

INDEX

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Fieldwork in Pune, India – Fall 2017 AAR4525 - Urban Action Planning Department of Architecture and Planning Faculty of Architecture and Design

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Preface

6 Acknowledgements

8 Introduction

14 Methods and data

Situation analysis

20 History

22 Physical infrastructure

30 Social organization

38 Political organization

46 Economy

SRS-scheme and future development

Action proposal group 1

84 Action proposal group 2

Conclusions and reflections

108 References

PREFACE

This report is the outcome of a one semester fieldwork in Pune and New Delhi (India), conducted by students at the Faculty of Architecture and Design at the Norwegian University of Science and Technology (NTNU) in collaboration with the School of Planning and Architecture (SPA) New Delhi. The fieldwork was part of a research project "Smart Sustainable City Regions in India" (SSCRI) financed by the Norwegian Centre for International Cooperation in Education (SIU). The one-semester fieldwork is an integral part of the 2-year International Master of Science Program in Urban Ecological Planning (UEP) at NTNU established in 1997. Similar fieldtrips have been undertaken previously in Nepal, Uganda and India.

Students participating in the UEP fieldworks have always been very diverse in terms of their nationalities and professional backgrounds. This group is no exception; among the 22 participants of the 2017 fieldwork are architects, urban planners, engineers, geographers, environmentalists, psychologists as well

as experts in communication, business and sustainability. They come from Belarus, Brazil, China, Ghana, India, Indonesia, Lebanon, Mexico, Nepal, Norway and the USA.

The semester started with an intensive two-week period with introductory lectures and preparatory activities at the NTNU premises in Trondheim, Norway. After arriving in Pune, NTNU students joined the SPA New Delhi students from the Regional Planning and Environmental Planning Master programs to investigate planning issues at the regional, metropolitan and city scales. After the joint NTNU-SPA field research, NTNU students have been divided into six smaller groups and were given the task to focus their further investigation on three different settlements in central Pune: one being a notified slum known as Shirole Vasti and two being old-city residential and marketplace areas: Kasba Peth and Raviwar Peth. In all three settlements, interesting dynamics of formalizing-informal and informalizing-formal can be observed. This theme will be further elaborated in the

report.

In their project work, students practiced what we call the "Urban Ecological Planning" approach, which focuses on integrated area-based (as opposed to sectorial) situation analysis and proposal making using participatory and strategic planning methods. By spending one month in the assigned areas and engaging with local communities as well as relevant stakeholders, students gained an in-depth understanding of the local context, which allowed them to discover strengths and weaknesses and identify opportunities and challenges in each of the areas, something that would be impossible to achieve by applying more traditional technocratic and purely quantitative planning methods.

A particular focus of this fieldwork was on issues related to land, housing, water, sanitation and livelihoods. Students were also tasked to put their areas and proposals in the perspective of the Smart Cities Mission, which is the largest urban development fund and initiative currently implemented by the Government of India.

Students prepared a total of three situational analysis reports with proposals – one for each of the studied area. This report sums up the work of two groups working in Shirole Vasti.

Marcin Sliwa, Hilde Refstie and Rolee Aranya Fieldwork Supervisors, NTNU, Department of Architecture and Planning







ACKNOWLEDGEMENTS

There are many people and organizations who contributed to this work and we would like to express our immense appreciation for their support. First and foremost, we would like to thank the Norwegian Centre for International Cooperation in Education (SIU) for providing financial support for this project.

We are particularly thankful for the assistance given by the faculty at the School of Planning and Architecture (SPA) New Delhi: Prof. N. Sridharan, Ass. Prof. Arunava Dasgupta, Prof. Vinita Yadav and Prof. Meenakshi Dhote; as well as the students from the Urban Design, Regional Planning and Environmental Planning Master's programs. We would like to give our special thanks to Prof. Pratap Rawal from the Dept. of Town Planning at the College of Engineering, Pune (COEP) for his hospitality, logistic support, and in-depth knowledge in the field. Our field investigation would not be possible without the assistance in translation by the COEP students involved in the project.

We would like to express our gratitude to Mr. Sharad Mahajan from the Maharashtra Social Housing and Action League (MASHAL), Arch. Jui Tawade and Arch. Sharvey Dhongde from the Indian National Trust for Art and Cultural Heritage (INTACH) Pune Chapter, as well as Dr. Meera Bapat and Arch. Prasanna Desai for sharing with us their local expertise and relevant information.

We would also like to thank the The Society for the Promotion of Area Resource Centers (Sparc) for sharing their knowledge, and Omkar Associates Architects for meeting with us and showing us their previous projects. Furthermore, we would like to thank Shaily Patil, our translator from COEP, who helped us get in touch with the people in the settlement. last but not least, we would like to show special gratitude to the residents of Shirole Vasti for their hospitality and their contribution to our project, and for their engagement in the community meeting. We are immensly grateful to all the recidents for welcoming us into their homes and neighbourhood.

INTRODUCTION

PUNE OVERVIEW

Pune is a city located in the Indian state of Maharashtra, approximately 200 kilometres east of Mumbai. The city is a major industrial hub with a population of approximately 3.1 million and a total area of 729 square kilometres (Sen and Hobson, 2003). Pune is India's seventh most populous city, and second largest in the state of Maharashtra.

Pune's proximity to Mumbai allows for great economic benefits. Industrial development in Pune began in the 1950s, leading to the Pune metropolitan area to be known for its manufacturing and automobile industries (Tata Motors, Mahindra & Mahindra, Mercedes Benz, Force Motors, General Motors, Land Rover, and others have manufacturing plants in the Pune area). In 2000, Pune became the Indian city with the most IT professionals (Joshi et. Al., 2002). Pune is considered to be the cultural capital of Maharashtra, and is commonly known as the "Oxford of the East" because of the presence of several well-known educational institutions in the city (Sen and Hobson,

2003). Because of its educational reputation, Pune is considered the leading engineering city in the country. The city also serves as the headquarters of the Southern Command of the Indian Army. Hinduism is the dominant religion in Pune, but other religions in the city include: Muslims, Sikhs, Jains, Buddhists, and Christians (Sen and Hobson, 2003).

PUNE AND THE SMART CITY MISSION

The Smart City Mission in India was launched in 2015 under the Ministry of Urban Development by Prime Minister Narendra Modi. It is designed as an urban renewal and retrofitting program to develop 100 cities as model areas for sustainability and resident friendly design. The Smart City Mission is a program funded by the central government between the years 2017-2022. Every state nominates at least one city for the challenge, and Pune is one of 8 cities in Maharashtra to be nominated as a Smart City (smartcities.gov, Smart Cities Mission).

The concept of a smart city varies from city to city

and country to country. It is dependent on the level of development, willingness to accept change and reform, the available resources, and desires of the city's residents (smartcities.gov, What is Smart City). Pune's Smart City initiatives range from public transportation system upgrades, improving social infrastructure, and preparing for future population growth. As per the Smart City Mission in India, a smart city should enable local area development by harnessing technology, and more importantly, providing core infrastructural elements which include:

- 1. Adequate water supply
- 2. Assured electricity supply
- 3. Sanitation, including solid waste management
- 4. Efficient urban mobility and public transport
- 5. Affordable housing, especially for the poor
- 6. Robust IT connectivity and digitalization
- 7. Good governance, especially e-Governance and citizen participation,
- 8. Sustainable environment
- 9. Safety and security of citizens particularly women, children and the elderly
- 10. Health and education (smartcities.gov, What is Smart City)

LIST OF ABBREVIATIONS AND ACRONYMS

ASR – Annual Statement of Rates

BSUP – Basic Services to the Urban Poor

FSI – Floor Space Index

MASHAL – Maharashtra Social Housing

MHADA – Maharashtra Housing and Area Development Authority

NSDF – National Slum Dwellers Federation

PMC – Pune Municipal Corporation

PPP – Public private partnership

SDI – Slum Dwellers International

SPARC – Society for the Promotion of Area

SRA – Slum Rehabilitation Authority



Aap 1 Une in the Indian state of Maharashtra

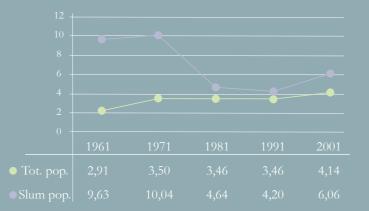
Table 1

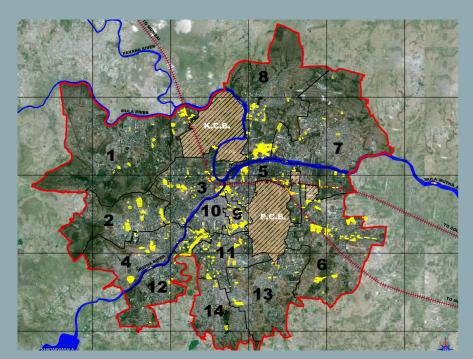
The total population, slum population and the percentage og the city's population living in slums from 1951 to 2009.

Year	Total Pop.	Slum Pop.	% of tot. pop.
1951	481.000	38500	
1961	606.777	92101	15,18 %
	856.105	239701	28 %
1981	1.203.363	377000	31,33 %
1991	1.691.430	569000	33,64 %
2001	2.538.473	1025000	40,38 %
		1050017	

Graph 1

The annual growthrate of the total population and the slum population from 1961 to 2001. The growthrate of the population living in slums, is consistently higher than for the city as a whole. (City development plan, 2012)





Map 2

All slum pockets marked in yellow. The mais from MASHALS slum atlas from 2011.

SLUMS AND SETTLEMENTS SITUATION IN PUNE

The economic and educational successes have led to Pune being one of the fastest growing cities in the Asia-Pacific region, attracting migrants from all over India. However, the rapid pace of urban growth has led to an inadequate amount of infrastructure provision (Joshi et. Al., 2002). This arrangement of poor infrastructure provision is also reflected in the slums of Pune, where poor living environments are the result of the lack of basic amenities (Sen and Hobson, N.D.). The migrating population increased from 43,900 in 2001 to 88,200 in 2005, and continues to increase through the 2010s (Sen and Hobson, N.D.), and it is estimated that 40% of Pune's population lived in slums by 2011 (City Development Plan, 2012)

Because of the increasing slum population in Pune and other cities in the Indian state of Maharashtra, the Maharashtra Slum Areas (Improvement, Clearance, and Redevelopment) 1971 Act was ratified to make it hard to evict slum dwellers from the land they encroached. Under this act, a settlement is declared a slum if the local municipality recognizes the area as having living conditions that are below specified standards, such as having congested, unhygienic areas, or buildings that are public hazards (Sen and Hobson, 2003).

There are now 564 slum pockets in the city, and only 353 of them are declared, according to the 2011 Survey that was prepared by Maharashtra's Social Housing and Action League (MASHAL). They also have

the latest socio-economic data about slums in Pune. Declared slums have been receiving basic infrastructural support from Pune Municipal Corporation (PMC). However, a majority of them were declared several years ago, and have extended considerably beyond their original boundaries, making these extensions ineligible for improvements (Joshi et. Al., 2002). Undeclared slums often have poorer conditions because the dwellers do not have the same tenure security and are not eligible for the same service provision.

Many steps have been taken to improve, upgrade, or rehabilitate slums in Pune. The Smart City Mission aims at making the city "slum free" by driving the socio-economic transformation of slums and focusing on the major areas of problems: sanitation, healthcare, education, and skill building (punesmart-city.in, Local Initiatives). In addition, many NGOs such as National Slum Dwellers Federation (NSDF) and MASHAL have previously worked with PMC to address such problems in slums. Moreover, several slum rehabilitation schemes have been implemented in Pune. The latest one, which we will discuss thoroughly in our situational analysis, is the Slum Rehabilitation Authority scheme (SRA scheme).

The SRA scheme is an in-situ rehabilitation scheme that provides free re-housing for slum dwellers in new high-rise blocks built by private developers on the same land which slums already occupied. Private developers get in return increased development rights which allow them to build their own residential or commercial units on the same land and sell them in the market. Sometimes developers get Transfer Development Rights (TDR) instead, which they can also sell in the market.

This kind of Public-Private-Partnership (PPP) in the Indian state of Maharashtra started in Mumbai in mid 1990s under an atmosphere of liberalization and decentralization. The same procedure was followed in Pune and led to establishing the Slum Rehabilitation Authority of Pune and Pimpri Chinchwad (SRA) in 2005 (Pimpri Chinchwad is an adjacent city to Pune and falls under the same metropolitan area). While state and central government funded projects can still play a role in slum redevelopment, SRA authority is now the main body responsible for slum redevelopment projects in Pune. The SRA scheme is of high importance because it is currently the first option given for slum dwellers to "solve their problem" and get permanent housing in the same location they lived before, so that their livelihood is not disrupted.

According to Mr. Anil Patil, the town planner we interviewed at SRA office in Pune, 777 SRA housing units have been completed in Pune, and it is expected that 10000 units will be completed by 2019. According to the city's development plan, the projected population of Pune in 2019 is 4.2 million, 50% of which will live in slums. So, 2.1 million people in Pune will be living in slums by 2019 and SRA is

expected to provide only 10000 housing units by that time! Obviously, the rate at which SRA housing units are provided is much slower than the rate at which slum population is growing in Pune.

SHIROLE VASTI AT A GLANCE

Shirole Vasti settlement is a small and compact slum located on Shirole Road in Deccan Gymkhana area in Pune. The area of the slum is 5484 m2 and it is distributed over 7 plots that have different ownerships.

The settlement was declared as a slum in 1984 and it consists of about 283 structures where around 250 families and 1400 residents live (MASHAL Survey, 2011).

Most families are Hindu with a small muslim minority, and many belong to Maratha1, Konkani2 and Kunbi3 castes (MASHALl survey, 2011).

Over half (180) families have been living in Shirole Vasti for over 13 years, and 190 families have been there for over 8 years (MASHALI Survey, 2011). Most of the families in Shirole Vasti own their homes and few are tenants. There are also some families that rent their property. However, this rent is small because it is controlled by rent control act.

The settlement Shirole Vasti is overcrowded and has a population density of 516 per ha (MAHSAL survey, 2011). Most of the houses do not have personal toilets, so residents must rely on the four public toilet facilities that have been provided by PMC (Pune Municipal Corporation), as a part of the Swachh Bharat Mission. However, almost all residents have access to electricity, gas and other utilities such as telephones and cable. Most parts of the slum have a defined mechanism of garbage disposal and there are garbage collection trucks that do daily rounds. The slum also had water and drainage upgrades in early the 2000s, allowing residents to have a better and more reliable water supply.

One would notice that Shirole Vasti greatly differs from a stereotypical slum, especially in aspects relating to livelihood, cleanliness and even infrastructure to a large extent. But at the same time, the statement should not be misunderstood and paint an ideal picture, as there is still a lot of room for improvements in this vibrant community within Pune.



Map 3
Pune city with Shirole Vasti marked in green

Aap 4 The Shirole vast slum with plots and owners markea



METHODOLOGY AND DATA GATHERING

We carried out our study in the Shirole Vasti slum through daily interaction with the residents over a period of one month. The quest was to understand their livelihood strategies and the daily challenges they face in the slum.

A qualitative approach was chosen as opposed to a quantitative one. This was due to considerations of the contextual attitudes and behavioral patterns in the settlement, which may have been more difficult to quantify. However, there are some limited sections in the study where quantitative analysis was more relevant, and hence adopted.

To gather data we used both primary and secondary sources. The secondary data was mainly based on available surveys, literature, and site maps we obtained from MASHAL, collaborators of the SRA, PMC and others.

Being in an unknown geographical area, which was culturally and linguistically different from what most

of us were used to (with the exception of one Indian group member), we selected some methods and techniques, which were implemented for the study with the help of Hindi and Marathi interpreters. Some of the data gathering techniques we employed included transect walks, observation, community mapping, interviews, and formal meetings.

Our first session of study involved a transect walk through the slum guided by a few residents, who were kind enough to show us around the various parts of the slum. They showed us infrastructure and also shared their views of the area. For most of the initial days, we walked from door to door, to introduce ourselves and get to know community members. The narrow footpaths within the community served as outlets, where we interacted with men, women and children who were residents. We were well on our way to achieving our primary target, of being able to connect, in some form or the other, with the community.

