

Research

Inclusive Interiorities

A focus on women; towards more inclusive designs

Research

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1. Introduction

In the first place, I chose the Global Housing studio for the relevance of the challenges it addresses. Poverty, education, lack of potable water and sanitation,... to name a few, are present worldwide and so important that the United Nations are addressing them under the UN Sustainable Development Goals for 2030, as a framework aiming for the improvement of the current situation in various domains¹.

To me, basic primary needs such as decent and humane sanitation facilities, water supply and decent housing are much more necessary and socially relevant than fancy hotels and ever higher skyscrapers, which have a dramatic impact on the environment and the planet. Such architecture is destroying our lived environment instead of making it more liveable and enjoyable.

These challenges not only restricts economic and social development, but

*«In the developing world [...], cities are expanding too rapidly
resulting in the
emergence of massive shanty towns. In most cities, these
settlements (normally illegal) lack even the most rudimentary
services such as
drainage, electricity and even clean water»²*

it also impacts people in their daily experience of the built environment. Indeed, “[the] lack of infrastructure restricts the access but also actively prevents people from participating in shaping the future of the city”³

In that sense, the role of the architect is very relevant as it has the power to improve and reverse the current situation. His impact goes beyond infrastructure and producing architecture, it affects social development in a positive way, makes places enjoyable, liveable and thus encouraging sustainable developments.

The city of Mumbai does not derogate to these issues. Indeed, the city encountered a massive rapid urbanization, making Mumbai Metropolitan Region «one of the top 5 most dense cities in the world».

The consequences are dramatic for the liveability of the city, the living conditions and the quality of life of its inhabitants, as more than 40% of the population of Mumbai lives in slums. Dharavi, the most renown one, Dharavi houses 340.000 ppl/km²⁴

‘The ratio of open space per thousand residents in globally aspirational Mumbai is a shameful 0.03 acres, as against more than 3 acres in New Delhi and Kolkata. The National Commission on Urbanization (1988) suggest that the ideal ratio of open spaces is 4 acres/1,000 persons’³

Following the direction of the studio, I addressed the effects of rapid urbanization under the challenge of mass housing, taking into consideration efficiency, affordability and liveability. This meant constantly referring to low tech and low cost solutions, optimizing the amount of materials used, taking into account the availability of local resources, construction techniques and knowledge.

Added to that, the context of Mumbai was completely foreign for me: I had so far only developed projects in Europe, except for one in Ghana, where I first encountered the reality that the Global South faces. This context was new in many regards: architecturally speaking, but also in terms of practices, habits and perceptions.

Before going to Mumbai, I already knew I wanted to emphasize the anthropological aspect of design, which during the field trip concretized itself in a specific focus on women. Gender equality is relevant worldwide and still accurate in developed countries. In the Global South especially, gender inequalities are very strong, often related to traditions oppressing and undermining women on a daily basis. In fact, gender equality is considered as major concern by the United Nations, as it is goal number 5 of the Sustainable Development Agenda for 2030. What is more, the fight for female rights is still ongoing today, supported by many national and international feminist movements, gender equality organizations, demonstrations and protests for female rights... The most recent ones in India; the Sabrimala and Shah Bano cases, illustrate how societal constructs restrict women's rights and freedom of access to public spaces in particular.

I had never taken a gendered perspective to analyse and perceive the lived environment before. From that moment on, I reconsidered my architectural approach, being more aware than I was before, that each of my design decisions would have an impact on behaviours, freedom, comfort and safety of people, and women, especially in this context.

The challenge of the studio took another dimension for me: it became

*'Vertical development often means a detachment from the ground. In comparison to low-rise horizontal urban forms, the public spaces of a vertical city are less friendly and safe, particularly for women
[...]*

Urban 'beautification', clean lines and peopleless streets do not equal comfort or safety for women who often seem to prefer a degree of chaos, ambiguity and multiplicity to univalent notions of cleanliness and order'³

much more than designing nice spaces, it was about projecting, understanding and evaluating all the anthropological consequences that would be caused by my design choices. Thanks to this book, I could build up a richer vision and consideration of architecture's impacts on its users.

However, addressing women's status can easily become too women centred, and deviate from the notion of gender equality. I choose to address gender in terms of inclusiveness, and precisely not in order to valorise a specific gender or target group at the expense of another. This would mean reversing the current situation by creating one that is not equalitarian either. I do believe that a comprehensive and good design has to re-equilibrate the unbalance, by being inclusive in addressing all genders and status equally.

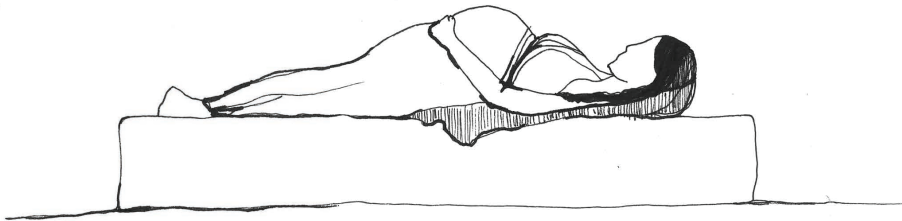
To me, addressing women's condition and empowerment trough design, is a way to raise awareness on their oppressed status and under-recognized roles in society. I know that my design proposal might have forgotten some important aspects of inclusiveness, and can become better in technical and social terms. However, my goal is to sensitize people, architects and planners about the importance of inclusive planning and design.

*‘As we collectively produce cities, so we collectively
produce ourselves... [if] we accept that ‘society is
made and imagined’, then we can also believe that
it can be
‘remade and reimagined’*

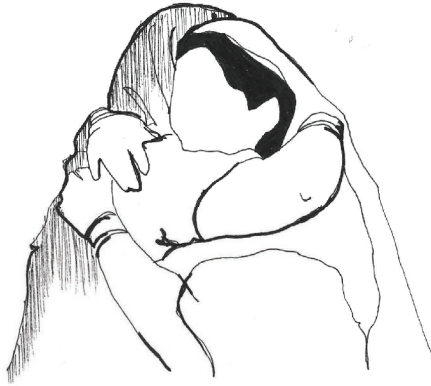
David Harvey³

2. A short indian story

Hope



My name is Asha, it means 'hope'. I am 12 years old and I was born in a 10m² kitchen, in Nalasopara, a city 45 minutes north from Mumbai. My brother is older than me. I won't get any other siblings, unless it's a boy. In many families in India, girls are missing. Killings happen early after birth, usually by the step-family, unless they push the mum to do it herself.



I was very lucky to survive, thanks to this lady that my mum knows well. She protects women and helps them fighting to keep their girl babies. She lives secluded from the rest of the city, educating and protecting the girls from their family that want them dead, because they are a burden. They have to be taken care of by the family.



I go to the same school as my brother, but many of my friends don't have this chance. Their family can't afford them to go to high school. And they are more useful helping out in the house. My school day finishes at 17:30, but my mum always comes earlier. There she can meet and talk with other mums. It's the only break she can afford, away from her duties.



On the way home, we pass by the market, getting some groceries for tonight's dinner. We never stay long here, dad says it's not safe for us because of the men hanging out and the cars on the street.



Back home, I have to go fetching water, 10 minutes away from our house. While my brother plays on the street with other boys, I have to pump water and carry the two heavy jars twice a day, sometimes more when the weather is very hot. But my mum cannot do it anymore because she has spine deformation due to the water carriage.



After dinner, as the lights turn on, our dads hangout in the street and our brothers play cricket. From afar, I can hear our mums dreaming about a better life.



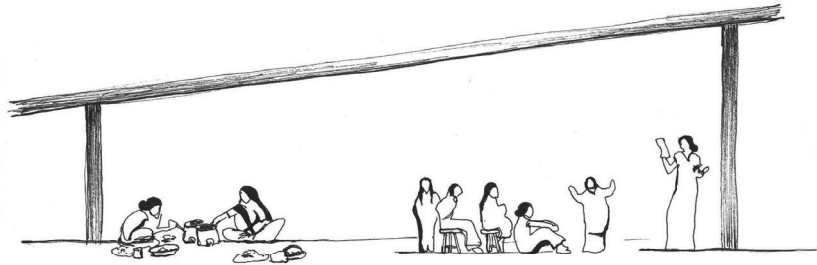
One day, my mum wakes me up at 5:00am. I have to prepare breakfast and then go to school on my own. Yesterday, she received a letter from a women organisation. They want to talk with her. As she leaves the house with two of her friends, I can feel that she is tense. They are going to Mumbai, the big city.



