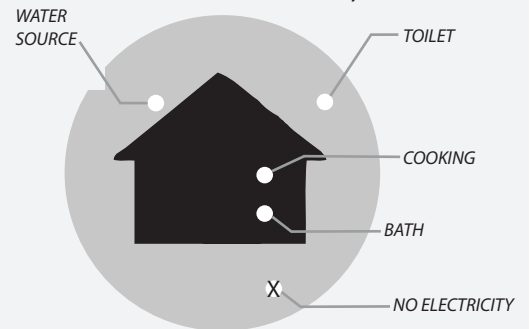
Annual Migration Pattern



○ AHMEDABAD 11 MONTHS ● FESTIVAL (NATIVE) 1 MONTH ● OTHER (NATIVE)* 0.5 MONTH

*FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



instilled a sense of insecurity in the residents. During the group discussion one of the residents mentioned that their settlement might be cleared off due to the slum-free city drives in Ahmedabad and they would not be provided housing as they have no proof that they have been living in this area for 15 years.

None of the residents (except for one permanent migrant from Baroda, Interviewee 2b) have ration card, election card, BPL certificate, or Aadhar card that shows Ahmedabad as their city of residence. Most of the seasonal migrants here have these documents for their villages and do not want to transfer them to the city as they live here for 7-8 months only and need them back in their village. Transferring of documents would also cost them money and they think that effort and money required for transfer is not worth it. The residents reported that none of the municipal officials or political leaders are supportive and they will not stand by them in case of eviction. However, the police have shown some support. There used to be harassment caused earlier by men from a nearby area who would drive through the settlement in the night. They felt unsafe because the women sleep outside in the open. Police patrolling has almost put a stop to this.

Residents access water from a borewell located in the nearby farm and reported paying Rs.300 per month for this. They can only get water once a day very early in the morning (5 am). They are allowed to fill 6-8 cans of water so they have to ration their use of water. Some residents also get water from a nearby office building where a security guard allows them to fill 6 cans without any charge. There are days when he does not allow them and they have to figure out other options then. The residents resort to open defecation. Women have to wake up early for this. Bathing is done in semi-enclosed bathing structures that they have constructed at the edge of the service road. Women feel unsafe bathing in this manner and so they try to bathe early during the day when there is less vehicular movement. Their access to other amenities such as healthcare and education is also limited. Most seasonal migrants leave the older school going children back in villages. One permanent resident (Interviewee 2b) reported that he sends his son to public school but it is quite far. Also, there are no public hospitals close by so they go to the private hospitals in case they need medical attention.

Residents reported a strong need for security of tenure (perhaps because of the fear instilled by recent eviction). With regard to housing preference, they said that they prefer *pucca* houses with basic services of water, sanitation and electricity. They do not mind moving to a different location in the city as long as it is near one of the *nakas*. In terms of affordability one individual male interviewee reported that he is willing to invest Rs.10000-15,000 in instalments for housing with secure tenure (Interviewee 2b). An individual woman interviewee reported that her family might be willing to invest Rs.5000-10,000 in instalments for housing, but they might have to take a loan to pay this amount (Interviewee 2a).

Since some of them do regular contract work sometimes, we also asked them whether they prefer to work at *nakas* or would like more regular contract work and would like to live on construction sites. In response, two construction workers stated similar preferences, stating that they would like more regular contract work but would not like to live on sites because of the working conditions. An unskilled woman construction worker mentioned that she had lived on site for one year with her family and was employed by a *mukkadam* (Interviewee 2a).

She said it was very difficult to live on site because of long working hours and no basic facilities of water and sanitation. After the site, they moved to this settlement where they have some access to water and flexibility of work. Another resident reported that there is insecurity of wages on site since sometimes the contractor does not pay them the full amount based on the number of days they have worked.

In summary, this settlement consists of seasonal migrants from Dahod. Most people find work either through *nakas* or through direct contact with contractors. Families (with children) live in huts constructed with wooden structural members and tarpaulin. They pay Rs 300 per month for water and do not have access to other basic services. There is high insecurity of tenure being located on a street edge and other vulnerabilities such as water logging in monsoon, rodent and mosquitoes infestation, vehicular movement through settlement, and insecurity of belongings.

5.2. Shelters / settlements on government or private land (not recognised as slums)

Behind Vasna Police Chowky

This settlement is a group of 80-100 *kutcha* tarpaulin houses built on a plot of land owned by the Ahmedabad Municipal Corporation (AMC). This settlement extends beyond this plot on to the footpaths of the adjoining road. In fact, there are scattered houses along this road all the way to the Sabarmati river. There is also a group of people who live in front of the nearby police *chowky*. There are primarily two groups of people residing on the AMC plot. One group consists of tribal (Adivasi) migrants from Banswara district of Rajasthan and the other group comprises of people from nearby villages (50-100 kms from Ahmedabad) around the towns of Surendranagar, Viramgam and Patan. The people from Banswara are seasonal migrants, mostly comprising of only couples, who live in the city for a total of 6-8 months in an year (some even just 3-4 months) and travel back to their villages almost every two months for 8-10 days. They go back to villages to take care of families, for farm work and for festivals. There are also a few temporary short-term migrants who stay in the city for not more 4-5 months in a year and come to the city only on need-basis. On the other hand, people from nearby villages are as good as permanent migrants and go back to villages only for religious/social activities such as marriages, funerals and festivals. They have migrated to the city with their entire families.

Majority from the Banswara community is employed in the construction industry and gets employment through the nearby Vasna *naka*. The men work mainly as unskilled masons and the women are unskilled labourers. Some residents also find short-term contract work, but this is hard to come by as one needs contacts to get such work. Many also said that they prefer getting work from the *naka* even though there is no guarantee of employment every day since firstly, they prefer the security of wages in *naka* work (as wages are paid at the end of the day as opposed to end of the month in contract work) and secondly, if they get bound in contract work they cannot travel back to villages as and when they want and need. The occupation of people from nearby villages has greater diversity with the men working as construction workers (at *nakas*), balloon-sellers and vegetable vendors while most women are housewives.

A woman interviewee from Banswara (Interviewee 3a) reported that men earn Rs.300 and women earn Rs.250 for a day's work through the *naka*. But they only get work for around 15-20 days a month so in the end they do not always have major savings. So their daily household income is Rs 550 out of which they spend Rs.100-150 per day (for a couple without children) for groceries, cooking fuel, water etc. In addition there are also expenses to travel to the village (Rs.180, one way), healthcare expenses, expenses related to the family in village, loan repayment etc. The permanent migrants (Interviewee 3b) said that their household income is Rs 300 per day and they spent Rs.200-250 per day on groceries, cooking fuel, etc. This does not include other expenses such as medical expenses, festival expenses etc. They get work only for 15-20 days a month so sometimes they have to take short-term loans to meet every day expenses.

This settlement is an old settlement where people have reported living for 20-25 years. Residents began with living in the *kutcha* tarpaulin houses and then after a few years some families from nearby villages built semi-*pucca* houses. The tribal migrant population has

always lived in *kutcha* houses because they live in the city for a short time and do not want to invest in constructing semi-*pucca* houses. This settlement land has been under various conflicts of land ownership. A *Bharwad* had forcibly taken possession of the land (*kabjo*) and he fought a case in the Gujarat High Court to claim ownership but he lost and the land was declared as belonging to AMC. After this, AMC established its ownership by building a compound wall around the plot of land. AMC razed the houses and evicted the residents. Despite the large demolition, residents refused to move away. Initially, they just stayed in the open for a while. Every time they would erect some kind of shelter, the security guard placed here by AMC would destroy it. After repeatedly doing this, they finally managed to build *kutcha* houses without the guard destroying them.

The residents reported having no support from local or State authorities, political leaders or the police¹⁴. The residents from nearby villages had filed various applications and complaints with the local government to improve their housing condition (the Banswara group has not been involved in these efforts). However, the government stated that no resources can be allocated to them as they do not belong to the city. In fact, it was in the midst of the residents' efforts to get water from the AMC that it carried out the large eviction, thus creating fear amongst them to even approach the AMC again with any demand for services. The police also followed AMC orders and harassed them during eviction.

According to these residents, the *kutcha* houses of the Banswara people and the fact that they keep going back to their villages, creates the impression of them not being of the city. The relations between the two groups is not tense, but there is clearly a feeling amongst the permanent residents that the lack of permanency of the Banswara community is depriving them of the possibility of being recognized and getting government-provided basic services. Some of the residents who are from nearby villages (around 10-15 households) have managed to recently get ration cards, election cards, BPL certificates and Aadhar cards on the current address. It is clear that when these residents advocate for alternate housing, they will do so only for those who have these documents. One of the elders amongst them said that they have explained to the Banswara people that they should also get their document proofs, but they refuse to. It is worth noting here that it would be more difficult for the Banswara people to get these documents as they are intra-state migrants. Besides the insecurity of tenure, some of the permanent migrants also reported that the *Bharwad* who was claiming this land, brings his cattle into the compound and the cattle sometimes damages the house structure or enters the structure and eats their food. Also sometimes people from a nearby community who are slaughterers (*Kasais*) come to steal the cattle. This has led to some violence between the *Bharwad* and *Kasais* in the past. The residents have nothing to do with the cattle or the slaughterers and still they are the ones who fall prey to the turmoil.

The residents reported that they get water from nearby housing societies or from the farmland behind their settlement. The residents of the housing societies usually ask them to do some

¹⁴ There is another settlement in Vasna right in front of the police chowky. The residents live in *potla*-type dwellings where they tie their belongings in a tarpaulin sheet when they go to work. They reported that the police are very supportive, explaining that the police allow them to fill water from the station. In the monsoon, the police even allowed them to store their belongings in an empty room in the station. This reveals the complex role that the police often play with regard to such vulnerable groups in the city.

3

Vasna, Behind Police Chowky

Housing Type : Settlement on Government Land
 Land Owner : AMC
 Age of Settlement : 20-25 Years
 Rent/Cost : No Rent
 Tenure Security : Low

Settlement Layout



Demographic Info

POPULATION

• 400-800

NUMBER OF HOUSEHOLDS

• 80-100

HOUSEHOLD TYPE

- FAMILY WITH CHILDREN
- MULTIPLE FAMILY

PLACE OF ORIGIN

- VARIOUS VILLAGES, GUJARAT
- BANSWARA, RAJASTHAN

CASTE/COMMUNITY

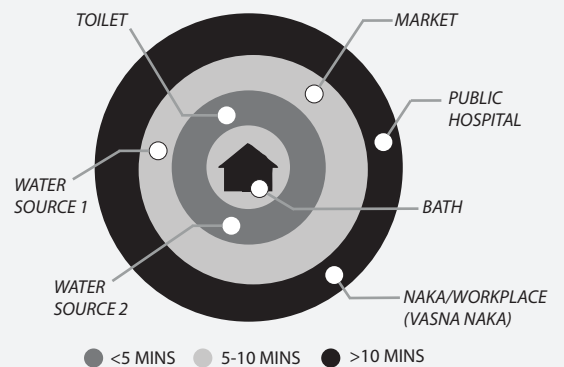
- TRIBAL

Legend

1	WATER SOURCE - TAP	1	SEMI-OPEN TARPULIN BATHS		TREES
2	WATER SOURCE - BOREWELL	2	PAY & USE BATH		OTHER BUILDINGS
1	PAY & USE TOILETS		INDIVIDUAL SHELTERS		
2	OPEN DEFECACTION		IMPORTANT BUILDINGS		

Access to Basic Services

					COST SOURCE
1. NEAR BY RESIDENTIAL AREA 2. BOREWELL	1. SEMI-OPEN TARPULIN BATHS 2. PAY & USE	1. OPEN GROUND 2. PAY & USE	YES	MARKET	
1. WORK FOR WATER 2. 10/- For 5 LITRE	1. NO CHARGE 2. 10/-	1. NO CHARGE 2. 5/-	NA	20/- PER KG	



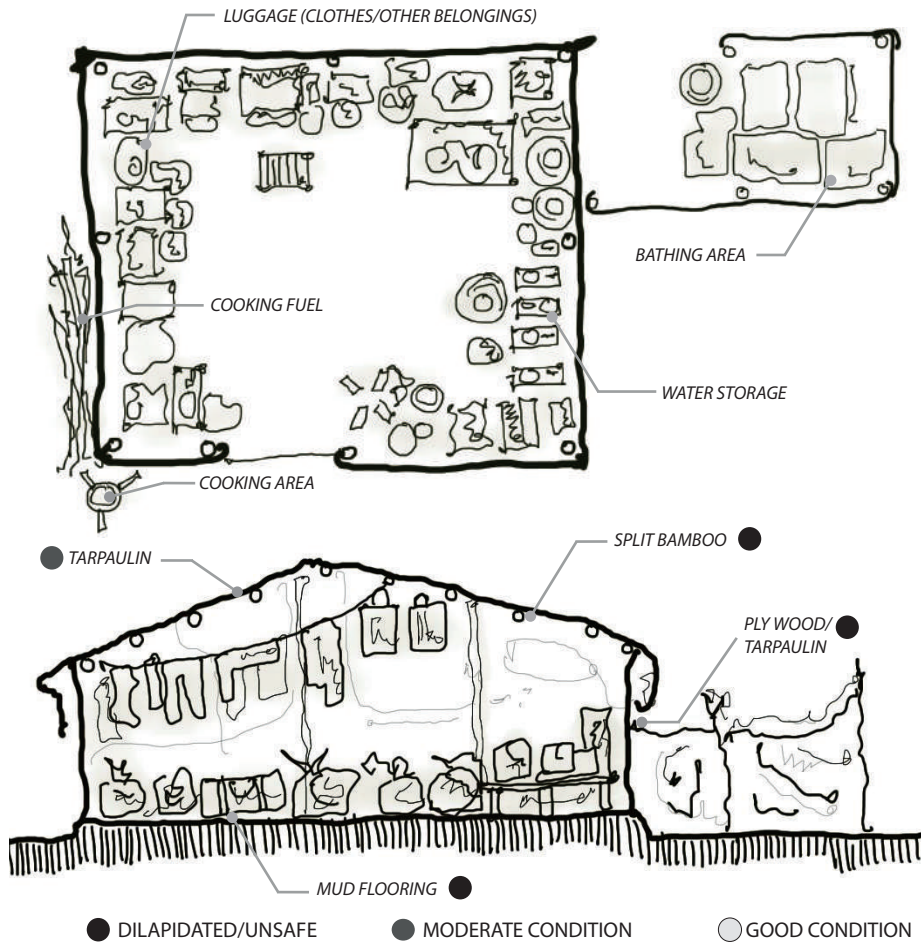
Gender: Male
 Caste/Community : Tribal
 Place of Origin : Banswara, Rajasthan
 In Ahmedabad since : 20-25 Years

Gender: Male
 Caste/Community : Tribal
 Place of Origin : Banswara, Rajasthan
 In Ahmedabad since : 20-25 Years

	Man	Woman
Occupation	Unskilled Construction Worker	Unskilled Construction Worker
Wage	300/- Per day	250/- Per day

3A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS

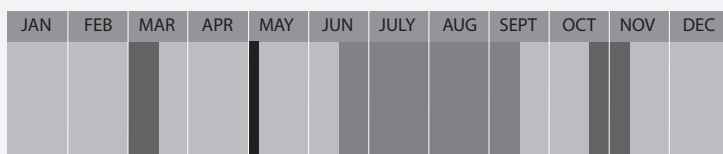
OTHER VULNERABILITIES

- FLOOR EXPOSED TO GROUND
- NO SUFFICIENT ROOFING TO PREVENT HEAT/COLD
- RODENT INFESTATION
- STRAY ANIMALS IN THE SETTLEMENT DURING NIGHT
- WATER LOGGING DURING MONSOON

MODE OF CONSTRUCTION

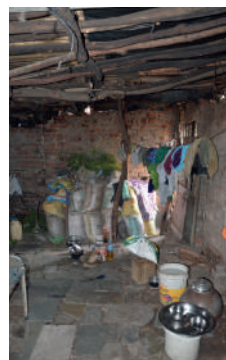
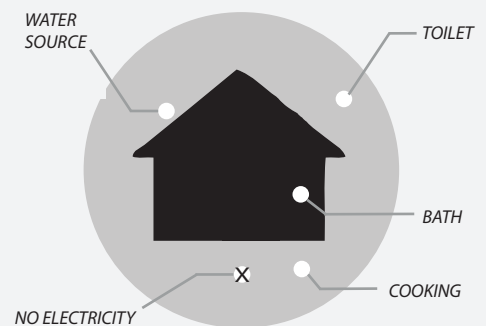
- SELF BUILT WITH SALVAGED MATERIAL

Annual Migration Pattern



○ AHMEDABAD 8 MONTHS
 ● FARMING (NATIVE) 3 MONTHS
 ● FESTIVAL (NATIVE) 1 MONTH
 ● OTHER (NATIVE)
 FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



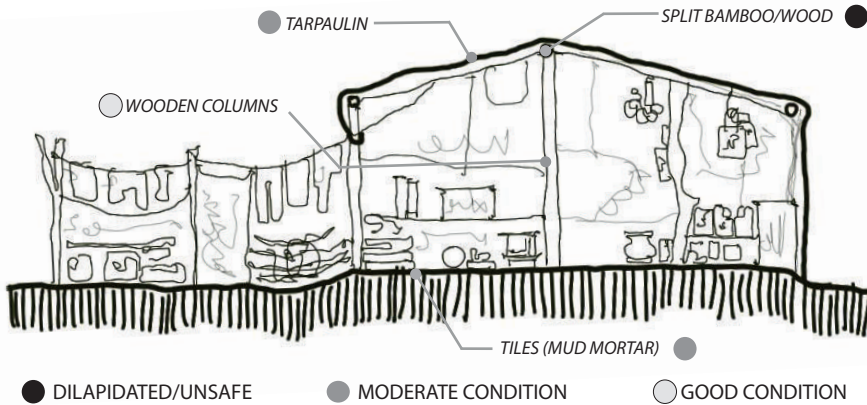
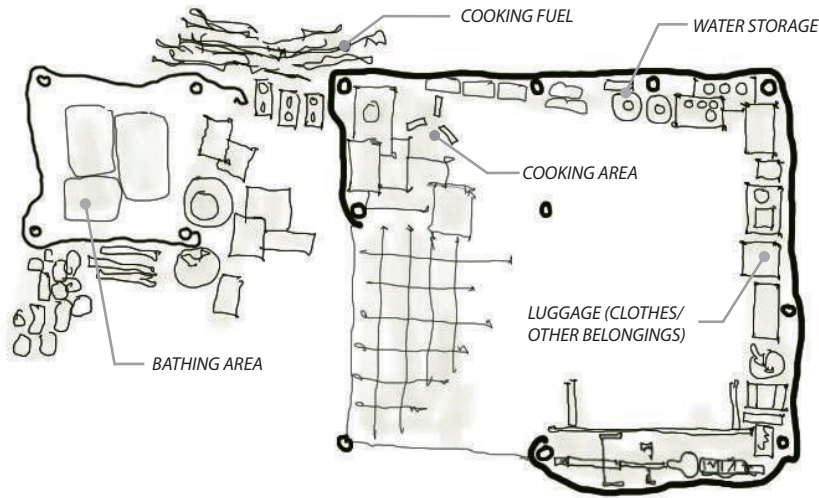


Gender: Female
 Caste/Community : Devipoojak
 Place of Origin : Radhanpur, Gujarat
 In Ahmedabad since : 15-20 Years

	Man	Woman
Occupation	Unskilled Construction Worker	House Wife
Wage	300/- Per day	NA

3B

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS
- CYCLE
- BED

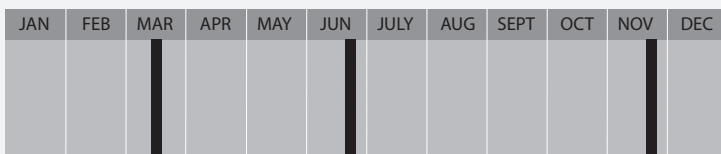
OTHER VULNERABILITIES

- NO SUFFICIENT ROOFING TO PREVENT HEAT/COLD
- RODENTS INFESTATION
- STRAY ANIMALS IN THE SETTLEMENT DURING NIGHT
- WATER LOGGING DURING MONSOON
- SAFETY OF BELONGINGS AS SHELTER IS OPEN FROM ONE SIDE

MODE OF CONSTRUCTION

- SELF MADE WITH SALVAGED MATERIALS

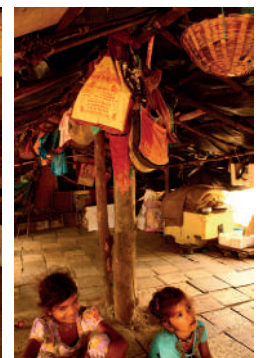
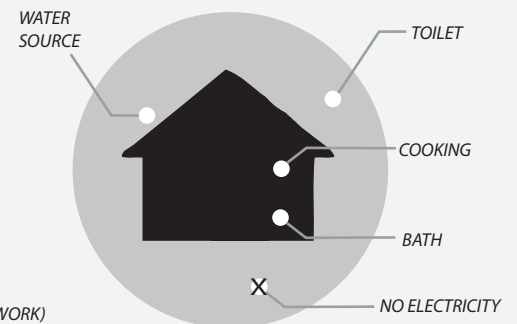
Annual Migration Pattern



○ AHMEDABAD 11.5 MONTHS ● OTHER (NATIVE)* 0.5 MONTH

*THEY GO TO NATIVE FOR ABOUT A MONTH AS SITUATION ARISES. (WEDDING, FUNERAL, RELIGIOUS WORK)

Access to Basic Facilities, Inside/Outside



chores in exchange for filling water. The chores include cleaning, taking out the trash and other odd jobs. They usually allow them to fill 2-3 cans for half an hour's work. Some residents reported that they are treated in a very derogatory manner by the housing society residents; at times they spill their cans of water if they are irked with them. In the case of filling water from the nearby farmlands, the farm owner also asks them to do some chores around the farm or asks them to pay Rs.10 for a 5-litre can of water. For defecation, there is a pay and use toilet nearby but it is usually crowded and ends up being too expensive to use every day, so most residents resort to open defecation. Most men bathe out in the open and for women there are semi-enclosed tarpaulin enclosures near their shelters. Women reported that they bathe before everyone wakes up or later during the night when it gets dark. Some residents reported that they use portable batteries for electricity which costs about Rs.30 for recharging and lasts for 7-10 days. During the research fieldwork, the wires on one of the batteries heated up and began to burn, starting a small fire, revealing the hazardous nature of using such devices for electricity. The residents have access to amenities like health care and education. The permanent migrants reported that they send the kids to a nearby public school from where a van comes to the settlement to pick up the kids. However the Banswara people leave the kids back in the villages. In case of need of healthcare services, they go to nearby public hospital.

When asked about their housing preferences during individual interviews with a family from each group (Banswara people and people from nearby villages), they stated different requirements. A family from Banswara community (Interviewee 3a) expressed a preference for more community style living where 2-3 couples could share sleeping spaces and they could have separate cooking areas. They even reported to be comfortable with semi-*pucca* houses as they do not live in the city for long periods. They said that it is very important that the place of residence should be close to a *naka*. A family from the other group (comprising of people from nearby villages) stated that they would prefer a *pucca* house with 1-2 bedrooms, kitchen and toilet. They also said that they are willing to relocate to any area in the city. Both groups said that they needed security of tenure and basic services of water, electricity and sanitation. In the group discussion, some people from nearby villages mentioned that they are willing to invest Rs.5000-10,000 in monthly instalments, while some others said that this was high. The Banswara people reported that they can pay Rs.300-500 per month and need the flexibility to not pay when they go back to villages. Affordability might differ from family to family based on their incomes and expenses and other obligations.

To sum up, this settlement consists of seasonal migrants from Banswara in Rajasthan and permanent migrants from nearby villages in Gujarat. Most Banswara people are unskilled construction workers who find work through *nakas*. People from nearby villages are either construction workers who find work at *nakas* or are self-employed as vegetable vendors, balloon sellers etc. They do not have access to any of the basic services and rely on informal arrangements to get water. They either do some labour to get water from neighbours or pay Rs.10 for a 5-litre can of water. There is high insecurity of tenure as the settlement is located on government land and is not recognized as a slum. There are other vulnerabilities such as severe waterlogging in monsoon, rodent and mosquitoes infestation, and insecurity of belongings.

Opposite Sabarmati Crematorium, near Acher Gaam

In this settlement there is a diverse community with a diverse typology of housing. There are houses ranging from *kutcha* tarpaulin houses to semi-*pucca* and *pucca* houses. A part of the settlement was also upgraded under the Slum Networking Project (SNP) and has water, sanitation and electricity in individual houses. There are various occupation groups living in the settlement. The construction workers comprise of a population of 180-2009 and inhabit approximately 60 houses, which are semi-*pucca* and *kutcha*. They are tribal migrants (*Adivasis*) mainly from Dahod district of Gujarat. Majority of households are families with only couples and some have smaller children who cannot be left behind in the villages. Most are seasonal migrants who go back to their village for the harvest season twice a year for about 15 days each and for festivals like Holi and Diwali for 5-8 days each.

The construction workers here comprise of both skilled and unskilled workers doing plaster work and miscellaneous labour. Most of them find work through the nearby Ramnagar *naka*. There are also some workers involved in regular contract work with a construction company. They also get transportation to the construction site.

One of the regular contract workers reported that as a skilled worker he earns Rs. 550 per day and his wife as an unskilled worker earns Rs. 250 per day (Interviewee 4b). They reported that they work for 25 days in a month earning a total household income of Rs. 20,000 per month. Out of this, their monthly expenses on groceries, cooking fuel, children's school expenses etc. are Rs. 9000-10,000. They invest their savings in improving their housing condition (currently they have a semi-*pucca* house). The employer pays them an advance (*kharchi*) every 8 days and then pays rest of the amount at end of the month. In another family, the husband and wife (both unskilled) are *naka* workers, and they reported that currently they get work for 15-20 days in a month and earning Rs.9,000-12,000 per month (Interviewee 4a). Their monthly expenses on groceries, cooking fuel etc. are Rs.4500-6000. These expenses do not include expenses like traveling back and forth between village and the city, medical expenses, agricultural expenses etc.