We could tell that the community members were curious about us, our intentions, and about the study. It could have been that a few residents, due to previous experiences with surveys, had pre-conceived notions about our mission, but this did not deter us. During the walks, we also observed the area with regards to the existence and physical conditions of toilets, water taps, houses, street layouts, economic activities, religious activities & temples, community meetings and interactions, as well as other aspects. We learned that, transect walks and observations are powerful tools in carrying out research work in an unknown environment.

Another method we used was community mapping. We went to the community with some basic maps of the slum. Community members were also allowed to do their own mapping and drawing of the slum to show positions of social amenities and share their perceptions of the physical area. Here, children played a major role, because they mapped places where they go to play, shop, and learn. We mapped the various businesses and economic activities in the slum, along with the two community spaces and their uses. We used interviewing as a technique to extract relatively unbiased information from the community members. This enabled both us, and the residents to participate on equal footing in a relatively frank discussion. This allowed us to develop intersubjective topics. About 40 community members were involved in our research. Individual interviews with seventeen men, four women, three shop owners and six children were carried out through the use of random sampling. To maintain a continuum, we employed snowball sampling techniques whereby one interviewee introduces us to another.

To end the study and conclude, we organized a community meeting with the residents. The meeting was conducted on the 27th of October, 2017. Posters advertising the meeting were hung up a week before and placed in areas such as entrances into the



slum from the roads, entryways of toilets, certain shops which the dwellers frequented, among other places. We also handed out additional flyers on the 26th of October. We observed that on the day before the event, the majority of the dwellers were aware of the event, and did not require any further information. The dwellers we interacted with promised us that they would attend and take part in the meeting.

Printouts of photographs and sets of drawings were made to explain to the community the various observations and possible improvement scenarios for the settlement. As a small token of appreciation for their time, we organized evening tea and biscuits for all those who attended.

When the meeting did not start as per schedule, we visited some of the houses to personally invite the dwellers again. It was one of the residents, who had gathered a group of her friends and neighbors, mostly women, and brought them over to meeting.

Even though the meeting did not start on schedule, there was an active audience of mostly women from the Ganesh Mitra Mandal area. There were a few men, but they were more passive, with the exception of one man who attended the meeting and who we had been talking with before. With the help of our interpreter, the nature of the work and intent was highlighted and established with the community. This set the tone for the rest of the discussion, as the possible improvement scenarios were discussed,

and derived again from initial concerns. The meeting was successful, as those present validated the study to a large extent, and were in support of the possible scenarios of improvement. One of the women told us by the end of the meeting: "This was the most detailed study that has ever been in the area".

Finally, through formal meetings with interested parties working on the slum, we obtained firsthand information and useful secondary data. Among the organized meetings, were those with planners, architects, stakeholders, and experts such as Mr. Anil Patil (the town planner at the SRA office in Pune), Mrs. Savita Sonawane (President of NSDF in Pune and influential member of Mahila Milan & Society for the promotion of Area Resource Center (SPARC) NGO), Meera Bapat (Architect and urban researcher residing in Pune), Kedar Associates (Developer registered with SRA), Siddharth Anil Shirole (corporator of municipal ward 14), among others. Some presentations were also held to enrich our data gathering circle such as a presentation on Bhendi Bazaar upliftment project in Bombay and another on slum upgrading projects under BSUP (Basic Services for the Urban Poor) by architect Prasanna Desai.

INTERVIEWS:

Gurudatt

14 residents

One mandal leaders

Ganesh

Six residents

Shop owners

Five mandal leaders

Nav Nath (Leader: Sachin)

Residents

One rickshaw driver

One mndal leader

Sri Krishna (Leader: ?)

Four residents

OTHER ACTIVITIES:

- NSDF meeting
- Bhendi Bazaar Presentation
- Architect Presentation on BSUP schemes (Prasanna Desai)
- Mapping Activities
- Visits to completed and ongoing SRA schemes with Kedar associates
- Kedar Associates meeting (Pratap Nikam)
- Meeting with Meera Bapat
- Meeting with Mr. Anil Patil, the town planner at SRA office in Pune
- Meeting with SDI President

mage 1 Photo taken during a visit to a SRA constructio site vith the developer.





SITUATION ANALYSIS

Image 2 and 3
Photo and drawing of some of the first people to settle in Shirole Vasti

HISTORY AND FORMATION

Shirole Vasti slum started developing as a migrant settlement, as early as the 1940s. During this period, there was substantial migration from surrounding rural areas into Pune. This migration resulted in various new settlements appearing closer to the railway station, eastern Bhavani, and Sardar Bazaar areas. Some prominent villages from where migrants hailed from include, Nilanga, Chankaman and certain villages from the Konkan Coast.

Shirole Vasti received its name because of the land on which the slum developed was initially owned by the wealthy Shirole family of Pune. The land was a part of a larger parcel of land, which was then partitioned and given to the five Shirole siblings as inheritance.

The present Member of Parliament from Pune, Anil Shirole and his son Siddharth Anil Shirole, one of the elected representatives of municipal ward 14, are members of the same Shirole family. Both are affiliated of the Bharatiya Janata Party or the Indian People's Party, and this branch of the family has been

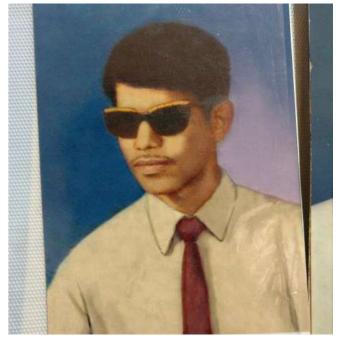
involved in politics for over 25 years. The father and son have their office set up adjacent to the slum in the same urban block.

In an interview with Siddharth Shirole, he mentioned that the Shirole Vasti settlement started through unauthorized occupation by migrant workers. Another theory, as per what one of the elder residents of the slum mentioned, is that one of the Shirole brothers was a drunk and the land was offered on rent to migrants, so he could earn money to supplement his drinking habit. Regardless of these theories, it can be understood that at one point of time, the inhabitants were in fact initially charged a rent of Rs. 5 per month (circa 1950s). The widow of one of the Shirole brothers now collects the rent from the area, currently a sum of Rs. 25 per month.

Other contradictions exist regarding the original land-use of the area. Some of the elder residents mention it being agricultural land initially, though this may not hold true when considering the colonial developments in and around the area before the 1940s.

It was not until 1984, that Shirole Vasti was declared as a slum under the 1971 Slum Act. Surveying, demarcation, rent control systems were subsequently introduced. It may be assumed that the original owners of the land paid property taxes, but it was not until the date of declaration that the residents paid the same to PMC for the built infrastructure on the land. The residents lobbied for better water supply, electricity and sanitation infrastructure through the years and have seen substantial improvements. The PMC provided better sanitation and water supply infrastructure, but a major part of the infrastructure costs was endured by the slum dwellers themselves. Currently, all dwellers possess necessary tax documents to prove their legitimate residences.





PHYSICAL INFRASTRUCTURE

In this section of the study, we have focused on describing the current situation of the building typology, water supply and sanitation as these were the main focus areas of the residents that we spoke to during the interviews.

HOUSING AND BUILDING TYPOLOGY

There is a variety of different sized houses in the area of Shirole Vasti. The smallest ones have a footprint of about 10 square meters, and most of them have two or three floors. In the densest part of the slum, we met with a family of seven that resided in one of these small houses.

To make most efficient use of the available space, the rooms are creatively used for more than one function or purpose by residents. The first or ground floor usually consists of a kitchen/living space and a small altar/sacred place, while the two upper floors functioned as bedrooms. This kind of division of functions and spaces is adopted by most of the residents

in their space-constrained houses, where the social space is on the ground floor, accessible through a door from the narrow streets outside.

The space right outside the houses is also commonly used for informal social meetings, washing dishes, drying clothes etc. Some of the residents keep pets, mostly small birds in cages such as parrots. Usually, the cages are hung near a small window of the house, or from the steel sections that support the overhanging upper floors. In some cases, there was an ingenious use of space under external staircases where bird cages are built.

Some of the houses located in the north-eastern part, near the dump yard, are more like sheds. They are made entirely out tin and have only one story, they also partly function as stores, workshops, etc. The houses facing Shirole road and the GH Patil Path, are mostly mixed use, with the first or ground floors being commercial, with small tea shops, grocery stores, snack stands, etc. The upper floors are typically

used as the residential spaces. The inner part of the settlement is almost entirely residential blocks, with the exception of the toilet blocks, and temple with a small community space above it.

The average family size in the settlement is around seven members. In most cases, the number of floors increase as the family size increases in the household. One of the community leaders, Mr. Ajit Jadhav, lives on the upper floor of the house with his family, while his brother's family lives on the ground floor.

The houses in the settlement are mostly made out of concrete or bricks with tin roofs. Many of the houses on the main path of the settlement have painted the exterior in bright enamel paints. The bright colors along with potted plants that swing from overhanging floors, and laundry that is left out to dry, make the street look very vibrant. The streets themselves were paved around the year 2000, with Kota stones that have shades of green and gray.

Most of the houses have a visible steel frame to support the cantilever of the second floor and the frames are used for a variety of other purposes, as previously mentioned. The condition of the houses are better than in many other informal areas or slums in the city, and it seems like people take good care of them as well as the streets and common spaces. Due to many of the washing activities of the residents taking place in the streets, the most public areas are rarely dirty or muddy. Most of the issues that were mentioned by the residents were linked to poor in-

frastructure such as piping, drains etc, along with the obvious lack of space.



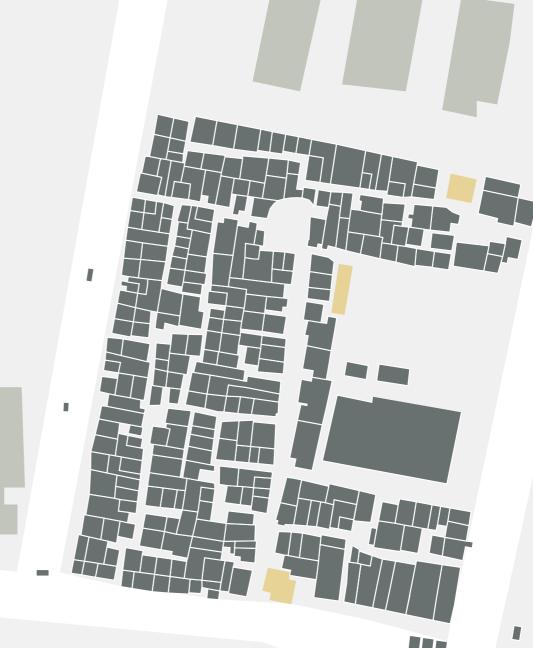


SHARED TOILET FACILITIES

The lack of toilets and their cleanliness were often mentioned by the residents when they were asked what they wanted to see improved in the settlement. Most of the residents have a private bathroom in their home, but very few have toilets. Mrs. Madhuri, a resident, mentioned that the lack of space (less than 10 sq.m.) meant the majority of the residents were ineligible to get government funding to build a toilet in their homes during the Swachh Bharat campaign.

The dwellers addressed the issue to PMC and to the various election candidates. Siddharth Shirole, during his campaign to run for corporator, promised to build toilets if he got their votes and he followed through with his promise. Mrs. Madhuri, told us that when she moved to the settlement there were open drains, no toilet facilities, only common water taps between the residents, and no individual household water supply. We did not get the exact date on when the services were provided to the settlement, but one would assume that it happened during the last 25 years, as that's how long she has been living there.

PMC then built four shared toilet facilities in the settlement, one located in the Shirole plot towards the north, one located close to the common area, and the biggest one which faces the Shirole road. They are painted in bright colors and marked with a "Swachh Bharat Mission" or "Clean India Initiative" logo. We learned that after building the toilet facilities, the government did not take responsibility in maintaining them. This led to a decrease in faith in the corporator, who built the toilets to get votes. We heard from the dwellers that a contractor was assigned by PMC to clean the toilets after each household in the settlement pays 75 rupees a month. However, there seems to be a general discontent among the people about the cleaning and maintenance of the toilets. Mr. Vinayak Rao Joshi, a resident, has informally taken up the responsibility of overseeing the daily cleaning of one of the community toilets. He decided to take matters into his own hands, as his house is located right in front of the toilet. As per him, the PMC had contracted a service provider from New Delhi for cleaning, with one of the conditions stipulated in the contract that cleaning would occur every day of the



25

Scale 1:750
The shared toilet facilities are marked in yellow

week, twice daily. But due to negligence on the side of the corporation and the contractor, the cleaning happens only occasionally, that is 3-4 times a week and only once in those days.

As each household has been provided with an individual water tap, almost every house has a bathroom with a tap and some buckets, but they are without showers and toilets. The settlement also includes 14 shared bathrooms for people who don't have their own because of a lack of space. They are all located in the Gurudutta Mandal, which is the biggest in area.

WATER SUPPLY AND DRAINS

The drains in the settlement were provided with the paving of the streets. The streets also have gentle gradients in most parts to guide the flow of storm-water to the drains. Earlier there had been problems with dirt and flooding, but the large Kota stone tiles makes it easier to keep the streets clean.

The intermittent inlets to the storm water drainages are covered with small cast iron grills. The residents we spoke to also said that sometimes slight flooding still happens during the monsoon season due to badly maintained and plugged pipelines. During one of our evening visits to the slum, just after one of PMC's pest control procedures, there was a tremendous amount of cockroaches coming out of these inlets and going into homes.

In the early 90s the settlement had only common water taps, in addition to a well which provided drinking water. Mr. Nandakumar, one of the residents, even told us that his father taught him to swim there in the 80s. After they got individual water taps, the well was in a state of neglect and the residents began to dump waste in it, until it was eventually sealed with a concrete slab over the opening.

Lack of water seems to be a problem in the settlement, one that has been addressed by the residents over the last 5 years. They only have water in the mornings, from approximately 08:00 to 12:00. There also seems to be a shortage of water during the summer, though people expressed that this was not a big issue for them. It also seemed that most people are generally unperturbed with sharing toilet facilities and that there are other issues such as a general lack of cleanliness and limitations of space that should be addressed more urgently.

ELECTRICITY AND LIGHTING

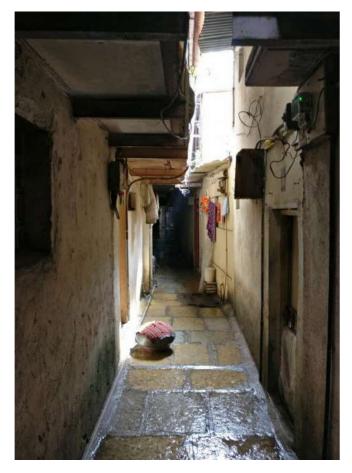
Electricity seems to be one of the most accessible services provided to the settlement. Most residents privately own and use electrical appliances such as refrigerators, telephones and televisions. The television-signals are usually serviced through dish-antennas. According to MASHAL's survey from 2011, all of the registered houses have electricity and almost all, with a few exceptions, have a TV antenna.



The biggest problem related to electricity is the lack of lighting in the streets and most public spaces of the settlement. This was another issue that was repeatedly addressed with high concern by different the residents we interviewed. The space used for community meeting, which is actually a parking lot owned by the Shirole family, has one single source of electrical light to light up the big space. The dump yard is also left dark. However, the main issue seems to be the darkness in the narrow lanes of the settlement. This is due to the fact that people have extended their houses upwards since there is a lack of space on ground level. Most of the houses also have a cantilever on the second floor, which makes even indirect day-light scarce.

The light that exists in these lanes at night, mostly comes from the houses that have their doors left open. Many of them have light sockets above their door but they are often left empty. When asked if it would be beneficial to have lighting in the streets and lanes, the general opinion was positive, although they had some reservations accounting for their fear of getting electrical shock through open wiring. Poor maintenance of electrical cords is a big problem in informal settlements, which makes situations like this dangerous.

From our observation and feedback form the residents, one of the most important aspects related to infrastructure was that of maintenance. Maintenance was even more of a concern than the provision of



newer infrastructure. This has caused the residents to informally manage and delegate maintenance work amongst themselves. These initiatives help to mask some of the flaws and shortcomings of the functionality of the local authorities tasked to maintain these public infrastructures. Another necessary aspect could be the need for quality design and technically correct construction, as construction in high density areas requires acute sensitivity and sensibilities from the designers and engineers.