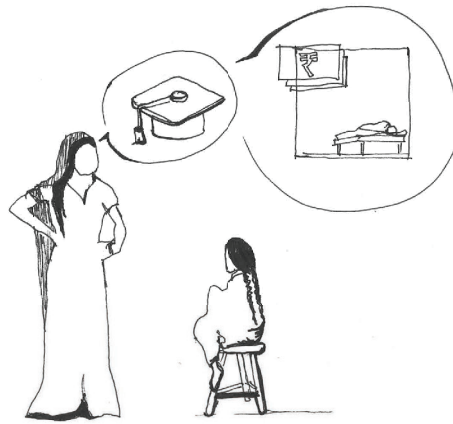
There, they will talk for a long time, with people who decided to make things change. The local government and an international private partner were granted funding from the World Bank.



This money will be given to the women's group as micro-loans helping them to start their businesses in a shared workshop space. The rest of the money will serve building two sanitation points in our neighbourhood.



While some women will use these loans to run a health and day-care centre, others are going to teach us after school under this huge roof, built for our mums to hangout in a safe place. Twice a week, my mum cooks there with others, and make dinner for everyone. The businesses have become fruitful and busy, so the women organisation decided to share responsibilities.



My mum says that in two years she will have saved up enough money to expand our house and build an extra room, for a 'paying guest'. She promises she will save up that money for my higher education she says.

3. Women & Mumbai

a. Women in India

Gender concerns

**IND: 127****NL: 3**

Gender Inequality Index

**16.4%**

domestic violence

**♀ 933****♂ 1000**

missing girls

**17.8%**

marriage before 18 yo

**9.9%**

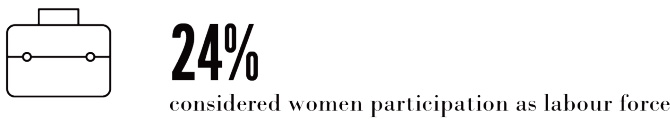
pregnancy (15-19 yo)

India is ranked 127/ 189 in the gender equality index, whereas the Netherlands is number 3⁵. This number is only touching a fragment of the issues regarding the wide gender disparities in India.

The gender disparity encompasses many societal issues. First, in the Indian society, women are the property of their husband and his family; they are considered as a burden that has to be taken care of. In general, they receive a different treatment than the rest of the society, and are subjected to domestic violence, rape, molestation, and much more. In fact, the National Family and Health Survey reported that in 2015-16, in urban Maharashtra, 16,4% of ever-married women experienced domestic violence.

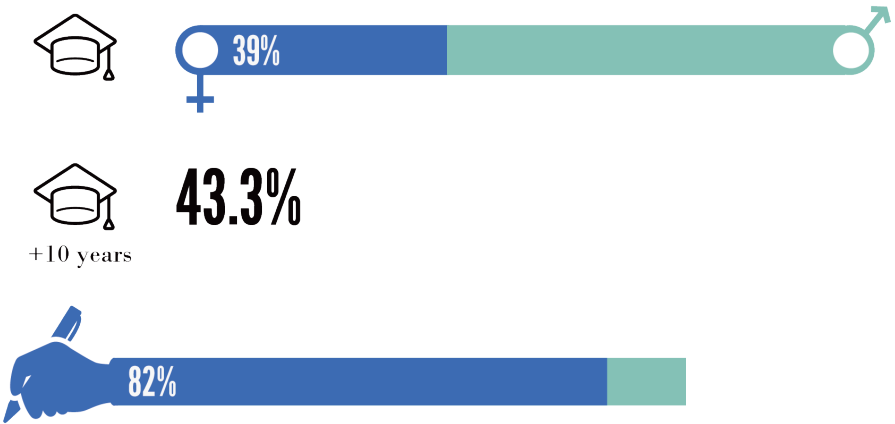
The situation is worst in rural Maharashtra, as 26,2% of women experienced this violence. However the situation improved, as the ratio was of 30,7% in 2005-06 in Maharashtra⁶. Their freedom and behaviours are framed and restricted by societal constructs and ideologies such as religion. Indeed, the recent ‘Shah Bano’⁷ and ‘Sabrimala’⁸ cases demonstrate how religion restricts women’s actions, their access to public space and rights for expression and equality. Besides religion, ethnicities and social beliefs have also an impact on the place of women in the Indian society. A major outcome of is gender selection: early after birth, some girls are murdered in order to relieve the family’s burden. In 2011, India counted 67 ‘missing girls’ per 1000 boys (aged 0 to 6)⁹. Women are also oppressed by the society, as early marriages are still common; 17,8% of women under 18 were married, and 9,9% of women between 15-19 years old were mother or pregnant, in 2015, in Mumbai suburban area¹⁰.

Employment



At an economic level, women are also under-recognized, as their labour force participation was only at 24% in the whole country in 2017. There are also more women unemployed than men: 4.2% of the women labour force was unemployed in 2016, against 3.3 of men. Indeed, the significance of women’s efforts and contribution to the country are not evaluated in economic terms, like for instance household chores. Furthermore, women are more susceptible to un-employment, as 81,4% of women have a vulnerable job, against 76% in the case of men. Among women workers, only 66% have a paid employment¹¹. Women’s participation in the labour force is also undermined by their health which is on average lower than the men’s, due to mistreatments, high fertility rates that lower their nutritional status, or even unsafe abortions. Heise’s research on women violence stipulates that “[violence against women] is detrimental to economic development because it deprives women of the ability to participate fully in the economy by depleting both their emotional and physical strength”¹².

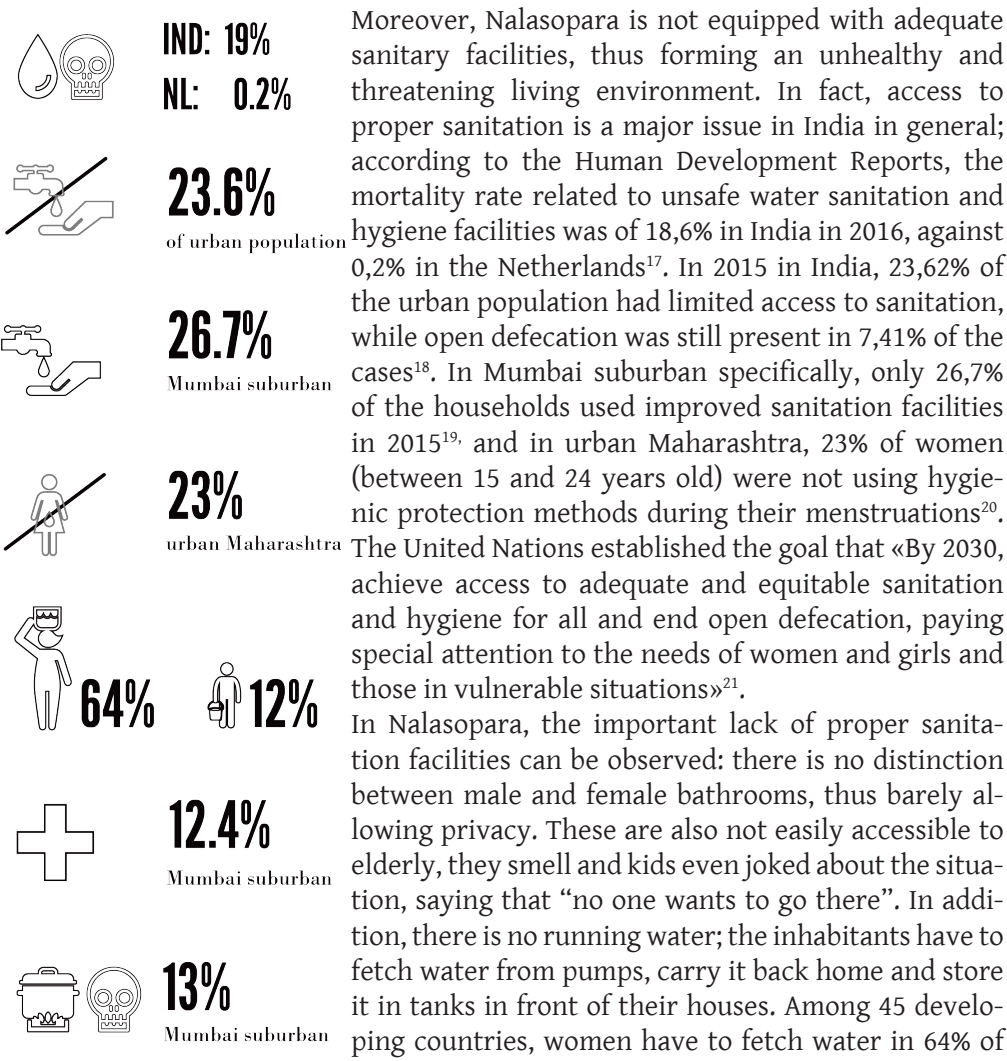
Education



Mumbai suburban - 2015-2016

Furthermore, access to public facilities is also restricted to women. Education in particular, is gendered. As a girl is considered as a burden for her family (because of dowry payment and her lack of value in taking care of the family¹³), her access to education is often restricted. Between 2010 and 2017, only 39% of women had received secondary education¹⁴. In 2015, only 43,3% of women had received 10 or more years of education. This results in 82% of women being literate, against 94,5% in the case of men¹⁵. These disparities impact the human development index, clearly showing inequalities between genders. In 2017, this index was 0,575 for women and 0,683 for men. In comparison, in the Netherlands, this gap was only of 0,031, with men also having a higher index (0,944)¹⁶.