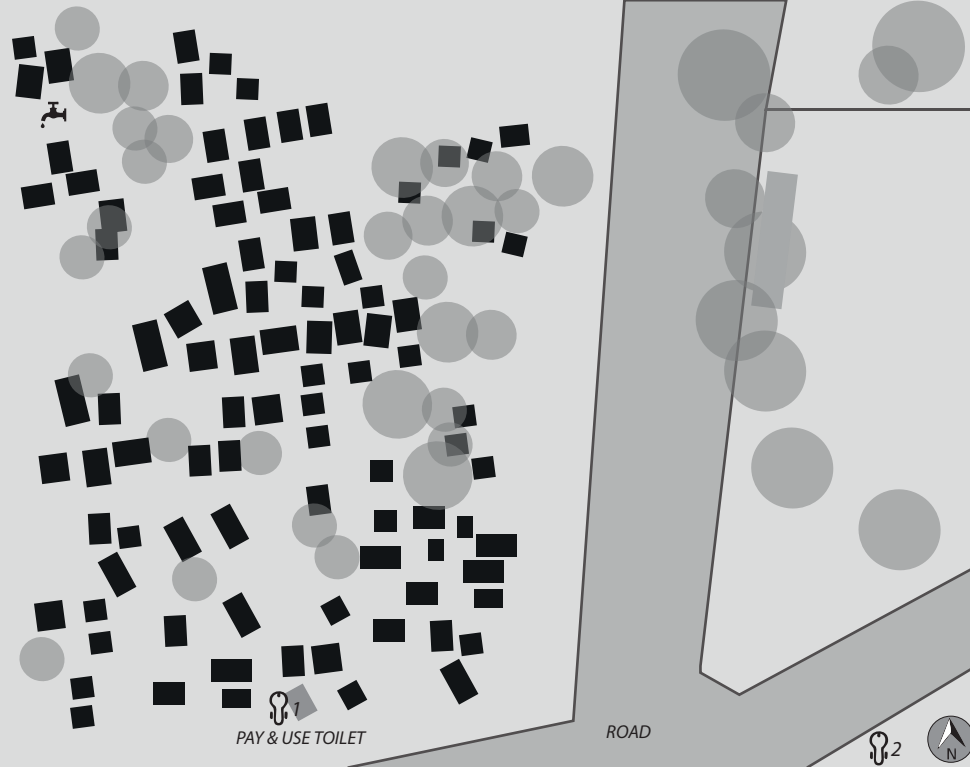
The construction workers have been living in this settlement for around 10 years in *kutcha* tarpaulin houses. There was an eviction in 2012 by AMC in part of their settlement during the time when people were back in the villages for a festival. They came back from the villages and rebuilt their houses. Since then there has been no eviction. Ten years ago, most people in this group used to live in *kutcha* tarpaulin houses under the bridge near Torrent power house. They had lived there for 3-4 years when they were evicted by Torrent and AMC. Some people went back to live there but most people moved to the current settlement. Before that, this group used to live on the railway land near D-cabin for 10-12 years. They were evicted from there by the AMC /Railway department. After the eviction they tried to rebuild the houses there but there was constant patrolling by police who did not allow them to settle back there. Many of the construction workers in this settlement have thus faced multiple evictions and displacements. In their current location also, they feel the local or State authorities do not support them and if they are evicted, they will be helpless as they have no documents proving that they have lived in this settlement for 10 years. Most of them have their identification documents such as ration cards, election cards, and BPL certificates in their villages. One of the residents (who is a regular contract worker) reported that he has been trying to get a ration

4

Acher Gaam, Near Cremetorium, Acher

Housing Type : Settlement on Government/Private Land
 Land Owner : AMC/Torrent
 Age of Settlement : 10 Years
 Rent/Cost : No Rent
 Tenure Security : Low to Medium

Settlement Layout



Demographic Info

POPULATION

• 180-200

NUMBER OF HOUSEHOLDS

• 60 (ONLY CONSTRUCTION WORKERS)

HOUSEHOLD TYPE

• FAMILY WITH CHILDREN








PLACE OF ORIGIN

• DAHOD, GUJARAT
 • JHABUA, MADHYA PRADESH

CASTE/COMMUNITY

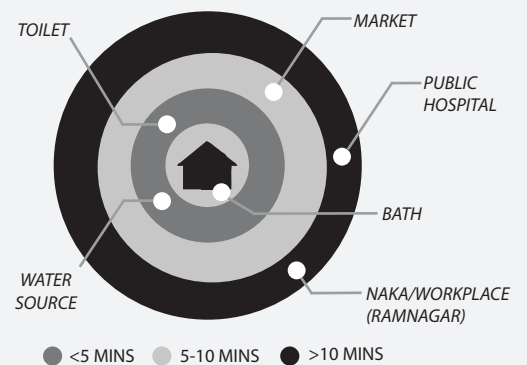
• TRIBAL

Legend

-  COMMON TAP
-  PAY & USE TOILET
-  INDIVIDUAL SHELTERS
-  IMPORTANT BUILDINGS
-  OPEN DEFECTION
-  TREES
-  SEMI-OPEN TARPULIN BATHS

Access to Basic Services

COMMON TAP	SEMI-OPEN TARPULIN BATH	1. OPEN GROUND 2. PAY & USE	YES	MARKET	COST SOURCE
NO CHARGE	NO CHARGE	1. NO CHARGE 2. F-3/- M-5/-	NA	10/- PER KG	



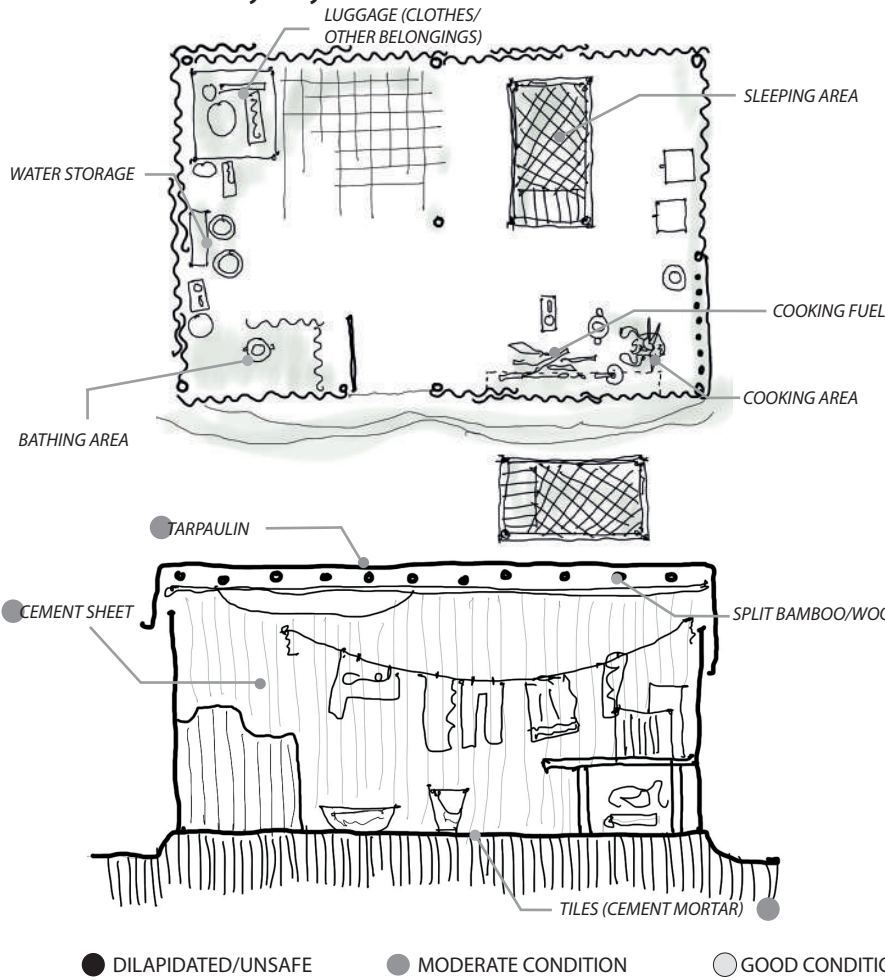


Gender: Male
 Caste/Community : Tribal
 Place of Origin : Jhabua, MP
 In Ahmedabad since : 20-25 Years

	Man	Woman
Occupation	Unskilled Construction Worker	Unskilled Construction Worker
Wage	300/- Per day	300/- Per day

4A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS
- BED
- CYCLE

OTHER VULNERABILITIES

- EVICTION INSECURITY
- WATER LOGGING IN THE MONSOON
- RODENT INFESTATION
- MOSQUITOES

MODE OF CONSTRUCTION

- SELF BUILT WITH SALVAGED MATERIALS

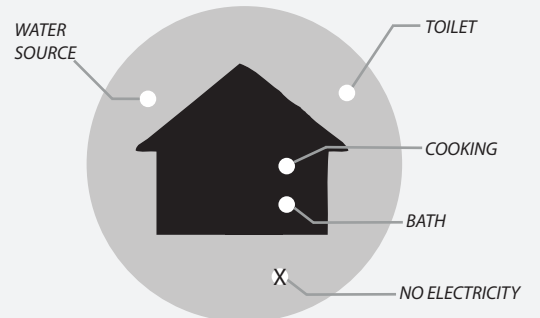
Annual Migration Pattern



○ AHMEDABAD 9.5 MONTHS
 ● FARMING (NATIVE) 1 MONTHS
 ● FESTIVAL (NATIVE) 0.5 MONTH
 ● OTHER (NATIVE)* 1 MONTH

*FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



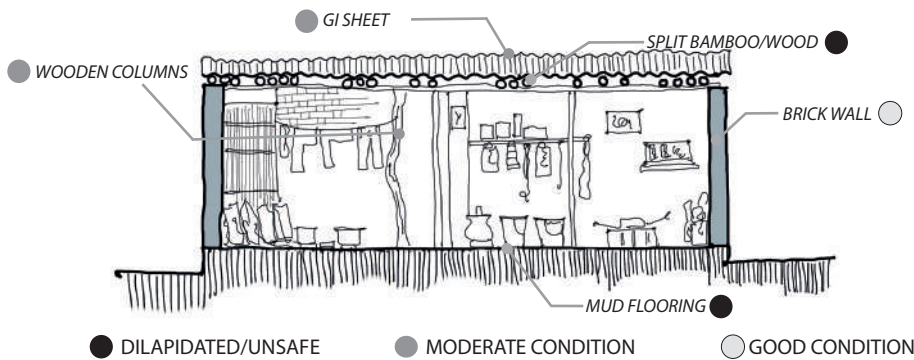
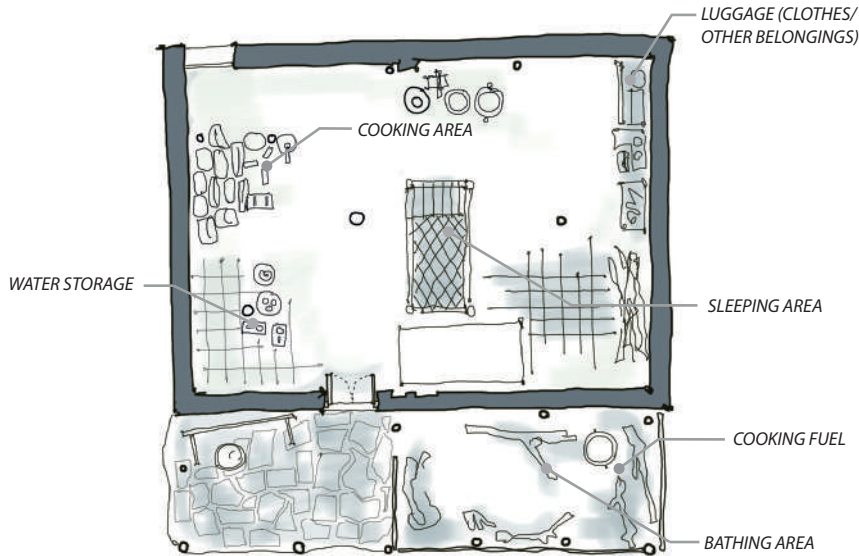


Gender: Male
 Caste/Community : Tribal
 Place of Origin : Dahod, Gujarat
 In Ahmedabad since : 20-25 Years

	Man	Woman
Occupation	Skilled Construction Worker	Unskilled Construction Worker
Wage	550/- Per day	280/- Per day

4B

Shelter Activity Layout/Vulnerabilities



Overview of Shelter BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS
- BED

OTHER VULNERABILITIES

- EVICTION INSECURITY
- WATER LOGGING IN THE MONSOON
- RODENT INFESTATION
- MOSQUITOES
- DISPUTE WITH NEIGHBOURS

MODE OF CONSTRUCTION

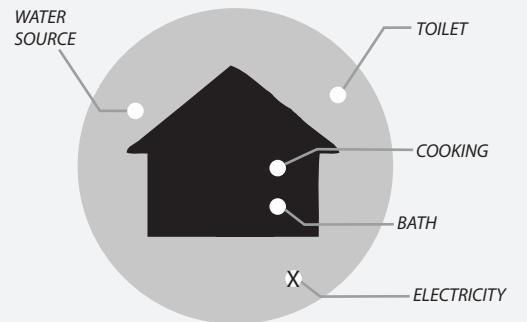
- SELF BUILT WITH PURCHASED MATERIALS

Annual Migration Pattern

JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC

○ AHMEDABAD 12 MONTHS ● FESTIVAL (NATIVE)

Access to Basic Facilities, Inside/Outside



card on the city address but he is facing problems due to bureaucracy and corruption (an official asked him for a bribe of Rs.5000-6000).

The residents reported that there is a municipal tap in the settlement from where they can fill water twice a day. Sometimes they have to stand in queue but they did not report it to be very long or time consuming. However, there is no provision of a toilet in the settlement. There is a pay and use toilet at the edge of the settlement where no charges are levied anymore but most people still go for open defecation as the toilet is only open from 9 am to 5:30 pm. The construction workers have to go to the *naka* at 9 am and return only after 6 pm, so this toilet is of no use to them. They have built small semi-open tarpaulin structures for bathing next to their houses. Women face some problems as these structures are not completely enclosed, so they have to bathe either early in the morning or after dark. Most seasonal migrants do not have older kids in the city, however one permanent migrant (Interviewee 4b) sends his children to the nearby public school. Most residents use the nearby private hospital for medical assistance because the public hospital closes by the time they get back from work.

The residents expressed a need for *pucca* houses and basic services of water, electricity and sanitation. They said that they are willing to relocate to any area in the city but it should be near one of the *nakas*. They also said that they are willing to invest some money for housing with security of tenure. The amount of investment that they felt was feasible differed across the families. A skilled regular contract worker (Interviewee 4b) whose wife is an unskilled regular contract worker said they can afford to pay monthly instalments of Rs.2000-3000 while an unskilled *naka* worker (Interviewee 4a) whose wife is also an unskilled worker said they might be able to afford monthly instalments of Rs.1000-1500 but this depends on the number of days they get work in a given month.

To sum up, the construction workers in this settlement consist of families (both only couples and family with children) from Dahod, majority of who live in *kutcha* tarpaulin shelters. Most are seasonal migrants though there are some permanent migrants as well, the latter of which are trying to build more *pucca* houses. Residents find work through *nakas* and some have regular contract jobs. The residents have access to water but they have no access to adequate sanitation and no access to electricity. There is medium to low security of tenure and other vulnerabilities such as severe waterlogging in monsoons, and rodent and mosquitoes infestation.

Opposite railway tracks, near Durganagar, Vatwa

This settlement comprises of *kutcha* tarpaulin houses built on a private plot of land owned by a Muslim *dargah* trust. The group of residents are tribal (Adivasi) migrants from Dahod district in Gujarat. Most residents are seasonal migrants but with differing migration patterns. There are three groups of residents in this settlement, each of which has been recruited by a different *mukkadam* from their village and brought to this settlement to work in the city as construction labour. Thus, there are three labour gangs living in this settlement and each works on a different construction site under their *mukkadam*. They work on road construction projects or infrastructure projects such as pipe-laying work. The contractor provides transportation between the settlement and the construction site. The labour gangs have some families with some children but mostly the gangs comprise of only couples who have left their children behind in their village. We conducted a group discussion with one of these labour gangs and interviewed two people from the same group in detail.

Most residents in the studied labour gang spend 5-6 months in the city while some residents spend 8-9 months. All of them return to their village for farm work, festivals and to take care of their families. Those who spend 5-6 months in the city go back to their village for 4 months in the monsoon, one month for Holi, 15 days for Diwali, and for 1-1.5 months for other reasons. The residents who spend 8-9 months in the city go back to their village for 2-2.5 months in the monsoon, 15-20 days for Holi and Diwali, and one month for other reasons.

All the residents in the studied group are either skilled or unskilled workers who have been employed by a *mukkadam* from their village. Skilled workers earn Rs. 500-700 per day and unskilled workers earn Rs. 250 per day. They work from 9 am to 6 pm and get overtime if they work for more than 2-3 hours after 6 pm. The *mukkadam* pays advances (*kharchi*) to the workers every 7-8 days for living expenses. He either pays the rest of the wages at the end of the month or when the workers return to their village. Most workers prefer to take the money when they leave for their village. A family of five (Interviewee 5a) reported that their household income is Rs. 10,000 per month and they spend about Rs. 3000-4500 on groceries and other miscellaneous expenses. They take the rest of the money back to villages for agricultural expenses and to take care of families back in the village. Another family of three (Interviewee 5b) reported that their household income is Rs 10,000 per month and they spend Rs. 2000-3000 per month. This does not include any medical expenses or any expenses back in the village.

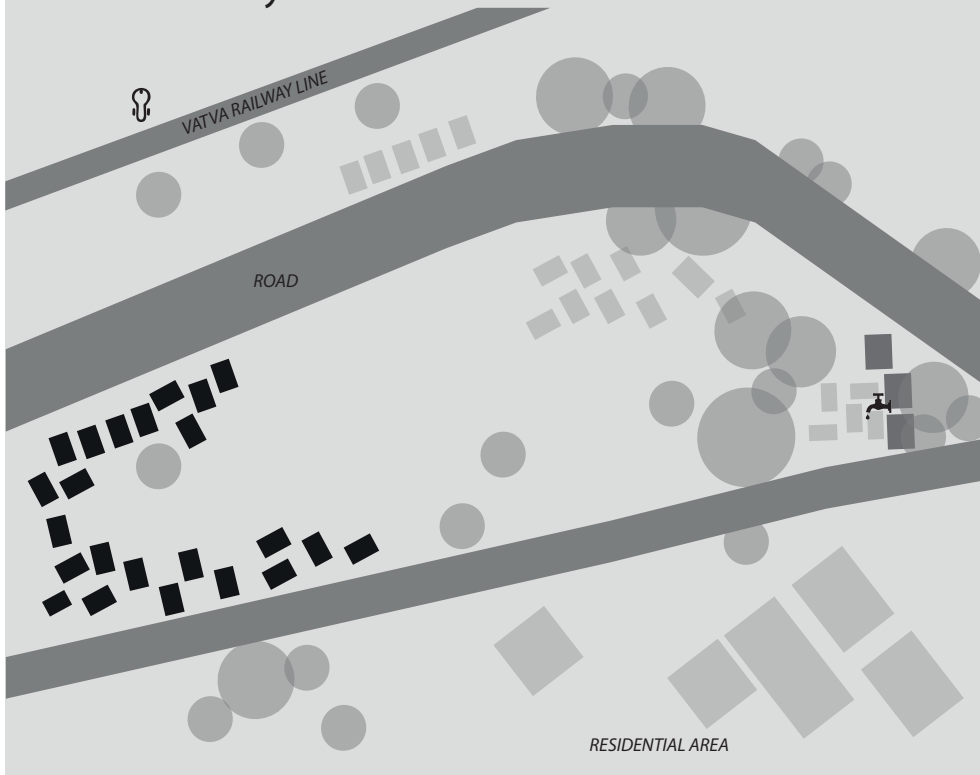
Some of the *mukkadams* have been living in this settlement for 7-8 years with different labour gangs they have assembled over the years. The *mukkadams* or residents did not report any issues of harassment or eviction from here. They also did not report paying rent to anyone. According to a nearby shop owner, the landowner allows them to live here as the land is lying vacant and residents only build temporary structures which can be dismantled anytime the landowner wishes. He also said that sometimes people from the landowning trust comes to check on the land. They ask the residents about their origin and occupation and make sure nobody is constructing any permanent structures. Although there have not been evictions and displacements, some of the residents have moved around the city, living in other settlements with other *mukkadams*. Some of them have also lived on construction sites in Ahmedabad. The residents reported that they have no support from any of the local authorities and they do

5

Vatva, Opposite Railway Land

Housing Type : Settlement on Private Land
 Land Owner : Muslim Dargah Trust
 Age of Settlement : 7-8 Years
 Rent/Cost : No Rent
 Tenure Security : Medium

Settlement Layout



Demographic Info

POPULATION

• 35-40

NUMBER OF HOUSEHOLDS

• 15-20

HOUSEHOLD TYPE

• FAMILY WITH CHILDREN

PLACE OF ORIGIN

• DAHOD, GUJARAT

CASTE/COMMUNITY

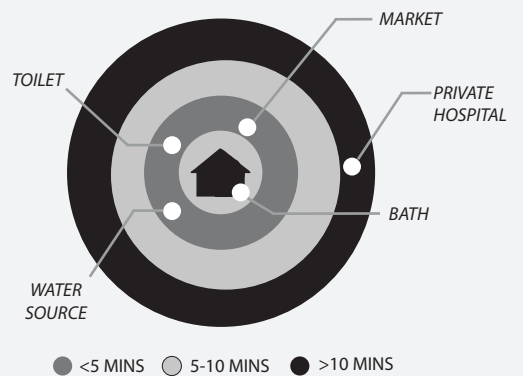
• TRIBAL

Legend

	HAND PUMP		INDIVIDUAL SHELTERS
	OPEN RAILWAY LAND		IMPORTANT BUILDINGS
	SEMI-OPEN TARPULIN BATHS		OTHER BUILDINGS
			TREES

Access to Basic Services

					COST SOURCE
HAND PUMP	SEMI OPEN TARPULIN BATH	OPEN RAILWAY LAND	YES	SALVAGED WOOD	
NO CHARGE	NO CHARGE	NO CHARGE	NA	NO CHARGE	



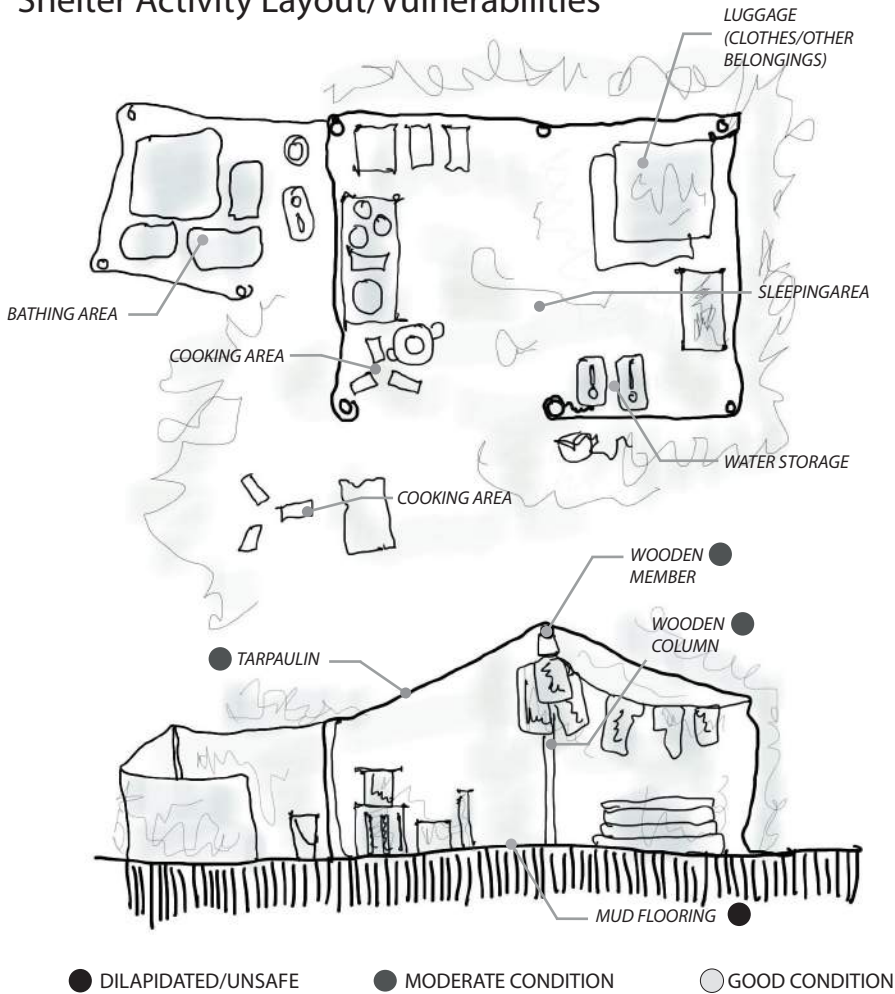


Gender: Male
 Caste/Community : Tribal
 Place of Origin : Dahod, Gujarat
 In Ahmedabad since : 20 Years

	Man	Woman
Occupation	Unskilled Construction Worker	Unskilled Construction Worker
Wage	250/- Per day	250/- Per day

5A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS

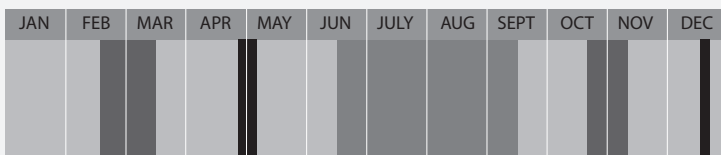
OTHER VULNERABILITIES

- FLOOR EXPOSED TO GROUND
- NO SUFFICIENT ROOFING TO PREVENT HEAT/COLD
- RODENT INFESTATION
- STRAY ANIMALS IN THE SETTLEMENT
- WATER LOGGING DURING MONSOON