SOCIAL ORGANIZATION

MANDALS

Despite being located in a small area, the slum subdivides into four "Mandals". The first division started approximately 50 years back, with the appearance of Ganesh Tarun Mandal, as a separation from Gurudatt Mandal – the latter is considered as the first one and it started about 55 years ago. Twenty years later, Nav Nath emerged in the southern part of the settlement. The last Mandal was Sri Krishna which is 20 years old, located in most of the Shirole's plot.

Settlements such as slums and squats, where people usually have similar origins and face similar problems, are likely to have a specific form of organization, or rely on "leaders" who can represent their interests. Shirole Vasti does not have one specific leader nor formal community organization. However, each Mandal has a group of men aging around 40 to 45, that people usually appeal to if they have any troubles or requests. They are called the Trust Committee, which is composed of President, Vice-President, Secretary, Treasurer, and other positions. It changes

every five years and is responsible for intermediating the relationship between the community needs and the respective corporators, as well as repairs in the area.

Mr. Sachin, a leader from Nav Nath, explained that all positions and hierarchies within the Mandal organization are informally chosen and the selection is based on proactivity. Participation is voluntary, but generally, people pass from being active in festivals to become one of the leaders. He added that the aim of having such internal division is to organize regular festivals. However, he also said there is a registration of the Mandals in PMC and there are more than 14,000 Mandals in Pune city.

Besides the Trust Committee, a group of young men (from 18 to 25 years old) is chosen every year to take care of the festivities physical preparation for each Mandal. The only disparity between the Mandals is related to personal questions of those groups of youngsters, and it happens mostly between Ganesh

and the three other Mandals. Perhaps it comes from certain ideological differences between both, such as gender power. Mrs. Madhuri Nitin Khilare told us the women from Ganesh Mandal, for example, are equally responsible for household's income.

As within the subdivisions, Mrs. Asha Magar explained there are not many fights, but when they happen, people try to solve them together. Apart from that, most of the dwellers that we interacted with do not see the internal division as a constraint.

Talking to Mr. Sopan Shinde, who arrived in the slum in 1966 with his parents, we came to know that the subdivision is merely a way of organization and not internal communities within Shirole Vasti. Despite saying he does not take any interest for the Mandal activities and events – he justified it claiming he actually focus on his job –, he also says there is good unity and understanding among people.

A young resident, Nilesh Tambet, has lived in the slum for 15 years and reinforced the idea that the Mandals have nothing to do with the unity of the people. He is not involved in any Mandal-related activity, but he frequents the festivities in all of them. According to another dweller, Mr. Nandakumar, when it comes to festivals, although each Mandal has its own way of organization and usually celebrate separately, they might also join another Mandal's event to celebrate.

A dweller, who works at the bank sector and used to be the Ganesh Mandal's treasurer, also explained that they might have the help of external sponsors for their festivities. Later, Mr. Anil Panchal confirmed such information, telling us that their Mandal's sponsor provides free meals (valued at Rs. 300) during the feasts. Mr. Sachin added that some politicians might also help in sponsoring, expecting for some electoral loyalty. An alternative to the usage of a sponsor is having money collected directly from the dwellers, under the responsibility of the Trust Committee.

TEMPLES

Mr. Anil Panchal used to be a trustee of the 11-member-committee and told us he was the one who put the Ganesh Mandal's temple idol on the narrow street at the western border of the slum, the GH Patil Path – also used as a venue for the religious festivities. The surrounding streets might be used for the same purposes, with temporary roof structures.

There are some more small temples throughout the settlement, built by the residents themselves. Mrs. Madhuri also clarified that each family worships their own God, but there is little space for their particular temples inside the houses, and they seem to share those temples built outside.

We could identify five of them, besides the main religious building in the middle of the settlement. The first one we visited was in the ground floor of two



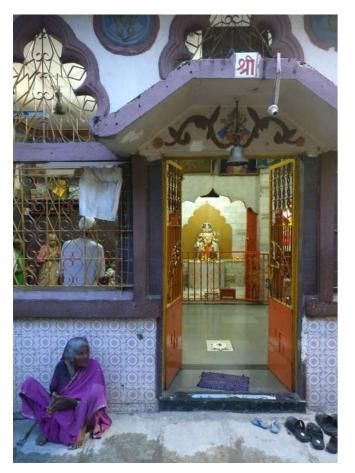




Image 4
Shirole Vasti's biggest temple on the main street of the settlement.

Image 5
The parking space used by the community as a social gathering place

transsexual's house, in front of the old well, at the intersection between Gurudatt, Ganesh Tarun and Sri Krishna Mandals. Then, there is the one mentioned above, on the street by Ganesh Mandal limits. Another two temples are located at the southern corners of the settlement, at Shirole Road. The last one we identified lies in the open space the people use to store material and to park motorcycles and auto rickshaws.

COMMON SPACES

Even though the overall aspect of the slum can be considered relatively clean, the open ground within the area seems to be designated as a dump yard and is the same place children have chosen to use as a playground. Other than that, they play along the GH Patil Path, among the movement of motor vehicle traffic. Across GH Patil Path, there is a plot leased to a travel agency and used as a parking area. Mrs. Madhuri told us the dwellers also use that space for informal meetings in the evenings — which is what influenced our choice on such venue for the community meeting. There are also some benches in the surroundings where we usually saw people gathering: some beside temples and some on Shirole Road, close to street vendors.

Image 6
GH Patil Path, with Diwali decorations

DWELLER'S LIKES AND DISLIKES ABOUT LIFE IN THE COMMUNITY

The main problems in Shirole Vasti that Mrs. Madhuri points out are related to the lack of a proper space to leave the children while parents go to work, and places to sell the food some women, who gather monthly to cook for the community, produce.

The factors she enjoys the most though are the proximity to relatives, the easy access to facilities, the central location of the settlement, the common festivals, and the overall sense of community. We often were told that everyone helps each other out if someone or a whole family is facing economic issues. For others, like Mr. Dharma Jaggannath Chavan, besides lack of space, he is also concerned about the cleanliness of the slum. Mrs. Asha Magar agrees with the problem of cleanliness, because "they are paying the taxes".

Mr. Nandakumar, on the other hand, wishes they had more open ground spaces for the children to play. He also misses being able to watch the sunrises and sunsets, since the slum started growing upwards.





Image 9 and 10
JASMIYA GOLANDAJ's most important places in her everyday life are her house, her best friend's house, her school, her tuition and the "playground" area outdoors. She studies in the 7th grade of Vidya Bhavan High School.



Mage 7 and 8 The dump yard used by the children in the area as a playground













mage 11 MRS. ASHA MAGAR learned from her parents not to have a bi amily if she could not he able to maintain it; she has heen living in tl lum for 45 years and works in the night shift of Prayag Hospital

Image 12 (top left)

IR. SOPAN SHINDE went to Shirole Vasti with his parents in 1966; his nephew works for Bosch, in Germany. (Top left)

Image 13 (middle left)

IR. NANDAKUMAR learned to swim in the slum's well; his father woved there in 1941. (Middle left)

Image 14 (bottom left

MR. DHARMA CHAVAN arrived in 1973 and is member of 6-people household; he does not have resources of livelihood. (Bottom left)

POLITICAL ORGANIZATION AND GOVERNANCE

To analyze the scenario of politics and governance in Shirole Vasti, it was necessary to consider what perceptions the residents have of the governing institutions and their elected representatives. We also studied the levels of participation in elections, policy making and planning (such as involvement with SRA schemes).

ELECTIONS AND PARTICIPATION

Through the 74th amendment of the constitution of India in 1992, local governments gained more autonomy from state and central governments. Democracy of Indian politics was distilled down to the municipal wards, and the marginalized social groups in urban areas were thus given an opportunity to interact with visible local governments. This sub-section deals with the residents' role in these local electoral wards, by analyzing the numbers of voter turnouts and possible political preferences of Shirole Vasti. The electoral wards and their structural definitions were changed by PMC prior to the 2017 elections.

This decreased the number of wards from 76 to 41, with each ward having four representatives. Each voter would vote for four candidates to fill each of the four available seats in the corporation. The elected representatives are known as 'Nagar Sevaks' or Corporators.

Shirole Vasti falls under municipal ward number 14 which is the "Deccan Gymkhana - Model Colony" ward. The following are the four elected representatives of the ward for the term of 2017-2019 (PMC website).

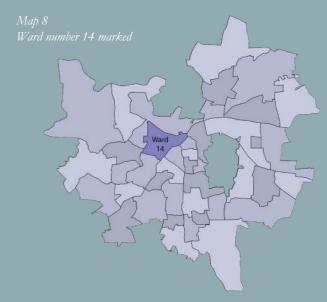
Of those interviewed in Shirole Vasti, all who were eligible to vote are active voters for local ward elections. Most of them have strong political opinions, and believe that it is important to exercise their right and power to select representatives. It is also worth noting that none of the social organizations in the slum rally for a common political opinion.

We noticed that the general understanding among those interviewed is that politicians promise certain specific services (such as more toilets, water supply, reduction in school fees for children, etc.) during their campaigns, and the vote is cast based on these promises. In principle, most of these services are categorized as basic services for the proper functioning of any settlement, yet they are still used in political manipulation.

The residents we interviewed may not see voting as an opportunity to choose representatives and participate in policy and decision at the local level. They tend to rely on clientelism in ward-level politics.

The participation in elections and representation of the community in local wards is crucial in understanding the social standing of the residents of Shirole Vasti within their locality. The following analyses are based on the ward elections of 2017. The data in table 3 suggests that the slum has a minor influence in the local municipal ward.

Although the above analyses may not yield a conclusion in terms of the quality of political participation, it does give an idea of how the fundamental act of political choice is perceived by the residents.



	Male	Female	Other	Total
Eligible voters in slum	379			
Eligible voters in ward				82905
Voters tunout in ward	22621			22615

Voter turnout in ward		
Max. possible votes from slum		
Max. possible votes from slum in turnout		

No. of votes cast for Siddhart Shirole







alias Anil Shirole

RESIDENTS' PERCEPTION OF ELECTED LEADERS

Democratic government means that the elected representatives and the governing political parties may keep changing after each term. This also means new sets of promises and solutions are offered to the voters to secure political support. In the case of Shirole Vasti, there are some complex relationships with certain representatives and political parties. These relationships are analyzed by looking at the people's perception of representatives, and vice-versa.

"If governance targets stakeholders in their roles and capacities to 'co-govern' with the government, one would assume most attention for elected politicians, the key movers and agents of democracy. Elected to lead the government, they are expected to act as representatives on the needs and priorities of the voters, ideally all citizens." – Joop De Wit

The many residents that we interviewed had mixed opinions on whether the corporators are 'useful' or 'useless'. Out of eight sample interviews, there were four residents under the impression that the corporator does not perform his duties, three under the impression that the corporator does, and one who initially answered that the corporator is not mindful of his duties, but immediately corrected himself upon prompting by his son.

Some residents mention that over the years, corporators have started to act in goodwill for the residents, and this has resulted in many changes at the

development level. These improvements include sanitation, street pavement & gullies, and water supply connections. Yet many residents have issues with the timely delivery of these services, as they believe they are made to wait for too long.

Mr. Panchal, a resident, mentioned that the local Corporator whose office in the same block as the slum, visits Shirole Vasti once every week. This contradicts with the corporator's own narrative of visiting once every two months or so. Besides which, Mr. Panchal also says that the accessibility to the corporator has increased over the years, and has made the corporators more accountable, contrary to another resident, Mrs. Madhuri. These differential views depict that residents have varying levels of trust placed on the elected representatives, and some of them interact with the corporator more than others.

Those of the slum who do not have their name on the electoral list, but live or work in the slum, channel their demands through those who have the right to vote and hence right of access, as mentioned by the workers at the ironing shop.

AN ELECTED LEADER'S PERCEPTION OF RESIDENTS

We had an interview with one of the abovementioned corporators, Siddharth Anil Shirole. His extended family has long-standing connections with the slum as mentioned in the History section of this report. It

was important to gather his viewpoints and present them in our report because of this connection.

Mr. Shirole believed that the greatest issues the residents faced are water, cleanliness, and garbage collection. While the first two issues were mentioned by the residents, the third was not prominently noted in any interview. He believes that one of the reasons why the slum isn't clean is because of the lack of hygiene by the majority of the population, who are Konkanis and hail from the Konkan coast of Maharashtra. There is general stigma in Marathi society that consider Konkanis unhygienic, and this could be because of their traditional occupations of fishing, and their diets of consuming fish as opposed to the vegetarianism observed in the Marathi culture.

Mr. Shirole is convinced that the residents need the SRA scheme and he believes that no injustice was done to the residents during the negotiations for the scheme. He mentioned that he does not intervene in the SRA process at Shirole Vasti unless any issues arise between those involved. He also mentions that no such issues have occurred so far. Although, at the same time, he contradicts himself by saying that the delay in the execution of the scheme could be because of a possible litigation between the developer and the residents.

RESIDENTS' PERCEPTIONS OF THE MUNICIPAL AUTHORITY

Since Shirole Vasti was officially declared a slum in 1984, there have been efforts to improve services and infrastructure by various individuals, agencies and organizations, including PMC.

There are many schemes by the local and national governments through which the infrastructure in regularized slums have been improved over the years. There have been improvements made in the conditions of water supply, drainage, sanitation, and electricity. This section deals with the residents' perceptions of such initiatives and schemes. This will help explain the ground realities of executed projects and their upkeep.

Over the years, the PMC has provided various basic services and infrastructure as mentioned in previous sections of the report. However, the interviewed residents complain on the lack of maintenance and upkeep to this infrastructure, especially the community toilets.

There is general awareness among the residents on the methods and functionality (or the lack of) of contracting that the PMC has employed to hire cleaning service providers. Some residents complain that the PMC has not taken any measures of significance to improve the cleanliness of the slum as a whole and in providing lighting to the dark streets within it. During the community meeting we organized, Mrs.

Madhuri mentioned, in regards to their demand for lighting, the corporation reverts with questions such as 'Where do we put the lights up?' and 'How do we do it?'.

In the case of water supply connections, Mrs. Asha Magar stressed that the PMC had only supplied them with the service, and that the residents themselves paid for the infrastructure costs. All the interviewed residents have been paying electricity bills, taxes for their property, and water regularly. These residents also have valid ration and identity cards.

The PMC offered incentives for the people to organize themselves into savings groups, under the Nagar Vasti Vikas Yojana or the City Slum Redevelopment Scheme. The incentives included free bicycles to school children, financing for entrepreneurial initiatives by residents, revolving funds given to women's self-help groups, as well as others. These were well received by the residents and did in fact promote more savings and self-help groups in the slum.

Another dynamic which adds to the relationship of the dwellers with the PMC is that one of the land plots on which the slum is situated in was seized by the PMC from the owner, Mr. Khone Patil, because of defaulting to pay taxes. Those residents who had their houses on the plot used to pay rent to Mr. Patil until the seizure. As per Mr. Pratap Nikam of Kedar Developers, the land was later acquired by a private developer through payment of a premium of 25%

of the value of the land. This new developer now wishes to implement the SRA scheme separately on this plot of land.

Based on our impressions, residents are not generally satisfied with the local governments. The residents also have high expectations for participatory development. They have a preference of the local government for service delivery, and as a result keep faith in the institution itself.

PARTICIPATION IN SLUM REHABILITATION AUTHORITY SCHEMES

The last sub-section deals with the participatory aspects pertaining to Slum Rehabilitation Authorities' policies and plans. Later sections in the report deal with the SRA schemes in a more detailed manner, but since the scheme offers possibilities of becoming a well conducted exercise in participatory planning there was a requirement for an analysis through the lens of politics, governance, and participation.

The Slum Rehabilitation Authority's 'SRA Scheme' would be the largest government policy oriented development to take place in Shirole Vasti. The initial processes under the scheme involves creating awareness, educating and gathering consensus among the people for the development to take place. The SRA scheme offers great potential in being an opportunity to exercise participatory planning rights for marginalized groups in attaining a better quality of life, such as in Shirole Vasti.