Sanitation and Health



Moreover, Nalasopara is not equipped with adequate sanitary facilities, thus forming an unhealthy and threatening living environment. In fact, access to proper sanitation is a major issue in India in general; according to the Human Development Reports, the mortality rate related to unsafe water sanitation and hygiene facilities was of 18,6% in India in 2016, against 0,2% in the Netherlands¹⁷. In 2015 in India, 23,62% of the urban population had limited access to sanitation, while open defecation was still present in 7,41% of the cases¹⁸. In Mumbai suburban specifically, only 26,7% of the households used improved sanitation facilities in 2015¹⁹, and in urban Maharashtra, 23% of women (between 15 and 24 years old) were not using hygienic protection methods during their menstruations²⁰. The United Nations established the goal that «By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations»²¹.

In Nalasopara, the important lack of proper sanitation facilities can be observed: there is no distinction between male and female bathrooms, thus barely allowing privacy. These are also not easily accessible to elderly, they smell and kids even joked about the situation, saying that “no one wants to go there”. In addition, there is no running water; the inhabitants have to fetch water from pumps, carry it back home and store it in tanks in front of their houses. Among 45 developing countries, women have to fetch water in 64% of the households. In 12% of the cases, it is the children’s duty²². Besides that, in Mumbai suburban, in 2015, only 12,4% of the households had a member covered by a health insurance scheme. At the dwelling level, health is also threatened, due to the use of unsafe cooking methods, still practiced by 13% of the households in the suburban areas of Mumbai²³.

These practices and the lack of hygienic amenities have an important impact on people’s daily life and health, resulting in a dangerous, unhealthy and unsustainable environment.



«Be careful that men don't feel undermined or defied by women if they gain too much importance in the society. But promote and explain sense of equity of rights bran men and women. Bring their rights in equity into the public space»

‘However, in some societies, especially the undermined and economically weak ones, gender equality is not a priority, . Education, safety, security, homelessness,, violence, starvation, sanitation».. Are more important issues. After these are addressed, they provide a safe ground base for further empowerment and development»

(Porter, Elisabeth, ‘Rethinking women’s empowerment’)

Today, gender equality is an important concern in India, and in the world. It is the second target of the Indian governmental expenses²⁴, and is number 5 of the UNSD goals for 2030, together with: ‘good health and well-being’, ‘quality education’ and ‘reduced inequalities’²⁵. The question of gender is therefore critical in the current ways of planning. However, a downfall of considering the women perspective could be of emphasizing it too much, at the expense of the men’s. Therefore, my aim is to improve the current situation, in order to propose a more balanced environment. I would like to raise awareness on the importance of design inclusiveness and gender related issues, with regards to the global south in particular. For these reasons, I would also like my response to be reproduceable and applicable in various locations, where gender equality is still an issue.

b. Mumbai City

(The information of the next section was analysed within the Global Housing Graduation Studio 2019, and compiled under a ‘Hard and Soft Data’ booklet)

The case study of the studio in Nalasopara, a city located 45 kilometres north from Mumbai, in the Vasai-Virar region, does not derogate from this national and global issue.

India

India is currently the worlds second most populated country. Nearly a fifth of the world population lives in this one country. India is on its way of becoming the world’s most populous country by 2024 and is expected to have around 1.5 billion inhabitants by 2030 and 1.7 billion inhabitants by 2050.

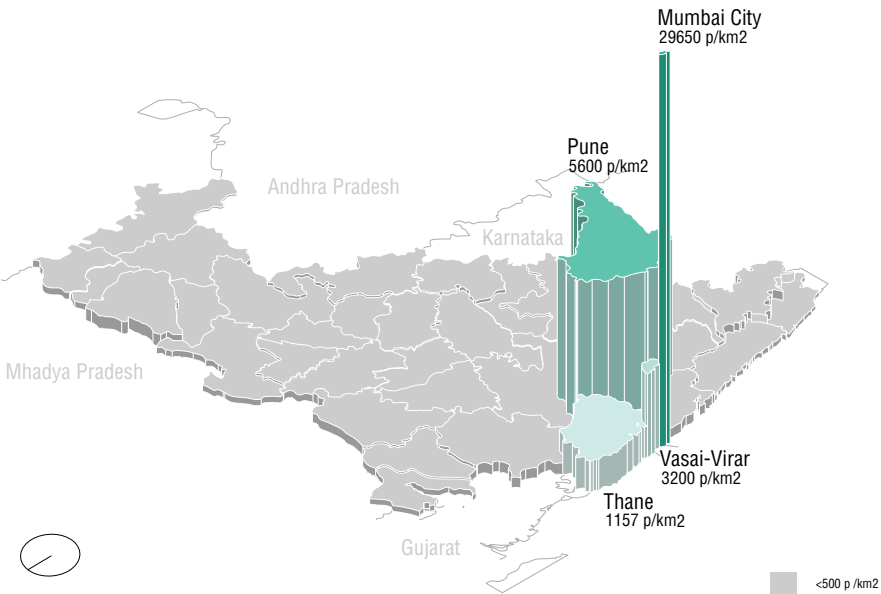
Mumbai’s Metropolitan Region

Mumbai’s Metropolitan Region currently has a population of around 23 million and positions itself in the top 15 most populous metropolitan areas in the world. The growth rate of the outer and inner zones of MMR averages at 3-4% while the growth rate in the core has decreased to around 0.4% per annum.

Vasai-Virar

The population in Vasai-Virar is currently around 1.5 million. There has been a spike in the growth rate from 2012 on with the population increasing by about 4 % each year, whilst between 2010 and 2012 the growth rate was at 1%.

Population Density in Maharashtra Districts



Density

India

The population density in India is above average, ranking it amongst the top 20 most dense countries. The density has gone up from 325 persons per square kilometer up to 382 persons per square kilometers in 2011. Even though the density in India has increased every year, the rate of increase has slowed down in the last decade.

Mumbai's Metropolitan Region

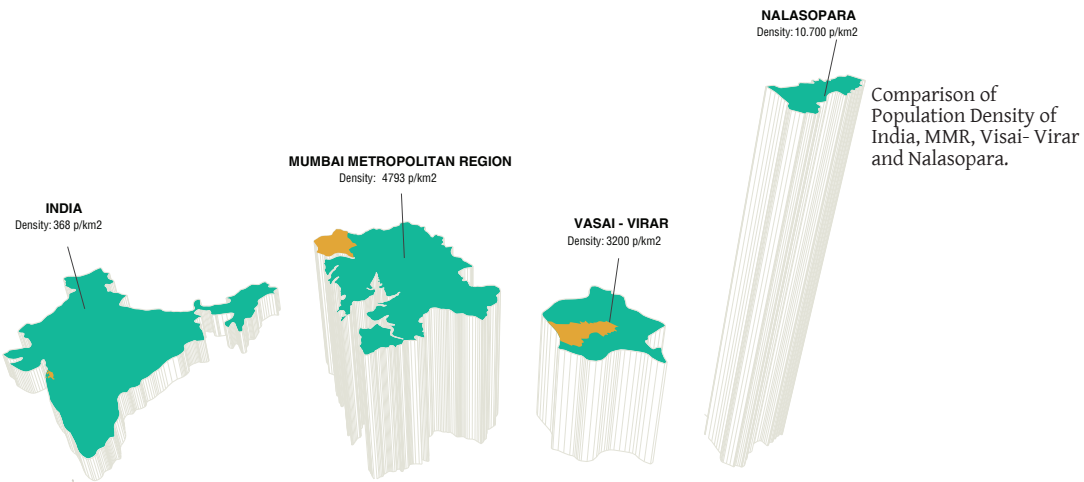
Mumbai's Metropolitan Region is in the top 5 of the most dense cities in the world. This is partly a consequence of the fact that more than 40% of the inhabitants of Mumbai live in slums. It's most infamous slum, Dharavi for example, has a population density of over 340.000 persons per square kilometers.