MODE OF CONSTRUCTION

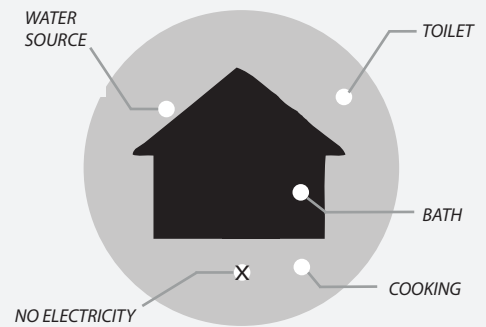
- SELF BUILT WITH MATERIALS PROVIDED BY MUKKADAM

Annual Migration Pattern



○ AHMEDABAD 7 MONTHS ● FARMING (NATIVE) 3 MONTHS ● FESTIVAL (NATIVE) 1 MONTH ● OTHER (NATIVE)* 1 MONTH
 *FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



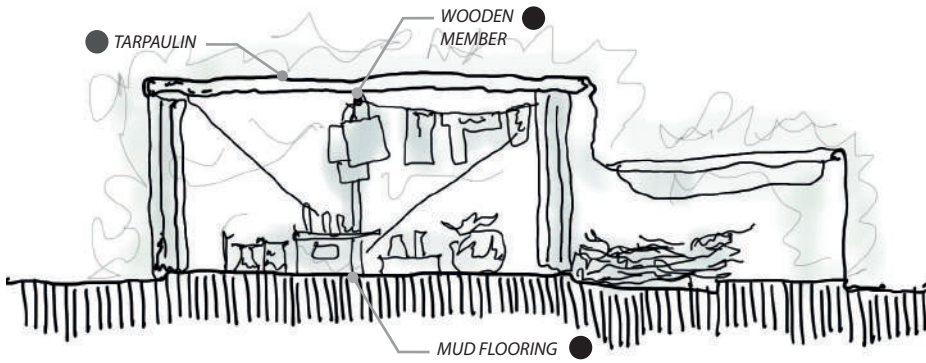
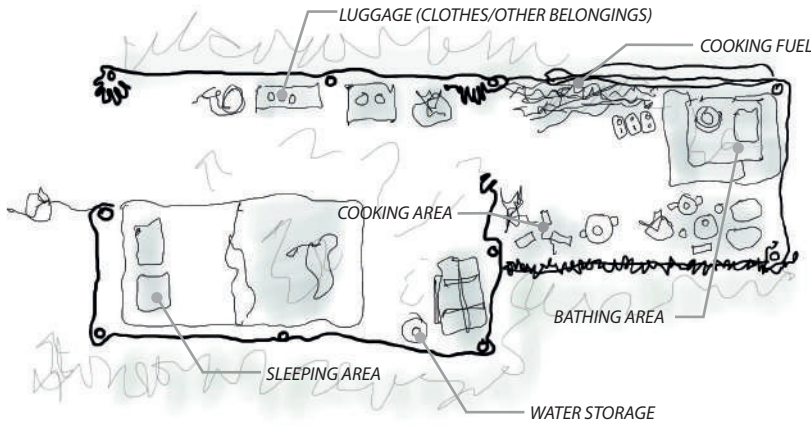


Gender: Female
 Caste/Community : Tribal
 Place of Origin : Dahod, Gujarat
 In Ahmedabad since : 20 Years

	Man	Woman
Occupation	Unskilled Construction Worker	Unskilled Construction Worker
Wage	250/- Per day	250/- Per day

5B

Shelter Activity Layout/Vulnerabilities



● DILAPIDATED/UNSAFE ● MODERATE CONDITION ○ GOOD CONDITION

Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS

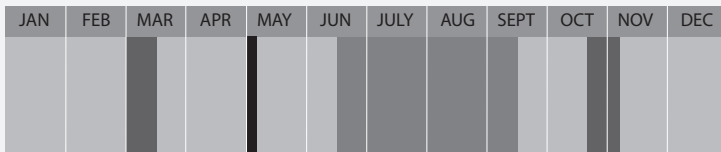
OTHER VULNERABILITIES

- FLOOR EXPOSED TO GROUND
- NO SUFFICIENT ROOFING TO PREVENT HEAT/COLD
- RODENT INFESTATION
- STRAY ANIMALS IN THE SETTLEMENT
- WATER LOGGING DURING MONSOON
- MOSQUITOES

MODE OF CONSTRUCTION

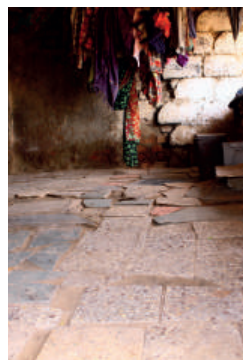
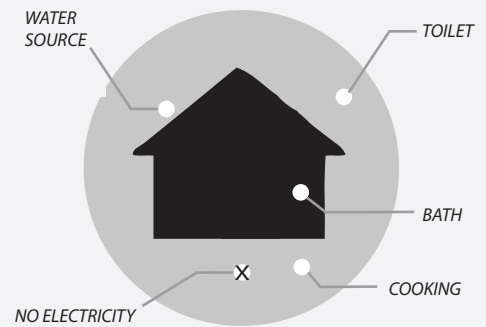
- SELF BUILT WITH MATERIALS PROVIDED BY MUKKADAM

Annual Migration Pattern



○ AHMEDABAD 8 MONTHS ● FARMING (NATIVE) 3 MONTHS ● FESTIVAL (NATIVE) 1 MONTH ● OTHER (NATIVE)*
 FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



not expect any help from them because they are temporary residents in the city. One of the residents said that the local authorities cannot provide them any facilities because they do not have any documents in the city and all their identification documents such as ration card and election card is on the village address. The residents reported having some support from the neighbouring retail establishments which allow them to fill water.

Materials for *kutcha* shelters that the residents live in are provided / funded by the *mukkadams* (might also be funded by the contractor). The residents have informal access to water from a tap located behind a nearby shop. The shop owner allows them to fill their cans without any charge. They can fill water anytime during the day. Residents have no access to sanitation facilities have to resort to open defecation on the nearby railway land. The women have to wake up early to defecate in the open. They have built small semi-open tarpaulin structures next to their houses for bathing. Women face some problems as these shelters are not completely enclosed so they have to bathe either early in the morning or after dark. There is no access to electricity and the nearby street lights are the only source of light in the settlement. The residents leave the older children behind in villages so none of the children in the settlement go to school in the city. In case of need of medical attention most residents go to the nearby private hospital.

With respect to their housing needs and preferences, the residents said that provision of basic services of water, sanitation and electricity would be very helpful to them. They do not require *pucca* houses as they stay in the city for short periods of time. The settlement can be anywhere in the city as they are provided transportation to the construction site where they work. They do not want to invest any money in housing as it is the *mukkadam's* and contractor's responsibility because they work for them, although it is important to remember here that the *mukkadam* may or may not be interested in investing money in the workers' housing based on the profit margins they are getting from the contractors.

In conclusion, this settlement consists of families (only couples and families with some children) from Dahod district who are part of labour gangs of *mukkadams*. Most are seasonal migrants although some might be temporary short-duration migrants as well. The residents live in *kutcha* tarpaulin shelters funded by the *mukkadam* (or contractor). The residents have informal access to water but no access to sanitation and electricity. There is medium de facto security of tenure as there has been no eviction or harassment in this settlement but as the land is owned privately there is no possibility of long-term security. In addition residents face vulnerabilities such as severe waterlogging in monsoons, mosquito infestation, and constant noise from the railway track nearby.

5.3. Rental housing in slums

Manav Mandir Chali, Gurukul

Manav Mandir Chali is one of the rental housing settlements where the land (most likely government land) has been occupied by a *Rabari*. He has built semi-*pucca* rooms which he rents out at Rs.1500 and Rs.2000 a month. One part of this settlement comprises of families who do not work in the construction industry and they were outside the scope of this study. The other part of the settlement comprises of construction workers, with a population of 200-250 living in 40-50 houses. They are single male migrants from Banswara district in Rajasthan. 4-5 men reside in one room so they have to bear Rs.300-400 per month as an individual for rent. Most of them are seasonal migrants who go to their villages every month for 2-3 days to take care of families and farms and also return for a longer time during harvest (3 months) and festivals like Holi and Diwali (15 days). There are also some temporary migrants who come from their village to the city on a short-term basis of 2-4 months when they are in need of additional income.

The construction workers living here are both skilled masons and unskilled masons doing plaster work, RCC slab construction, and miscellaneous labour. Most of the men find work at the nearby Gurukul *naka*. The residents who are *naka* workers reported that they get work for 20 days in a month and unskilled workers earn Rs.300 per day. One highly skilled *naka* worker (Interviewee 6a) involved in tile/stone laying said he earned Rs.800 per day and further reported that he used to have regular contract work with a builder for 10-15 years. He reported that as a skilled worker, he used to earn Rs.550 per day in regular contract work. He quit that because of personal reasons but now wants to get back into regular contract work. Sometimes the contractor used to provide transport from a common meeting point if the construction site is very far. He explained that when he was doing regular contract work he used to stay in the city for most of the year (10-11 months) and went back to the village for short periods during harvest and festivals and in case of emergencies. An unskilled *naka* worker (Interviewee 6b) reported that he earns Rs. 300 per day and only gets work for about 15 days a month. He pays rent of around Rs 300 per month (1500 shared by 5 people). Sometimes he has to pay more when less people are sharing the room.

There are some residents who have been living in this settlement for about 30 years. In the early years, they lived in *potla* dwellings and paid a rent of Rs.25-30 per month to the *Rabari* landlord to keep their belongings safe. Then, 8-10 years ago, the landlord built semi-*pucca* rooms and started charging higher rent. It started with Rs.300 and currently is Rs.1500 and Rs.2000 per month depending on the size of the room. Some of the residents have also moved to this settlement from the adjoining plot of land owned by Gujarat University. They used to live there in *kutcha* tarpaulin houses but had to move when construction of Gujarat Convention and Exhibition Centre started on that land in 2008. They were not evicted, and moved out of the land on their own when construction started. At the current location there has never been an eviction but neither has there been any support from the AMC since all the arrangements are informal between the residents and the landlord. It remains to be seen what would happen to them if the government authority that is the landowner decided to re-claim the land. Most men have voting cards, ration cards and BPL certificates on their village addresses. The residents expressed differing opinions about the landlord. One group reported

6

Manav Mandir Chali, Gurukul

Housing Type : Rental in Slum
 Land Owner : Unknown, Land Occupier : Bharwad
 Age of Settlement : 8-10 Years
 Rent/Cost : 1500-2000/- per Month
 Tenure Security : Medium to High

Settlement Layout



Demographic Info

POPULATION

• 200-250

NUMBER OF HOUSEHOLDS

• 40-50

HOUSEHOLD TYPE

• SINGLE MALE
MIGRANTS

PLACE OF ORIGIN

• BANSWARA, RAJASTHAN

CASTE/COMMUNITY

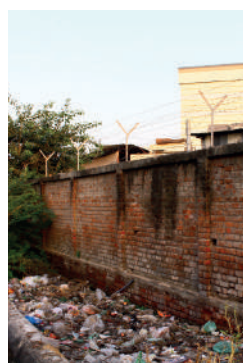
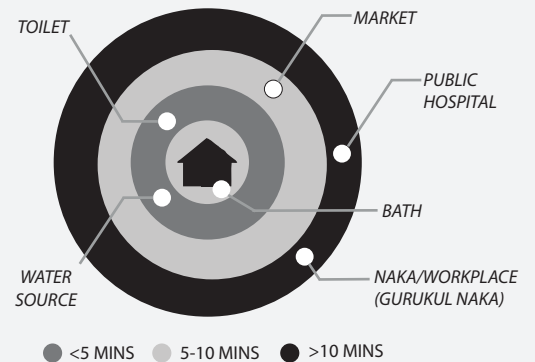
• TRIBAL

Legend

- WATER SOURCE - HAND PUMP
- OPEN DEFECACTION
- RENTAL SHELTERS
- OTHER BUILDINGS
- TREES

Access to Basic Services

Icon	Service	Availability	Cost	Source
	HAND PUMP	NO	NO	1. SALVAGED WOOD 2. KEROSINE STOVE
	INSIDE ROOMS	NO	NO	1. NO CHARGE 2. NOT KNOWN
	OPEN GROUND	NO	NO	1. NO CHARGE 2. NOT KNOWN
	NO	NO	NO	1. NO CHARGE 2. NOT KNOWN
	NO	NO	NO	1. NO CHARGE 2. NOT KNOWN



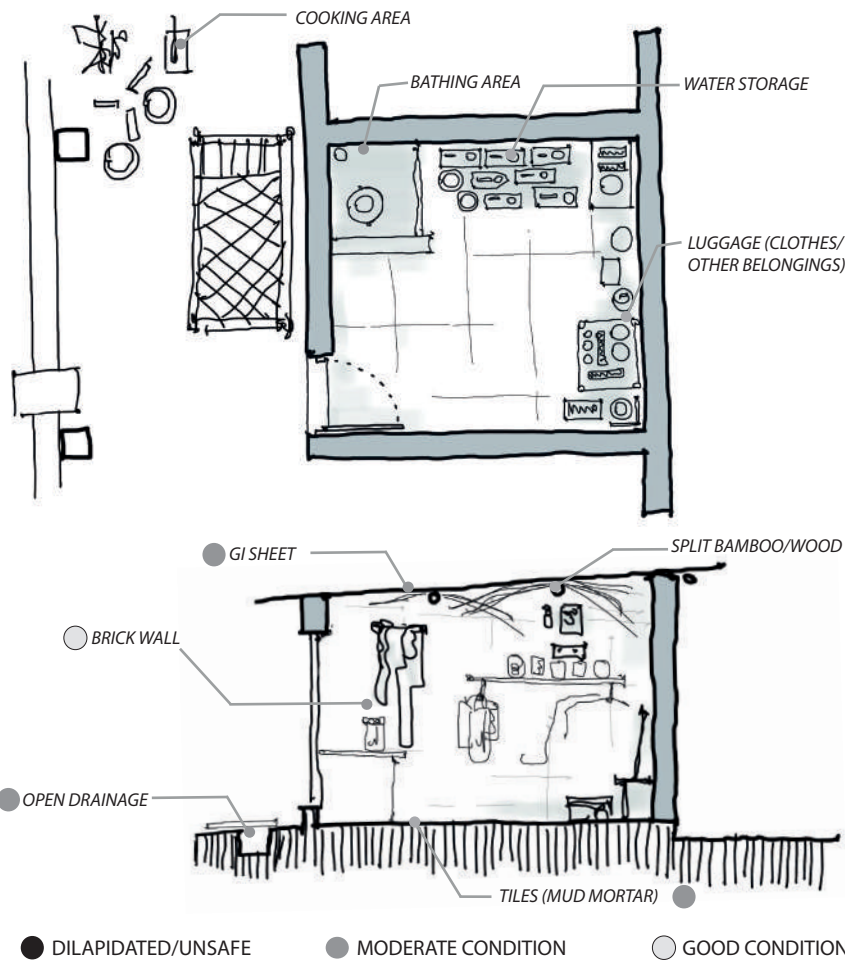


Gender: Male
 Caste/Community : Tribal
 Place of Origin : Banswara, Rajasthan
 In Ahmedabad since : 30-35 Years

	Man	Woman
Occupation	Skilled Construction Worker	NA
Wage	800/- Per day	NA

6A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS
- BED
- STOVE

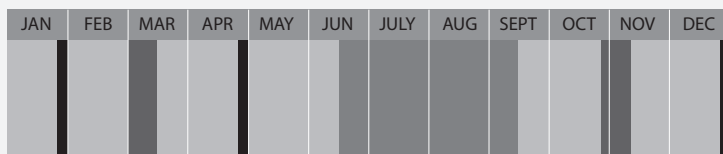
OTHER VULNERABILITIES

- TIN ROOFING HEATS UP THE ROOM IN SUMMER
- WATER LOGGING IN THE MONSOON
- RODENT INFESTATION
- MOSQUITOES

MODE OF CONSTRUCTION

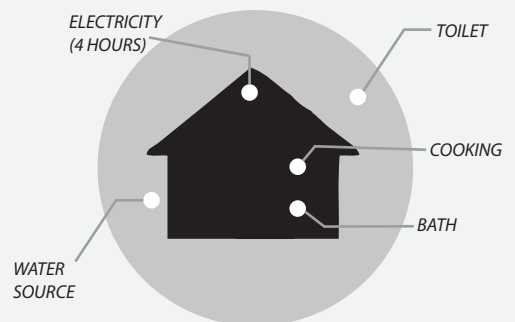
- CONSTRUCTED BY LAND OWNER

Annual Migration Pattern



○ AHMEDABAD 7 MONTHS ● FARMING (NATIVE) 3 MONTHS ● FESTIVAL (NATIVE) 1 MONTH ● OTHER (NATIVE)* 1 MONTH
 *FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



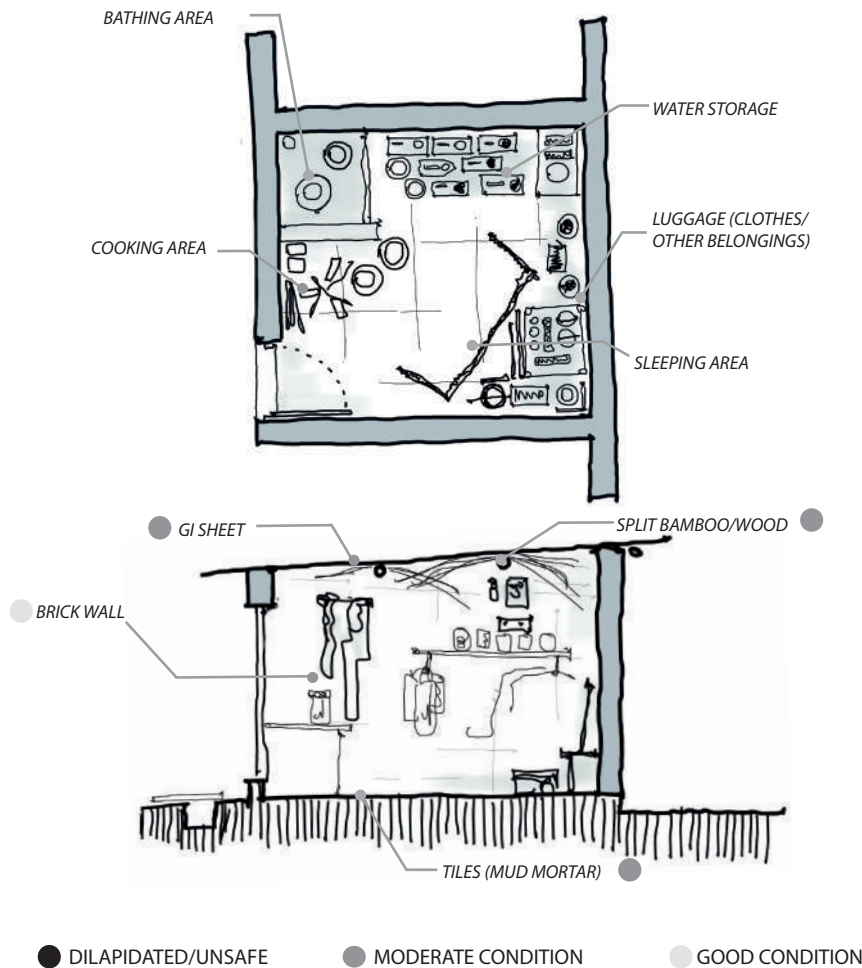


Gender: Male
 Caste/Community : Tribal
 Place of Origin : Banswara, Rajasthan
 In Ahmedabad since : 17-18 Years

	Man	Woman
Occupation	Unskilled Construction Worker	NA
Wage	300/- Per day	NA

6B

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS
- BED

OTHER VULNERABILITIES

- TIN ROOFING HEATS UP THE ROOM IN SUMMER
- WATER LOGGING IN THE MONSOON
- RODENT INFESTATION
- MOSQUITOES

MODE OF CONSTRUCTION

- CONSTRUCTED BY LAND LORD

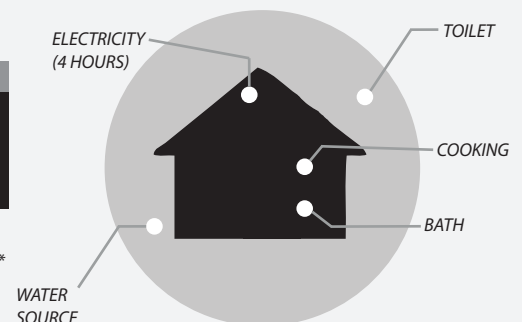
Annual Migration Pattern



○ AHMEDABAD 6 MONTHS ● FARMING (NATIVE) 3 MONTHS ● FESTIVAL (NATIVE) 1.5 MONTH ● OTHER (NATIVE)* 1.5 MONTH

*FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



that the landlord is very strict and non-accommodating in case of rent being late for a few days and did not pay much attention to complaints. The other group reported having very good relations with the landlord and said that he promptly did repair work and was very accommodating. However, the group that reported better relations has been living in this settlement since a longer period of time.

Residents obtain water from a hand pump installed in the settlement by the landlord. They can fill water twice a day and the cost of water is included in the rent. There are no toilets and they have to defecate in the open grounds around the settlement. Residents bathe in the small bathing/washing areas provided within each room. The settlement has only open drainage, resulting in health hazards as it creates a breeding ground for mosquitoes. The landlord provides electricity for 4 hours from 6:30 pm to 10:30 pm, the cost of which is included in the monthly rent. There are also times when the electricity supply is cut off. In case they need medical attention, most residents go to a public hospital which is located a bit far from the settlement.

With regard to their housing preferences, the residents had very differing views. One group (mostly *naka* workers) said that they do not require any permanent housing because they go back to their villages very often. The current rental system of housing works well for them because they can just pay rent for the number of days they are in the city. When they are away, they do not pay rent and the others sharing the room split his rent between them or find a replacement. It would be difficult for them to maintain two houses, one in the city and one in the village. However, another group said that they would prefer a *pucca* house near a *naka*, even if the *naka* is a far from their current location such as the Gota *naka*. They stated that they would then be able to bring their family to the city. They mentioned their need for one bedroom, kitchen and bathroom/toilet with basic services of water, electricity and sanitation.

We asked one of the workers who had been a regular contract worker whether he had ever lived on site in order to understand if on-site living arrangements were also provided to such workers and not just to labour gangs. He said that he had never lived on site and did not want to deal with issues that come with on-site living arrangement. He explained that on-site living means having to work for longer hours, a lack of freedom, and being blamed for anything that goes wrong on site such as theft, mishandling of materials, polluting of areas around the site, etc.

In conclusion, this settlement consists of single male migrants from Banswara in Rajasthan who live in semi-*pucca* houses and pay a collective house rent of Rs.1500-2000 per month. There are both seasonal and temporary short-duration migrants in this settlement. Most men find work through the *naka*. They have access to water and electricity (the latter in the evenings only) but no access to sanitation. There is medium security of tenure since they have never been evicted or harassed as such and have an informal rent agreement with the *Rabari* landlord. Vulnerabilities include waterlogging in monsoon, and rodent and mosquitoes infestation.

Thakore Vas, Chamundanagar, Odhav

The Thakore Vas settlement is a group of 10-12 semi-*pucca* houses with a population of 40-60 people. It is part of a larger recognized slum called Chamundanagar. The residents of the settlement are all locals who belong to Ahmedabad and live in the city all around the year with their families. Even though the land of this settlement belongs to AMC, some of the residents pay rent to a landlord who has informally occupied the land (*kabjo*). Other residents have paid a lump sum amount to other petty informal landlords to 'buy' the land from them to build their own houses. The settlement is thus a mix of land for rental and informal owners.

Most residents are skilled masons, unskilled masons doing plaster work and miscellaneous labour work. They find work at the nearby Odhav *naka*. In an individual interview, a woman (Interviewee 7a) reported that as a skilled worker, her husband earns Rs.500-600 per day and as an unskilled worker, she earns Rs.250-300 per day. They get work for 15-20 days in a month. Their monthly expenses are Rs.6000-7000 per month which includes groceries, travel, cooking fuel, electricity bill etc. Another family (Interviewee 7b) reported that their household income is Rs.9000-12000 out of which they spend Rs.5000-6000. These expenses do not include medical expenses and loan repayment etc.

Residents have been living in this settlement for about 5 years now. Prior to this most people were living in nearby slums on rent. As rents kept increasing, they kept moving to places where they could afford rent. A resident in an individual interview reported that he started by paying a rent of Rs.70 per month and now rent for the same place has increased to Rs.1200 per month. Here therefore decided to pay a lump sum amount to a petty informal landlord to own a plot of land and build his own house. There have been no evictions in this settlement but the residents feel that the AMC can evict them anytime they want, in which case they would lose all the money they have invested in building their houses. One of the residents reported that he had invested Rs.70,000-90,000 in building his house. It is noteworthy that the Slum Networking Programme (SNP) has been carried out Chamundanagar, including in this settlement, and yet the level of tenure security is not extremely high. Most residents have their identification documents such as ration card, election card, BPL certificate and Aadhar cards on the present address. They believe these documents will be helpful to them in building their case to get secure tenure.

Since Chamundanagar was provided basic services of water, sanitation and electricity under the Slum Networking Programme (SNP), residents do have some support from the AMC as well as one of the municipal corporators who helped them to benefit from the SNP and is also supportive with any other issues in the settlement. The residents did not report any problems with the basic services. They have all these provisions at individual household level. However, they did report intermittent power cuts and the street lights not working sometimes. They also have access to healthcare and education. Most of the children go to the nearby public schools. Most residents go to the nearby private hospital for healthcare services because going to the public hospitals is very time-consuming.