Arnstein's ladder of participation specifies eight different levels of participation. Although in reality, there could be more levels which are further detailed and have minute variations. This abstraction helps in understanding the scenarios conceptually.

Degree of Participation of the residents of the slum in SRA scheme:

3. Informing: As in the case seen with the meetings held with the community by the SRA, land owners and private developers involved in the project. Some of the interviewed residents mentioned being a part of those meetings, but also that these kinds of meetings were called over 10 times in over 35 years.

When we asked certain questions regarding the delay in decisions and why there have been so many meetings through the years, the residents did not have a concrete answer, but wondered the same. Some members do have theories as to why the process is perpetually delayed, but no proof for the validity of the theories. It can be assumed that the meetings were rarely about questions of the residents being answered but rather about informing them of minute progresses in the implementation of the scheme. There have also been claims of cases of injustice and malpractice from the developer's side. Mr. Santosh Ganjekan, a resident of the slum, said that Kedar Developers had forged signatures to show false consensus of 95% among the residents.



Figure 1

Arnstein's Ladde

of participation

DEGREES OF PARTICIPATION:

- Manipulation: The lowest rung describes the degree of power where there is absolutely no participation, and the citizens are considered as unimportant advisors by the power-holders.
- Therapy: The dishonesty and arrogance of the power-holders lead them to resort to group-the rapy of participants, and disguise it in the form of meetings for citizen participation.
- 3. Informing: The power-holders inform citizens o their rights and powers, where the power-holder have all the say, and the participants are mere listeners.
- 4. Consultation: Participants are invited to sugges and share concerns, which are then not conside red by the non-assuring power-holders.
- 5. Placation: This rung describes a degree of powe where citizens start gaining influence, though the re is still a presence of tokenism.
- Partnership: There occurs red-distribution of powers through negotiations between citizens and power-holders.
- Delegated Power: Negotiations happen between the participants and authorities, with high involvement of the citizens in part of the decision making, in tandem with the authorities.
- Citizen Control: The highest rung describes the degree of power where participants can comple tely govern planning.

4. Consultation: As per the policy, the SRA scheme required a consensus of at least 70% from the residents to be initiated in a community. This was to be documented by the developer on paper before commencement of any kind of planning work. Almost all of those interviewed from the slum had mentioned to having given their consensus on multiple occasions for being rehabilitated to new apartments.

It can be understood that the residents were mere statistic abstractions that were required to carry forward with pre-determined plans. The consensus of the scheme was recorded in the form of a yes/no, where if one were to choose no, it was unclear as to whether there was an alternative.

Mr. Sandeep Mahajan, who is involved with other SRA schemes, showed in his presentations that the communities are consulted on the design aspects of the schematic plans. However, he also mentioned that the residents have 'unrealistic' ideas that cannot be incorporated into the final plans. This can be seen in the case where Kedar developers had made floor plans for a possible future housing block, and most of the interviewed residents of Shirole Vasti were not aware of it.

Mrs. Salita Sonawane of the National Slum Dwellers Federation described the functioning of SRA in Pune as good in principle, but bad in practice. She explained that the residents were never part of the

design and planning as opposed to what happened in Mumbai. SPARC, which is the preferred NGO facilitator by the SRA in Mumbai, promotes resident involvement in planning and hence projects are well received by all involved parties. It was also mentioned that the residents of the slum were not educated or made aware of what the complexities the future holds when residing in apartment complexes.

It can be understood here, as per the placement of these scenarios on the ladder, that the level of participation is nothing more than Tokenism. This could be a result of the SRA's neglect in the way participatory processes are conducted, and the delegation of duties, to gather consent, to private developers. This would be dealt in detail in the section regarding SRA Scheme of the report.

Image 15

A billboard showing the various members of the Indian National Congress party in the locality of the slum. One of the members shown, Mr. Ajit, is a resident of the slum and active in local ward politics.





Image 16

A photo taken during the community meeting organized by us. The residents are discussing with us the various details we gathered regarding the SRA scheme and land divisions.

ECONOMY AND AMENITIES

Being a small slum pocket in a big city, Shirole Vasti's economic scenario is a complex one, with both local networks and capital, as well as citywide job markets and dependencies. To understand what makes up the economic capital of the people in the slum, we have studied the relationship between the settlement and the rest of the city, the levels of education, and types of labor or occupations people are engaged in. Besides which we studied the slums' various self-help groups and their saving schemes initiatives.

FACILITIES AND LARGER CONTEXT

Located in the north-western part of the central area of Pune, the Shirole Vasti slum is close to many of the city's colleges and educational institutions. It is also located in close proximity to all other necessary facilities such as hospitals, markets, shops, and points of public transport. In the map on the next page, all facilities that were mentioned by the interviewed dwellers are marked. Being centrally located also means that people have easy access to a many

types of income-generating activities. Closeness to facilities, and ease of access to the labor market are two of the main items people mentioned when asked about what they appreciated about the area and locality. This is also one of the main reasons why families that could probably afford a bigger apartment, usually in a less central locations of the city, chose to stay in the slum. At the same time, these are the causes for the high values of land in this area, attracting potential developers and investors. Further elaboration on this will be found in the next part of the analysis.

Since the slum is a clearly defined neighborhood and a close-knit community, we found it economically well integrated with the rest of the city. The size of the settlement is likely to be an important reason for this; the small area, number of dwellers and general homogeneity in economic class of the residents would imply that the neighborhood is unable to function as its own unit. The inhabitants use many facilities that the city has to offer. In return, the slum offers resources to the rest of the city in the form of labor



and necessary services to complement the lifestyles of the higher economic classes. In a predominant middle-class to upper middle-class mixed-use area, the settlement, its people and the services they render occupies a niche that is mostly unchallenged. In addition, the shops and businesses in the slum, ranging mostly from grocery, vegetables, dry cleaning, and snacks and tea shops, are important parts of the commercial facilities in the extended neighborhood. According to the workers of an ironing shop, located in the slum, their customers come from an area within a radius of about 2,5 km.

In various interviews including one with a woman from Sri Krishna Mandal, most residents are mentioned to be dependent on private healthcare offered by nearby hospitals such as 'Manohar Joshi Memorial Hospital' and 'Deendayal Memorial Hospital'. These are privately owned and operated, charge relatively high consultation fee as opposed to public healthcare, and stock relatively expensive drug brands in the in-house pharmacies. The consultation fee for a general practitioner involved in private healthcare ranges between Rs. 350 to Rs. 600.

This dependence is created due to the nearest government hospital, which is 4,0 KM, being less accessible through the nearby roads that usually have congested traffic. Other reasons may also include longer waiting lines in government operated hospitals and perception of quality of healthcare.

Most of the residents mentioned to have been incurring some monthly costs, that range from property taxes, water taxes, rent on land, among other miscellaneous costs. A limited assumption, based on various interviews, would imply the community spends at least Rs. 150 to Rs. 200 a month for such expenses.

LABOR AND EDUCATION

Based on the interviews, we understood that most of the men in the area were engaged in semi-skilled and skilled labor. They typically worked in small shops, as tailors, in repair workshops, as carpenters, or watchmen. Some owned their own shops, and some worked in offices. There are also some who belong to sectors such as banking and education. We also heard talks of a lawyer and a doctor living in the settlement, which we don't find unlikely as the location of the neighborhood is favorable. However, we never got a first-hand account of this.

When we visited the slum during the workday, we mostly met women and children. Most of the women we interviewed were not employed and were engaged in housework and childcare. However, some of the women worked as maids for nearby families, and some worked in shops, messes, or other types of semiskilled work. According to Mrs. Madhuri, a home-maker resident of the slum, there was a wish among the women in the community for a place where they could arrange a community kindergarten and a place for small cottage industries where they could produce food items such as pickles, pappads

and snacks. One woman could watch several kids, and thereby make the other women free to work in wage labor. Giving women the opportunity to engage in income-generating activities can be one of the most effective ways of increasing a household's income (Moser, 1998). However, the size of the houses and the lack of access to suitable community spaces, don't allow most of the women to leave their kids in the care of others.

We observed a tendency towards more professional work among the younger generations. Many of the older residents we talked to spoke proudly of their children working in offices, as police officers, in hospitals, as engineers, or in other professional work. We also interviewed several young people who were studying at nearby colleges. This reinforced the findings in MASHAL's surveys from 2011, where the average level of education for people above 40 is 4.4 years. For people between 18 and 30 the average is 10.5 years. These findings seem to denote that the gender gap in education level is decreasing. The average number of years in education is almost the same for women and men in the younger age groups. Based on our interactions, we believe that more women in younger age-groups tend to be involved in income-generating work than those of older age-groups. The possible reasoning being the support system offered by older female relatives in the neighborhood, in caring for the children of the households, therefore liberating the younger women to an extent where they may devote their time to other activities in the



Image 17
The various shops that line the streets are where many of the dwellers have their workplace

Image 18
A shop in the slum selling decorations for the celebration of Diwali



day. However, this was difficult to assess in a quantitative way with the data we have available.

Most children in the settlement go to public schools nearby, the biggest being Modern High School, but some also attend private schools such as Apte School and Andhra School. The majority of children go to Marathi schools, while others go to English schools. In one of the families we interviewed it was a clear priority to send the children to Vidya Bhavan High School and Junior College, a Christian private school. Because they were attending this school, the family's children were fluent in English, even the son who was only about 7 years old. The other children we spoke to in the settlement, who attended the public schools, were not as comfortable speaking English, or they didn't know the language at all. The children of the families who can afford the private school fees, therefore have an advantage in their further studies. Their skills (human capital) will be higher than that of the others, and so will their social capital as their social network tends to exceed the limits of the neighborhood.

SHOPS AND BUSINESSES

Along most of the peripheries of the slum, were a variety of shops or businesses. There were several laundry and tailoring businesses, mini markets and grocery stores, snack and tea shops, print and stationery shops, mechanical and automobile workshops, barbers and several other shops selling everything

from eggs and flour to electronics and eye glasses. We registered a total 30 permanent businesses in the settlement. In addition, there were also several semi-permanent street vendors operating on the south pavement of Shirole Road. They were selling fruit, vegetables, chai, and street food. We also noticed a tailor who operated from within a house in the interiors of the slum but lived elsewhere. One of our group members had some minor clothes repairs done for free by this tailor. We could not schedule an interview with the owner, as he was busy with work in the festival seasons.

After speaking with the shopkeepers, we discovered that a majority own their shops. Many of them also live above or behind their shops, making a lot of the buildings mixed in terms of use (showed as green in the map). Some lived inside the settlement in another house, and in some cases, people had their work in the settlement, but lived elsewhere. There were also a minority who rented their shops from house-owners. The owner had in many of these cases moved out of the settlement, but rented out their house and commercial space instead of selling it. Because of the central city location of the settlement, it is in many cases more profitable to lease the space than to sell it. Since a majority of the residents and owners are aware of the slum being marked for rehabilitation, it is possible that they are in anticipation of added value to their property. However, we never had a chance to speak about this directly with any of the owners that were leasing because they lived elsewhere.



The two migrant workers (on the left) from that state of Uttar Pradesh, who work in the ironing shop in the slum and live in the upper floor. Mr. Anil Panchal (on the right), a permanent resident of the slum, and a friend of the workers.

SAVING SCHEMES

The women, and some of the men of the settlement, had organized themselves into small sized, self-help groups, and these groups initiated savings schemes. We learned from the interviews, that there were about ten groups running such schemes at the time. These initiatives are promoted by the PMC through incentives for the self-help groups (such as scholarships for their children and subsidies). The municipality's role in the saving schemes is further discussed in sections under politics and governance

From our understanding, the women themselves started organizing saving groups, or 'Bachatgars'. The usual size of these groups were 10 to 15 women. The monthly contributions to the fund are deposited into a bank account, which was opened in the name of three nominated members of the group. The account is usually held for 5 years, after which the participants receive their fair share of the saved amount with interest. Intermediate withdrawals can also be done, but would have to be paid back with interest by the withdrawer. There is a minimum amount that must be contributed each month by every participant, and the amount increases each year. At the time of our study it was Rs. 100. This model is similar to the one used by Mahila Milan (meaning "women together"), an Indian organization working with empowering women for community development. However, Mahila Milan has never been involved in organizing the schemes in Shirole Vasti. There also exists some separate savings schemes started by

self-help groups run by men, but the information we gathered on these is limited.

Some of the saving schemes have proven to be very successful. In one case, four women used their saved funds to open a mess, creating a job for themselves and thereby increasing their future financial capital. In another case however, there was a woman that took a loan and was unable to pay it back. As a result, the savings group was prematurely disbanded.

When well managed and organized, the saving schemes are an effective way for people to improve their livelihoods. These schemes allow them to collaboratively use the capital they have access to, to accumulate new capital. At the same time, there are those who will not benefit from these saving schemes as they live on a hand to mouth subsistence and cannot afford the minimum monthly contribution. This is where the model in Shirole Vasti slightly differs from those initiated by Mahila Milan and SPARC. From the meeting we had with Jockin Arputham, the current president Slum Dwellers International (SDI), we understood that in their saving schemes there are no minimum requirement when it comes to deposits. People contribute with whatever amount they can manage. This enables even the poorest in the community to participate in and benefit from the schemes.



Image 20 Typical houses in Shirole Vasti.

Image 21
New appartment building constructed through
the SRA scheme



SRA-SCHEME AND FUTURE DEVELOPMENT

We have explained in our introduction the general idea of the SRA scheme and how the authority was established in 2005. Before we move into our discussion, it is important to remember the importance of this scheme since it is now the first option given to Shirole Vasti dwellers to get permanent housing on the same land they occupy.

In this part of our analysis, we present the details of the SRA scheme and discuss its dynamics in the context of Shirole Vasti. We try to look at the special technicalities that challenge the implementation of the scheme in this settlement, and we focus on the dwellers' impressions, specifically what they think of and what they expect from such a scheme.

SRA SCHEME IN DETAILS

The latest SRA bylaws were published in 2014 and they explain all details about the rehabilitation process. Based on an interview we had with Mr. Anil Patil, we provide a summary of the basic structure of

the SRA scheme:

- A slum is considered eligible for SRA scheme if it was declared under 1971 Act and listed in the census before 1st January 2000
- A house is considered eligible for rehabilitation under SRA scheme if it was registered in the slum before 1st January 2000. Every eligible house will get a new unit regardless of the family size.
- A developer can initiate an SRA scheme after getting 70% consent from eligible slum dwellers. Technically, the owner of the eligible house, who is the head of the family on the government-issued ration card, is the one who signs the consent. Usually, it takes a lot of time to start the construction process even after getting the 70% consent because families that live in the same house and wish to be considered eligible for more than one housing unit in the new scheme may resort to litigation.
- Developers are given an increased Floor Space Index (FSI) which allows for more building development rights on the land that the slum oc-

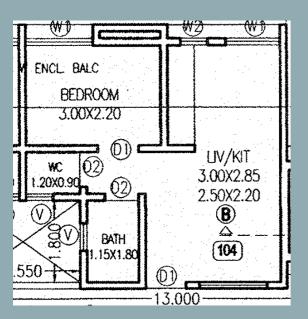


Figure 2 A standarized SRA appartmen

Image 22
Interior of an SRA appartment



cupied. However, if the area of the land is not enough to be divided between the slum rehabilitation component and the developer's sale component (i.e. if the capacity of 360 tenements per ha is not enough for that), the developer gets his FSI relaxations in the form of Transferable Development Rights (TDR) which he can sell in the market. The TDR is transferred into additional loaded FSI in other building zones in the city. Slum TDR is special because it can generate an additional FSI of 0.6, while regular TDR can only generate 0.4. The amount of TDR generated depends on the rehab-to-sale ratio. For example, in Zone A where Shirole Vasti slum exists, the rehab-to-sale ratio is 1:1.5. This means that if the developer builds 1 sqm in the rehabilitation project, he obtains 1.5 sqm as TDR which can subsequently be sold and added to the existing FSI in other zones.