Vasai-Virar

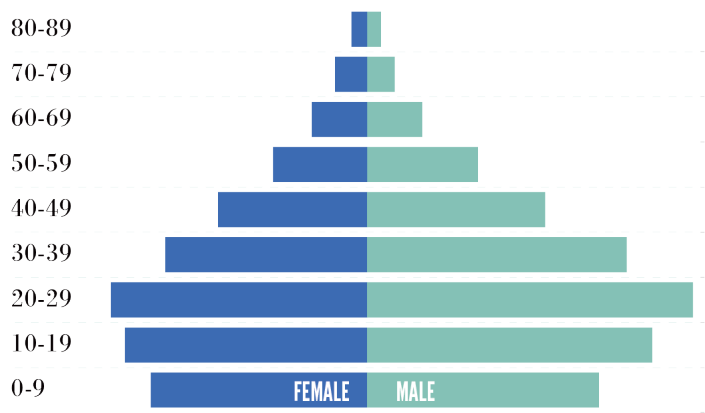
The density is lower than that of Mumbai's Metropolitan Region, however it is still very dense compared to other cities in the world.

Nalasopara

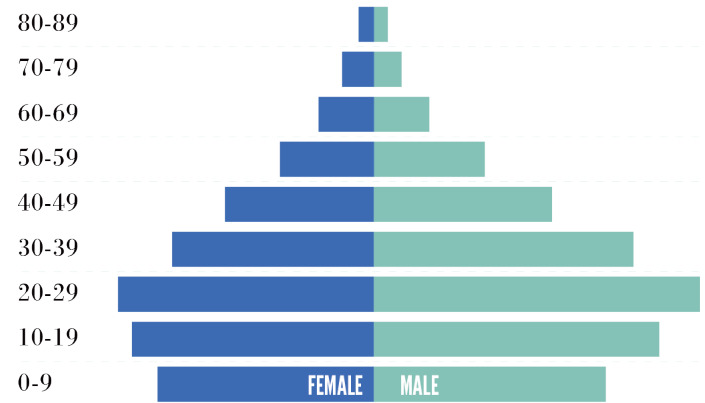
The density in Nalasopara is astonishingly high, with around 30% of the population of Vasai-Virar living in an area which makes up only 11% of the whole of Vasai-Virar.



Age pyramid - 2010s

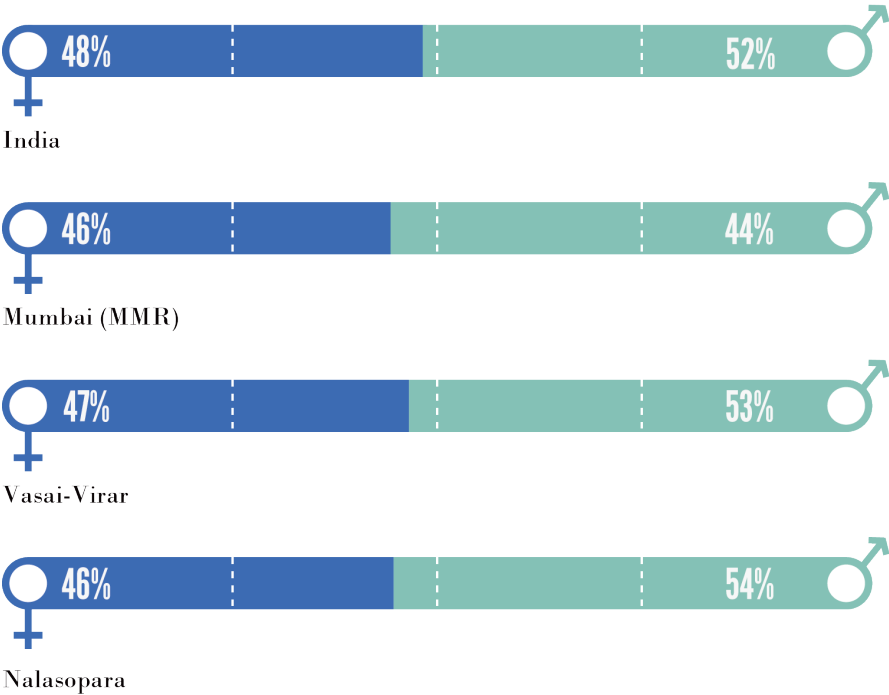


India

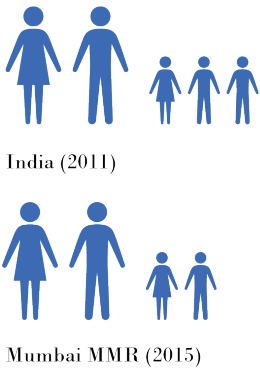


Vasai-Virar

Comparison of sex ratio - 2010s



Comparison of children per family - 2010s



Sex Ratio

India

The major cause for the imbalanced sex ratio between males and females is considered to be the violent treatments of female children at the time of birth. The sex ratio in India has increased from slightly from 933 females per 1000 male in 2011 to 940 females per 1000 males in 2011.

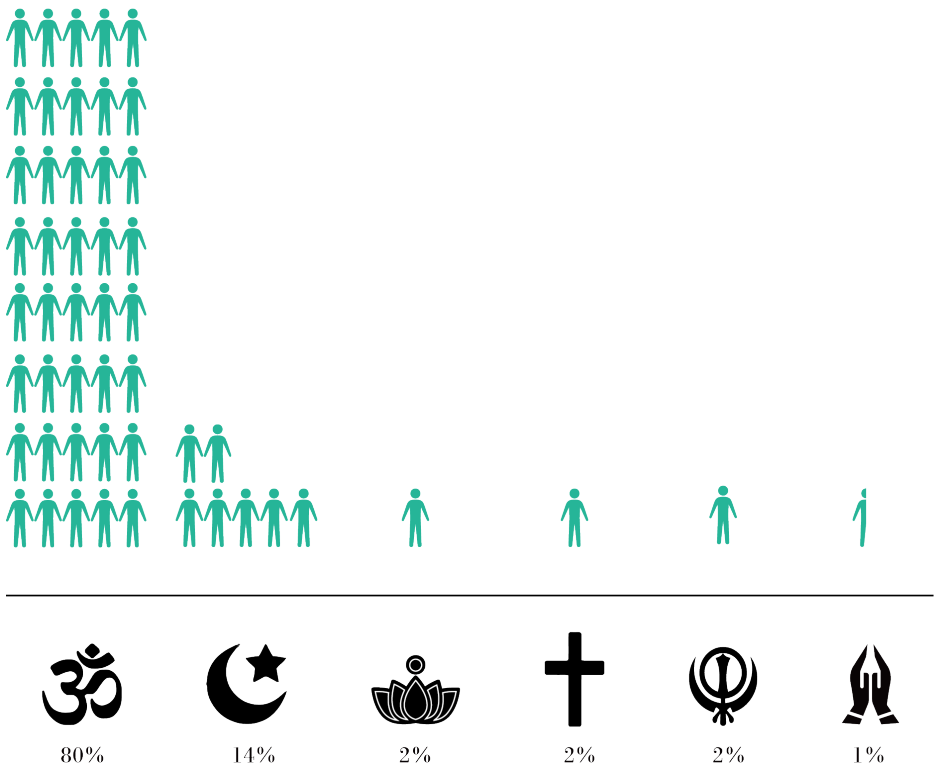
Mumbai’s Metropolitan Region

When compared to the overall sex ratio in India, women are less represented in the MMR. On the flip side the sex ration in 2011 is much more balanced then in 2001 with 777 females per 100 males in 2001 and 940 females per 1000 men in 2011.

Vasai-Virar

The sex ratio lies at the average of India, however it should be noted that the ratio of females per 1000 males has dropped since 2001. In 2001 there were 973 females per 1000 males, while in 2011 there were 886 females per 1000 males.