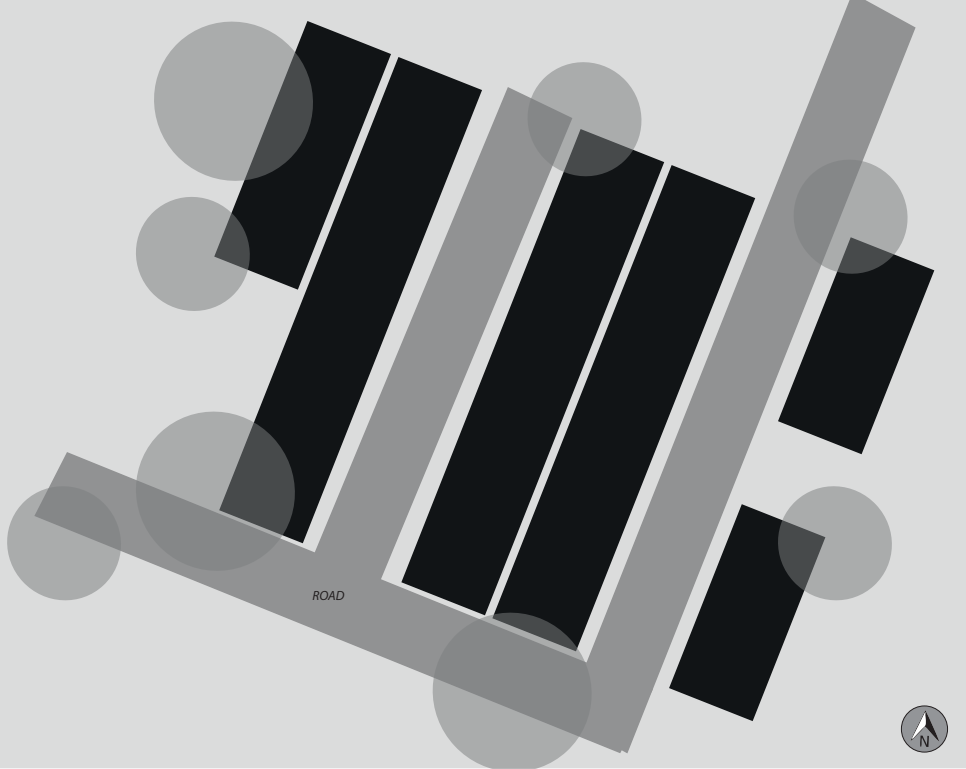
With regard to housing preferences, the residents in both individual and group interviews reported that obtaining high tenure security in the same location is of utmost importance to them. A few residents mentioned that they are willing to pay half of the land price decided by

7

Thakore Vas, Chamundanagar, Odhav

Housing Type : Rental in Slum
 Land Owner : Unknown, Land Occupier : Thakore
 Age of Settlement : 5 Years
 Rent/Cost : 800/- per Month
 Tenure Security : Medium

Settlement Layout



Demographic Info

POPULATION

• 40-60

NUMBER OF HOUSEHOLDS

• 10-12

HOUSEHOLD TYPE

• FAMILY WITH CHILDREN





PLACE OF ORIGIN

• AHMEDABAD, GUJARAT

CASTE/COMMUNITY

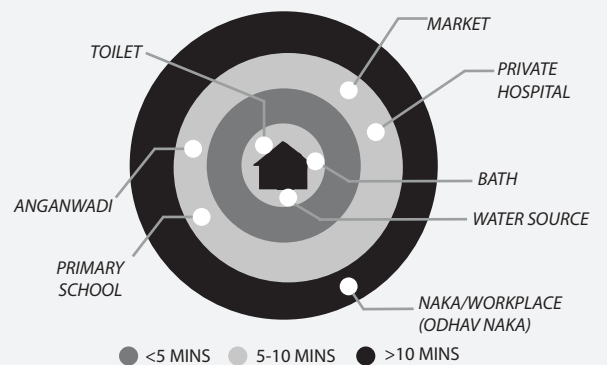
• THAKORE

Legend

-  INDIVIDUAL TAP
-  INDIVIDUAL INSIDE HOUSE
-  RENTAL SHELTERS
-  TREES

Access to Basic Services

INDIVIDUAL TAP	INDIVIDUAL INSIDE THE HOUSE	INDIVIDUAL INSIDE THE HOUSE	YES	MARKET	COST SOURCE
NA	NA	NA	NA	5/- PER KG	



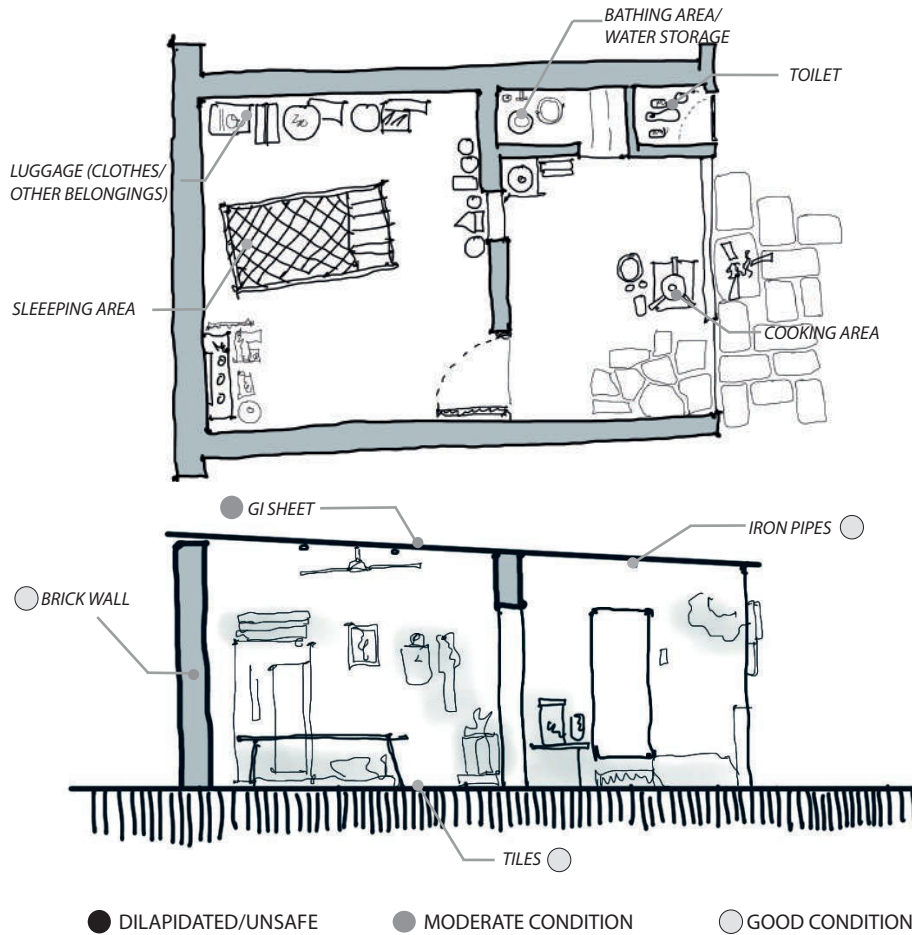


Gender: Female
 Caste/Community : Thakor
 Place of Origin : Ahmedabad, Gujarat
 In Ahmedabad since : Locals

	Man	Woman
Occupation	Skilled Construction Worker	Unskilled Construction Worker
Wage	500/- Per Day	250-300/- Per Day

7A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- TV
- 2 WHEELER
- FAN
- BED
- VESSELS
- CLOTHES

OTHER VULNERABILITIES

- INTERMEDIATE POWER CUT-OFF
- INSECURITY OF TENURE
- MOSQUITOES

MODE OF CONSTRUCTION

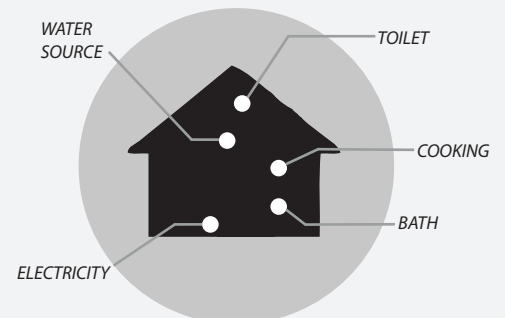
- SELF BUILT WITH PURCHASED MATERIALS

Annual Migration Pattern

JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC

○ AHMEDABAD
12 MONTHS

Access to Basic Facilities, Inside/Outside



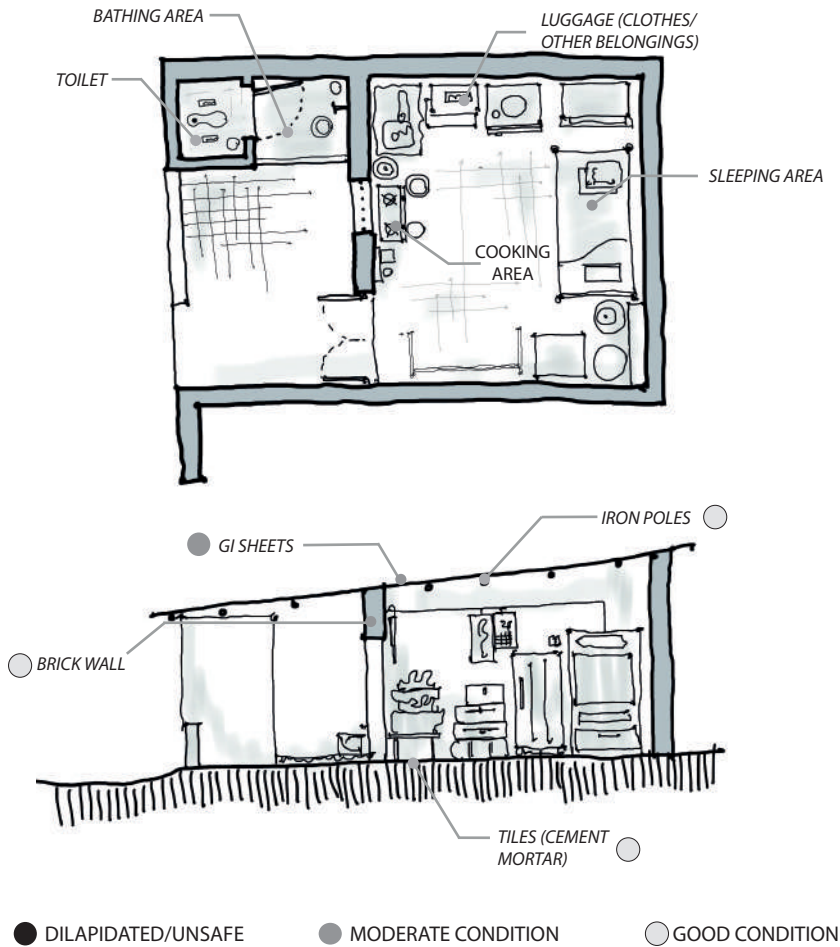


Gender: Male
 Caste/Community : Thakor
 Place of Origin : Ahmedabad, Gujarat
 In Ahmedabad since : Locals

	Man	Woman
Occupation	Unskilled Construction Worker	House Wife
Wage	300/- Per day	NA

7B

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- TV
- FRIDGE
- GAS-STOVE
- FAN
- BED
- VESSELS
- CLOTHES

OTHER VULNERABILITIES

- INTERMEDIATE POWER CUT-OFF
- INSECURITY OF TENURE
- MOSQUITOES

MODE OF CONSTRUCTION

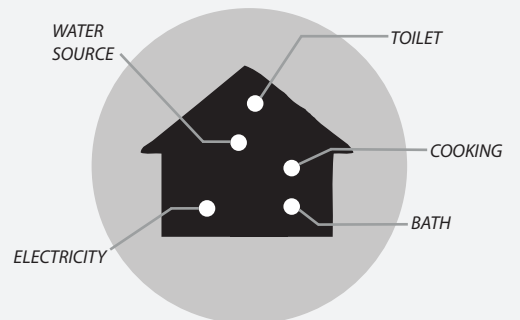
- SELF BUILT WITH PURCHASED MATERIALS

Annual Migration Pattern

JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC

○ AHMEDABAD
12 MONTHS

Access to Basic Facilities, Inside/Outside



AMC to legally own the land, adding that they would be able to pay this amount in monthly instalments of Rs.2000-2500. They also said that once they have security of tenure they can further invest in improving their housing conditions. They are not willing to move away from this settlement as they have already invested money in their houses and also because they have strong social networks here that help them to obtain work and in their everyday lives.

In conclusion, this settlement consists of locals, some of who informally own land and some of who pay rent for land. The families live in semi-*pucca* houses that have individual water connection, sanitation facility and electricity connection. Most people find work on *nakas* although their assets also suggest that they might have other sources of income. They have medium security of tenure because while they do not have formal ownership of land, SNP has been carried out, no evictions have been done, and they have identification documents for linked to this location.

5.4. Shelters / settlements on private-sector construction sites

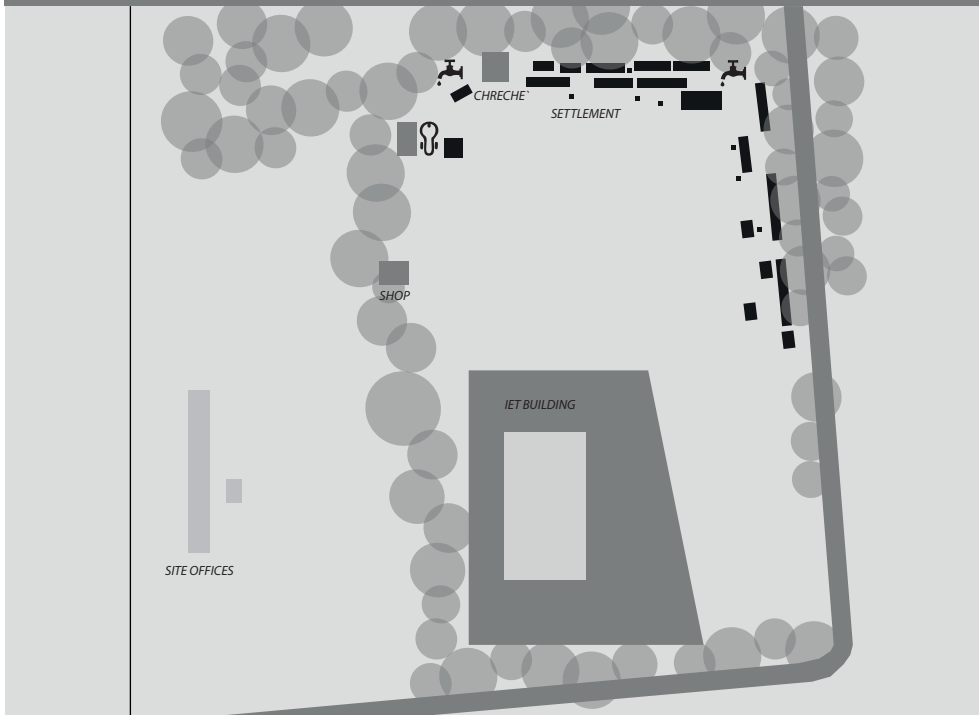
Settlement at Institute of Engineering and Technology (IET) construction site

The Institute of Engineering and Technology (IET) site is a private institutional construction site. The construction workers' settlement at the site was quite large when construction was at its peak, and there was a population of 400-500 workers living in around 100 houses in this settlement. At the time of this study, the site was in the final construction phase so many workers had left. Most houses had been dismantled and only 30 remained with a population of about 35 people. Most of these residents were tribal (Adivasi) people from Dahod district in Gujarat. Most workers have come with their families, but have brought only their younger children while leaving the older children back in the villages. Earlier there were people from other States as well and there were single male migrants also. The people from Dahod district are seasonal migrants who go back to their villages for farm work, for Diwali and Holi, and to take care of families. Most people in this group have ration cards, election cards and BPL certificates on their village addresses.

This group from Dahod has been living on this site since the past four months. They came here with a *mukkadam* who was hired by the registered contractor, Babulal Patel Construction (BPC) company. This group has both skilled and unskilled workers and are involved in plastering work. One of the workers (Interviewee 8a) said that skilled workers earn Rs.550 per day and unskilled workers earned Rs.250 per day. They get paid overtime if they work after 6 pm. If they work from 6 pm to 9 pm they earn half a day's extra pay and if they work from 6 pm to 12 am they earn a full day's extra pay. The *mukkadam* pays advances (*kharchi*) to the workers every week and wages at the end of the month. The *mukkadam* also reported that he took up contract for plaster work by per sq.ft. rate (Rs.13 per sq.ft. for single layer plaster). Then he hired the number of workers needed for the size of the project from his village. He earns from the margin between what he earns by per sq.ft. rate and the wages he pays to the workers. Like other construction sites, there is no direct contact between the workers and the contractor, and all communication is through the *mukkadam*. The *mukkadam* is responsible for finishing the work allotted to him by the contractor in a stipulated time period. The workers stated that they have a good relationship with the *mukkadam* and some of them have worked with the same *mukkadam* before and trust him for giving them the wages that they are due.

BPC has provided tin sheds for housing the workers. It has also provided a toilet block on site, water source (a water tap connected to the municipal water line), and electricity connection in each shelter. There is also a provision of crèche on-site where a caretaker is available from 9 am to 6 pm. There are no health services provided by the contractor and in case of injury or illness the workers have to bear their own expenses. The workers reported that this site had comparable facilities to many other construction sites they had lived in. They reported that since the houses are made entirely of tin sheets, these heat up during the day so it is hot to be inside, including in the night. Also there are no cots provided for them to sleep on so they have to sleep on the floor or on wooden planks which is not very comfortable. Although toilet facilities are provided, they are not very well-maintained which poses health risks. They suggested that larger rooms of 8 feet x 10 feet semi-*pucca* rooms would be more comfortable. There is a need for provision of beds with mosquito nets. They reported that at

Settlement Layout



Demographic Info

POPULATION

• 35

NUMBER OF HOUSEHOLDS

• 30

HOUSEHOLD TYPE

- SINGLE MALE
- FAMILY
- FAMILY WITH CHILDREN

PLACE OF ORIGIN

• DAHOD, GUJARAT

CASTE/COMMUNITY

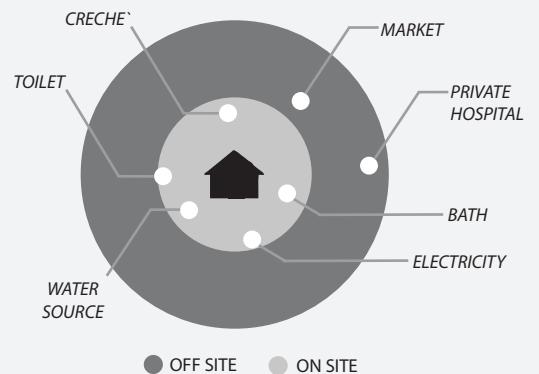
• TRIBAL

Legend

- WATER SOURCE - TAP
- COMMON TOILETS
- SEMI-OPEN TARPULIN BATHS
- INDIVIDUAL SHELTERS
- IMPORTANT BUILDINGS
- OTHER BUILDINGS
- TREES

Access to Basic Services

					COST SOURCE
TAP	SEMI-OPEN TARPULIN BATHS	BUILT ON SITE	YES	SALVAGED WOOD	
NO CHARGE	NO CHARGE	NO CHARGE	NA	NO CHARGE	



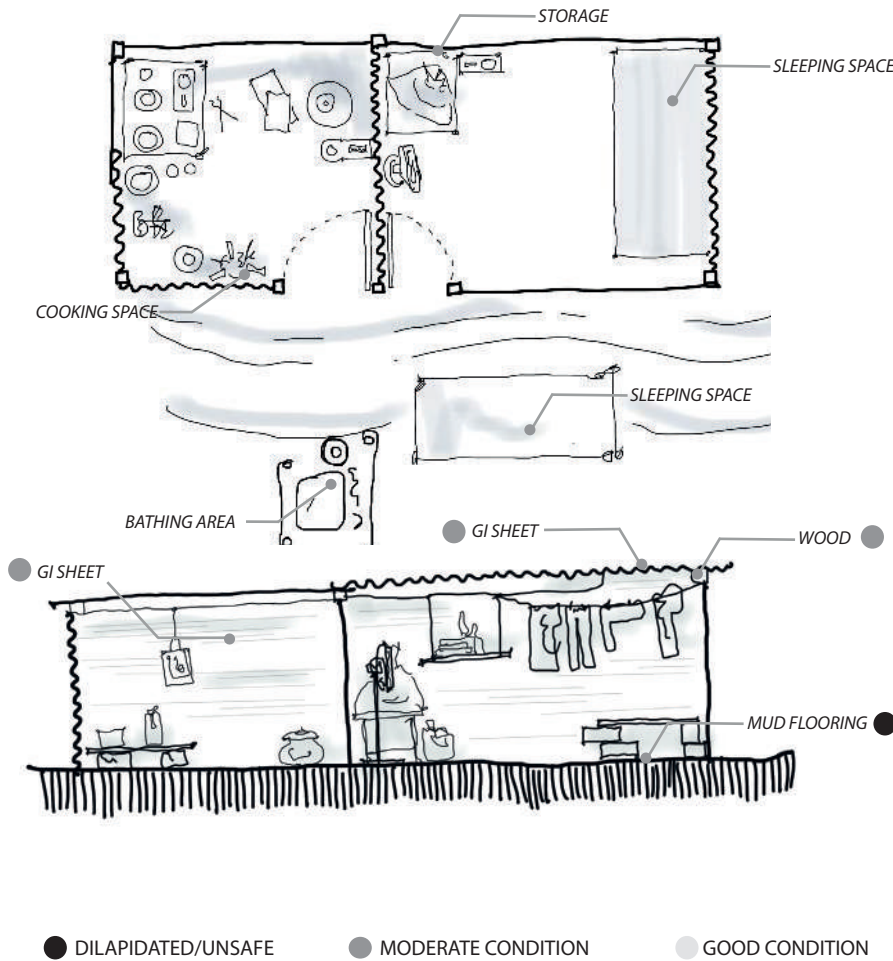


Gender: Male
 Caste/Community : Tribal
 Place of Origin : Dahod, Gujarat
 On this Site since : 4 Months

	Man	Woman
Occupation	Skilled Construction Worker	Unskilled Construction Worker
Wage	550/- Per day	250/- Per day

8A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS
- BED

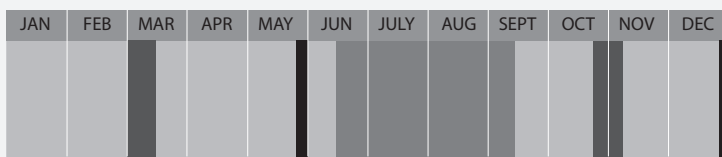
OTHER VULNERABILITIES

- UNCOMFORTABLE SLEEPING SPACE
- FLOOR EXPOSED TO GROUND

MODE OF CONSTRUCTION

- FINANCED AND CONSTRUCTED BY CONTRACTOR

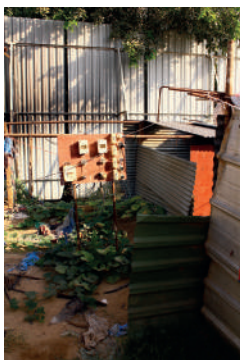
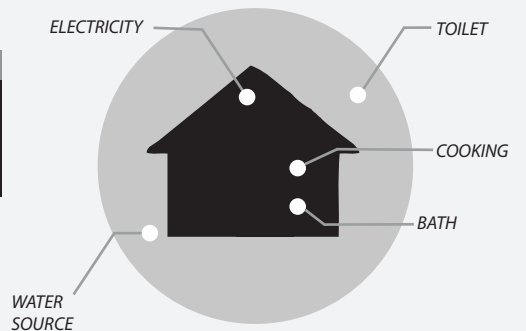
Annual Migration Pattern



○ AHMEDABAD 7 MONTHS ● FARMING (NATIVE) 3 MONTHS ● FESTIVAL (NATIVE) 1 MONTH ● OTHER (NATIVE)* 1 MONTH

*FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



bigger sites they have seen better facilities but have also seen worse living conditions at smaller sites. They explained that they preferred this mode of work and living on site than working on *nakas* because of the permanence of work, security of regular wages and availability of some basic services (at most sites).

To summarize, this on-site settlement currently consists of workers from Dahod who have found work through a *mukkada*, who lives on site as well. They have been provided tin sheds by the contractor and they also have access to water, sanitation (although not well-maintained), electricity and a crèche. Most are families with young children and there are some single male migrants as well. Most are seasonal migrants. There is no insecurity of tenure in this settlement as the land is owned by the institution that has undertaken the construction project. Despite this, residents do face some problems such as waterlogging, heated up shelters due to construction from low-insulation material and uncomfortable sleeping arrangements.