- SRA schemes are in-situ projects, unless the slum area is conflicting with the zoning regulations of the city development plan, or if the slum is located in at-risk locations such as steep hills, flood-prone lands or any other naturally vulnerable areas. When in-situ, the dwellers are shifted into a transit camp for a period of approximately two years during the construction process. Transit camps are owned by Maharashtra Housing and Area Development Authority (MHADA) and they are taken on rent by the developer.
- The floor area of the new units is 25 sqm. Every unit will have its own bathroom, kitchen, living

room, and bedroom. Each unit is provided with a parking space for one two-wheeler and two cycles.

- In the case of shops, they would be rehabilitated into the new development with an area that is equal to the existing shop or 25 sqm., whichever is lower.
- During construction, the developer gets staged development rights, i.e. 35% after the slum is emptied and land becomes plain, 45% after structuring, 10% after completion, 10% after registration. This provides an incentive for developers to complete projects as fast as possible.
- Slum dwellers get rehabilitated units for free. After ten years of ownership, they are free to sell them under the condition that they pay a premium that is equal to 25% of the market price of the unit. It has been said that some of dwellers informally rent the new houses they get and go to find other places to live in the city.
- An area of 12 sqm shall be constructed for the cooperative housing society that will manage the new building's issues. Schemes with an area of more than 10,000 sqm shall be provided with one Balwadi (Indian Pre-School), one social center and one women's welfare center with a floor area of 25 sqm each.
- An amount of Rs. 20000 per tenement should be deposited by the developer towards the maintenance corpus fund. The cooperative housing society is responsible for the maintenance of the new scheme.

SRA SCHEME IN SHIROLE VASTI SLUM

LAND DYNAMICS:

Shirole Vasti slum exists in an area that has expensive real estate prices. We heard from a community leader that one square feet in the slum is worth more than Rs. 10000. It is not a surprise that most slum rehabilitation projects are targeting slums that exist on expensive lands in the city and forgetting about other slums that exist on the fringes, even if they are in worse conditions. In our meeting with Meera Bapat, she mentioned that developers are interested in releasing these parts of land to make more profit. MASHAL's 2011 survey classifies Shirole Vasti as a single slum pocket that has private ownership, exists in a residential zone, and has a "developer involved" in the SRA scheme.

However, as we can see in the map below, technically, Shirole Vasti slum (marked in red) cannot be considered as "one slum pocket". The slum is located on seven different plots of land that have different ownerships, different zoning, and different statuses regarding SRA scheme. As it may be observed from the above table, implementing the SRA scheme within this set up of land ownership may have a lot of complications.

Firstly, the fact that there are 7 plots of land allows for the implementation of SRA schemes on each plot separately. In such a case, houses of the slum that are not rehabilitated will be eclipsed by the new

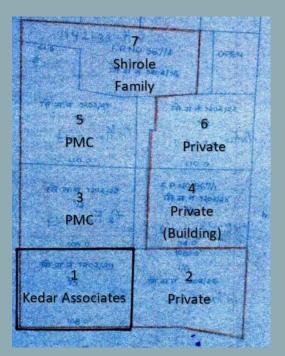


Image 23
Original drawing showing the plots and owners.

Table !

PLOT NR	OWNERSHIP	ZONING	SRA SCHEME
1	Kedar Associate	Residential	Developer
	Developer		involved
2	Sudhil Mandke	Residential	
	PMC	Residential	Developer
			involved
	Sudhil Mandke	Residential (exis-	
		ting building)	
5	PMC	Residential	Developer
			involved
6	Sudhil Mandke	Residential	
	Shirole Family	Open Space	

neighboring high-rise blocks.

In fact, separate rehabilitation plans for plots 1, 3 and 5 are already in the process as seen from the table. On plot 1, Kedar Associates Development Company initiated a project, but progress has stalled due to problems between them and the dwellers. The head of the trust committee of Navnath Mandal informed us that Kedar faked the signatures of the dwellers to get a 70% consent. On the other hand, Mr. Pratap Nikam, of Kedar, denied that his company forged signatures and said that the dwellers had given him 96.5% consent, besides which they trust him on account of his previous experiences in slum redevelopment.

On plots 3 and 5, we were told by Mr. Pratap that there is another developer who is involved in the SRA process, but the dwellers do not trust him. He also said that Kedar is ready to compensate for all expenses incurred to this second developer and buy both plots to make a composite scheme including plot 1. Besides which, both developers are not willing to start the projects immediately, because they are lobbying for an increase in FSI and rehab-to-sale ratio. These rates were changed recently in the new draft of SRA bylaws (2014). In the area where Shirole Vasti exists, the extra FSI granted to the developers was decreased from 3 to 2.5 and rehab-to-sale ratio was decreased from 1:2 to 1:1.5.

Secondly, plot 7 exists on a land that is considered as

an open space in the city development plan (revised in 2017). In this case, if the zoning was not changed, the dwellers on this plot will have to join a composite rehabilitation scheme with other plots or otherwise they will not be able to secure an in-situ rehabilitation.

Thirdly, the part of the slum that exists on plot 4 is very small since there is already an established building there. This makes it impossible to have a separate SRA scheme on this land. Therefore, similar to what might happen with those who live on Plot 7, the dwellers who live on this plot will have to join a rehabilitation scheme with other plots or they will not be able to secure in-situ rehabilitation. SRA bylaws mention that slum dwellers have the right for in-situ rehabilitation unless there is contradiction with the zoning and building regulations, but here we have an example where in-situ rehabilitation may not be possible, not because of any regulation, but because of the complicated nature of land division. Fourthly, on the southern part of plot 6, there are houses that exist outside the red line, which presumably marks the area of slum that was declared in 1984. The residents of these houses will not be rehabilitated if the SRA does not reconsider the area of declaration.

THE PROBLEM OF ELIGIBILITY

As mentioned in the section dealing with history, most families in Shirole Vasti live in houses that were built a few decades ago (in some cases they inherited them from previous generations), which implies that these houses were registered before 1st January 2000, and therefore, are eligible to be rehabilitated in case an SRA scheme was implemented.

In some cases, residents have built and registered houses after 2000. These residents are the children of older-generation of dwellers. In the situation with plot 1, we were told by Mr. Pratap Nikam that according to his plan, out of 45 existing houses, 43 are eligible. When we asked him about those ineligible, he said that "their parents have eligible houses", meaning that they are on the ration card of a related family that is eligible for a free house and would have to share a single unit after the rehabilitation.

However, the problem of eligibility is not only about whether the houses themselves are eligible or not, it is also about the fact that in some eligible houses, multiple families live together, but not every one of them is considered eligible for a separate house. As mentioned previously, the SRA scheme offers one new housing unit for every eligible house regardless of the family size. However, families that live in the same house demand a separate apartment for each in the new scheme. Moreover, some adult men also demand separate houses since they are planning for marriage.

There were 207 hutments and around 250 families in Shirole Vasti, and the average family size was 7 members (MASHAL, 2011). We can see that not

only do many families live in the same house, but also the size of one family is big, and thus the 25 sqm houses offered under SRA are not enough. This was the case in 2011 and in six years the scenarios would have changed, considering marriages, families' growth, and newer adult children starting to dream about having their own houses. It would be considered unfair if these dwellers were expected to agree on a scheme that does not give them the number of apartments they need. At the same time, the new scheme would also deprive them of the ability to do incremental housing, something which is possible in the current scenario.

RENTS AND OWNERSHIP

It is legally allowed to buy, sell and rent houses in slums in Pune. Out of 207 houses in Shirole Vasti, 5 were rented (MASHAL, 2011). While we do not have accurate data about the current situation, we were told in some interviews that the number of tenants is still less than those who own their houses. Among the tenants we met, one of them told us that he has no say in what happens regarding the SRA scheme and they will have to find houses outside the slum if it was rehabilitated.

Most of those who rent out houses inside the slum, were once dwellers of Shirole Vasti who maintained ownership, regardless of having moved out. However, not everyone who is in possession of housing elsewhere, rent out their houses in the slum, nor do

they live outside the settlement. Another point would be that the number of rented houses, which are less, do not reflect on the number of those who own houses elsewhere. In fact, it was surprising to know from one of the community leaders that 40% of the people he represents have houses outside the slum. He also mentioned, that even though these people have houses outside, they are still getting free apartments in the new scheme. When we met with architect Meera Bapat, she mentioned that SRA bylaws do not provide free rehabilitated units for those who already own ones outside the slum. Nevertheless, this is a common situation where these residents through non-transparency of their owned assets, still manage to obtain free units as a part of the SRA scheme.

Here we shed the light on an issue that may raise conflict between the dwellers. While some of them refuse the SRA scheme because they want more apartments for families that live together in the same house, it seems that quite a good proportion of them have houses outside the slum and yet will get free houses in case an SRA scheme was implemented. Issues with Consent.

"Before giving consent to the developer, we gather everyone and ask why they want or do not want to move into a new block. I decide on the project with the developer and then we get the consent from the dwellers. We try as much as we can to convince those who do not want, and we tell them: "please, please sign"

"We try to use hygiene as an excuse to convince the dwellers

that moving is a good idea", "We try to tell them that if they live in new apartments, the social stigma about living in a slum will be gone"

These were some responses from a community leader and one of the developers when we asked them about how they manage to get the 70% consent from the dwellers. We can see that they focus on getting the consent regardless of how they approach the dwellers, providing them with inaccurate expectations.

The consent process can also be exclusive since it does not have any participatory framework and only requires the signatures house-owners. It is mostly men who are the owners of houses in Shirole Vasti (MASHAL, 2011). This mostly results in excluding other household members, especially women, from the decision-making process and producing schemes that lack their contribution.

Women's contribution is of high importance because they have different interests and are aware of some problems which men are not aware of. In Shirole Vasti, women have more vested interest in having indoor social spaces in the SRA scheme, and if they do not have a decisive role in the consent process, their voice will not be expressed in the design. We observed that women sit around the tiny paths between the houses or hang out in the hidden side of the western road while men socialize outdoors in front of the shops and beside the sidewalks. Moreover,



women are more aware of what their children need, especially when it comes to having playgrounds and places to study. They take care of the children while men spend most of their days at work. Therefore, women are the ones who can make the SRA scheme more children and comminity friendly.

Dwellers' General Perceptions about SRA Scheme When we try to understand the dwellers' perceptions about SRA schemes, we notice two dominant narratives. These narratives are based on individual stories and opinions of the dwellers.

On the one hand, many of them do not refuse the core idea of the SRA scheme, which is to move into new high rise building instead of keeping the current situation as it is. They are open to discuss the SRA scheme since it can grant them new permanent houses (with an area of 25 sqm) in the same place where they live currently (with around 10 sqm). For example, we heard: "We support SRA scheme", "I agreed to SRA scheme", "We believe that this is the biggest need and it is going to happen in the coming two years", "I have no issue with current area but would love to see it improved by SRA", "the new shops will be better", "PMC will have offices and we will have more customers", "SRA should happen", "I want to live in a better place", etc.

On the other hand, the dwellers share a common frustration due to the delays that happen when they discuss the SRA scheme. For example, we heard: "we

were told by the corporator that new houses will be built next month but nothing happened", "we agreed on an SRA scheme in a meeting and then nothing happened", "meetings have been happening for years and none is taking the responsibility", "we gave the consent but did not see anything", "we haven't heard anything new about the development", "we have been promised a new apartment and have had meetings at least 10 times", "Everyone supports SRA scheme but no one does anything"," SRA should happen, but corruption impedes it", etc. In fact, this frustration comes from continually giving false promises to the dwellers and from the lack of planning and organization when the scheme is discussed. All of this led many of the dwellers to lose trust in authorities, be it SRA, developers, etc.

Between these two narratives of acceptance and frustration, the dwellers share common concerns about the SRA scheme, some of which come from stories they heard from their fellow previous slum dwellers who moved to new SRA schemes:

- Dwellers are not very motivated to pay more taxes. One community leader told us that they pay now a property tax of 250 INR a year and it will be six times higher if they get new units under the SRA scheme. Dwellers will also have to pay more for water supply since water meters will be installed. Even electricity bills will be higher due to the need for water pumps, and lifts.
- Problems with maintenance, especially lift maintenance, are demotivating dwellers from accep-

ting the SRA scheme. One dweller mentioned to us: "If there is a lift, we don't mind moving to a high-rise building. However, in other SRA schemes, lifts do not work, buildings are dirty and there is no water supply in upper floors. The elderlies have trouble climbing up. In one of the existing schemes, old people spend their days in the parking area because of that".

- Dwellers refuse the idea of staying in a transit camp during the construction process and prefer monthly payments which they can use to rent houses in the area around.
- Shop owners, when we interviewed them, showed a strong interest in the SRA scheme. This is what some of them told us: "PMC will have its own quota in the new building and there will be new offices and more tenants which will definitely bring more customers", "my shop will be more visible because the road will widen", "if they give me better services, I have no problem paying more taxes".

To conclude, we believe that it is important to realize that Shirole Vasti dwellers have different needs and interests regarding the SRA scheme. To be able to take all their concerns into consideration, micromanagement and in-depth discussions are needed if there is a will to produce a well-designed and inclusive SRA scheme. The dwellers are doubtful about the SRA process, and the stories they hear about the management and maintenance of infrastructure in completed SRA schemes is not motivating them.

However, since they have a strong sense of tenure security, they are not afraid of raising their concerns. One of them told us: "We are educated people, we have read all the details about SRA and no one can deceive us". The dwellers have also improved their livelihood conditions. Their houses and infrastructure do not need crucial changes at the moment. Thus, they are not worried about whether they should improve the current houses or wait until they get new apartments in the SRA scheme. They are not in this situation and thus they are not in a rush to agree on a scheme that they do not trust completely.



ACTION PROPOSAL GROUP 1

INTRODUCTION

After studying and getting to know the Shirole Vasti slum for over a month, we have seen a community with qualities, challenges and possibilities. There are unrealized potential, unfortunate development plans, pressing issues and qualities that should be preserved. All changes that will happen in the area will affect the life of its inhabitants, their assets and their livelihood. We have looked at both short term and long term changes that can be done, trying to take all assets into consideration in order to secure a development that will improve the livelihood, and not only the physical surroundings, of the people in the slum.

Our proposal is divided into three parts. First, we have some suggestions for improvements that can be implemented with immediate effect, improving the community spaces already available for the people in the settlement. Secondly, we wanted to address the ongoing negotiations concerning the SRA development. There are several aspects of the SRA-policies that we find dysfunctional, and therefore suggest changing. Some changes are specific for the Shiro-

le Vasti, other are applicable to any SRA project. In addition to suggesting changes in the policies, we suggest changes in the physical design and implementation of the schemes that address problems we saw when visiting a finished SRA project. For this we present two different scenarios. One: redeveloping the area, as what is being done today, but with new design principles and having a more participatory process. Two: introducing a semi-self-help house upgrading scheme, improving the already existing built environment in the slum.

PRESENT SITUATION: WHAT CAN BE DONE NOW?

TOILETS

Some of the dwellers we interviewed told us about their concern with cleanliness within the settlement and the fact that they pay 75 rupees for a private company to clean the public toilets. Since there are some people with no livelihood resources, we came up with the idea of community itself being in charge of their own cleaning scheme, where some of the residents would receive the same amount of money and would be responsible for the maintenance of the toilets. However, when we presented this idea during the community meeting at the end of our stay in Pune, people did not find it applicable.

The suggestion takes into account decreasing the dependency and expenses with external agents, while bringing some responsibilities to the community itself. This measure would generate a new economy in Shirole Vasti and keep the money running within the settlement, for those who need subsistence means. Another justification lies in the lack of constancy of the service provided by the private company. We

were told it is supposed to clean the toilets twice a day but only comes 15 times a month.

The main reason for the disapproval of the idea might have been due to the fact that cleaning-like tasks used to be executed by the lowest caste – the "untouchables" – and people may still have some prejudice against duties previously related to inferiority. If such mentality was left aside and the dwellers could understand the whole area as if it was their own house, they would be able to take care of the public toilets thinking they are not only executing a work but also looking after the health and well-being of their neighborhood and friends.

When Clean India Program, the institution responsible for the maintenance of the public toilets, realized they were not able to meet the cleaning schedule they had promised to the community, they could have started a campaign to raise an ownership awareness among the residents and combat the taboo related to the activity.