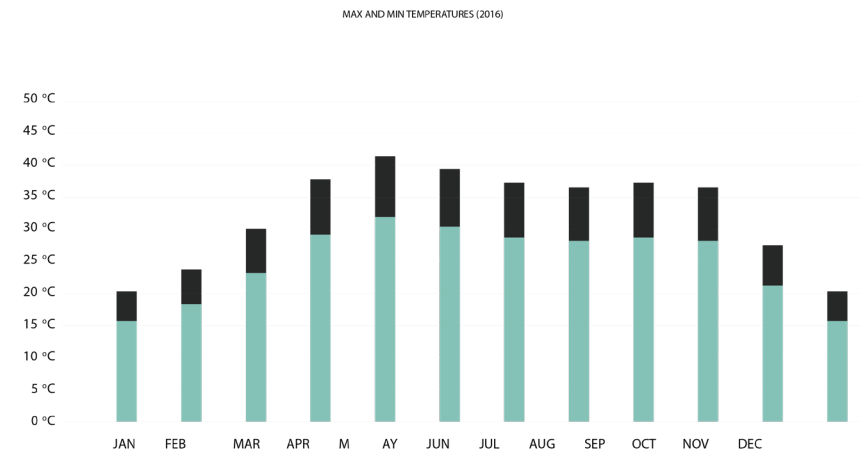
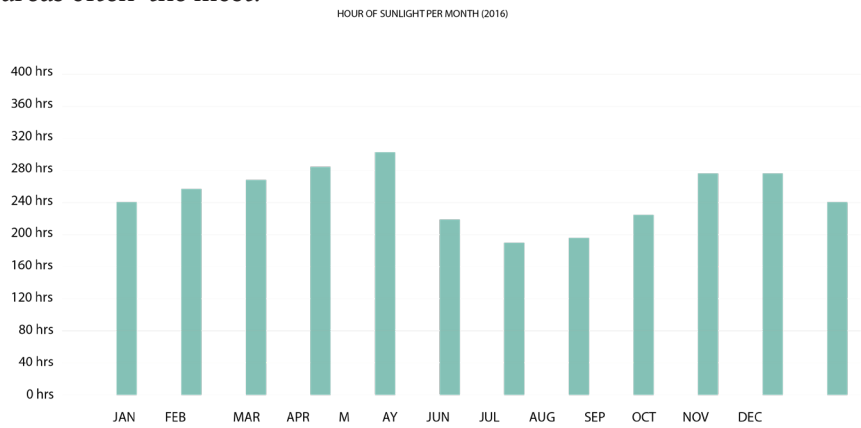
Religious profile of Nalasopara- 2010s



Climate

From March till May the average amount of sunlight in India is the highest, which correlates with the maximum temperatures which are reached around May. The maximum temperature can reach 41 degrees celsius, and the minimum temperature can be around 16 degrees celsius. This however differs from region to region, since India covers a large area resulting in different climates between north and south.

Precipitation in India causes many problems during july and august especially with the maximum precipitation at around 200mm. Global warming also enhances this effect with the indian sea level rising about 1.3mm per year and precipitation increasing with about 6-8% by 2030. There are many areas in mumbai that are considered as Low elevation zones, which are prone to flooding. This results in India being highly vulnerable to climate hazards and the people living in slums and low lying areas often the most.



Average Precipitation per Month (2016)

Month	Precipitation (mm)
JAN	25
FEB	22
MAR	20
APR	12
M	0
AY	25
JUN	75
JUL	170
AUG	165
SEP	120
OCT	22
NOV	5
DEC	15

The chart displays two data series over a 12-month period. The red line, representing the total number of people vaccinated, starts at approximately 16 million in January, rises to a peak of nearly 30 million in April and May, and then declines to around 13 million by November before a slight uptick in December. The teal line, representing the number of people who have received their second vaccine, remains very low (below 1 million) until March, then rises to a peak of about 6 million in June, before gradually declining back to near zero by December.

Month	Total Vaccinated (Millions)	Second Vaccine (Millions)
JAN	16	0.5
FEB	18	0.5
MAR	25	0.5
APR	28	0.5
MAY	29	2.0
JUN	26	6.0
JUL	20	5.0
AUG	18	3.0
SEP	16	2.0
OCT	14	1.0
NOV	13	0.5
DEC	14	0.5

Economy

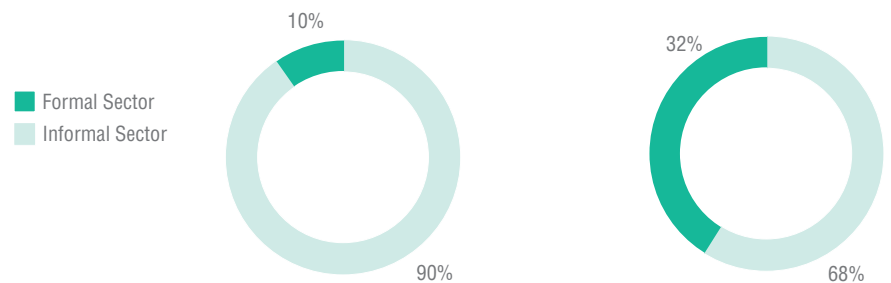
In 2017, only 10% of India’s workforce is in the formal sector, which means that 90% of India’s workers do not have the privileges—like social security and workplace benefits—enjoyed by their counterparts who are formally employed. The leading contributors of informal employment are agriculture, manufacturing, construction and trade.

According to the Report of the Committee on Unorganized Sector Statistics, the informal economy makes a considerable contribution to the economy and caters to the requirements of the formal economy. However, its negative repercussions cannot be ignored.

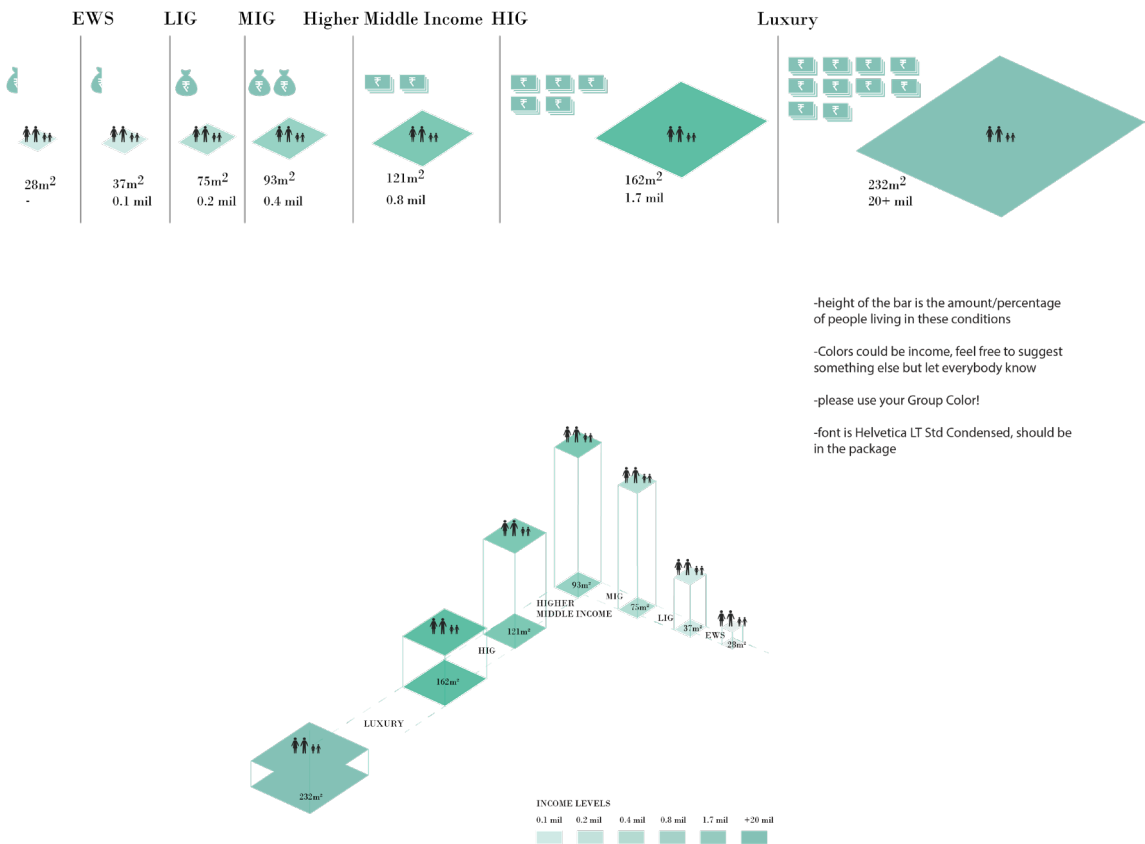
Informal workers also work under worse working conditions with little job security, no perks or protections and with low wages. The protections guaranteed to workers under different legislations are not complied with by the informal sector, and they also escape the purview of the authorities.

The percentage of workforce in the formal sector in Mumbai is higher than that of the nation. 68% of Mumbai’s workforce is employed by the informal sector. A vast majority of these workers are the urban poor - excluded not only from formal sector jobs, but also from formal sector housing - living in slums and informal settlements across the city.

Throughout the decade, there was a shift from workers working in the agriculture sector to services, while the of workers in the industries remains at a similar percentage.