Settlement at Amarnath Business Complex (AMC) construction site

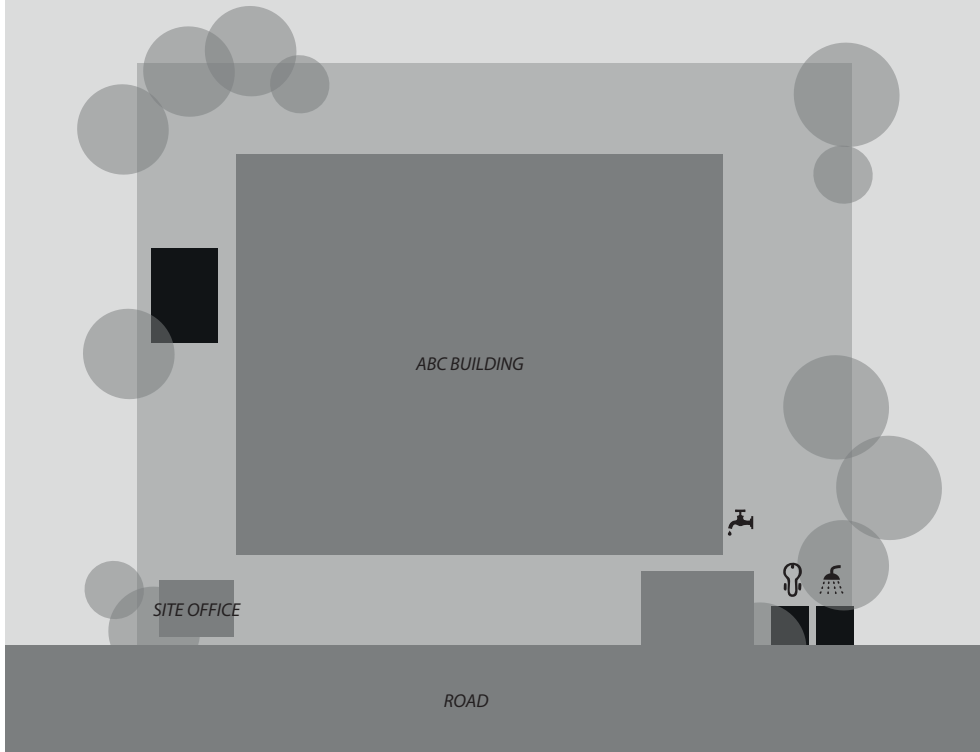
The Amarnath Business Complex (ABC) site is a private commercial construction site. The construction on this site has been going on for around one year. The workers who are currently at the site have been living here for two months at the most. Their settlement comprises of a group of 20 single male migrants living in one *kutccha* tarpaulin hut. There are primarily two groups of workers, with one group from Dungarpur and Udaipur districts in Rajasthan and the other group from villages around Baria town in Dahod district in Gujarat. The group from Rajasthan is involved in RCC work and the group from Gujarat does centring work. Both groups came to the site with their respective *mukkadams*, who have connections with the contractor of the site. Workers in both groups are seasonal migrants who go back to their villages during harvest season, for Diwali and Holi, and also in case of family-related issues. One of the workers from Rajasthan said that he goes to his village for 20-30 days during harvesting season, for 15 days for Holi and Diwali, for a few days now and then for any family emergencies/work, and he also rests for 20-30 days between working on different sites. The workers said that they stay in the city on construction sites for 8-9 months each year. Most of them have the identification documents like ration card, election card and BPL certificates in their villages.

There are both skilled and unskilled workers in both groups. The skilled workers reported earning Rs.500 per day and the unskilled workers Rs.400 per day. They also reported being paid overtime if they work after 6 pm. The *mukkadam* pays them advances (*kharchi*) for everyday expenses and pays their wages at the end of the month based on the number of days they have worked. Sometimes they do not take their wages at the end of the month and let it accumulate with the *mukkadam*, from whom they take it when they return to their village. A worker from Gujarat also mentioned that often they send their wages back to their village with a worker from their group who is going to the village at the end of the month. Workers reported having a good relationship with their *mukkadams*. The *mukkadams* also lend money to the workers in case they need larger advances before the monsoon season. The workers have no contact or communication with the contractor or developer, and it is the *mukkadam* who has negotiated the wages and other facilities with the contractor.

The contractor has not provided any sort of housing to the workers on this site. The workers have built a single *kutccha* tarpaulin hut in the margin area of the construction site. They store their belongings inside and they sleep in the open. The workers said that their biggest problem is the sleeping arrangement and mosquitoes. They said they should have sleeping cots and mosquito nets. However, they had not made any effort to get these. They explained that they have to get used to these living conditions because no contractor will provide them with good living conditions as it does not benefit him in any way. There is also an abundance of labour so if the workers make demands they would be asked to leave and new ones would be hired. The contractor has provided two portable toilets on site, a borewell for water and an electricity connection in the room. The contractor does not provide any access to health services and they go to a public hospital in case they need medical help.

One of the workers said it is better to work with a *mukkadam* as there is regularity of work as opposed to *naka* where they get paid more but the work is very capricious. In his opinion it is better to get paid less rather than worrying about money every day. Working with *mukkadams*

Settlement Layout



Demographic Info

POPULATION

• 20

NUMBER OF HOUSEHOLDS

• 1

HOUSEHOLD TYPE

• SINGLE MALE

PLACE OF ORIGIN

• DUNGARPUR, RAJASTHAN

• DAHOD, GUJARAT






CASTE/COMMUNITY

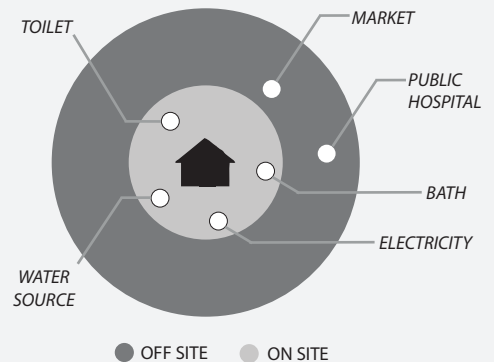
• TRIBAL

Legend

-  BOREWELL
-  INDIVIDUAL SHELTERS
-  PORTABLE TOILETS
-  IMPORTANT BUILDINGS
-  OPEN BATHING
-  TREES

Access to Basic Services

					COST SOURCE
BOREWELL	OPEN ON SITE	PORTABLE ON SITE	YES	SALVAGED WOOD	
NO CHARGE	NO CHARGE	NO CHARGE	NA	NO CHARGE	



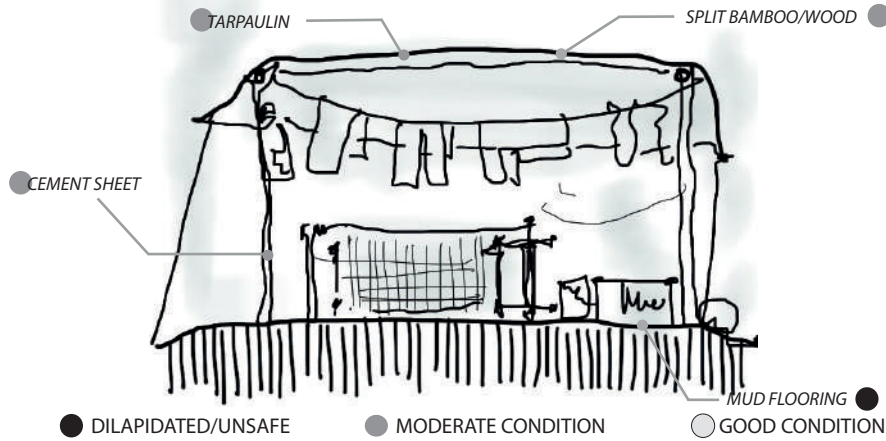
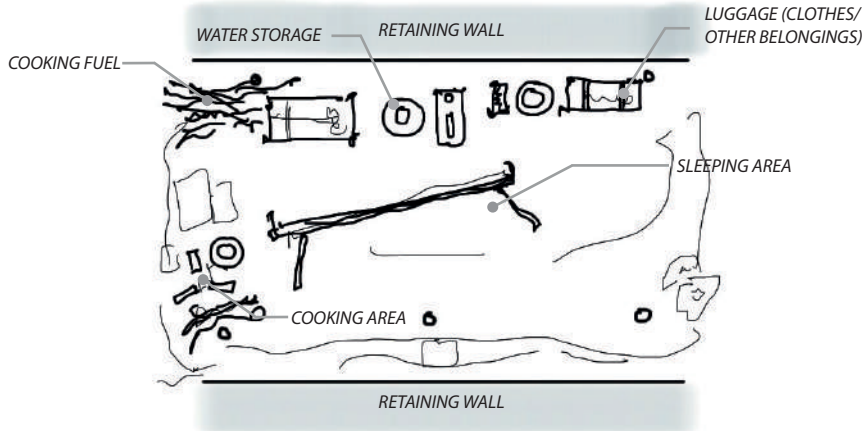


Gender: Male
 Caste/Community : Tribal
 Place of Origin : Dungarpur, Rajsthan
 Dahod, Gujarat
 On this Site Since : 1.5 Months

	Man	Woman
Occupation	Skilled Construction Worker	NA
Wage	400-500/- Per Day	NA

9A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter BELONGINGS

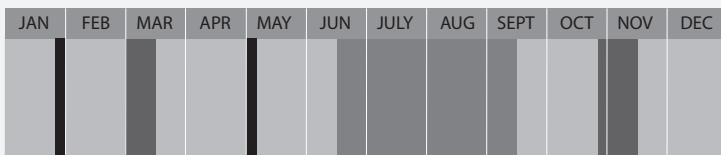
- VESSELS
 - CLOTHES
 - WATER CONTAINERS
- ### OTHER VULNERABILITIES

- MUDDY ENVIRONMENT
- MOSQUITOES
- UNCOMFORTABLE SLEEPING ARRANGEMENT

MODE OF CONSTRUCTION

- SELF BUILT WITH SALVAGED MATERIALS

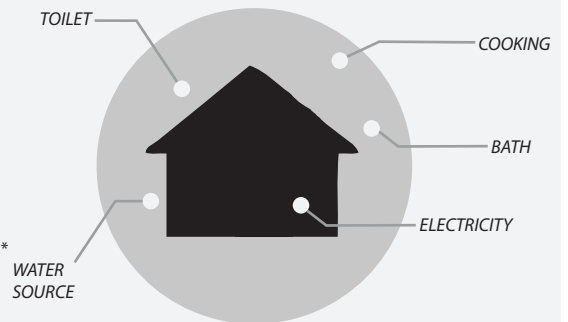
Annual Migration Pattern



○ CONSTRUCTION SITES 7.5 MONTHS ● FARMING (NATIVE) 3 MONTHS ● FESTIVAL (NATIVE) 1 MONTH ● OTHER (NATIVE)* 0.5 MONTH

*FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



also ensures housing while at *nakas* one has to look for one's own housing which might end up being very costly or bad living conditions. Thus, these workers preferred to live on sites so that they do not have to waste time and money on housing or transportation.

In conclusion, this on-site settlement currently consists of single male migrants from both Rajasthan and Gujarat who have found work through *mukkadams*. All 20 of them live in one tarpaulin shed that they have constructed at the edge of the site. Most workers are seasonal migrants. They have access to water, sanitation and electricity on site. There is no insecurity of tenure in this settlement as the land is owned by the builder. However, residents face problems of crowding, mosquitoes infestation, and uncomfortable sleeping arrangements.

5.5. Shelters / settlements on public-sector construction sites

Settlement at Indian Institute of Technology Gandhinagar (IITG) new campus construction site, Near Palaj village, Gandhinagar

The construction workers' settlement at Indian Institute of Technology (IIT), Gandhinagar, is on a large public institutional construction site. There are four labour settlements spread out on the entire construction site, and only one of the settlements was studied here (it does not reflect the conditions of all the settlements on this site). This settlement consists of 200-250 workers living in 50-60 houses. The population consists of varied groups of people from several places in India: Gujarat, Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, Maharashtra and Assam. There is a large variability in type of households, ranging from single male migrants, couples, and families with some children (only younger children while the older ones are left in the villages). The migration pattern, type of construction work and wages for all of the above mentioned groups differ from each other.

We interviewed one group of workers from Nagpur, Maharashtra in detail and talked briefly with other groups. The Nagpur group has come to the site with a *mukkadam* who also lives on site. They are a group of 13 single male migrants living in one house. They are all seasonal migrants who go back to their villages every 2-3 months to take care of personal work like family-related issues (number of days they spend in their village at this time depends on the work but on an average it is for 8-10 days). In the monsoon they go back to their villages for 3 months for farm-work. They also go back for Diwali and Holi for 8-10 days. Thus, they stay on construction sites for a total of about 7 months in a year. They have their identification documents such as ration cards, election cards and Aadhar cards on their village addresses.

The Nagpur group (Interview 10a) consists of both skilled and unskilled masons involved in shuttering and centring work. Skilled workers earn Rs.450-500 per day and unskilled workers earn Rs.300-350 per day. They get advances (*kharchi*) from the *mukkadam* for everyday expenses and get paid at the end of the month based on the number of days they have worked. The *mukkadam* either deposits the amount in their bank accounts or gives them cash which they deposit through a nearby bank (in Chiloda village, 7 kms away).

The Nagpur group has started working and living on this site very recently. However, there are other groups who had been living on the site for longer periods of time such as the families from Dahod district in Gujarat, who have been living there since 6-7 months. Most groups have come to the site with a *mukkadam* who is hired by the sub-contractor, RelCon construction company who in turn has been employed by the Central Public Works Department (CPWD, a Central Government authority in charge of public-sector works). IITG and CPWD have drawn up a contract which specifies the norms that the CPWD has to follow in constructing the labour colonies on the site. IITG has taken this initiative to make sure that adequate housing is provided to the workers on-site. CPWD has sub-contracted to RelCon and M.S. Khurana construction companies who have built these labour colonies. The labour colony studied here has been built by RelCon.

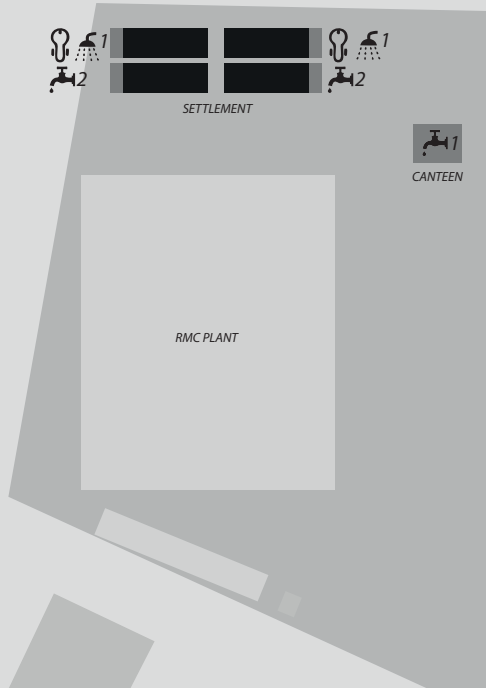
RelCon has built semi-*pucca* rooms equipped with electricity and has also provided a common toilet and bathing blocks where two toilet and bathing units shared between 12

10

IIT GN,
Palaj, Gandhinagar

Housing Type : Public Construction Site
Land Owner : IIT Gandhinagar
Age of Settlement : 2 Years
Rent/Cost : No Rent
Tenure Security : High

Settlement Layout



Demographic Info

POPULATION

• 200-250

NUMBER OF HOUSEHOLDS

• 50-60

HOUSEHOLD TYPE

- SINGLE MALE
- FAMILY
- FAMILY WITH CHILDREN

PLACE OF ORIGIN

- DAHOD, RAJASTHAN
- JAMNAGAR, GUJARAT
- NAGPUR, MAHARASTRA
- BIHAR
- UTTER PRADESH
- MADHYA PRADESH
- RAJASTHAN

CASTE/COMMUNITY

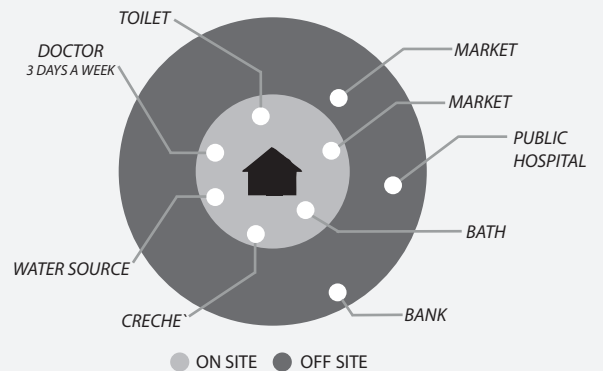
• MIXED

Legend

- DRINKING WATER
- BATHING/WASHING WATER
- COMMON TOILETS
- COMMON BATHROOMS
- SEMI-OPEN TARPULIN BATH
- SHELTERS
- IMPORTANT BUILDINGS
- OTHER BUILDINGS

Access to Basic Services

					COST SOURCE
RO FILTER CANTEEN	1. COMMON BATH 2. SEMI-OPEN TARPAULIN BATH	TOILET BLOCKS ON SITE	YES	1. SALVAGED WOOD 2. KEROSENE STOVE	
NO CHARGE	1. NO CHARGE 2. NO CHARGE	NO CHARGE	NA	1. NO CHARGE 2. NOT KNOWN	





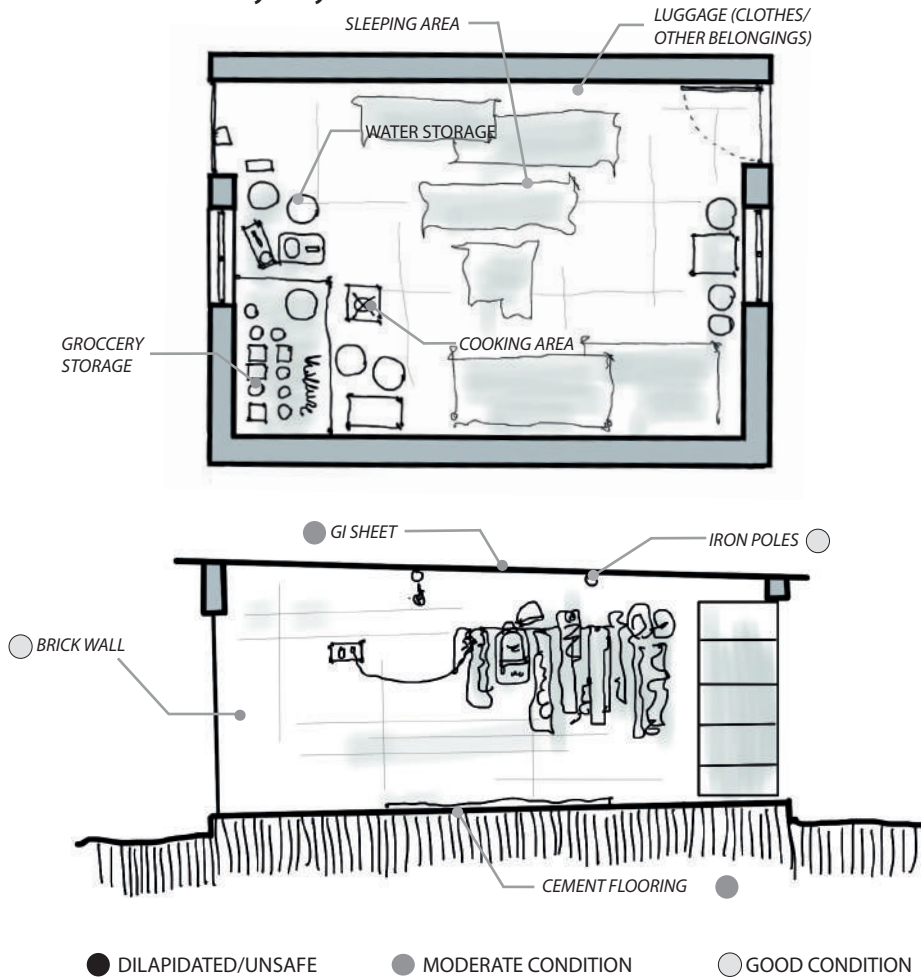
x10-15

Gender: Male
Caste/Community : Tribal
Place of Origin : Nagpur, Maharastra
On this Site since : 2 Weeks

	Man	Woman
Occupation	Skilled Construction Worker	NA
Wage	500/- Per day	NA

10A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS
- STOVE

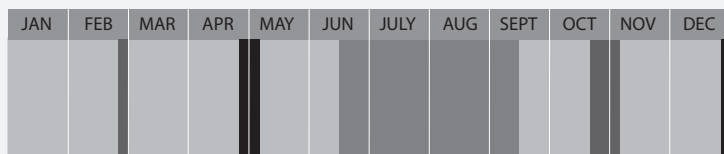
OTHER VULNERABILITIES

- CROWDED ROOMS

MODE OF CONSTRUCTION

- FINANCED AND CONSTRUCTED BY CONTRACTOR

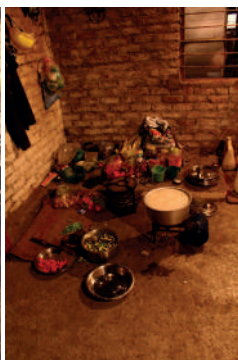
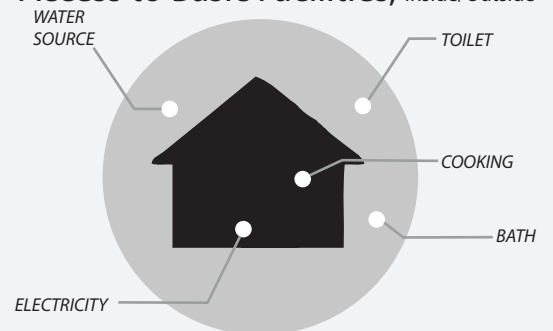
Annual Migration Pattern



- AHMEDABAD 7 MONTHS
- FARMING (NATIVE) 3 MONTHS
- FESTIVAL (NATIVE) 1 MONTH
- OTHER (NATIVE)* 1 MONTH

*FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Inside/Outside



rooms. Drinking water can be filled from the nearby canteen. There is a crèche on site and many workers reported sending their children there during work hours. There is also a medical camp three days in a week available for workers. There are regular vaccination drives held in the colonies. There is also a small grocery shop in the colony. In addition there is a larger shop on the construction site (10 minute walk).

Some workers from Nagpur reported that they have previously lived in labour settlements with similar amenities provided by contractors at large construction sites. A worker from Nagpur mentioned that he has worked in the construction industry for 14-15 years and has seen many different kinds of housing on site: very temporary tarpaulin houses, tin sheds, inside under-construction buildings and semi-*pucca* rooms. He explained that at larger sites where the construction work goes on for two years or more, the contractor provides better housing like semi-*pucca* rooms as different groups of workers can keep reusing the same structures as construction goes on for a long period of time. At larger sites water, sanitation facilities and electricity are provided, while at smaller sites, limited facilities are provided.

The workers reported that the living conditions on site are comfortable. However, we observed that some of them live in crowded conditions (13 people in one room, 22 people in two rooms). These crowded conditions force some workers to sleep outside in the open. There is no provision of cots and the workers have to sleep on the floor or on wooden planks raised by bricks. Some workers have modified their houses to accommodate their needs and improve living conditions. Workers from Dahod, who have been living on this site for 6-7 months, have a cooking area outside their room and they had built a low-height brick wall to provide a semi-enclosure to this area. They mentioned that earlier single male workers used to live in the rooms next to theirs and they were not very clean and used to throw garbage outside. They created this partition to keep their area clean and hygienic. They have also built a shed for children to play in front of their house. Similarly, families from Bihar have extended their housing structure using a tin sheet as roof for sleeping outside. They have also built semi-enclosed bathing structures for women near their rooms. The women in this group were not involved in construction work. Single males from Jamnagar have spread out a tarpaulin sheet outside their houses to gather in the evening. Sometimes they also use it to sleep.

In terms of housing needs and preferences, the Nagpur group reported that they would like to live on-site. Provision of water, toilets and electricity is crucial to them. In addition, they said that they would like a comfortable sleeping place, a place to cook and a way to store their belongings properly.

In conclusion, this on-site settlement consists of people from various regions in India with different migration cycles and household types. This is due to the scale of this construction site. The workers have been provided semi-*pucca* rooms. There is access to water and sanitation through shared facilities and each room has electricity. Other amenities such as crèche, market and access to basic healthcare have been provided. There is no insecurity of tenure as the land is owned by the institution. The shortcomings included the crowding in some of the rooms, not well-maintained common sanitation facilities and some waterlogging around the labour colonies since there is no stormwater drainage.

Settlement at flyover construction site near Narol circle

The settlement is part of a public construction project of a flyover. It comprises of a group of 20 single male migrants and one woman living in six huts near the pier that is under construction for the flyover. These huts are constructed entirely out of tin sheets. The group is from Ranchi district in Jharkhand and came to this site with a *mukkadam*. Most of the men are seasonal migrants who go back to their villages for festivals such as Holi and Diwali, and in case of family-related issues. Many also return to their village for farm work. They often take rest periods between different construction sites. One of the workers mentioned that he spends a total of about 8 months in a year working on construction sites, often in different cities. They have identification documents such as ration cards and election cards in their villages.

The main contractor, IRB Infrastructure Developers Ltd., has engaged a sub-contractor, Chetan Engineering, which has hired a labour gang through a *mukkadam*. The gang is engaged in RCC work, shuttering and centring. The sub-contractor pays the *mukkadam* and he takes care of paying advances and wages to the workers. The workers reported having a good relationship with the *mukkadam*. They belong to the same kin group and have worked with him before, so there is mutual trust and security of wages. A worker reported (Interviewee 11a) that they earn Rs.250 per day and get paid overtime if they work after 6 pm. Most workers usually work a little extra to earn Rs.300 per day. The *mukkadam* pays the workers weekly advance (*kharchi*) for everyday living expenses and pays the rest of the amount at the end of the month based on the number of days they have worked. The amount at month-end is either collected by the workers' family in the village from the *mukkadam's* family or the *mukkadam* deposits the wages in the workers' bank accounts. The woman, who is the wife of one of the workers, cooks for the whole group. The *mukkadam* said that he pays her Rs.3000 per month to cook for the group.