Image 24
One of the public toilet blocks in the slum.

Image 25 (top) https://goo.gl/images/8ZKh8

Image 26 (middle) https://goo.gl/images/GL5c66

Image 27 (bottom) https://goo.gl/images/45KZ2p







RECYCLING WORKSHOP

Some of the complaints we took notice during our interviews in the slum were about lack of open ground spaces for the children to play, as well as a proper place to watch them while the parents go for work, and for some extra businesses to happen. We also heard from the dwellers, during the community meeting, that they would like to have access to some workshops in order to improve their general skills, so that they would be able to develop more technical knowledge and stimulate their creativity for crafts.

There are two spare areas close to the slum – one of them is used for storage of construction materials and disposal of waste, and as playground by the children; the other is a travel agency's parking lot where some informal meetings may take place – with no infrastructure for gathering, such as benches and tables. We then identified a great potential for rearranging the site with the usage of recycled material as furniture.

Our proposal here is to provide the community with recycling skills, through workshops, so they can be able to transform the accumulated waste into useful equipment and build temporary and changeable communal spaces anywhere and anytime they feel the need. By improving their organizational skills, the open ground spaces could also be used as a community garden where the women in the slum can take turn watching each others' children.

With the workshops, it would also be possible for the residents to commercialize their work or have partnerships with large construction enterprises. In addition, besides increasing their handicraft capabilities, they would be using the stock of dumped materials and releasing space within the area, and reorganizing it in a creative way.

PROPOSED CHANGES TO CURRENT SRA SCHEME

We here try to suggest principles which can improve the current SRA process and reshape some of its core ideas.

POLICY PRINCIPLES

COMPOSITE SCHEMES

As we have mentioned in our situational analysis, looking at Shirole Vasti as "one slum pocket" through a satellite map can be misleading because the situation on the ground is more complicated. The slum is located on a land that has 7 plots, each of which has different dynamics regarding ownership, zoning and size. We have shown throughout our analysis that implementing separate SRA schemes on separate plots might cause three main problems: a) Those who live on plots that are not rehabilitated will be left behind by the new neighboring high-rise blocks especially that the slum is small, b) Those who live on plot 7, which is considered an open space according to the city development plan 2017, will need to rezone their

land, otherwise they will not be able to have their own SRA scheme and will not be able to have in-situ rehabilitation, c) Those who live on the very small part of plot 4, which already has a developed residential building, will also not be able to build their own scheme and therefore they will not be able to have in-situ rehabilitation

These issues cannot be avoided unless a composite SRA scheme is prepared to rehabilitate the whole slum together instead of fragmenting it based on the current plot geometry.

In fact, according to article 20 in SRA bylaws, there is a possibility to make composite schemes on lands that have different ownerships following some conditions:

"Clubbing of two or more Slum Rehabilitation Schemes, proposed within a radius of 2 km aerial distance, may be allowed by keeping the ratio of rehabilitation component to sale component, same in the respective lands and the corresponding ratio zones.

In such a case, the rehabilitation component can be proposed on one land and the sale component on the other. Slum TDR generation in such case shall be as per the respective ratio zone of individual schemes. Provided that this approval shall be subject to payment of difference in the Rate as per ASR of built-up premises for sale components, proposed to be exchanged".

Achieving a composite scheme will not be an easy task. With many different ownerships and two developers already involved with the SRA process, negotiations can be exhausting, especially that as some developers have already spent money and they will ask for compensations in case plans are to be changed.

However, since the final authority is in SRA's hand and there is nothing in the bylaws that prevents doing a composite scheme when there are multiple land owners and developers, we recommend that:

- 1. SRA should make the dwellers aware of the consequences of implementing separate rehabilitation schemes so that they can be better equipped to advocate for a composite scheme
- 2. SRA should play the mediator role between the different owners and developers. Otherwise, it is impossible to agree on a composite scheme that can make everyone happy.
- 3. For future projects, SRA should micromanage and see if such complications exist whenever a

developer initiates a rehabilitation process. SRA should check if it is a wise idea to develop different plots separately without a complete plan for the whole slum and that depends on how big the slum is and how divided the land can be (Shirole Vasti looks like a complicated case in this sense).

ELIGIBILITY AND PROPERTY LISTS

We have pointed out in our analysis that a conflict may arise between those who are multiple families living in one home and therefore want separate apartments, and those who are getting free rehousing although they already have houses outside the slum.

On the one hand, the eligibility date (January 1st, 2000) is somehow arbitrary, and depriving some dwellers from getting new apartments just because they did not build houses in the slum before that specific date seems unjust. One should acknowledge that it is unfair to deprive these people of new apartments while others who have houses outside the slum are getting new ones.

On the other hand, those who have houses outside have been enjoying an acquisition which was given to them long time ago. As it is happening in Shirole Vasti, they are hiding behind and still getting what they think is their right.

While we do not aim at putting an ethical etiquette on this issue due to its complications, we think that it

is SRA's responsibility to pay special attention to the issue and:

- 1. Make a list of those who own houses outside the slum and another of those who are demanding extra apartments and bring these two parties together for discussion before the rehabilitation process starts. This will help converging the conflicting points of view and reaching solutions that can satisfy everyone, such as providing compensation for those who have houses outside and giving their prospective houses to those who need them the most.
- 2. Make city wise statistics about the number of slum dwellers that own houses outside the slums and the number of families that are not eligible for separate housing under SRA scheme. One should look at how big the gap is, how the housing demand looks like and check if a city-wide strategy is possible to make SRA schemes more efficient in solving the crisis. To make a register of people owning properties outside slums might prove to be a difficult task as people might try to withhold information. Consequently, a NGO such as MASHAL, who has earlier experience with these kind of numerations, should be engaged by the SRA to contribute to the process. The mission is ambitious but not impossible.

SCHEME IMPLEMENTATION AND CONSENT

We have mentioned many problems that has to do with how SRA schemes are designed and how the consent is taken from the dwellers. SRA's architectural drawings have been replicated everywhere and the dwellers are being considered as receptors who just sign. The consent process has no clear timeline and it is left for the developer to prepare the consent papers and submit them at SRA office without any further obligations. The consent process only asks for the approval of the dweller without requirement of any form of participatory planning processes.

This results in standardized designs and drawings that lack contribution from the dwellers and local modifications. In Shirole Vasti, this process has resulted in a lot of falsified negotiations that did not show the dwellers exactly what their future will be. Over time, they therefore lost trust and confidence in the developer.

We believe that a solution to these issues would be to change the lens through which SRA presents the consent process. SRA should move on from seeing the consent in technocratic terms (i.e. 70% approval) to seeing it as a participatory process that does not only ask for approval but also brings the dwellers together, especially women, to participate in the designing and raising their points of view. Such a process will also help remedy the frustration that was built up over time in the settlement, and to help rebuild trust and confidence between developer and dwellers.

This idea is inspired by Nabeel Hamdi's work presented in the book "The Place-makers' Guide to Building Community" where the author explains how in one of the areas where he worked, a participatory planning workshop helped solve conflicts and put the dwellers in a situation where they were producing development plans themselves to find housing alternatives (The Place-Maker's guide, pg. 118). The trust shown to the dwellers by the project managers, made them confident in what they were doing. Hamdi mentions: "At first we needed to organize, to break down the site plan into manageable organizational units with whom we could engage in planning, design and management, so that anyone who wanted to could have a say and more could get involved".

Such processes might be rare but not new in the context of Pune. In fact, we had a lecture by architect Prasanna Desai who worked on slum upgrading schemes under BSUP mission in Yerwada, a neighborhood in Pune. Mr. Desai showed us how in Yerwada, in a set up that had many conflicts because of a "vicious circle" constituted of developers and politicians, only close discussions and workshops with the dwellers could produce a scheme that everyone agreed upon. In the Yerwada Project, people did not want to sign the project papers easily because they did not trust the government, but when they stared to include people in the design process, things started to get better and the dwellers helped producing the maps and structure of the scheme. As Mr. Desai said; "participatory approach is not only about showing people a model".

Our recommendation here is: instead of leaving the floor empty for the developers to get their consents done in unorganized manners, a series of participatory planning workshops should be required for an SRA scheme. These workshops should:

- 1. Bring all the dwellers together, especially women and children, to do brainstorming sessions and start sharing ideas about how they see the future of their area
- 2. Rebuild trust between dwellers and authorities
- 3. Take the dwellers' input into the design of the new scheme and accommodate for all their needs. This puts them in a situation where they are in control of their future instead of just approving it
- 4. Help produce proper plans to manage the building later. List of responsibilities regarding maintenance and other necessary tasks should be produced to ensure sustainability in the long run

NEW PHYSICAL DESIGN PRINCIPLES TO EXISTING SCHEME

Shops as social spaces

As previously mentioned, shop owners in Shirole Vasti tend to accept the SRA scheme. They think that, if an SRA scheme was implemented, the area will be more modern with wider streets and more traffic that will give them more customers. However,



the scheme might not be beneficial to them, especially if it does not keep the social and informal atmosphere that currently exists around the shops in Shirole Vasti.

From what we have seen in the completed scheme we visited, the new shops were not well-connected to the street because the new building was lifted half a floor up from the street level as we can see in the pictures. As a result, the shops become less apparent to the customers passing by.

This happens because developers try to reduce the underground parking excavation cost during the construction process. The SRA provide shop owners with new shops with the same size and approximate location as previously. However, if these shops are not well connected to streets and sidewalks, the old informal social space that the current shops have now might disappear, and so will their customers.



We recommend that:

- shops should be seen as social spaces and not only units with size and location
- the informal sketch should be used to create the new one and keep the shops as lively and connected as they are now
- the scheme should avoid architectural mistakes, such as raising the floor, that are only profitable to the developer in the short run, but that don't respect the social life of the former settlement. Regulations should be set by the authority to ensure this. If the social life of the dwellers are preserved, we believe the projects will be more successful in the long run.
- more creativity to increase social spaces on the ground floor

While shops serve as outdoor social space for men, women in Shirole Vasti are more interested in indoor social spaces. In the completed scheme we visited, the cooperative housing office in the ground floor was so dark and was rented for a coaching club. Also, the ground floor was full of parked cars which took up all the space, preventing people from sitting, mingling and watching their children play.

We believe that more creative ideas for the ground floor area should be considered and we recommend that:

- one should start seeing this floor as a social space that needs to be well designed by the participation of the dwellers
- the cooperative society room should be designed to be multifunctional and multi-equipped so that they can serve different types of use. Types of spaces requested by the interviewed, include a place where women can have workshops, study rooms, community kindergarten and space for community meetings.
- parking should be restricted to underground are-



- as so that the space between the columns are left open for children to play and for social gatherings to happen. If underground parking is not possible because of flood zones, reducing or removing parking requirements will be needed to keep this floor for socialization.
- the ground floor area should be designed to optimize the amount of uninterrupted space to make space for children to play.



RETHINKING THE SRA

I addition to the above suggested changes to the physical design of the scheme, we also want to propose a new way of thinking about the SRA scheme. As it works today, the scheme solves some of the most pressing issues related to the building quality and sanitation. However, we argue that some of the qualities currently apparent in the slum are lost, especially those related to social life, the local economy and the ability to adapt to changing circumstances. In addition, the complete rebuilding of the physical structure of the slum also seems unnecessary, as a lot of the structures are already of a sufficient quality. We believe the funds can be put to more effective use with a different approach.

To address this, we suggest a new way of organizing the SRA scheme. We think a semi self-help housing model is better suited if one wants to solve the problems while at the same time preserving and enhancing the qualities that are already there. We oppose the idea of the "one size fits all" view that is present in the current schemes. The development should be

customized to the different circumstances in the slum and be more focused on solving the most pressing issues in a way that does not undermine the qualities.

Here we present what we see as the qualities and attributes of the slum worth preserving, and the challenges apparent that needs to be addressed by a development, before suggesting strategies and principles that answer to these needs.

IMPLEMENTATION

A customized upgrading like the one suggested might seem like an impossibility in terms of funds, time and workload. However, we believe that the SRA public-private partnership provides a golden opportunity to make such a scheme possible. The funds are there, they just need to be used differently and new priorities need to be made. The building costs will be considerably lower as only parts of the area need to be rebuilt. The spending will be pinpointed to where it is most needed. The remaining funds can then be

used finance all the surveys, participatory processes and community space upgrading that needs to be done for the project to be successful.

For the SRA public-private partnership to work, the developer has to be given extra FSI which they can use to build more units that is sold to on the open market, and thus makes the project profitable, as mentioned in the analysis. There are openings in the SRA regulations that already makes this possible to combine with an upgrading where there will be no space left in the plot to build units for the open market. Instead of using the FSI on the land of the slum, they are aloud to use the FSI elsewhere in the city. They can even sell the gained FSI to other developers. In a country where the a lot of developers want to build towards the sky, but the standard regulation only gives you a FSI of 1, this can be an attractive deal.

Alternative funding can also be raised using saving schemes, of which there is already several running in the settlement. If all households has to save a certain amount that they then contribute to the upgrading, the feeling of ownership to and pride in the finalized result might be increased.







QUALITIES AND WELL-FUNCTIONING ATTRIBUTES OF THE SLUM:

1. Social network and transition from public to private space
In the slum we saw a nice transition between the private and the public sphere. All the narrow streets were like semi-private spaces where social interaction between neighbours happened, this is in a large part where the community is created. Most of the doors were open into the streets, some had curtains in their doorway, separating the living space from the street outside while keeping the audial contact with the surroundings. In the SRA buildings we visited, we saw that these spaces did not work the same way as in the slum. The narrow streets are replaced with hallways. However, the qualities like daylight, plants and personalized space are gone, so people did not use the hallway-spaces in the same way. Because of this the transition from public to private space were more abrupt. We think this will affect the relationship between neighbours in the long term.

2. Multifunctional spaces

Because of the relatively small living space each family have access to in the slum, they actively use the space in between the buildings, the space between the private and public sphere mentioned earlier. These spaces have a richness in use, spanning from dishwashing and laundry to storage to playing and hanging out. They are prime examples of effective use of space. The equivalent spaces in the SRA apartment buildings we visited, the hallways, were not used for anything at all. Consequently, a lot of space is wasted, and people might actually have access to less functional space than they previously had in the slum. People seems to be more hesitant to domesticize the area outside their door when they move into an already finished building. The slum, on the other hand, has grown organically over time, and people seem to feel more ownership and

responsibility in regard to the space outside their homes. The lack of responsibility felt towards more than your own private living space, is a recurring problem in apartment buildings and often result in problems with maintenance of the shared spaces.

3. Local shops and businesses

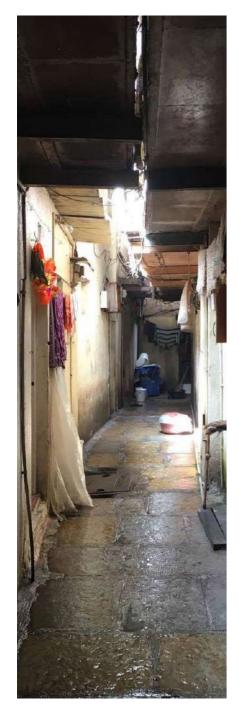
The shops and businesses facing the outside of the settlement, fill the streets with busy life all day long. The pavement outside the shops are important social gathering spots, both for people from the settlement and from the surrounding community. The shops work in many ways as a connection between the settlement and the city surrounding it. As mentioned earlier, in the SRA scheme the shopkeepers get a new store equal in size to the one they had before, but some of the old shop's most important characteristics are gone. They are placed at the ground floor of the apartment building together with parking space, pushed back from the street often raised up from the street level and sometimes even behind a fence surrounding the building. Consequently, most of the stores in the SRA building we visited were vacant. The kind of stores that exists in a slum needs the spontaneous costumers walking past their stores, and only a close contact with the street can provide them with this

4. Possibility of expansion

In the slum, the dwellers have a possibility of expanding their houses, though limited in some cases. We were told that all the houses had started out as simple huts that had gradually been improved and expanded into the structures that are there today. Most houses now have two floors, some even have three and some still have one. In other slums in bigger and denser cities, such as Dharavi in Mumbai, small houses have over time been developed into buildings of three to four floors. Such a development is therefore not impossible to imagine in Shirole Vasti. The possibility of expanding their homes,







makes people able to adjust their house to their life situation. They can expand their homes when needed and when they have the economic capital to do so. In the SRA buildings, this possibility is lost. You get an apartment of a certain size, and can neither expand vertically nor horizontally.