Income groups

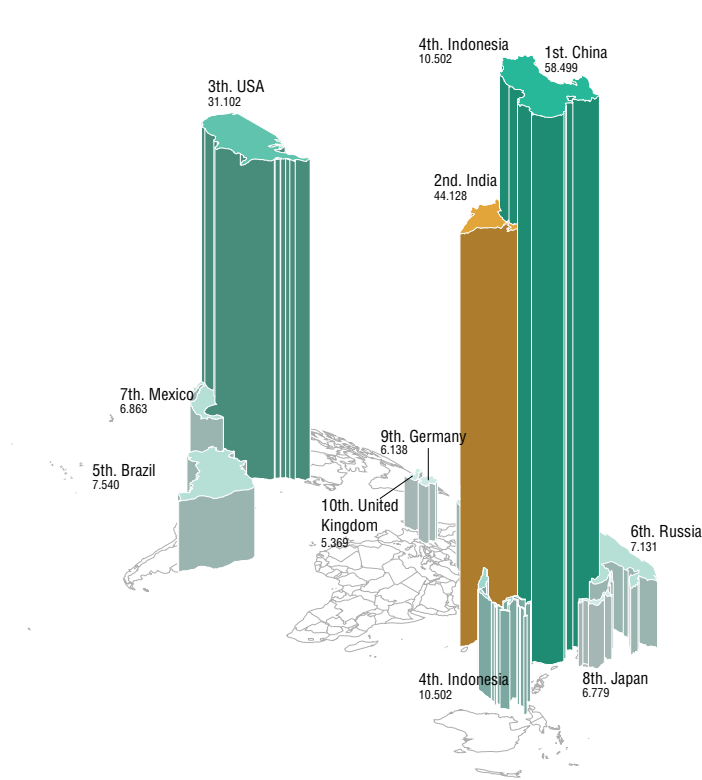


Out of total 228.4 million households of the country at the end of 2009-10, 47.6 million were high income households (20.44 per cent), 140.7 million (61.6 per cent) were middle income households and 41.0 million (17.96 per cent) were low income households.

Middle Income households are the largest income group in modern India, as well as the largest consumer group for housing. On the other hand, affordable housing sector is the fastest growing segment in India, and there is a paradigm shift of affordable housing tailored to the aspirations of the middle class living style.

The huge disparity of income gap in India results in a wide range of differences in terms of square meters per household, ranging from 232m² for most luxurious households to 28m² per household in the EWS.

GDP Rankings



There has been a notable rise in India's performance at the World's Gross Domestic Product (GDP) Rankings throughout the past decade. In 2013, India was ranked 7th with a total GDP of 2.102 trillion USD, and was ranked the 6th in 2017, with a total GDP of 2.611 trillion USD.

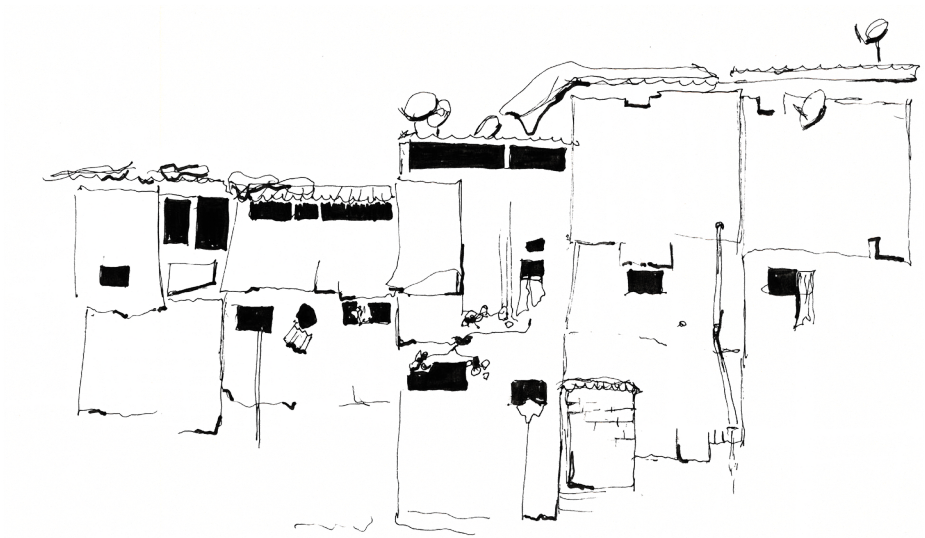
India's economy hasn't had a down year in this century and has been growing at around 7% per year ever since Prime Minister Narendra Modi took office in 2014. In 2018, India's economy will be one-third bigger than when Modi took office.

In a report by PricewaterhouseCoopers (PwC) titled "the world in 2050", they projected that the emerging markets will continue to be the growth engine of the global economy. By 2050, China could be the largest economy in the world, accounting for around 20% of world GDP in 2050, with India in second place and Indonesia in fourth place.

«In the developing world, by contrast, cities are expanding too rapidly, resulting in the emergence of massive shanty towns. 50% of the world's urban population are new to the city: for many the first and only experience of modern city life is the shanty. »

R. Rogers, *Cities for a Small Planet*

Sketch from Dharavi



Urban development

Because of rapid urbanization, Mumbai is today one of the top 5 most dense cities in the world. However, the consequences are dramatic for the liveability of the city and the quality of life of its inhabitants, with more than 40% of them living in slums. With this massive urbanization, public spaces shrank considerably, with only 0.03 acres of open space per thousand residents²⁶.

Informal settlements, or slums are crowded unhealthy living environments, which is why they are being transformed under vertical slum redevelopments, of 5 storey high chawls. This results into a detachment from the ground. Compared to low-rises, the public spaces of a vertical city are less friendly and safe, especially for women, who prefer a chaos of activities, ensuring them a certain comfort.

Besides that, anthropological research shows that women are only present in the public sphere in a transitional phase. Access to public space is gendered, because of its design and because of socio-cultural ideologies.

«Lack of infrastructure restricts the access but also actively prevents people from participating in shaping the future of the city»²⁶

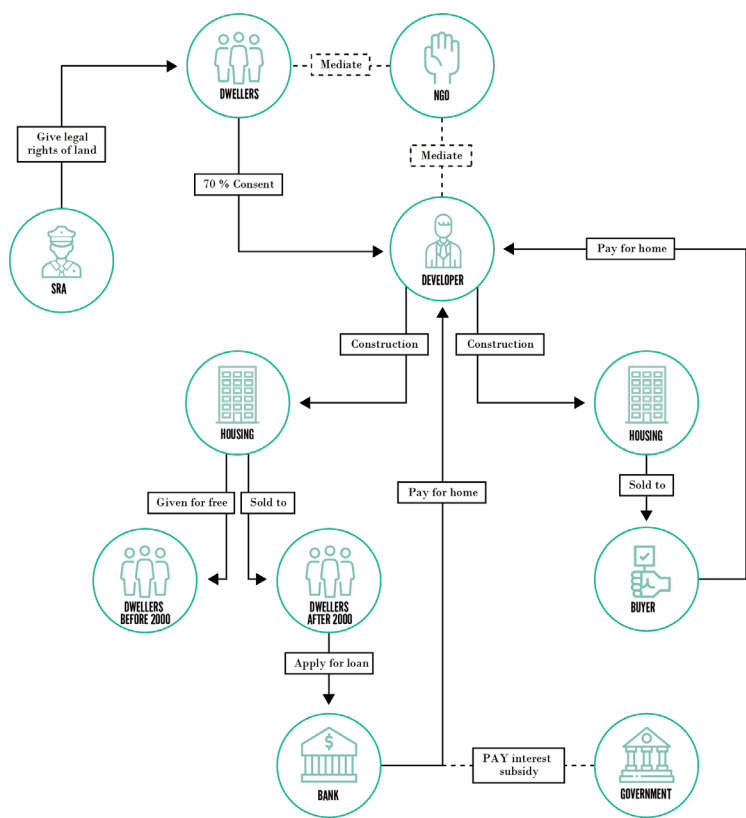
«In Mumbai, a crowd is in average composed of 28% of women only»

(Ranade, 2007)



Photo: Fleur Melchers

Slum Rehabilitation Scheme (1995)



The Slum rehabilitation Scheme which was implemented in 1995 can be seen as the successor of all previous attempts to redevelop the slums. The main driving force behind this scheme has been the reliance of the redevelopments on the housing and property market. The very basic workings of this is that the redevelopment of slums has been incentivized for developers by giving them the right to also make profit, by building additional housing on the land that has been cleared and if this is not sufficient they have the right to build housing elsewhere on public land. In order for the developer to do any redevelopment in a slum community however, he needs to receive 70% consent from the community and because of this there are NGO's who mediate between developers and slum communities in order to make sure that agreements can be reached and the desires of the slum dwellers are met.



«Even though slum women want private spaces, they also wish to access public space for fun and when offered opportunities to do so, grab them with both hands»

«Various slum redevelopment schemes may offer even fewer opportunities for women to have fun»²⁶

Women have to seek for 'respectable reasons' such as festivals, in order to legitimate their presence in the public realm. Slum redevelopments also disregard formal structures such as schools or health centres, ignoring the existing forms of community life, and therefore restricting women's participation and appropriation of the public sphere.