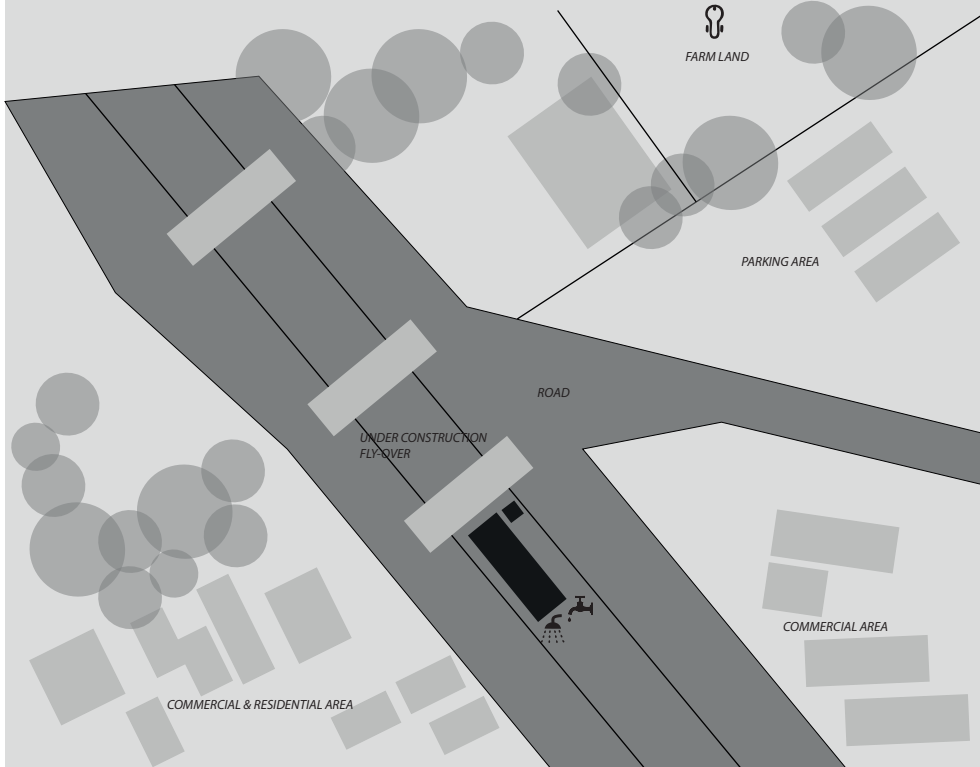
This settlement has been in existence for about four months and the workers plan to stay there for a couple of more months (till the work is finished). Chetan Engineering provided the workers with tin sheets to build their houses. The workers expressed dissatisfaction with the houses. The tin gets too hot during the day and it is too hot to sleep in the huts at night so they have to sleep outside in the open on the under-construction pier. This affects their health as it is hot in the day and they are subjected to cold when they sleep outside. The *mukkadam* also lives on site, but in a separate unit. Water is provided by the sub-contractor through large water drums lying around on site which are filled by water tankers. The workers reported dissatisfaction with the hygiene level of drinking water as it is the same as bathing water and is stored in open water drums. There are no sanitation facilities and they have to defecate in an open ground nearby. Electricity is provided for about three hours by the sub-contractor through a Diesel Generator Set. The contractor has not provided the workers any healthcare services and most workers go to a private hospital nearby. The workers have no direct link with the sub-contractor and communication can be done only through the *mukkadam*. When we asked the *mukkadam* about the deficiencies in housing on site, he said that as construction work is temporary, they cannot ask for better facilities since the sub-contractor would not want to invest in something that is short-term. He explained that bigger construction companies can provide better facilities at large-scale construction sites but the same cannot be expected from smaller contractors. He added that even at larger construction sites where facilities are provided, they are not maintained. When the workers were asked for reasons for

11

Narol Flyover, Near Narol Circle

Housing Type : Public Construction Site
 Land Owner : AMC
 Age of Settlement : 6 Months
 Rent/Cost : No Rent
 Tenure Security : High

Settlement Layout



Demographic Info

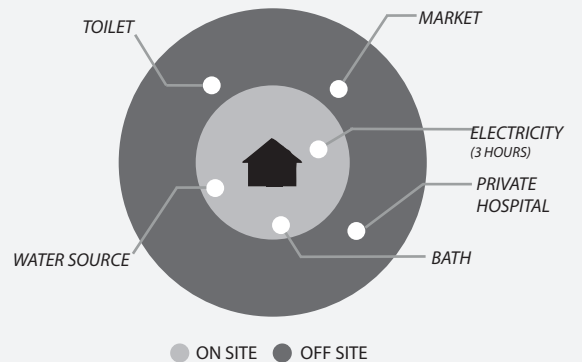
- POPULATION**
- 20
- NUMBER OF HOUSEHOLDS**
- 6
- HOUSEHOLD TYPE**
- SINGLE MALE
- PLACE OF ORIGIN**
- RANCHI, JHARKHAND
- CASTE/COMMUNITY**
- VISHWAKARMA

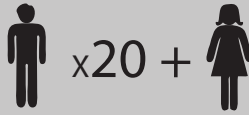
Legend

- | | | | |
|--|-----------------------------|--|---------------------|
| | STORED TANKER WATER | | INDIVIDUAL SHELTERS |
| | OPEN DEFECACTION- FARM LAND | | OTHER BUILDINGS |
| | SEMI-OPEN TARPULIN BATH | | TREES |

Access to Basic Services

					COST SOURCE
TANKER	SEMI-OPEN TARPULIN BATH	OPEN GROUND	YES	SALVAGED WOOD	
NO CHARGE	NO CHARGE	NO CHARGE	NA	NO CHARGE	



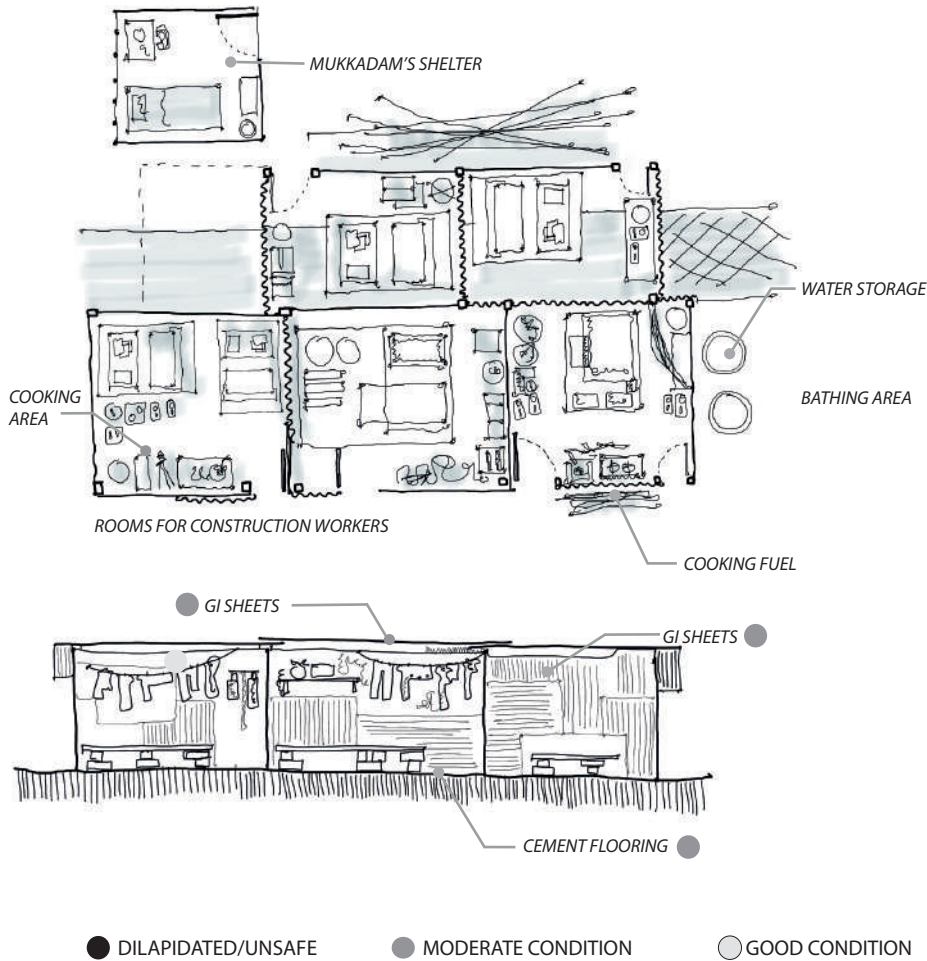


Gender: Male
 Caste/Community : Vishvakarma
 Place of Origin : Ranchi, Jharkhand
 On this Site since : 4 Months

	Man	Woman
Occupation	Unskilled Construction Worker	Cook
Wage	300/- Per Day	100/- Per Day

11A

Shelter Activity Layout/Vulnerabilities



Overview of Shelter

BELONGINGS

- VESSELS
- CLOTHES
- WATER CONTAINERS

OTHER VULNERABILITIES

- UNHYGIENIC LIVING CONDITION
- MOSQUITOES
- UNSAFE DRINKING WATER
- UNCOMFORTABLE SLEEPING ARRANGEMENT

MODE OF CONSTRUCTION

- SELF BUILT WITH MATERIALS PROVIDED BY CONTRACTOR

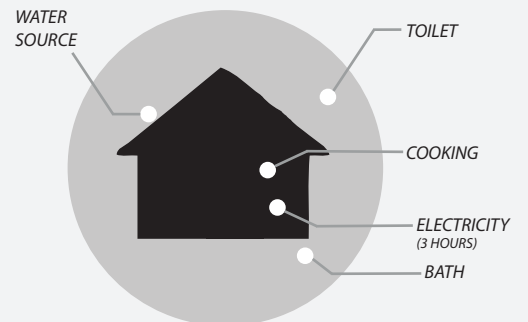
Annual Migration Pattern



- CONSTRUCTION SITES 9.5 MONTHS
- FARMING (NATIVE) 1 MONTHS
- FESTIVAL (NATIVE) 1 MONTH
- OTHER (NATIVE)*

*FOR OTHER WORK THERE IS NO FIXED MONTH, THEY GO ON NEED BASIS

Access to Basic Facilities, Onsite/Offsite



not pushing the *mukkadam* to negotiate for better facilities, they said that the *mukkadam* could select other workers for his gang and if they made more demands he would just ask them to leave. In their opinion they do not have the power to influence their housing conditions. In terms of housing preference, workers said that they would prefer living on-site or close to the site as they do not want to spend time and money for transportation. They expressed preference for houses with better sleeping arrangements and filtered drinking water. While they did not ask for toilet facilities, this is certainly lacking and would be particularly desirable for the woman.

One of the workers from Jharkhand (Interviewee 11a) who spends a total of about 8 months in a year on construction sites in different cities reported that he can earn Rs.60,000 to Rs.1,00,000 per year through construction work, spends around Rs.30,000 and saves the rest of the money to take back to his village. He said that these savings are important for him and therefore he works and lives at construction sites; such savings would not be possible from the naka.

In conclusion, this on-site settlement currently consists of single male migrants from Ranchi district in Jharkhand who have found work through a *mukkadam*. They live in self-constructed tin sheds for which material was provided by the sub-contractor. Most workers are seasonal migrants. They have access to water and electricity on site but this is inadequate. They have no access to sanitation. There is no insecurity of tenure in this settlement as the land of the public construction site is overseen by the contractor while construction is ongoing. The main vulnerabilities include unhygienic living conditions, unsafe drinking water, and poor housing structures leading to uncomfortable sleeping arrangements.

6. Research Findings

This study identifies five typologies of settlements in which construction workers find shelter, and examines the housing conditions and factors shaping these conditions through 11 case-studies. Three of the typologies are of the off-site settlements. In this, the seven case-study settlements that we have studied cover small to medium size settlements, with population in the range of 10-100 households (see Table 2).¹⁵ In terms of the age of these settlements, the oldest we studied was 20-25 years old while the most recently formed settlement was about 5 years old. There was a settlement that was about 9 months old, but this was in terms of its current location where it had emerged after its residents were evicted from a nearby location. Two of the typologies are of the on-site settlements. In this, the four case-study settlements that we have studied cover small to medium size construction-sites (see Table 2).¹⁶ In terms of the age of these on-site settlements, the oldest was 2 years old while the most recently formed settlement had existed since only several months. The research findings discussed below with regard to the housing conditions and choices of construction workers are based on these case studies. The discussion is structured around five themes: (i) tenure security; (ii) housing quality; (iii) access to basic services and amenities; (iv) documents for entitlement in the city; (v) construction work, migration and housing; and (vi) household income and housing expenditures

6.1. Tenure security

Generally speaking, majority of the off-site settlements of construction workers have low tenure security in Ahmedabad while the on-site settlements have high tenure security. It is noteworthy, however, that residents of many off-site settlements have lived at the same location for many years despite low tenure security. Tenure security also varies by the typology of settlements, as discussed below.

With regard to the shelters / settlements that are on pavements and street edges, and under flyovers and bridges, these are the most vulnerable in terms of tenure security, regardless of how old the settlements are. The residents are considered to be illegally occupying the land and are often harassed or subject to evictions. We see this with the case-study settlement on the street edge near Parin Furniture showroom on S.G. Highway; the residents moved here recently after they faced an eviction at their prior location which was on a nearby street edge. The residents living with *potlas* under the Shreyas Flyover have also faced harassment and threats of eviction a number of times over the past 8-10 years from the AMC which has come and taken away their belongings while residents are away at work. There are instances of informal tenure arrangements that come to light through previous studies. For instance, Prayas (2012b) refers to residents paying Rs.100 per month as rent to a railway officer to live under the Chanakyapuri railway bridge in Ahmedabad. However, while such arrangements might be giving temporary security they do not always protect against eviction drives taken up by the government authorities.

¹⁵ The smallest settlement of 10 houses was actually part of a larger settlement comprising of also non-construction workers.

¹⁶ There were a number of settlements in one of the medium-size sites, and we studied only one of them, while in the other medium-size site, the construction was nearing completion and so the settlement had shrunk at the time of the study.

Table 2. Profile of the case-study settlements

Case-study settlement	Age of settlement	No. of Houses
1. Shelters / settlements on pavements and street edges, under flyovers and bridges		
Beneath Shreyas flyover	10 years	40-50
Street-edge near Parin Furniture showroom, S.G. Highway (only on the service road)	9 months (earlier was at a nearby location from where they were evicted – had lived there for approx. 15 years)	30
2. Shelters / settlements on government or private land (not a recognized slum)		
Behind Vasna Police chowky	20-25 years	80-100 (includes houses where residents are not involved in construction work)
Opp. Sabarmati crematorium, near Acher Gaam	10 years	60 (excludes houses where residents are not involved in construction work)
Opposite railway tracks, Near Durganagar, Vatwa	7-8 years	Approx. 20
3. Rental housing in slums		
९		
Manav Mandir Chali, Gurukul	8-10 years	40-50 (excludes houses where residents are not involved in construction work)
Thakore Vas, Chamundanagar, Odhav	5 years	10-12 (not all are tenants)
4. Shelters / settlements on private-sector construction sites		
IET Ahmedabad University campus, Navrangpura	2 years	35
Amarnath Business Complex (ABC), near St. Xavier's College	Less than one year	1
5. Shelters / settlements on public-sector construction sites		
IIT Gandhinagar new campus, near Palaj village (has four labour colonies; only one of these is taken as the case-study)	2 years	50-60
Flyover construction site near Narol circle	Less than one year	6

With regard to the shelters / settlements of construction workers on government or private land, these are generally non-recognized slums and have low to medium tenure security generally. Many of these settlements are on land owned by AMC, with some under dispute with a private landlord claiming to own the land. The land of the case-study settlement behind Vasna police chowky was under such a dispute until the landlord lost a court case against AMC. After this, AMC established its ownership by building a compound wall around the land and evicting the residents, who had in fact approached AMC at the time for basic services. Despite the eviction, residents refused to move from the land and gradually rebuilt their houses, albeit *kutcha*. The experience has led to an imminent threat of eviction and low tenure security. With regard to the case-study settlement near Acher Gaam, while a part of it was upgraded under the Slum Networking Programme (SNP) revealing that there is a recognized slum here, the part where construction workers live has not been upgraded. Some houses in this part have not faced eviction since a long time while others faced eviction two years ago. Until the boundaries of the recognized slum are expanded and upgrading carried out, or the construction workers' housing cluster is listed as a slum by AMC, the construction workers will face low to medium tenure security. The third case-study settlement in this typology is opposite the railway tracks near Durganagar in Vatwa, and is located on land owned by a private trust. No evictions or harassment were reported by residents here, suggesting higher tenure security. However, when we began our research in this settlement, some residents feared that we might have come to evict them, revealing that tenure security is really quite low. Here, we would also like to take note of Arjun Ashram Basti (not one of our case-study settlements), which, during our research study, faced an eviction drive by the railway authority that owns this land.

Construction workers also live in rental housing in the city's slums which has higher tenure security than the above two settlement typologies. Although the rental agreement is undocumented, and the landlord is often an informal occupier of the land and is not legally allowed to build rental units on it, the informal claims and arrangements often seem to provide some security. However, if the actual landowner seeks to establish claim on the land, the acting landlord's claim would get destabilised and could lead to eviction of his tenants.

Lastly, in the on-site settlements, be it sites constructed by private sector or public sector, there is high security of tenure for the workers during the period of their employment at the work-site.

We conclude that with regard to the low tenure security in many off-site settlements, construction workers (and their families) often face violence. This is in the form of evictions and harassment, leading to losses of both belongings and investments they have made in their housing, or an everyday experience of uncertainty and insecurity about their houses and belongings. This denies them a secure space in the city as well as access to basic services. This is a direct result of the state's attitude towards informality and the urban poor compounded by its attitude towards migrants in the city, especially those who are recent migrants or non-permanent, that is, seasonal or temporary short-duration migrants. There is a need for urban and housing policy to address the question of their tenure security in the off-site settlements and / or provide alternative secure and viable housing options for them. Secure tenure could be extended in many of the existing off-site settlements, especially where

residents have built *kutcha* shelters of some kind. For those who live in the open on pavements or along street-edges, alternative housing options could be provided through temporary migrant hostels / colonies located near *nakas*. For those living under flyovers, there might be a possibility of building temporary migrant hostels under the flyovers, like the night shelters that have been built under flyovers. Unlike the night shelters, however, these hostels would have to be designed for families also. This would ensure secure tenure as well as retain the link between their place of residence and place of work.

6.2. Housing quality

There are four main types of shelters found in construction workers' settlements in terms of housing quality: *potla* type shelters, *kutcha* shelters made from tarpaulin, *kutcha* shelters made from tin sheets and semi-*pucca* shelters built with brick walls and tin sheet roofs. Although our study was done by typology of settlement, these shelter types are not necessarily linked to a specific typology (see Annexure 7 for housing quality by case study).

Potla type shelters are open housing arrangements where the residents tie up their belongings with a tarpaulin in a heap during the day when away for work and open the heap in the evenings to set up a sleeping and cooking area. They are found in settlements on pavements and street edges, and under flyovers and bridges (Shreyas case study), as well as in settlements on government or private lands which are non-recognized slums. This shelter type is extremely vulnerable to weather conditions as there is no enclosure. Without an enclosure there is also a higher likelihood of rodent infestation and mosquitoes which results in health hazards. Also there is high insecurity of belongings as the residents leave the belongings in a heap with is mostly unattended and not locked. The temporary short-duration migrants may choose this type of shelter as they do not require much investment and can be easily moved from one place to the other. Sometimes seasonal migrants also resort to this type if the tenure security is very low. For instance, during the research fieldwork we came across a *potla*-type settlement outside the Vasna police chowky. Residents reported that the temporariness of this housing type enables them to be on that land and if they try to build *kutcha* shelters, the police will not allow them. In addition, migrants may choose to live in this type of shelter instead of building *kutcha* enclosures if contextual conditions like flyovers or other kind of overhead structures already provide some shelter (predominant reason in Shreyas case study seems to be this).

A 1996 study had found that many of the *kutcha* shelters of construction workers were made using cane matting or unmortared bricks as walls and polythene sheets as roofing material (Sharma, 1996). Today, we find that these materials have changed and *kutcha* shelters are made from either tarpaulin or tin sheets. The tarpaulin *kutcha* shelters are found in settlements on pavements and street edges (case study near Parin Furniture showroom), and under flyovers and bridges, as well as settlements on government or private lands which are non-recognized slums (case studies at Vasna, near Acher Gaam and at Vatva). They are also found at the smaller construction sites (ABC case study). These *kutcha* shelters, where the tarpaulin is held up by wooden supports, are unstable structures vulnerable to weather conditions. Even though there is an enclosure, the materials have very low insulation properties to safeguard from heat and cold. In addition, they are not conducive to keeping the belongings safe as there is no way to lock and secure the structures. Due to the structural

conditions these shelters are also prone to rodent infestation. In case of waterlogging in the settlement, the shelter is vulnerable to flooding. The seasonal migrants or even permanent migrants may choose this type of housing as it requires less investment. Residents may also choose this housing type where there is low tenure security since it is conducive to dismantling and reusing of materials to build shelters in a different location.

The other type of *kutcha* shelter is built almost entirely out of tin sheets. They are found on construction sites, especially medium-sized ones (IET and Narol flyover case studies). Tin sheet shelters are very susceptible to heating up in the day and still remaining very hot during the night as they capture heat. Also there is not much ventilation in these structures which poses health risks if cooking is done inside the shelter. However, these structures can be locked and thus belongings can be secured. If built by the contractor, they are most likely used to keep costs incurred by the contractor at a low level since he can keep re-using the sheets. Tin-sheet shelters are not found in many off-site settlements. This could be because the value addition that these provide over *kutcha* tarpaulin shelters is not worth the additional investment.

The fourth type is the semi-*pucca* shelter consisting of brick walls and tin sheet roofing. This was found in part of a settlement on government land (case study near Acher Gaam), rental housing (Manav Mandir chali and Thakore Vas case studies) as well as the larger public-sector construction site (IITG case study). This structure is less vulnerable to weather, though there are still issues with shelters heating up due to the tin sheet roofs which do not provide insulation. However, the structure can be locked so there is more security. Rodent infestation can also be controlled in these structures. Overall, this structure is more stable in comparison to the other shelter types. In the settlement on government lands (case study near Acher Gaam) if there is some security of tenure, permanent migrants may choose to invest in this type of shelter. Residents may also use this shelter type to make claims to the land and demand higher tenure security and basic services because this type of housing projects to the authorities a sense of permanency and long-term habitation. In rental housing (Manav Mandir chali and Thakore Vas case studies), the landlord is likely to choose to build this shelter type in order to extract a rent that gives him some profit. At the larger public-sector construction sites (IITG case study) where construction would continue for more than 2-3 years, the developer / contractor might be willing to invest in this kind of housing as there is a constant rotation of workers and the structures can be used to house them and also do not require much maintenance.

We also found some common settlement-level vulnerabilities across the settlement typologies. In most shelters / settlements on pavements and street sides, and under bridges and flyovers as well as on government or private lands, there is an issue of waterlogging during monsoons and mosquitoes and rodent infestation. In all settlements on construction sites residents reported issues with uncomfortable and in some cases crowded sleeping arrangements.

To summarise, in the off-site settlements, the poorest housing quality—*potla* type and *kutcha* tarpaulin type—is found in settlements on pavements and street-edges, and under flyovers and bridges, as well as settlements on government or private lands which are non-

recognized slums. Semi-*pucca* shelters are mostly found in the latter and also in rental housing. There are multiple reasons for these variations in off-site settlements. One reason has to do with level of tenure security. If tenure security is higher, residents are more willing to invest in better shelters. A second reason has to do with migration patterns which would also shape their willingness to invest in housing. Permanent migrants seek to build semi-*pucca* houses while temporary short-duration migrants usually live with *potlas* out in the open and seasonal migrants usually live in *kutcha* tarpaulin and tin sheet structures. A third reason has to do with affordability. These different types of shelters require varying amounts of investment (least in the *potla* type and most in the semi-*pucca* shelters). Depending on their income levels, workers may choose one over the other. Fourth reason is contextual conditions such as existence of structures that already provide some shelter. Thus, the existing flyover in the Shreyas case study seems to be the main reason for *potla* shelters there.

In the on-site settlements, the larger public-sector construction sites had semi-*pucca* rooms of brick walls and tin sheet roofing (IITG case study); the medium-size sites had tin-sheet walls and roofing (Narol flyover and IET case studies), and the smaller sites had temporary tarpaulin structures (ABC case study). Here, shelter type and housing quality was found to be linked to the size of the construction site and duration of work. This is because the scale of the project usually determines whether a developer / contractor thinks it is worthwhile to invest in better shelters or not.

6.3. Basic services and amenities

The workers living on-site were found to be better off than workers living off-site with regard to the basic services and amenities available to them. However, there are variations within the off-site and on-site settlements also.

We found that the settlements on the street-edges (case study near Parin Furniture showroom) and under flyovers (Shreyas case study) as well as on government or private lands (case studies at Vasna, near Acher Gaam, at Vatwa) do not have any basic services and rely on developing connections with neighbouring establishments / institutions / individuals to access water through a tap or borewell. To get this access sometimes residents are required to pay or do some labour work. Three of these settlements have no provision of toilet facilities and thus residents have to resort to open defecation in grounds nearby. They have pay and use toilet-and-bathing facilities nearby, but due to the cost implication most residents do not use it. Only one of the settlements (case study near Acher Gaam) has a pay-and-use facility that is used at times. It is noteworthy that charges are no longer taken at the facility. But even here, the facility is not used much because it is not open during the crucial morning and evening/night hours. None of these settlements have electricity at either at individual or settlement level, and are lit up by streetlights only. Amongst off-site settlements, it is only the rental housing that has some level of basic services provided by the landlord/informal owner. Manav Mandir Chali has a borewell in the settlement and access to it is included in the rent, but there are no toilet facilities at all. The landlord provides electricity for 4 hours in the day, and this too is included in the rent. In Thakore Vas settlement, all the houses have individual water connections, electricity and toilet facilities. This is because it is part of a larger settlement which was provided these services under the Slum Networking Programme (SNP) and also the residents are locals and therefore have been able to produce the necessary documents to

avail of the scheme. Thus, within the off-site settlements, access to basic services like water, sanitation and electricity in the rental housing is a bit better than in settlements on street-edges, under flyovers and on plots of government or private land. However, it may still be inadequate as in Manav Mandir Chali.

On private-sector construction sites (case studies of ABC and IET), there is provision of water and toilet facilities. Electricity is also provided, although not necessarily for 24 hours. However, these services are not very well-maintained and workers often resort to practices of open defecation. On one public-sector construction site (case study of Narol flyover), water is provided but through a tanker and there are hygiene issues attached to that for drinking water. It does not have any toilet facility. However, on the other public-sector construction site (case study of IITG), facilities of water, toilet and bathing, and electricity are provided. This is due to the keen interest of the institution undertaking the project. Additionally, a creche is provided and a regular health camp is conducted on-site. Thus, larger construction sites and sites where the employer fulfils some of his responsibility, are most likely to have better facilities. The worst in terms of basic services was the public-sector infrastructure construction site of the Narol flyover.