PROBLEMS IN THE SETTLEMENT TODAY THAT NEEDS TO BE ADDRESSED:

- Living space
 - Many of the houses are clearly overcrowded. In some houses there were three generations living on less than 15 sqm.
- House resilience and durability
 - The condition of the houses is very varied, some are fairly good, others no more than shacks. Many of the houses are vulnerable to flooding in the monsoon season.
- Sanitation
 - As far as we were told, most of the houses had their own washrooms, but none had their own toilets.
- Daylight conditions
 - Some of the streets were extremely narrow, nomore than 0,5 meters. When the buildings on both sides were two floors, the daylight was sparse. For some of the houses, the only source of daylight were windows and doors on the wall facing these narrow streets. The spacing between the buildings are therefor of huge importance for the daylight quality of these houses.

SUGGESTIONS AS TO HOW ONE CAN SOLVE THESE PROBLEMS WHILE PRESERVING THE QUALITIES:

- 1. Improve the basic framework of the houses that are not durable enough. A comprehensive survey of the condition of all houses will need to be done. Some houses have a structure that is solid enough for further vertical expansion and will not need a redevelopment. Other might need certain improvements, while some will have to be built from the ground up. Such surveys have earlier been done in Pune by Prasanna Desai in the project in Yerwada earlier mentioned. The survey is necessary to ensure that the funds are used where most needed. If people are provided with a solid base structure, they can expand or improve their homes as they want and have the ability to. Several successful projects based on this idea has been done by the Chilean architect Alejandro Aravena.
- 2. The new and old structures should be strong enough to support a solid rooftop terrace. This will largely increase the outdoor space available to each family in the slum. The space can be used for storage, water tanks (which, as far as we learned, no households have access to today), social spaces, gardens etc. It can also be built in if necessary in the future. If neighboring houses join terraces, bigger community spaces can be made.
- 3. Where ground floor area is too small for a solid structure which allow vertical expansion to be made, a cluster development can be done. Again, we look to Desai's projects for successful examples. They joined about three to four plots together, constructed a three to four floor building where each family got an apartment. The possibility of expansion will be limited in these cases, but a sizeable rooftop terrace will be made available to the families. There is also a possibility of introducing shared functions, such as toilets, kitchen



Image 28
Social housing project by Alejandro Aravena
in Iquique, Chile.
(http://www.elementalchile.cl/en/projects/
quinta-monroy/)

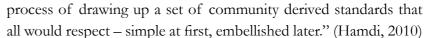


Image 29
In situ slum rehabilitation in Pune by Presanna Desai Architects.
(http://prasannadesaiarchitects.com/housing.html#)



and storage, as an effective use of the space will increase the living space made available to each family.

- 4. The solutions above mentioned, where old buildings are maintained where possible and new ones are built with in situ adjustments, the areas original structure with the semi-private and multifunctional in-between spaces are maintained. The spaces can be further improved by introducing smart storage solutions. We already saw a lot of effective storage in the settlement (see pictures), and these solutions should be shared and copied throughout the neighbourhood.
- 5. The local shops and businesses are also part of this original structure, and should be kept in close contact with the streets to ensure their customer base and preserve their function as social spaces for interaction.
- 6. By raising the ground floor of the houses two steps up from the street level, resilience against flooding will be increased. Where there is sufficient space a small porch might also provide a nice and useful transition between the private house and the semi-private street. Where steps and porches already existed, these were used as benches and created a small social space at the entrance of the house.
- 7. The daylight quality should be improved in certain parts of the sett-lement. This can be done by introducing setbacks in upper floors of the buildings. To ensure every households access to necessities such as daylight, the community should through workshops and discussions make a set of "design rules" that every household needs to comply with. An example of this being done, is in Nabeel Hamdi's "The Place-makers' Guide to Building Community". He writes: "When, …, everyone had agreed it was a mess, we began the



- 8. In addition to these design rules, one might add design suggestions, including recommendation related to the placement of functions in the house. Functions that need more daylight, like living rooms and work spaces, might be lifted up from the ground floor for example.
- 9. With time, and as each house is developed, all houses should be provided with a toilet. This will ensure good sanitary conditions for all inhabitants, especially the women, and solve the existing problems related to the community toilets. For this to be possible, a proper sewage system needs to be in place. This should be provided by the developer so that each household can connect to this system when they install a private toilet. As people get private toilet facilities, the existing community toilets can be developed into other kinds of community spaces, such as laundry facilities or communal kitchens.









ACTION PROPOSAL GROUP 2



LIGHTNING

LIGHTING SITUATION IN SHIROLE VASTI

Like in many other informal settlements, lighting seems to be an issue in Shirole Vasti. The main mandal (area based on social structure) in the area, Guru Dutta, has installed light poles, while the narrower streets lack any form of lighting. This was one of the first and strongest impressions from the area, and therefore a natural focus area.

Due to a general lack of space in the settlement, people began to extend their houses upwards, which made sun light and even indirect day light scarce. The second floor in most of the houses is built with an overhang which makes the streets even more dark and closed off.

Better lighting will have a huge impact on different aspects of the living conditions in the settlement, such as safety, social interaction, productivity among the residents and cleanliness.

When speaking to the residents, we noticed that this was an issue that was repeatedly addressed, particu-

larly in the densest part of the settlement, - the Sri Krishna mandal. This was often mentioned in context with the problem with cleanliness. When asked if they wanted electric lights in the narrow streets many replied that they don't because they are afraid of electrical shock due to poor maintenance of cords etc.

The height of most of the passages are standard ceiling height (approx. 2,4 m), as the extension of the second floor makes the "ceiling". Some places it would be even lower because of piping systems etc., so there is really not much space to install electrical lighting in a safe way.



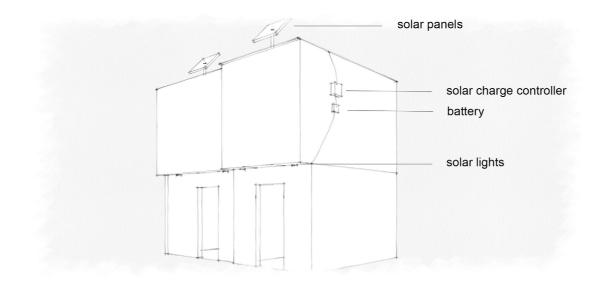
POSSIBLE SOLUTION

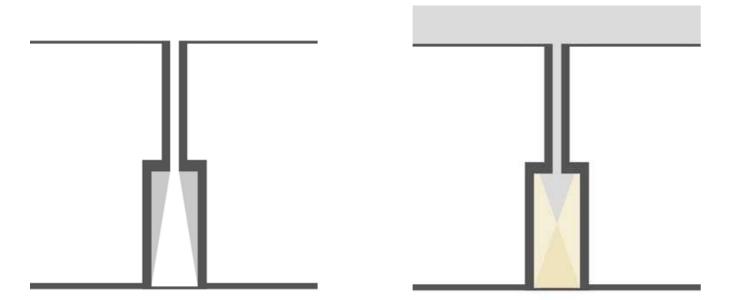
One solution could be the use of lights powered by solar panels. The solar panels can be installed on the roofs and connected to the battery run lights in the pathways. Pune has an annual number of sunny days that are higher than most other cities on the same latitude, like Mumbai and Hyderabad*, which makes it a great point for using solar energy.

The lighting could be formed in different ways, and placed differently in the pathways. However, considering the lack of space, and people's respect of electrical lights, the best way would be to place them in the corners between the walls and the extension of the second floor. That way they would be kept in a safe distance from children, and the streets would feel more spacious when the corners are lit.

By making use of solar power, the community are contributing to the plan for making Pune a "green" city. This could make way for other settlements to follow, or to make future projects in Shirole Vasti as sustainable. The government of India have been working to increase the use of solar powered energy, by funding and subsidies for public institutions, schools etc. that is buying solar panels. The National Solar Mission was launched on the 11th January 2010 by the Prime Minister and "is aimed at reducing the cost of solar power generation in the country…"***

The project could be realized through participatory work and funding. One way to do this would be to present a similar project to the residents to show them a possible outcome. The residents could then take part in deciding the degree of lighting and where it should be provided. There should also be an elected chair from the settlement that control the finance and the decision making in the process.





Creating such a community chair can make a positive change in the settlement as people from different mandals would work together and strengthen the community feeling. Giving the residents authority in this project could also have a positive outcome in the future as it is shown in previous projects that this creates a motivation for the chairs to work on other projects later on. The participatory aspect of this could also strengthen the sense of ownership among the residents, not only in their own household, but in their neighbourhood.

There are different ways of community funding for such projects. One way is through a saving scheme, which already exists in Shirole Vasti. Innovative solutions for cutting costs is crucial in an area like this, and the project may have to be done in a longer period of time.

Another way of funding, as shown in the Orangi Pilot Project work in Pakistan**, is that people who are better off financially pay at the beginning and the

poorer households pay over time.

Creating an off-grid solution like this would give the community more autonomy and make them more independent of the PMC, who have proved to be unreliable when it comes to maintaining the services they have provided, like in the case of the toilets. As India has a problem with frequent power cuts, solar powered lights can be a more stable source of lighting. Short circuits have already caused one fire in the settlement, so the residents have a lot of respect for the electricity.

The most important impact the providing of light would have, is probably the impact on the social life in the settlement. Many of the residents expressed concern about leaving their children outside to play in the evening, due to lack of light, which would be resolved. Community meetings, both formal and informal ones, could easily take place in the evening as well.

TRAFFIC

TRAFFIC SITUATION SHIROLE VASTI

In Shirole Vasti, we recognized the lack of parks and play spaces, as well as places for the community to gather. While there are two open vacant lots that flank the east and west sides of the settlement, they are used for storage and waste disposal, leaving them unideal for people to gather, and unsafe for children to play in. Also, at any time of day you can find people gathering on the streets to talk to one another, along with children playing games and running up and down the roads, but that also is unsafe because the roads are still open for motor vehicle traffic. While there are some sidewalks in the area, they are appropriated by businesses, which forces people to socialize on the streets.

WHAT SHIROLE VASTI COULD BE:

While the two streets on the sides of Shirole Vasti are closed in the evenings, children of the settlement would be able to assemble games on the roads without fear of motor vehicle traffic. The community would also be able to use these closed roads as a common space to gather and hold meetings when necessary. Or just use the traffic free area to sit and talk with friends and family in the evenings.

One of our proposals for Shirole Vasti is to get per-



Image 30

The current situation in Shirole Vasti:

Children use the roads to play on, but cars and motorcycles are free to use the roads at any time of the day. We propose closing the two roads on either side of the settlement for children to play, and people to gather in the evenings



Map 11
Suggested blocking of GH Patil Path and Dr.
Appasaheb Ganpat Rao Pawar Path





Image 31

Roads closed for children's day of play in Birminghan, UK http://www.birminghammail.co.uk/news/kings-heath-national-play-day-7564619

Image 32
Indian Children playing cricket
http://www.knocksense.com/2016/08/29/now-indians-to-teach-theenglish-how-else-to-play-cricket/



mission from the city of Pune to shut down and block off GH Patil Path and Dr. Appasaheb Ganpat Rao Pawar Path to motor vehicle traffic for a few hours during the evenings (such as 6pm-9pm) to allow children to play games, and for the community to gather for meetings or casual conversations. If there are people who live on the streets that need access to their residencies during the closure times, they would be given a special permit to enter the area. These are not main roads for the area, and traffic could be easily diverted around the area using many of the other side streets off of Shirole Road. Traffic is the major cause of deaths and accidents for children worldwide, and with cities continuing to grow at such rapid rates, this threat is continuously increasing (Lester and Russell, 2010). The threat of traffic accidents is particularly relevant in developing countries and poorer areas where, children living in slums use roads as places to play, such as what we have witnessed in Shirole Vasti. While talking with residents we heard from parents that they were concerned about their children's' safety while running in the streets, and observed a mother yelling at boys to stop playing cricket for fear of cars driving by.

This proposal would be incredibly beneficial to the children of the area. Having a safe space to play without the threat of cars or motorbikes would be a great improvement for Shirole Vasti. Play is a defining feature of childhood, and described as an essential part of development. It contributes to cognitive, physical, social, and emotional growth and well-be-

ing of youths (Ginsburg, 2007). Play is such an integral part of development that the United Nations High Commission for Human Rights has recognized it as a right for every child (Lester and Russell, 2010). Through play, children are able to engage and interact with the world around them (Ginsburg, 2007). Children are also able to situate themselves in a better state of mind as compared to children without the opportunity to have a place to be active and play (Lester and Russell, 2010).

If this proposal were to become a reality, the children of Shirole Vasti would be able to have a safe place to engage in games and activities in the evenings, after school and homework. This would allow for beneficial interactions among the children, and further increase community bonds. The rest of the community would be able to benefit from this proposal as well. With the streets closed, people would be able to gather for meetings in the streets, where the lighting is better than in the lots that are currently used. In relation to one of our other proposals about lighting in the Shirole Vasti settlement, people who are walking from their homes to the streets in the evening will have safer journeys to get there because the paths will be lit as well. If both of these proposals were to take form it would create a better overall sense of and safety for the community members and their children.



Image 33

Temporary street closure for community gatherings

https://nacto.org/publication/urban-street-design-guide/interim-design-strategies/temporary-street-closures/

Image 34
Children playing hockey on a closed Canadian Street
https://ecokids.ca/play/earthplay



COMMUNITY TRUST

INTRODUCTION

When considering the Slum Rehabilitation Act, the policy itself can be linked to the fundamental ineptitude of the government to provide affordable housing to those who need it. In his presentation, Architect Sharad Mahajan said "The government says they do not have money to buy private land and build housing for the poor who live in slums. So instead they asked private developers and land owners to do so." This mentality reflects an attitude of the government trying to wash their hands and let someone else clean up after them. The Public-Private Partnership model in the SRA schemes, like most other PPP ventures, is profit oriented for the private entity involved. Nevertheless, this resulted in a system that works to improve slums in Maharashtra, albeit with certain flaws like the non-consideration of social aspects of the life of the poor, mentalities, etc.

It should be noted that the future of the settlements, through the physical changes, would imply many changes in the lifestyle of the residents. Hence there should be sufficient awareness created before the execution of any kind of re-development projects, and the dwellers should be educated about caring for and maintaining the new infrastructure.

In the future SRA related development, as per the previous inferences, the best development would be an inclusive one, involving all seven land plots on which the slum lies on. Such a comprehensive development would imply the community and its members retaining their identity as a part of a single settlement. The most ideal scenario would be to facilitate more decision-making power for the community in the new project. These concerns guided the approach to deriving improvement scenarios.

COMMUNITY TRUST AND COMMUNITY GOVERNANCE

The proposal mainly focusses on community organization to overcome issues of representation, exclusion, participation, responsibility, accountability

	Thematic Committees	Head Committee
Composition	Residents	Majority Residents, Minority Govern- mental (SRA, MHADA) & Experts (NGO, Academics, etc.)
Functions	 Water & Saniation, Exterior Upkeep, Interior Upkeep, Electricity & Gas, Business & Development, Social & Community Events, Savings Scheme, Community Health Subscriptions 	 Final authority to pass proposals by thematic councils, Owns substantial equity in the project, Authorizes future buyers of housing units, Rents out units in complete ownership of the trust
Selection	Voting for Members	Voting for Members, Nomination for Experts
Term	2 years for members	5 years for members, No terms for experts

Table 6

and self-governance associated with completed SRA projects. Table 6. mentions the basic aspects as to how the new project at Shirole Vasti would be governed by a community trust (relatable to Community Land Trusts). The idea of constituting a body of mixed personnel for decision-making, that is including outsiders, was well received idea in the community meeting we organized at the end of the fieldwork. The residents saw it as an opportunity for guidance in actions as well as curtailing unwanted politics among them. It could be possible scenario for the

Head Committee to receive nominal salaries from an operational fund for the trust.