Problem statement

The lack of access to proper sanitary facilities, education and public space, together with societal constructs, undermine the role and status of women in India, and Nalasopara in particular.

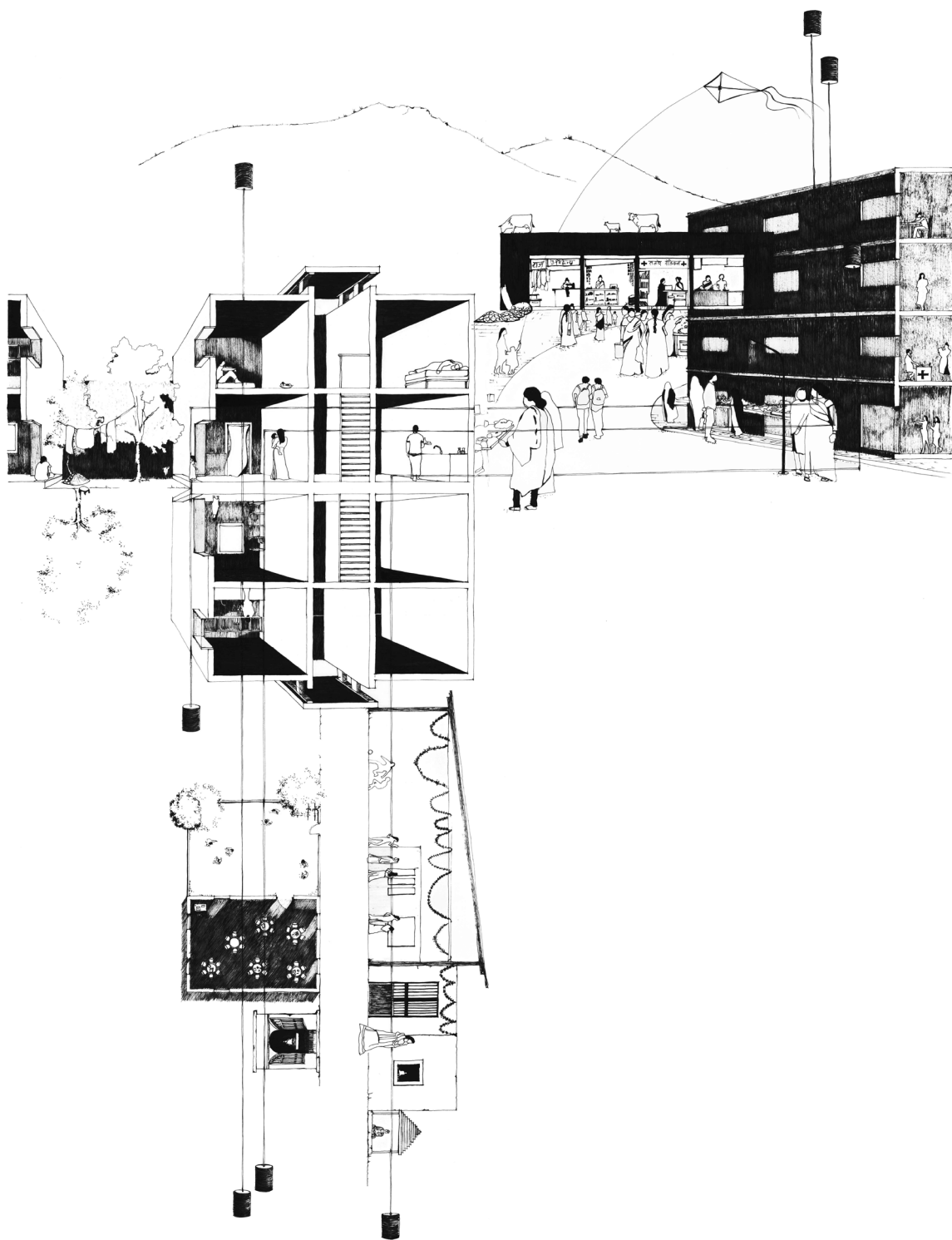
Currently, women are undermined, under-represented and are not socio-economically independent. Their living environment is unhealthy, dangerous and not prone to sustainable development.

The current slum redevelopment schemes are restricting women's participation in public life.

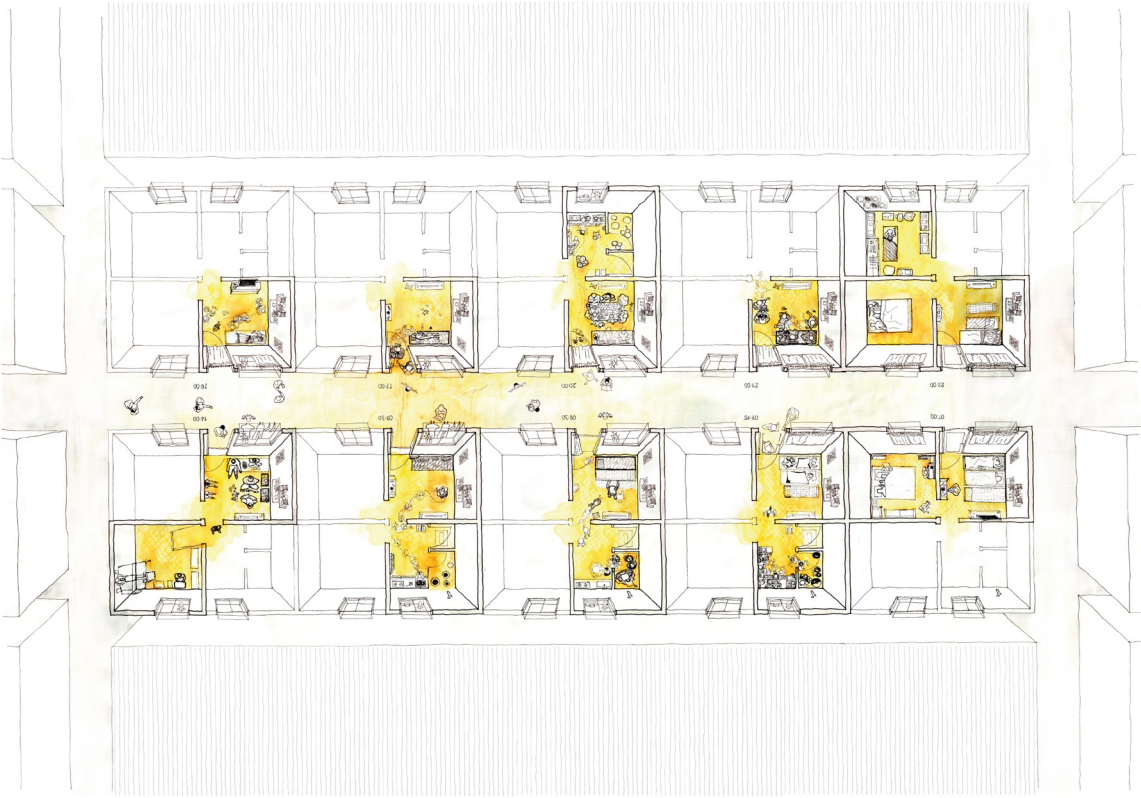
Research question(s)

How can design empower women, give them more freedom and allow them to participate in the public realm?

What are the potentials of a gender sensitive design?