6.4. Documents for entitlements in the city

Documents that show proof of residence in the city, such as ration card, election card, property tax receipts and electricity bill, are important for the urban poor to build claims to their informal housing spaces and basic urban services as well as realize entitlements to government schemes, including housing schemes. In our case-study settlements, except for the locals living in Thakore Vas, Chamundanagar, Odhav and one permanent migrant in the street-edge settlement near Parin Furniture showroom on S.G. Highway, none of the other residents had any document showing Ahmedabad address. One of the permanent migrants in the settlement near Acher Gaam stated that he wanted to get a ration card made but middlemen were asking for a large sum of money. The seasonal migrants have ration cards and election cards for their villages and are not willing to give these up in order to get new ones at their city address. For temporary short-duration migrants, having such documents of the city is an impossibility.

Due to the absence of these documents, migrant construction workers are unable to build up housing claims in the city. This is one of the major reasons for the fact that migrant construction workers continue to live in settlements with low tenure security and dismal housing conditions despite being residents of the city on a seasonal basis for many years. Since registration with the Building and Other Construction Workers' Welfare Board is also difficult, they cannot even avail of the welfare schemes, including housing subsidy, meant specifically for them. Any policy intervention to improve their housing conditions would have to take this into account in its design and implementation so that city-based documentary requirements in housing do not create exclusion. For any housing programme targeted at this group to actually reach this group, the Welfare Board would have to become pro-active in registering construction workers, a demand made persistently by NGOs (Prayas, 2012b). The Board could do this by conducting mass registration drives at the *nakas*.

6.5. Construction work, migration and housing

This study clearly identifies three types of off-site housing typologies: (i) settlements on pavements and street-edges, and under flyovers and bridges; (ii) settlements on government or private lands which are non-recognised slums; and (iii) rental housing in slums. It also clearly identifies two types of on-site housing typologies: (i) settlements on private-sector construction sites; and (ii) settlements on public-sector construction sites. The typology of housing in which construction workers live is interlinked to two main aspects: the mode of obtaining construction work (finding work at the *naka*, being part of a labour gang, or getting regular contract work) and the dynamics of migration (which includes type of migrant household and migration pattern). We discuss this below since housing interventions for construction workers would have to be based on an understanding of this.

Previous writings have observed that *naka* workers live in different types of off-site housing settlements / arrangements while labour gangs live in on-site settlements (e.g. Prayas, 2012a; 2014) (also see Figure 3). While this is generally true, this study reveals that labour gangs are also found off-site in settlements on government or private lands which are non-recognized slums (Figure 3). We found this to be in cases where the labour gangs were involved in public-sector or private-sector infrastructure-laying work such as road-building or pipeline-laying. Instead of living in shelters on-site, where there is little space to live on the work-site and the work-site also keeps moving, the labour gangs are accommodated on open plots of land, access to which seems to be informally negotiated by the *mukkadam* / labour contractor / contractor (case-study at Vatwa).

This study also reveals the existence of regular contract workers, who have got work directly through their contacts in the industry and then go to the worksite directly from their urban place of residence. The builder / contractor often arranges for transport from the urban place of residence or a common meeting point to the worksite on a daily basis. This study found that they live in off-site housing typologies. Probably because of their security of regular earnings, they are not found in the most vulnerable off-site housing typology of settlements on pavements and street-edges, or under flyovers and bridges, and are found in settlements on government or private lands (which are non-recognized slums) (case study near Acher Gaam) and rental housing (case study of Manav Mandir ni Chali).¹⁷

The other important aspect that determines the housing typology in which *naka* workers, labour gangs and regular contract workers live is the migration pattern and the type of migrant household (see Figure 3). Locals and permanent migrants, who live in the city with their entire family, live mostly in off-site housing typologies. Among them, those who are *naka* workers are found in all the three off-site housing typologies, while, as mentioned earlier, those who are regular contract workers are not found in the most vulnerable off-site housing type. Being permanent migrants, they seek to invest in and improve their housing conditions in the city, and gradually try to obtain documents of the city to build up their claims to their urban informal housing spaces. This is a process that has begun among the permanent

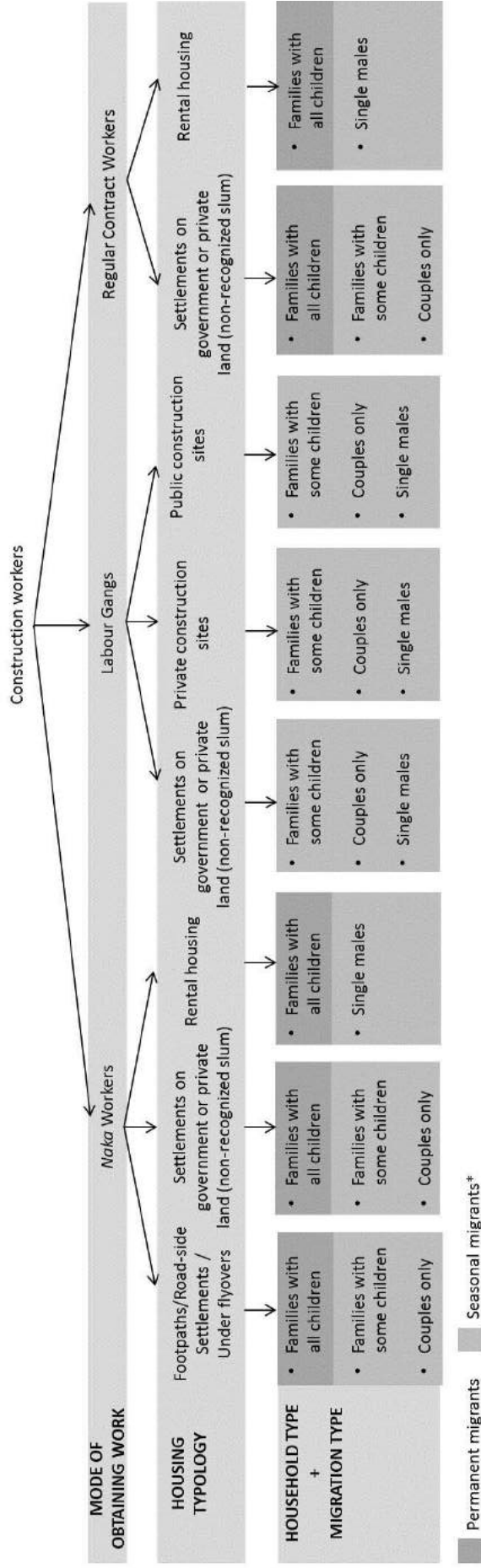
¹⁷ As explained earlier in Section 3, a construction worker might move between these three modes of obtaining work over the course of his/her work-life; this may or may not lead to a change in housing typology for them.

Table 3. Dynamics of Migration

Case-study settlement	Household type	Place of origin	Migrant Type and Annual Migration Pattern
Shelters / settlements on pavements and street edges, under flyovers and bridges			
Beneath Shreyas flyover	<ul style="list-style-type: none"> Families with children 	<ul style="list-style-type: none"> Dahod district (Gujarat) 	<ul style="list-style-type: none"> Majority are seasonal migrants since 1 year to 20 years: spends total 7 months of the year in the city
Street-edge near Parin Furniture showroom, S.G. Highway	<ul style="list-style-type: none"> Families with children 	<ul style="list-style-type: none"> Dahod district (Gujarat); one family is from Baroda 	<ul style="list-style-type: none"> Majority are seasonal migrants since 1 year to 20 years: spends total 7 months of the year in the city
2. Shelters / settlements on government or private land (not a recognized slum)			
Behind Vasna Police chowky	<ul style="list-style-type: none"> Couples (multiple couples sharing a single shelter) Families with children 	<ul style="list-style-type: none"> Banswara district (Rajasthan); Patan district and Surendranagar district (Gujarat) 	<ul style="list-style-type: none"> Seasonal migrants since 1 year to 18 years: spends total 9-10 months of the year in the city Permanent migrants
Opposite Sabarmati crematorium, near Acher Gaam	<ul style="list-style-type: none"> Families with children 	<ul style="list-style-type: none"> Dahod district (Gujarat); Jhabua district (MP) 	<ul style="list-style-type: none"> Majority are seasonal migrants since 1 year to 18 years: spends total 9-10 months of the year in the city Some permanent migrants
Opposite railway track, Near Durganagar, Vatwa	<ul style="list-style-type: none"> Families with children 	<ul style="list-style-type: none"> Dahod district (Gujarat) 	<ul style="list-style-type: none"> Seasonal migrants: one group spends total 5-6 months of the year in the city; another group spends total 8-9 months of the year in the city They are part of labour gangs under mukkadams who have been seasonally migrating to the city since more than a decade.
3. Rental housing in slums			
Manav Mandir Chali, Gurukul	<ul style="list-style-type: none"> Single male migrants 	<ul style="list-style-type: none"> Banswara district (Rajasthan) 	<ul style="list-style-type: none"> Seasonal migrants since 1 year to 18 years: spends total 6-7 months of the year in the city
Thakore Vas, Odhav	<ul style="list-style-type: none"> Families with children 	<ul style="list-style-type: none"> Ahmedabad 	<ul style="list-style-type: none"> Locals

4. Shelters / settlements on private-sector construction sites			
IET Ahmedabad University campus, Navrangpura	<ul style="list-style-type: none"> Families with children 	<ul style="list-style-type: none"> Dahod district (Gujarat) 	<ul style="list-style-type: none"> Seasonal migrants: one group spends total 7 months of the year at worksites; another group spends total 8.5 months of the year at worksites
Amarnath Business Complex (ABC), near Gulbai Tekra	<ul style="list-style-type: none"> Single male migrants 	<ul style="list-style-type: none"> Dungarpur (Rajasthan); Baria in Dahod district (Gujarat) 	<ul style="list-style-type: none"> Seasonal migrants: one group spends total 7 months of the year at worksites; another group spends total 8.5 months of the year at worksites
5. Shelters / settlements on public-sector construction sites			
IIT Gandhinagar new campus, near Palaj village	<ul style="list-style-type: none"> Single male migrants Couples Families with children 	<ul style="list-style-type: none"> Dahod district (Gujarat); Jamnagar (Gujarat); Nagpur district (Maharashtra); Other States like Bihar, Uttar Pradesh, Madhya Pradesh and Rajasthan 	<ul style="list-style-type: none"> Seasonal migrants: one group spends total 6 months of the year at worksites; another group spends total 8.5 months of the year at worksites
Flyover construction site near Narol circle	<ul style="list-style-type: none"> Single male migrants accompanied by one woman migrant 	<ul style="list-style-type: none"> Ranchi district (Jharkand) 	<ul style="list-style-type: none"> Seasonal migrants: one group spends total 6 months of the year at worksites; another group spends total 8.5 months of the year at worksites

Figure 3. Construction work, migration and housing



*Some of these could be temporary migrants as well. In our case studies we did not interview many temporary migrants.

migrants in the case study at Vasna and the permanent migrant we interviewed in the case study near Acher Gaam. Fewer permanent migrants were found living in the most vulnerable off-site typology, that is, settlements on pavements and street-edges, and under flyovers and bridges (case studies of Shreyas and near Parin Furniture showroom). We found locals in the rental housing, but found that over time, they were trying to become informal owners, either in the same location or in another location. The locals and permanent migrants, therefore, are not the most vulnerable of the construction workers – the interventions regarding housing that would benefit them would be somewhat similar to the interventions for slum dwellers. In other words, their informal settlements need to be recognized as slums, the processes of getting documents like ration card in the city need to be made easier, and their settlements need to be upgraded with basic services and amenities. If the need for relocation arises, then they should be relocated nearby so that the link between their place of residence and place of livelihood is sustained.

Seasonal migrants, which make up a large proportion of construction workers, are found in all the on-site and off-site housing typologies. Which housing typology they choose to live in depends not only on the mode of obtaining work, as already discussed, but also on the migrant household type (see Figure 3). Thus, *naka* workers who are seasonal migrants coming to the city with their family (some or all children) or as couples (husband and wife only) are found in all the off-site housing typologies except rental housing since the latter is not affordable to them on the household's earnings. *Naka* workers who are seasonal migrants coming to the city as single male migrants live in rental housing as sharing with other single male migrants makes this affordable for them. The rental arrangement is noteworthy. In the case study of Manav Mandir Chali, most of the single males are seasonal migrants and many spend only 6-7 months in the city. When they return to their village, they simply leave and the other single males in the household cover his share of the rent or find someone to replace him. When he returns, if there is room in the same room or another room with single males he knows, he joins them. What this means is that these single male migrants might have lived in the same settlement since quite many years but do not pay rent for the time they are away.

The above discussion reveals that when seasonal migrants come to the city as couples or families with children, and go to the *naka* to search for work, they cannot live in rental housing due to the expense that this entails and instead live in the more vulnerable off-site housing types. It is for this group that housing interventions that take their seasonal migration and affordability into account are currently lacking and needed urgently. As seasonal migrants, they are not ready to greatly invest in their housing in the city since they want to send remittances to their village for family members living there as well as for improving their own conditions and assets there. And yet, they do spend considerable time in the city each year. In this study, there were seasonal migrants spending a total of 6-7 months in the city and then the remaining 5-6 months in their native village for festivals, farming and other family-related reasons (case studies at Shreyas and near Parin Furniture showroom); there were others who were spending 9-10 months in the city and the remaining months in their native village for the same reasons (case studies at Vasna and near Acher Gaam). Many also come seasonally to Ahmedabad for years. In this study, we found some recent seasonal migrants but many have been seasonally coming to Ahmedabad for 5-6 years (case study at Vasna), 8-10 years (case studies at Vasna and near Parin Furniture showroom) or even more

than 15 years (case studies at Vasna and near Acher Gaam) (see Table 3). Housing interventions that emphasize permanency in the city and (informal or formal) ownership would not work for this group.

This study also found that kinship and community play a central role in determining the settlements that the seasonal *naka* workers choose to live in. In our study, most of the seasonal *naka* workers were from Dahod district in Gujarat, Banswara and Dungarpur districts in Rajasthan, and Jhabua district in Madhya Pradesh. They are mainly tribals. In each of the case-study settlements, people lived amongst their own kin and community. At the case-study settlement under the Shreyas flyover, we even found that families from villages around Dahod town in Dahod district lived separately from the families from villages around Jhalod town, also in Dahod district. Housing interventions must be sensitive and responsive to the role that kinship and community plays in the lives of these migrant construction workers.

Additionally, location of their settlements matters for the *naka* workers since place of residence should be close to a *naka*. In this study, the seasonal *naka* workers walked a maximum distance of 15-20 minutes to reach a *naka*. It is necessary that these *naka* workers do not need to incur transport cost to reach a *naka* since there is no guarantee that they will obtain work at the *naka* everyday.

Workers who are part of labour gangs and are seasonal migrants come to the city as couples or with their family (some or all children) or as single male migrants. Each of these migrant households types are found in the two on-site housing typologies as well as in the settlements on government or private land arranged informally by the *mukkadam* / labour contractor / contractor (see Figure 3). In all these cases, interventions to improve their housing conditions would need to involve the employer and make him more responsible for the welfare of the construction workers he employs. In this, the state must become a stronger regulator with labour welfare as priority. As discussed in this report, there are many existing legislations and rules that lack enforcement by the state. The state could also explore partnerships with employers (contractors and builders) to improve the housing condition of these construction workers.

6.6. Household income and housing expenditure

In Table 4, we estimate construction workers' monthly household income from construction work.¹⁸ Since this study is based on a very small sample of construction workers and therefore not reliable for estimating income, our estimates here are based primarily on discussions with Prayas which has extensive experience working with construction workers. These discussions reveal that monthly household income depends on the number of earning members, their skill levels, and their mode of obtaining work which determines daily wage rates and the number of days they get work in a month. Our calculations here consider only single male migrants or nuclear family households with 1-2 earning members. Generally speaking, the daily wage rates at the *naka* are higher than the wages of those in labour gangs, however, the number of days of employment are much lower for the *naka* workers as compared to those in labour

¹⁸ There might be household income from other sources also, however, this is not accounted for here since these are general estimations.

gangs. Wages also vary between skilled labour and unskilled labour. Wages are highest for highly skilled labour, but we have not considered them here since our focus is on the more vulnerable sections amongst construction workers. Thus, Table 4 shows different household compositions in terms of number of earning members, daily wage rates for skilled and unskilled construction workers, number of employment days in a month, and corresponding monthly household incomes.

Table 4: Household income of construction workers

Household Composition	Skill Level	Daily wage rate (in Rupees)	Employment days per month	Monthly Household Income (MHI) (in Rupees)
<i>Naka workers</i>				
Single Earning member	Unskilled	300	10-15 days	3000-4500
	Skilled	500	10-15 days	5000-7500
Two Earning members	Unskilled (Male) + Unskilled (Female)*	600	10-15 days	6000-9000
	Skilled (Male) + Unskilled (Female)*	800	10-15 days	8000-12000
<i>Labour gangs</i>				
Single Earning member	Unskilled	200	20 days	4000
	Skilled	400	20 days	8000
Two Earning members	Unskilled (Male) + Unskilled (Female)*	400	20 days	8000
	Skilled (Male) + Unskilled (Female)*	600	20 days	12000

* The daily wage rate for a woman construction worker has been considered to be the same as for a male construction worker, however, this is generally lesser. At *nakas*, unskilled women construction workers are often hired at only Rs.250 per day while on site they are often paid only Rs.180 per day.

It should be noted that these are broad estimations. For *naka* workers, the daily wages they earn and the number of days they get work in a month can also depend on the negotiation skills and bargaining power they exercise at the *naka*. Thus, they could earn more or less than the daily wage rate. They may also agree to work for a lesser daily wage if they have not found work at the *naka* by 9:30-10:00 am. Additionally, women are usually hired at a lesser daily wage rate than the men. Nonetheless, the estimations in Table 4 are useful to give an idea of the range of monthly household income amongst construction workers.

We now briefly discuss housing expenditures (including for services such as water, sanitation and electricity) for seasonal migrant construction workers. This study shows that in the on-site housing typologies, construction workers do not incur housing expenditures as shelters and some level of services (though inadequate) are provided on-site by the employers. In the off-site housing typologies, the highest housing expenditures are incurred by those living in rental housing. It is the single male migrants who live in rental housing, and they share the rents with other single male migrants in order to keep it affordable. In Manav Mandir ni Chali, room rents are Rs.1500-2000 per month. Sharing it with others, a single male (seasonal) migrant usually spends Rs.375-500 as monthly rent, including access to water and 4 hours of electricity in a day. Considering the monthly household income calculated for a

single earning member doing unskilled work to be Rs.3000-4500 (see Table 4), he thus spends 8-15 per cent of his income on housing.¹⁹ He incurs this expense only for the period he is in the city, with the other single male migrants finding a replacement or covering his rent when he returns to his village. This ensures that he is not incurring a housing expense in the city during the time that he is in his village.

Here, we also draw upon two fieldvisits to rental housing undertaken by one of the authors in September 2013 for another research project. One fieldvisit was to a slum located in Wadaj area, where the monthly rent for rooms were found to be Rs.900. Each room was shared by 5-6 single male migrants working in construction. Besides the rent that was shared amongst them, each was additionally paying about Rs.5 per day to access a toilet and bath in a nearby pay-and-use facility. Thus, each was paying approximately Rs.300 a month for housing, including services. They reported their income to be Rs.7000-8000 per month (suggesting they were skilled workers), thus, the rent they were paying was about 4 per cent of their income. In another fieldvisit in September 2013, this time to the Guptanagar slum in Vasna, monthly rent was found to be Rs.2500 for a room provided with electricity and with a water tap, toilet and bath shared with 10 other rooms. The room was shared amongst 5-6 single male migrants. Thus, each paid Rs.400-500 per month as rent, which included access to a relatively good level of services. The men were working in different sectors, from restaurants / hotels to construction work, with some reporting that they earned about Rs.8000 per month (suggesting that those in construction were skilled workers). This means the rent they were paying was between 5-6.5 per cent of their income. They also reported that some single male migrants were living in rooms in Guptanagar which did not have toilet and bath and lacked electricity, whose rent was Rs.800-1500. From what we know about Wadaj and Manav Mandir Chali, it is safe to assume that these rooms were rented out by unskilled workers due to their lesser earnings. The above discussion reveals that for the seasonal migrants who come as single male migrants, living in rental housing in the city's slums is affordable since they share the rent with others, paying 4-15 per cent of their income on rent.

If a seasonal migrant family comprising of two unskilled construction workers were to take up a rental room in Manav Mandir Chali, given their household monthly income of Rs.6000-9000 (see Table 4), they would have to pay 16-25 per cent of this on rent. Since such families are not usually found in this rental housing, this suggests that it is not affordable to them. Such families are therefore found in settlements on pavements and street-edges, under flyovers and bridges and on government or private plots of land which are unrecognised slums. While in some of these cases, they have to pay protection money, this is generally not too high. Prayas (2012b) reports that residents living under the Chanakyapuri railway bridge in Ahmedabad were paying Rs.100 per month to a railway officer to live there. In our case-studies (Shreyas, near Parin Furniture showroom, at Vasna, near Acher Gaam and at Vatwa), none of the families reported paying any regular amount to anyone. They were also not incurring expenses for sanitation. Some were spending money for water. In the case study near Parin Furniture showroom, each household was paying Rs.300 per month for water. In the case study near Vasna, some paid Rs.10 for a 5-litre can of water and as much as Rs.50 per day on water, however, since they sometimes did odd jobs to get this water, it is difficult

¹⁹ Note that upfront deposits are not taken into account in this calculation of rent as percentage of income.

to estimate their total monthly water expenses. Their main housing expense was for the building of their shelter and its repair and maintenance, which was difficult to estimate since these expenses are not incurred at fixed regular intervals and often salvaged materials are used and the process of building and repair is incremental, undertaken when necessary and when possible.

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Annexures

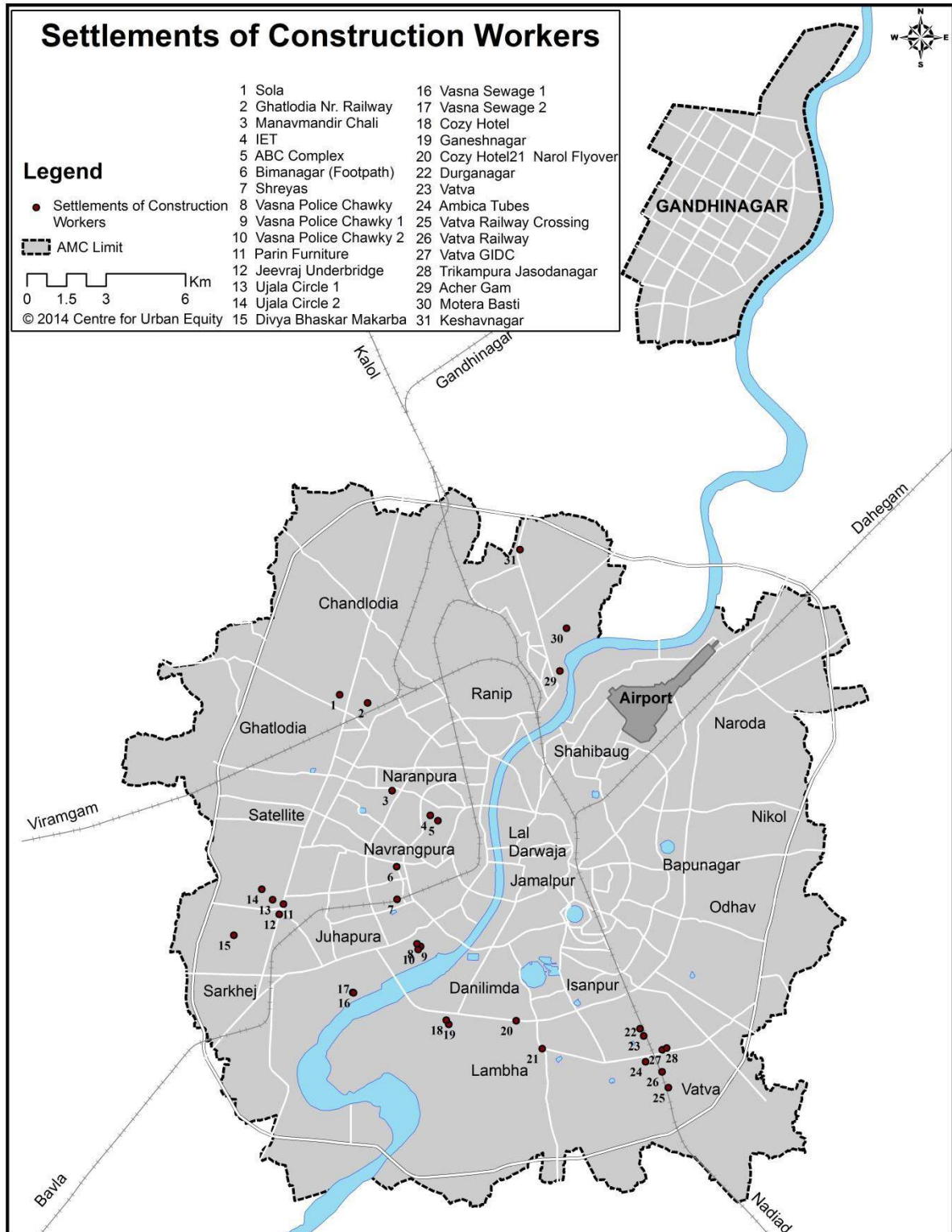
Annexure 1: List of *nakas* in Ahmedabad