EQUITY MODEL AND TENURE

The proposal for the SRA scheme to be executed in Shirole Vasti involves modifying the tenure typology. What we propose is to equitise or convert into shares of the total stock value of the land and infrastructure. These shares would be conferred to the residents who will be rehabilitated, to the trust and to

the government, where the latter two have minority holding. Any future sale of these shares would be in a closed market involving these three parties, and those individuals in agreement with the trust to own and occupy a unit in the future. The sale and purchase may be seen as forms of reverse-mortgage and mortgage respectively. This form of tenure would enable the project to be an alternative to rental housing in urban centres, where there is some kind of investment in assets involved.

The rent market for units would involve interested parties buying a stipulated percentage (governed by various conditions set by the trust for ownership and resale) of the equity from the owner/trust who would continue to maintain majority. It would also be explicit, in a written set of guidelines, that the trust and government should own a minimum specified equity in each individual housing unit.

COMMUNITY HEALTH SUBSCRIPTIONS

The residents presently depend on nearby private healthcare with high consultation fees, as mentioned in the economy section of the report. The subscription would a nominal amount collected every month by the trust (as low as Rs. 100) from the resident families (considered as three members, additional charges, say Rs. 15, per member after third member). This fund would facilitate a resident general practitioner of medicine, along with providing him space for practice within the housing project. The facility

would be open for all residents and nearby patrons (who could be charged on a consultation basis).

POSSIBLE SCENARIO WHEN IN PRACTICE

In a comprehensive rehabilitation scheme facilitated through a developer, each resident of the slum obtains 75% equity of a single housing unit, with residents who own housing assets elsewhere getting 51% instead. The remaining equity of a single unit is owned by the trust with 15% and MHADA owning 10% or proportional in case of additional available equity. A trust with a head committee of the trust with 70% residents, 10% MHADA, 10% SRA and 10% nominated experts is constituted.

Within the first ten years, some residents complete reverse mortgaging up to 49%, as per a limit stipulated in bylaws of ownership. Within the next five years, many residents complete reverse-mortgages. Thus, having substantial number of buyable equity for units in the closed market. Some interested buyers through consent of the trust, start acquiring equity and a few move-in after purchasing majority. In all cases, including that of state or trust buying the equity from owners, the market value was determined by the combined value of the land and infrastructure. In the case of state-owned units, they are allocated to new residents in a transparent manner. Each new resident, including family members, registers with

the trust and is eligible to contest for a seat in the managing and thematic committees (the contestant should not be a minor).

Each unit pays the stipulated amount as per owner-ship distribution of the unit, to the trust as maintenance fee. This fee would be accumulated majorly in the maintenance account in a bank, and partly in trust operational account (used for general operations). In addition, the collected health subscriptions from all families in the settlement would enable a general practitioner to earn a stable monthly income and entitle free healthcare, within a reasonable limit, to the residents.

CONCLUSION

The expected outcomes and limitations are:

- 1. Maharashtra Housing and Area Development Authority would hold economic stakes in the projects, hence assists in the maintenance and upkeep (either financially or through technical expertise).
- 2. Shares bought by the government would translate to more units owned, hence increasing the state's affordable housing stock. And hence enable streamlining of future housing policy. The system can be considered as facilitating a form of loan to the government.

- 3. Shares bought by the trust would enable it to resell the same, or rent out apartments under its ownership. The profits may be used to for the maintenance and upkeep of the project.
- 4. The residents may partially sell their equity to the trust or the government as and when the need of liquidity arises. Occupation of a unit depends on holding a specified majority percentage of the shares.
- 5. Those residents who own houses outside the original settlement, yet require a rehabilitated unit, would be given the minimum equity required to occupy the unit. In an SRA development, these residents do not receive a rehabilitated unit. Hence, they try to hide assets by exploiting loopholes such as transferring ownerships to spouses, among other ways. It might require in-depth studies on how to mitigate such dishonesty.
- 6. The value of the equity held by the government and the trust combined, would calculate the value of monthly contributions by the citizens toward upkeep and maintenance.
- 7. There would be a foreseeable increase in the density, as a result relating to the immediate urban context.

- 8. The formation of a Community Trust would protect the residents who wish to stay there from pressures related to raising property values in the area.
- 9. It would be beneficial to move out of these apartments as family size increases, at the same time generational inheritance would also be a possibility for the residents without affecting the economic conditions of non-earning members of previous generations.
- 10. The future development would be owned and managed by the resident community with assistance from the elected and approved representatives from different authorities, and nominated experts.
- 11. The residents only contribute to the trust corpus-fund and not to capital costs, hence easing the immediate financial burden on the residents.
- 12. The trust would enable residents to contribute actively, and create a good mentality to maintaining infrastructure. This would in turn, increase the value of their investments.
- 13. Enable better organization among the residents, and nominate responsible residents to have authority which is acknowledged by the state, to act in the goodwill of the community.

- 14. The existence of systems guided by bylaws enhance the credibility of the community to seek external funding in case of requirement.
- 15. All funds mobilized by the trust through contributions are transparently held in accounts and offer capital for a variety of needs of the community.
- 16. The community health subscription offers a good value alternative to expensive privately-run hospitals and health centres.
- 17. The assumption should hold true that the government are always willing to allocate funds to increase housing stock, and that the trust could mobilize enough funds to buy further equity.
- 18. New tenure typology and equity system might be hard to comprehend for the residents
- 19. The power-holders and bureaucracy may not accept the proposal. It would therefore require open and visionary public servants who will help push the proposal and other ideas of public participation forward. As in the case of Puerto Rico.
- 20. The following model enables the community and strengthens it, but at the same time it depends on each individual placing the community higher than him/herself.





CONCLUSION AND REFLECTIONS Shirole Vasti Slum is yet one more example of an 'informal' settlement that evolved in a city whose 'formal' development plans failed to fulfill the housing demands of its citizens. In a complex urban-rural scenario, such as what is present in India, formal planners fail to provide for the large number of migrants that aspire for a city life and better standards of living. Since the 1940s, this settlement has been providing shelter for families and individuals that could never afford a house within the 'formal' economy. Shirole Vasti now accommodates more than 1400 residents and 250 families. All of them have taken something from and given something back to Pune, and have contributed to the accumulation of wealth in their city. Throughout the study we saw some pertinent examples of how it would be unideal to separate formal and informal practices. A separation in theory would lead to the creation of a dichotomy, which would be far from the real life scenario. The formal and informal rest in a continuum. Formal institutions have been unable to reach the majority of residents of the slums, whereas informal settlements have made their integration into society much easier. It can be understood that the settlement is better off than it was in the beginning, and still depends on a variety of service providers who may be placed in all parts of the spectrum of formality.

The creativity that Shirole Vasti dwellers used to uplift their settlement did not pursue any formal design. Indeed, the settlement grew informally, by the people and for the people. This is an example of an

organic and innovative use of space that could never have been mapped out in a master plan. Throughout the month of daily interactions with the dwellers, we saw how they built their livelihoods through complex mechanisms that could not be designed by top-down planning. The absolute measure of informality, if one could quantify it by any means, would far outweigh that of formality. Considering our various experiences in the city of Pune, especially of the visits to the posh Amanora Township, it contrasts deeply the trust and dependencies of the residents of Shirole Vasti, as opposed to more affluent citizens of the city.

Of course, we do not mean to allege that everything about the settlement is perfect and thus to sanctify the informal. Shirole Vasti is like any other place; it has its own problems and dynamics. Therefore we chose to analyze the different aspects of the settlement in detail, from its physical structure to its social organization to its governance and economy. Planning, in a democratic context, should ideally be used to simplify and facilitate the interactions of all people with the physical environment and of the social life with the physical state. By illustrating the current situations and its advantages and disadvantages, we hope to challenge the stigma excluding this slum and other informal settlements from the realm of "formal" planning, which generalizes them as spaces to be removed sooner or later.

As one of the residents informed us, our study was

the first of its kind to be carried out in Shirole Vasti. We understood later that she was referring to the participatory approach of our study, having spent time in extensive interaction with the residents. For the residents, it was a pleasant change from the usual brigade of surveyors that they were used to seeing, meandering the streets with questionnaires and forms. Yet, some dwellers used to ask us, "What kind of survey are you conducting?" We struggled sometimes to convey to them that we are just students who sincerely want to understand the livelihoods of the area, instead of passively surveying it as part of a big housing problem in the city. Institutionalization has resulted in far less meaningful interactions between the various characters, and certain lack of faith among those who have never been favored greatly by these institutions.

The relations between those in power, and all those being governed by them, reflect the equity and equality in a society. It is important for the dignity of an individual that his voice be heard, especially if he or she exercises the power to vote a representative into authority. The importance of democracy in today's context transcends boundaries of discussions regarding formal/informal. In the case of Shirole Vasti or any other informal settlement the residents contribute in many ways to the functioning of the city, and also accept their fundamental responsibility to vote. There have been many campaigns for promoting voter turnouts in elections, both by the government and other private organizations. In our

observations on the political scenario, we note that there should be campaigns targeted at authorities to promote accountability and responsible actions for the general welfare of all populations.

When we were discussing the prospects of future developments in the slum with one of the dwellers, he mentioned that, because of the Smart City Mission aiming to make Pune a "slum-free city", the SRA had begun pushing to implement a rehabilitation scheme in the slum. This conventional approach, which seeks to "free" the city from its slums, does not seem to appreciate the cleverness underlying these same settlements. While proposing improvement scenarios, we considered the present social structures and intangible aspects related to the community of Shirole Vasti, and we stressed on the importance of maintaining them through our proposals.

To close up our report, we decided that every group member leaves a short reflection about how this fieldwork experience changed their intellectual perceptions and analytical abilities.





"Being declared as a slum implies that Shirole Vasti is a representation of a larger housing problem in Pune. However, I could not but see the settlement as a solution that the dwellers found when the 'formal' sector failed to fulfill their needs. It puzzles me to see how in such a tiny settlement, they have improved their lives organically, without the need of any chief planner."

- Abbas Saac

"My initial perceptions about slum areas is that they are considered dents of anti-social behaviours such as armed robberies, theft, prostitutions and all sort of criminal activities. However, my perception was shocked to the bone marrow about the social networks, sense of community bonds among members in this slum. They seems to know everyone in the slum, and expressed no fear of insecurity of life and personal belongings, defying the general perception of slum dwellers. I think my fears has been demystified and I feel comfortable to work with slum communities and slum dwellers."

- Issifu Salifu

"We were able to interact with so many wonderful individuals through the course of our study, and this project has led me to see slum and settlement areas in a completely different light. I am excited to take the skills I have learned this semester and apply them to my master's work, and my future career."

- Rachael Letscher

"The most memorable thing for me, must be the warmth and hospitality shown by the residents of Shirole Vasti. All of the people we spoke to showed an incredible engagement in our project, which became especially evident with the turnout and the discussion in the community meeting we had at the end. It shows how participatory work can be done, and how important it is to include the residents. Without them we could only have scratched the surface when analysing the settlement. (I think it is important for architects and planners to incorporate these methods of working in order to make projects that take into consideration the human scale of a project and how the architecture can make an impact, either positive or negative, on the community."

- Idunn Dagestad

"My perceptions of what a slum is have been broadened by the fieldwork - there is no simple definition of one. The social life and culture of Shirole Vasti was one of the most important aspect worth studying, and the impact of exterior forces on it. I believe the fieldwork showed me the importance of first-hand experiences in unknown contexts and has made it easier to comprehend these situations. It has been a memorable experience which has motivated me to understand informality better. The single biggest take-away for me would be understanding the need of participatory planning in today's and future contexts."

- Krishnan Kavungal Anat

"It is impressive to see how creative people can be in order to find solutions to adapt to any environment or limited area, with few sources of livelihood and even so, live harmonically in their organic way of organization. Those realities might lie in our own neighborhoods, and still, it becomes hard to imagine ourselves in a situation where we would answer, when asked about our dreams, that we 'do not want more than a house, food and health.'"

- Danússia Baracho Teixeira

"What I think I have learned about the most throughout this fieldwork, is perceptions and view-points, both in relation to the other students in the group, the indian society as a whole and the community we worked in. We all see the world differently based on our experiences and backgrounds. Trying to understand others people and societies can be difficult, but have teached me a great deal about planning, architecture and life in general. It will definetly affect my future studies and work."

- Marie Langsholt Holmqvist

REFERENCES

Arnstein, S.R., 2015. A ladder of citizen participation. The City Reader, p.279.

Arts and Humanities Research Council (AHRC) and Indian Council of Historical Research (ICHR), 2015.

Cultural Heritage and Rapid Urbanisation in India. Newton-Bhabha Fund. [online] Delhi: Research Councils UK India and the British Library. Available at: http://ichr.ac.in/AHRC.pdf

Bapat, M., 2012. How has market-based slum redevelopment worked for the poor?: The case of Pune, India. Asian Coalition for Housing Rights, Bangkok.

Bapat, M., 1981. Shanty town and city: The case of Poona. Progress in Planning, 15, pp.151-269.

Bredenoord, J. and van Lindert, P., 2010. Pro-poor housing policies: rethinking the potential of assisted self-help housing. Habitat International, 34(3), pp.278-287.

De Wit, J., 2016. Urban Poverty, Local Governance and Everyday Politics in Mumbai. Taylor & Francis. Ginsburg, K.R., 2007. The importance of play in promoting healthy child development and maintaining strong parent-child bonds. Pediatrics, 119(1), pp.182-191.

Hamdi, N., 2010. The placemaker's guide to building community. Earthscan.

Joshi, P., Sen, S. and Hobson, J., 2002. Experiences with surveying and mapping Pune and Sangli slums on a geographical information system (GIS). Environment and Urbanization, 14(2), pp.225-240.

Lester, S. and Russell, W., 2010. Children's Right to Play: An Examination of the Importance of Play in the Lives of Children Worldwide. Working Papers in Early Childhood Development, No. 57. Bernard van Leer Foundation. PO Box 82334, 2508 EH, The Hague, The Netherlands.

Maharashtra Social Housing and Action League (MASHAL), 2011. Pune Slum Atlas. Prepared in association with Slum Redevelopment Authority, Urban Community Development, Pune Municipal Corporation and Community Housing Federation (CHF) International. Pune, MASHAL.

Maharashtra Social Housing and Action League (MASHAL), 2011. Shirole Vasti, Shivaji Nagar - Personal Info. [Survey] Repository, UCD 065. Pune: MASHAL.

Moser, C.O., 1998. The asset vulnerability framework: reassessing urban poverty reduction strategies. World development, 26(1), pp.1-19.

Pune Municipal Corporation (PMC), 2015. Reimagining Pune: Mission Smart City. Detailed plan to transform Pune into a world-class Smart City. Pune: PMC.

Pune Municipal Corporation (PMC), 2012. Revising/Updating the City Development Plan (CDP) of Pune City-2041, under JNNURM – Vol.1. Pune: PMC.

Punesmartcity.in, 2016. Local Area Initiatives. [online] Available at: http://www.punesmartcity.in/?wicket:bookmarkablePage=:Com.SmartCity.Page.Internal.Localarea

Sen, S., Hobson, J. and Joshi, P., 2003. The Pune Slum Census: creating a socio-economic and spatial information base on a GIS for integrated & inclusive city development. Habitat International, 27(4), pp.595-611.

Seyd, B., 2016. How should we measure political trust? In: PSA Annual Conference. [online] Kent: University of Kent, p.12. Available at:

https://www.psa.ac.uk/sites/default/files/conference/papers/2016/Paper.v2.pdf

Smartcities.gov.in, Smart City Features. [online] Available at: http://smartcities.gov.in/content/innerpage/smart-city-features.php

Smartcities.gov.in, What is Smart City. [online] Available at: http://smartcities.gov.in/content/innerpage/what-is-smart-city.php

Sra.gov.in, About Us: Slum Rehabilitation Authority (SRA). [online] Available at: http://www.sra.gov.in/page/innerpage/about-us.php

Srapune.gov.in, 2014. SRA Rules (New). [online] Available at: http://www.srapune.gov.in/admin/uploads/left_menu/1/SRARules(New).pdf

All pictures throughout the report that does not have a reference, is shot by one of the students in the group.







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