No.	Name of <i>naka</i>	Size of <i>naka</i>
1	Akhbarnagar Circle	Large
2	Ambavadi	Large
3	Amdupura	Small
4	Amraiwadi	Medium
5	Amruta mill, Saraspur	Medium
6	Astodiya	Small
7	Azad Society Near Saraswati Society	Small
8	Bapunagar Cross Road	Medium
9	Bapunagar last bus stop	Small
10	Behrampura	Medium
11	Bibi Talav (Vatva)	Small
12	Bopal	Medium
13	Chamundanagar	Small
14	Chankyapuri	Small
15	Chandkheda (Jantanagar)	Medium
16	Chandlodia	Small
17	Chandola Talav	Medium
18	CTM cross roads	Medium
19	Dani Limda	Medium
20	Dariyapur	Medium
21	Delhi Darwaja	Medium
22	Ghatlodia	Medium
23	Gomtipur Darwaja	Medium
24	Guptanagar, Vasna	Small
25	Gurukul	Large
26	Haridarshan, New Naroda	Medium
27	Hatkeshvar	Medium
28	Isanpur	Medium
29	Iscon cross road	Medium
30	Jamalpur cross road	Medium
31	Jashoda chowkdi	Medium
32	Jawahar chowk, Maninagar	Medium
33	Jivraj Park	Medium
34	Judges bungalow cross road	Small
35	Juhapura	Small
36	Khamasa chakla	Small
37	Krushnanagar	Medium
38	Lal Darwaja	Medium
39	Lambha gam	Medium
40	Majurgam, Gitamadir	Medium
41	Maninagar	Medium
42	Meghaninagar last bus stop	Small
43	Meghaninagar near Rameshwar Mahadev	Small
44	Memco cross road	Medium
45	Memnagar – Vadinath chowk	Small

46	Mota Chiloda	Medium
47	Naranpura	Medium
48	Narayannagar, Paldi	Medium
49	Naroda gam	Medium
50	Narol cross road	Medium
51	Nikol gam	Medium
52	Nirnaynagar Garnara	Medium
53	Odhav	Medium
54	Paldi Laxminarayan society	Medium
55	Pavapuri, Ghatlodiya	Small
56	Raipur big bazar	Small
57	Rajpur toll naka	Small
58	Rakhiyal	Small
59	Ranip bus stand	Small
60	Rannapark	Medium
61	Revdi Bazar, Kalupur	Small
62	Sabarmati (D Cabin)	Medium
63	Sabarmati (Kesavnagar)	Small
64	Sabarmati (Ramnagar)	Medium
65	Sabarmati toll naka	Medium
66	Shahibaug- near Radha-Krishna temple	Small
67	Sarangpur pani ni tanki	Small
68	Saraspur, near Amruta mill	Small
69	Sardarnagar	Small
70	Sarkhej	Small
71	Shahpur Darwaja near Shankar bhuvan	Medium
72	Shivranjani cross road	Medium
73	Sonini Chali	Medium
74	Sujhramnagar	Medium
75	Thakkarbapa nagar	Medium
76	V.S. Hospital	Small
77	Vasana bus stop	Large
78	Vasant Cinema, Idgah chowk	Small
79	Vastral	Small
80	Vatva gam	Small
81	Vejalpur (Boot Bhavani)	Small
82	Vyaswadi cross road	Small
83	Wicket bus stop, Umiyanagar	Small

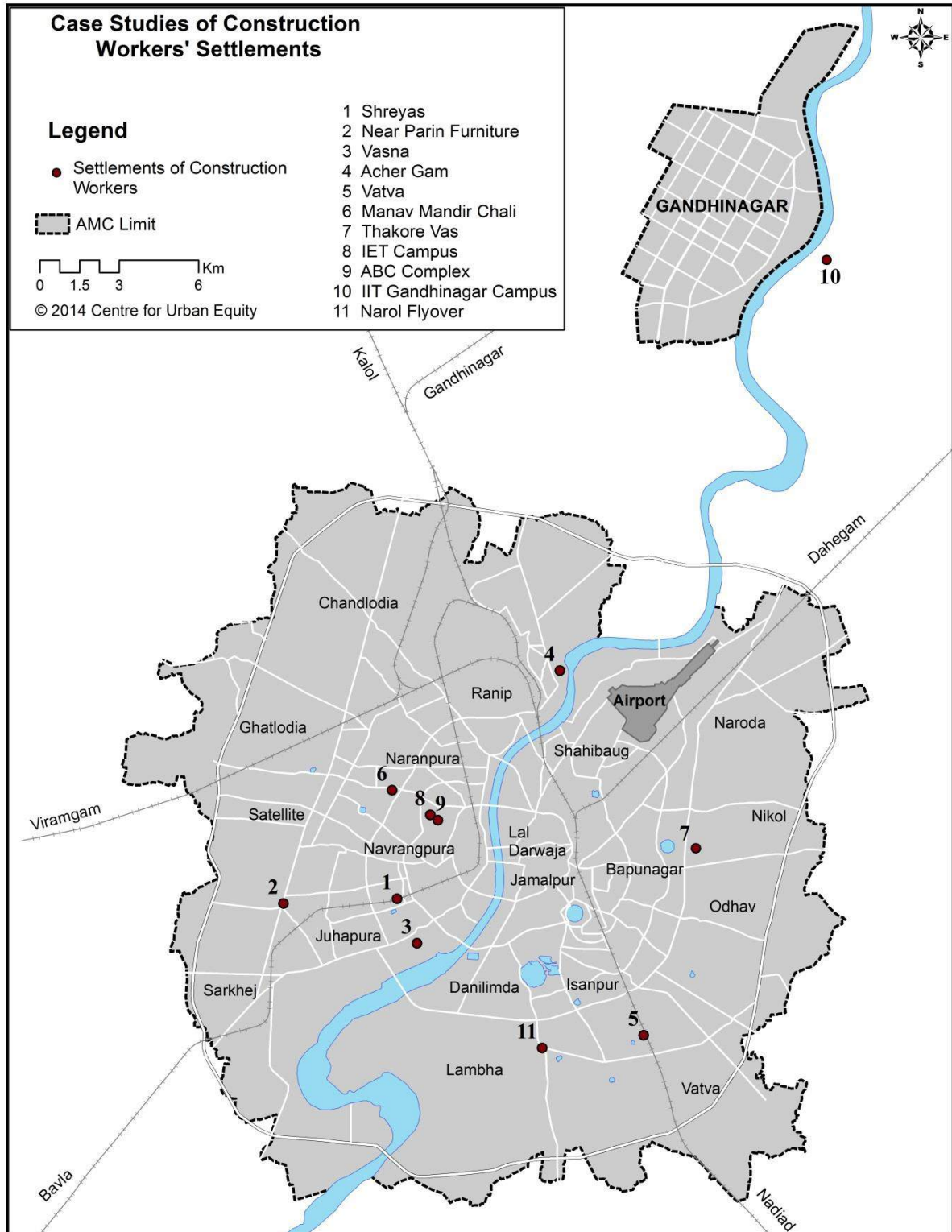
Source: BSC, 2009: Annexure 3

Annexure 2: Construction workers' settlements in Ahmedabad in 2012



Source: 2012 data shared by Prayas

Annexure 3: Map of location of case-study settlements



Annexure 4: Guide for Group Discussion

Study of Migrant Construction Labourers' Housing By Centre for Urban Equity, CEPT University Case Study Field Visits: Questionnaire for Group Discussion

Typology (tick):

Squatting on pavement or street-edge or under flyover or bridge _____

Squatting on government or private land _____

Rental in slum _____

Private-sector construction site _____

Public-sector construction site _____

Name of settlement: _____

Area / Location: _____

I. Demography:

1. Population: _____ 2. No. of houses (households): _____

3. Type of households (tick one or more):

Families with children ____ Couples only ____ Single male migrants ____

4. Place of origin of residents (tick one or more):

Rajasthan ____ Madhya Pradesh ____ Uttar Pradesh ____ Chattisgarh ____

Gujarat (specify district) _____ Other States (specify) _____

5. Caste / Religion of residents: _____

6. Occupations:

Men: _____

Women: _____

II. Migration history of residents:

7. Year of oldest migration to Ahmedabad: _____

8. Year of most recent migration to Ahmedabad: _____

9. Do you stay in the city round the year? Yes ____ No ____

10. If no, then, what is the period of stay in village during the year and reasons:

III. Land Tenure and History of Internal Migration:

No	Year	Settlement and Area (start with current location)	Landownership (i)	Mode of access and amount of rent / <i>hafta</i> (ii)	Reason for living there (iii)	Reason for shifting away from there (iv)

11. Refer to below when filling above table:

(i) Landownership:

AMC - Pavement or Street-edge / AMC - Under flyover or bridge / AMC / State govt /
Railways / Other govt / Private / Builder / Mixed (specify)

(ii) Mode of accessing this land:

Annual rent / Monthly rent / Annual hafta / Monthly hafta / No hafta / Provided by
employer-contractor / Provided by employer-builder / Other (specify)

(iii) Reasons for living there may be:

locational advantage, their own community members living here since long duration,
affordability, etc

(iv) Reasons for shifting from there may be:

high rent, eviction or eviction threat, etc

IV. Type of shelters:

12. Occupancy of shelters (tick one or more):

Occupied by single family _____
Shared amongst more than one family _____
Shared amongst single male migrants _____

13. Mode of constructing the shelters and cost (tick one or more):

Self-constructed with salvaged materials _____
Self-constructed with purchased materials _____
Constructed by paid labour _____
Financed and constructed by landlord, builder or contractor _____
Other (specify): _____

Observations:

14. Wall material in majority of shelters (tick one or more):

No shelter-only potla _____ Plastic sheets _____ Tin sheets _____
Brick _____ Stone _____ Other (specify): _____

15. Roof material in majority of shelters (tick one or more):

No shelter-only potla _____ Plastic sheets _____
Tin sheets _____ RCC _____ Other (specify): _____

16. Floor material in majority of shelters (tick one or more):

Mud _____ IPC _____ Bamboo mat _____ Other (specify) _____

17. Do the majority of shelter units have doors? Yes _____ No _____

V. Vulnerabilities of location, land and shelter:

18. What are the main difficulties you face regarding this location, land and shelter?

(probe: low-lying land, proximity of hazardous conditions, garbage dump, heavy traffic, noise,
easily damaged shelters, evictions, safety issues, security of belongings, pests and rodents)

VI. Basic Services:

19. Drinking water provision in settlement: Yes _____ No _____

19a. Source (tick one or more):
In settlement: Individual Tap _____ Common Tap _____ Hand-pump _____
Outside settlement: Tap _____ Tanker _____ Other (specify): _____

19b. How frequently can you fill?
Once a day _____ Twice a day _____ Alternate days _____ Other (specify): _____

19c. Cost incurred, if any (mention if included in rent /hafta): _____

20. Bathing and washing water provision in settlement: Yes _____ No _____

20a. Source (tick one or more):
In settlement: Individual Tap _____ Common Tap _____ Hand-pump _____
Outside settlement: Tap _____ Tanker _____ Other (specify): _____

20b. How frequently can you fill?
Once a day _____ Twice a day _____ Alternate days _____ Other (specify): _____

20c. Cost incurred, if any (mention if included in rent /hafta): _____

21. Toilet facility in / adjacent to the settlement: Yes _____ No _____

21a. Type of toilet access (tick one or more):
Common toilet _____ Public toilet block _____ Pay and Use _____
Toilet block at work site _____ Open defecation _____ Other (specify): _____

21b. Cost incurred, if any (mention if included in rent /hafta): _____

22. Bath facility in / adjacent settlement: Yes _____ No _____

22a. Type of bath access (tick one or more):
Inside shelter _____ Open, in front of house _____ Open, near water source _____
Common bath _____ Pay and Use _____ Other (specify) _____

22b. Cost incurred, if any (mention if included in rent / hafta): _____

23. Electricity provision in individual dwelling units: Yes _____ No _____

23a. Duration of provision: _____

23b. Cost incurred, if any (mention if included in rent /hafta): _____

24. Cooking Fuel used: _____

VII. Amenities and accessibility:

25. Health:
Clinic: Public / Private Transport mode _____ Time to reach _____
Hospital: Public / Private Transport mode _____ Time to reach _____

26. Education:
Anganwadi: Public / Private Transport mode _____ Time to reach _____
Primary school: Public / Private Transport mode _____ Time to reach _____

27. Grocery:
Transport mode _____ Time to reach _____

VIII. Link of housing to workplace:

28. Mode of obtaining work (probes: gets work through *naka* or directly, etc): _____

29. Distance _____ Transport mode _____ Time to reach _____

IX. Institutional matrix

30. Role of institutions and actors in your housing-related issues in Ahmedabad city:

Institutions / Actors	Role (supportive / hinderance)
AMC	
Political leaders (probe: election cards)	
Police	
NGOs or labour unions	
Local leaders in your settlement	
Employer (Builder or contractor)	
Other (neighbours)	

X. Housing preference:

31. What type of housing would you like?

(probe:location, house type, tenure arrangement, level of basic services, affordability (of house, basic services and maintainance), mix of communities, etc)

XI. Other remarks:

32. Any other relevant issues raised by the residents:

Annexure 5: Guide for Individual Interview

Study of Migrant Construction Labourers' Housing By Centre for Urban Equity, CEPT University Case Study Field Visits: Questionnaire for Individual Interviews

Typology (tick):

Squatting on pavement or street-edge or under flyover or bridge _____

Squatting on government or private land _____

Rental in slum _____

Private-sector construction site _____

Public-sector construction site _____

1. Name of settlement: _____

2. Name of interviewee: _____

3. Age: _____ 4. Gender: _____

5. Occupation and wage (men and women): _____

I. Profile of household:

6. Type of household (tick):

Family with children ____ Couple only ____ Single male migrants ____

6a. No. of Household members: Adults: _____ Children (below 14 yrs): _____

7. Place of origin (tick one or more):

Rajasthan ____ Madhya Pradesh ____ Uttar Pradesh ____ Chattisgarh ____

Gujarat (specify district) _____ Other States (specify) _____

8. Caste / Religion: _____

II. Migration history:

9. Year of migration to Ahmedabad: _____

10. Do you stay in the city round the year? Yes ____ No ____

11. If no, then what is the period of stay in village during the year and reasons:

III. Residential and housing mobility:

12. Duration of stay in this settlement: _____

13. Places you have lived in Ahmedabad since you first migrated:

No	Year	Settlement and Area (start with current location)	Landownership (i)	Mode of access and amount of rent / <i>hafta</i> (ii)	Reason for living there (iii)	Reason for shifting away from there (iv)

Refer to below when filling above table:

(i) Landownership:

AMC - Pavement or Street-edge / AMC - Under flyover or bridge / AMC / State govt /
Railways / Other govt / Private / Builder / Mixed (specify)

(ii) Mode of accessing this land:

Annual rent / Monthly rent / Annual hafta / Monthly hafta / No hafta / Provided by
employer-contractor / Provided by employer-builder / Other (specify)

(iii) Reasons for living there may be:

locational advantage, their own community members living here since long duration,
affordability, etc

(iv) Reasons for shifting from there may be:

high rent, eviction or eviction threat, etc

IV. Type of shelter:

14. Occupancy of shelter:

Occupied by single family ____
Shared amongst more than one family ____
Shared amongst single male migrants ____

15. Mode of constructing the shelter and cost (tick one or more):

Self-constructed with collected materials ____
Self-constructed with purchased materials ____
Constructed by paid labour ____
Financed and constructed by landlord, builder or contractor ____
Other (specify): _____

16. Total cost incurred (note: help interviewee to roughly estimate cost of construction and repairs): _____

V. Vulnerabilities of location, land and shelter:

17. What are the main difficulties you face regarding this location, land and shelter?

(probe: low-lying land, proximity of hazardous conditions, flooding, waterlogging, garbage
dump, noise, heavy traffic, easily damaged shelters, evictions, safety issues, security of
belongings, pest and rodent issues)

VI. Basic Services:

18. Drinking water provision in settlement: Yes ____ No ____

18a. Source:

In settlement: Individual Tap ____ Common Tap ____ Hand-pump ____
Outside settlement: Tap ____ Tanker ____ Other (specify): _____

18b. How frequently can you fill?

Once a day ____ Twice a day ____ Alternate days ____ Other (specify): _____

18c. Cost incurred, if any (mention if included in rent /hafta): _____

19. Bathing and washing water provision in settlement: Yes ____ No ____
 19a. Source:
 In settlement: Individual Tap ____ Common Tap ____ Hand-pump ____
 Outside settlement: Tap ____ Tanker ____ Other (specify): ____
 19b. How frequently can you fill?
 Once a day ____ Twice a day ____ Alternate days ____ Other (specify): ____
 19c. Cost incurred, if any (mention if included in rent /*hafta*): _____

20. Toilet facility in / adjacent to the settlement: Yes ____ No ____
 20a. Type of toilet access (tick one or more):
 Common toilet ____ Public toilet block ____ Pay and Use ____
 Toilet block at work site ____ Open defecation ____ Other (specify): ____
 20b. Cost incurred, if any (mention if included in rent /*hafta*): _____
 20c. Difficulties faced by women: _____

21. Bath facility in / adjacent settlement: Yes ____ No ____
 21a. Type of bath access (tick one or more):
 Inside shelter ____ Open, in front of house ____ Open, near water source ____
 Common bath ____ Pay and Use ____ Other (specify): ____
 21b. Cost incurred, if any (mention if included in rent / *hafta*): _____
 21c. Difficulties faced by women: _____

22. Electricity provision in individual dwelling units: Yes ____ No ____
 22a. Cost incurred, if any (mention if included in rent /*hafta*): _____

23. Cooking Fuel used: _____

VII. Amenities and accessibility:

24. Health:
 Clinic: Public / Private Transport mode _____ Time to reach _____
 Hospital: Public / Private Transport mode _____ Time to reach _____
 25. Education:
 Anganwadi: Public / Private Transport mode _____ Time to reach _____
 Primary school: Public / Private Transport mode _____ Time to reach _____
 26. Grocery:
 Transport mode _____ Time to reach _____

VIII. Link of housing to workplace:

27. Mode of obtaining work (probes: gets work through *naka* or directly, etc): _____

 28. Distance _____ Transport mode _____ Time to reach _____

IX. Expenditures:

29. Daily expenses incurred (Rupees per day)
 Grocery _____ Cooking Fuel _____ School _____
 Travel _____ Other expenses (specify) _____

Total daily expenses*: _____

(*Rent, electricity, water expenses should be added from previous questions)

X. Housing preference:

30. What type of housing would you like?

(probe:location, house type, tenure arrangement, level of basic services, affordability of house, basic services and maintenance), mix of communities, etc)

XI. Other remarks:

31. Any other relevant issues raised by the interviewee:

Annexure 6: Checklist for mapping of case-studies

I. Settlement level:

- Layout of settlement with surrounding roads, land-uses, landmarks, etc
- Location of basic services:
 - Source of drinking water
 - Source of bathing water
 - Toilet facility / place for open defecation
 - Bathing facility / space
- Settlement vulnerabilities such as waterlogging, etc
- Photographs of the settlement

II. Shelter level:

- Shelter – sketch of plan and section to document:
 - Approximate size of shelter and number of rooms
 - Construction materials
 - Condition of structure
 - Construction technique / method
 - Use of space / layout of activities (sleeping, cooking, bathing, storage, etc)
- List of belongings stored in / around the shelter
- Shelter vulnerabilities such as rodent infestation, waterlogging, etc
- Basic services used by the household (whether available inside the shelter or not):
 - Source of drinking water
 - Source of bathing water
 - Toilet facility
 - Bathing facility / space
 - Electricity

Annexure 7: Tenure security, housing quality, vulnerabilities, basic services and amenities for the case studies

Case-study settlement	Landowner & Level of Tenure Security	Housing quality / materials	Vulnerabilities of settlement and house	Water source	Sanitation type	Electricity	Health and Education (time to reach)
1. Shelters / settlements on pavements and street edges, under flyovers and bridges							
Beneath Shreyas flyover	AMC Low tenure security	Not an enclosed structure; <i>potla</i> dwellings	<ul style="list-style-type: none"> No shelter, exposed to weather Mosquitoes + Rodent infestation Traffic noise Safety of belongings 	<ol style="list-style-type: none"> Tap (nearby retail establishment) Tap (nearby temple) 	<ul style="list-style-type: none"> Open defecation on nearby railway land Bathing on site or nearby railway land 	<ul style="list-style-type: none"> No individual electricity Streetlights on nearby road 	<ul style="list-style-type: none"> Health service: Public (10-15 mins) Education: Public (10-15 mins)
Street-edge near Parin Furniture showroom, S.G. Highway	AMC Low tenure security	Tarpaulin sheets with wooden support structure	<ul style="list-style-type: none"> Houses heat up-due to low insulation in roof Mosquitoes + Rodent infestation Traffic noise + constant vehicular movement through the settlement Safety of women Security of belongings. 	<ol style="list-style-type: none"> Tap (nearby retail establishment) Borewell in nearby farm (charges Rs.300 per month) 	<ul style="list-style-type: none"> Open defecation Semi-enclosed bathing enclosures outside shelter 	<ul style="list-style-type: none"> No individual electricity Streetlights on nearby road 	<ul style="list-style-type: none"> Health service: Private (10-15 mins) Education: Most children do not go to school
2. Shelters / settlements on government and private lands (not recognized as slums)							
Behind Vasha Police chowky	AMC Low tenure security	Tarpaulin sheets with wooden support structure	<ul style="list-style-type: none"> Houses heat up-due to low insulation in roof Mosquitoes + Rodent infestation Waterlogging Stray animals in the settlement 	<ol style="list-style-type: none"> Tap (nearby residences, have to do odd jobs to get water) Borewell in farm (have to do odd jobs to get water or pay Rs.10 to fill a 5-litre can) 	<ul style="list-style-type: none"> Open defecation / Pay and use toilet nearby Semi-enclosed bathing enclosures outside shelter 	<ul style="list-style-type: none"> No individual electricity No street lights 	<ul style="list-style-type: none"> Health service: Public/Private (10-15 mins/20 mins) Education: Public (5 mins)

Opp. Sabarmati crematorium, near Acher Gaam	AMC Low tenure security	Tarpaulin sheets with wooden support structure	<ul style="list-style-type: none"> Houses heat up-due to low insulation in roof Mosquitoes + Rodent infestation Waterlogging 	1. Municipal tap (in settlement)	<ul style="list-style-type: none"> Open defecation / Pay and use toilet nearby Semi-enclosed bathing enclosures outside shelter 	<ul style="list-style-type: none"> No individual electricity Streetlights on nearby road 	<ul style="list-style-type: none"> Health service: Private (20-30 mins) Education: Public (5 mins)
Opp. railway tracks, next to Durganagar, Vatwa	Private trust Medium tenure security	Tarpaulin sheets with wooden support structure	<ul style="list-style-type: none"> Houses heat up-due to low insulation in roof Mosquitoes + Rodent infestation Waterlogging 	1. Tap (nearby shop)	<ul style="list-style-type: none"> Open defecation Semi-enclosed bathing enclosures outside shelter 	<ul style="list-style-type: none"> No individual electricity Streetlights on nearby road 	-
3. Rental housing in slums							
Manav Mandir Chali, Gurukul	Government land with informal landlord Medium security (Monthly room rental is Rs.1500-2000)	Brick walls with tin sheets roofing	<ul style="list-style-type: none"> Houses heat up-due to low insulation in roof Mosquitoes + Rodent infestation Lack of ventilation 	1. Borewell (in settlement)	<ul style="list-style-type: none"> Open defecation Bathing area inside shelter 	<ul style="list-style-type: none"> Individual electricity for 4 hours No street lights 	<ul style="list-style-type: none"> Health service: Public (30 mins)
Thakore Vas, Odhav	AMC with few informal landlords. Medium security (Monthly rent Rs. 800)	Brick walls with tin sheets roofing	<ul style="list-style-type: none"> Houses heat up-due to low insulation in roof 	1. Individual taps from AMC	<ul style="list-style-type: none"> Individual toilet and bathrooms 	<ul style="list-style-type: none"> Individual electricity for 24 hrs Street lights in settlement 	<ul style="list-style-type: none"> Health service: Private (10-15 mins) Education: Public (5 mins)

4. Shelters / settlements on private-sector construction sites							
IET Ahmedabad University campus, Navrangpura	Ahmedabad University High tenure security	Tin sheets	<ul style="list-style-type: none"> Houses heat up-due to construction material Poor sleeping arrangements Waterlogging Lack of ventilation 	1. Taps connected to municipal water line (on site)	<ul style="list-style-type: none"> Common toilet block (on site) Semi-enclosed bathing shelters outside shelter 	<ul style="list-style-type: none"> Individual electricity for 24 hours No street lights 	<ul style="list-style-type: none"> Health service: Private (20 mins) Education: Crèche on site
Amarnath Business Complex, near Gulbai Tekra	Amarnath Enterprise High tenure security	Tarpaulin sheets with wooden support structure	<ul style="list-style-type: none"> Poor sleeping arrangements Mosquitoes 	1. Borewell (on site)	<ul style="list-style-type: none"> Portable toilets (on site) Bathing in open near water source 	<ul style="list-style-type: none"> Individual electricity for 24 hours No street lights 	<ul style="list-style-type: none"> Health service: Public (10 mins)
5. Shelters / settlements on public-sector construction sites							
IIT Gandhinagar new campus, near Palaj village	IIT High tenure security	Brick walls with tin sheets roofing	<ul style="list-style-type: none"> Poor sleeping arrangements Crowding 	<ol style="list-style-type: none"> Water storage tank filled by Tanker (paid for by contractor) Drinking water from nearby canteen 	<ul style="list-style-type: none"> Common toilet block (on site) Semi-enclosed bathing shelters outside shelter 	<ul style="list-style-type: none"> Individual electricity for 24 hours No street lights 	<ul style="list-style-type: none"> Health service: Doctor on site three days a week Education: Crèche on site
Flyover construction site near Narol circle	AMC High tenure security	Tin sheets	<ul style="list-style-type: none"> Houses heat up-due to construction material Poor sleeping arrangements Unhygienic drinking water Lack of ventilation 	1. Water drums filled by Tanker (paid for by contractor)	<ul style="list-style-type: none"> Open defecation Bathing in open near water source 	<ul style="list-style-type: none"> No individual electricity Streetlights on nearby road 	<ul style="list-style-type: none"> Health service: Private (10 mins)