4. Patterns of inhabitation



PUBLIC

PRIVATE



front door step for food preparation



food sharing



kitchen utensils



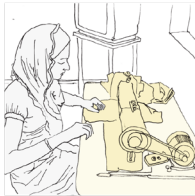
kitchen storage



curtains for privacy



clothes drying



home-based work



wet elements in the house

COMMUNAL SPACE

HOME



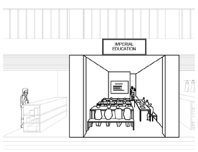
the informal corner



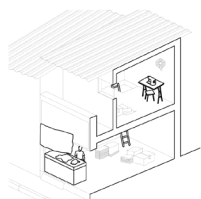
licensed location



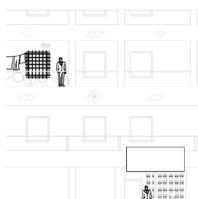
women work at home



education as an investment



production and consumption are never far from one another



intimate working and living



commercial extensions



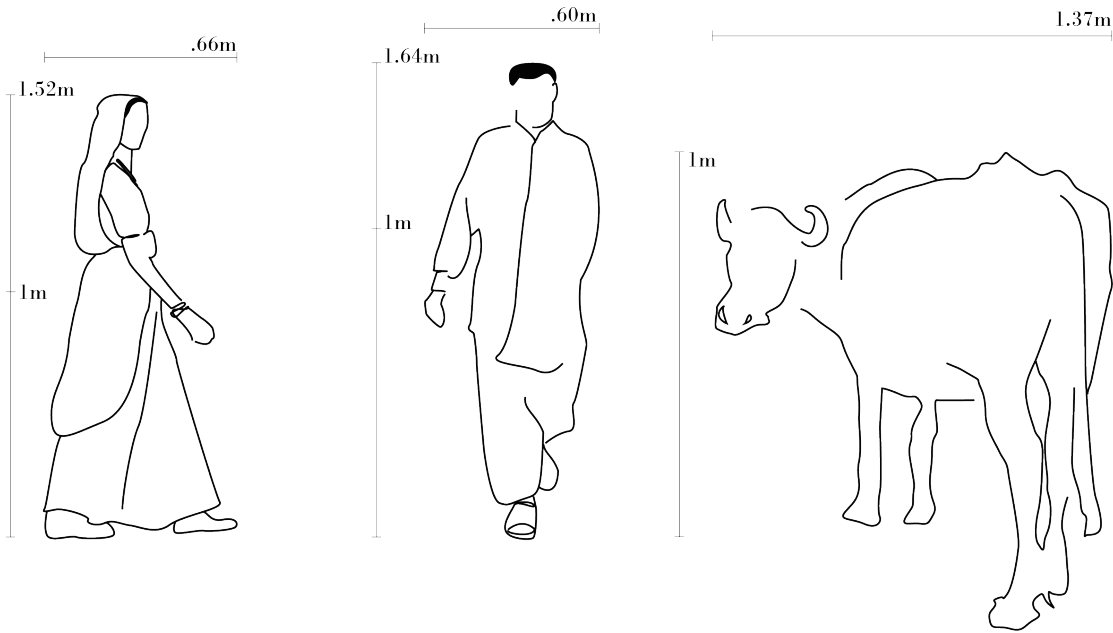
space is scarce - thus always used for income generation

5. Indian Modulo

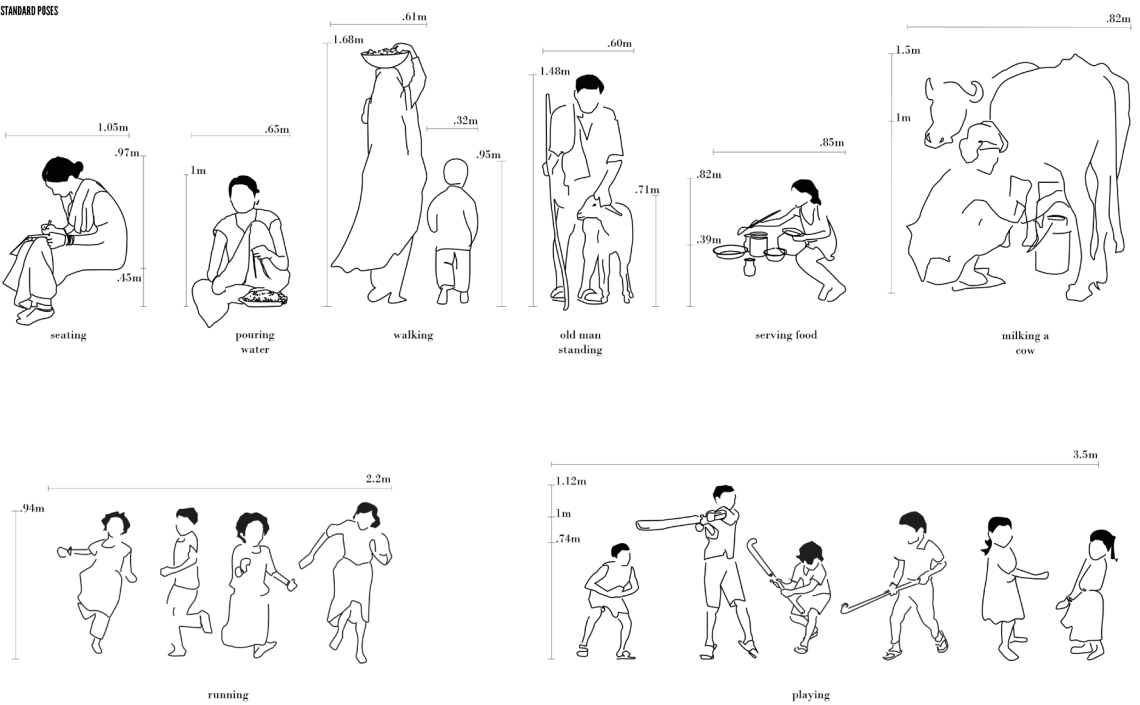
To follow up on these studies, I developed a sort of “modulator”, based on Indian dimensions. It was the point of departure of the design, which emerged in correspondance to the activities performed, and the amount of space they require.

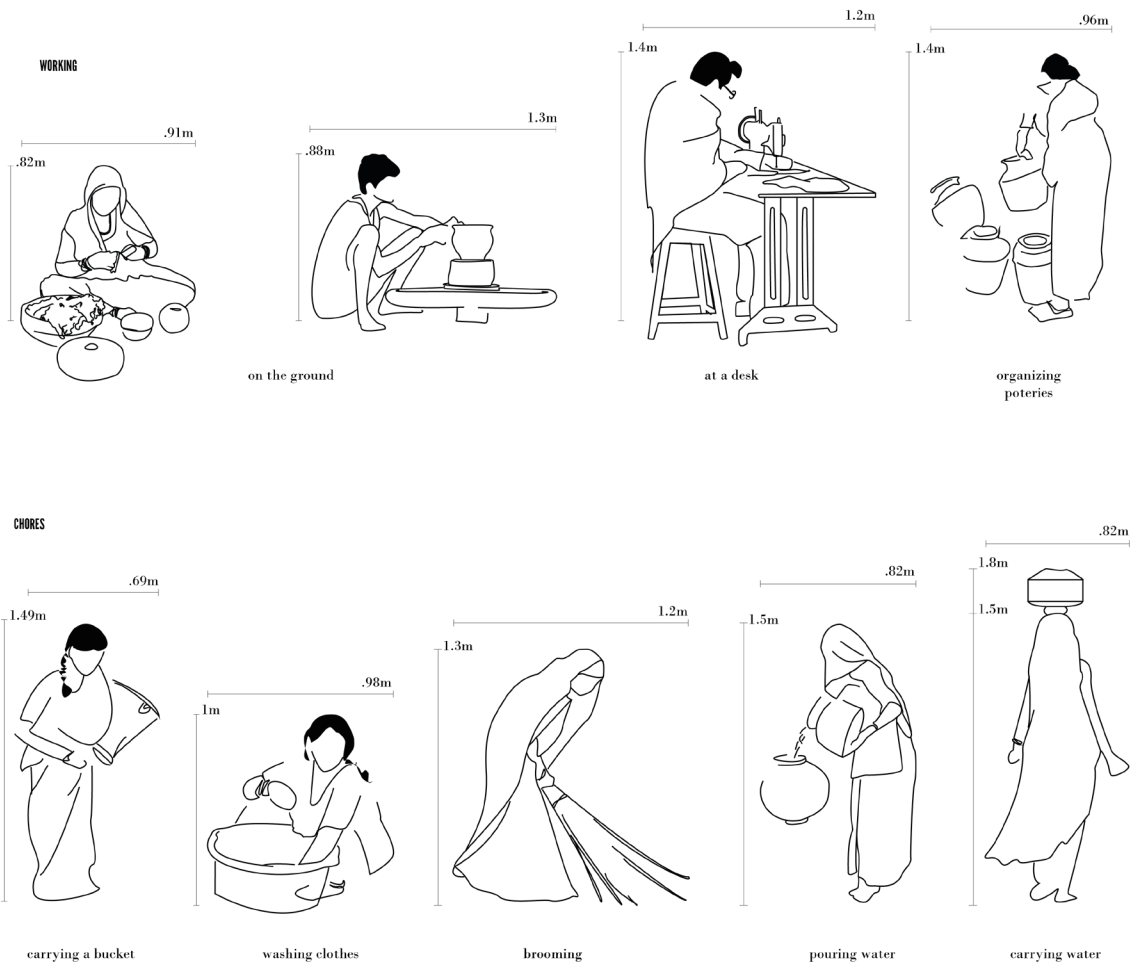
HEIGHT			
india		netherlands	
WOMEN	MEN	WOMEN	MEN
1.52m	1.64m	1.68m	1.81m

source: <http://www.imperial.ac.uk/news/173634/dutch-latvian-women-tallest-world-according/>

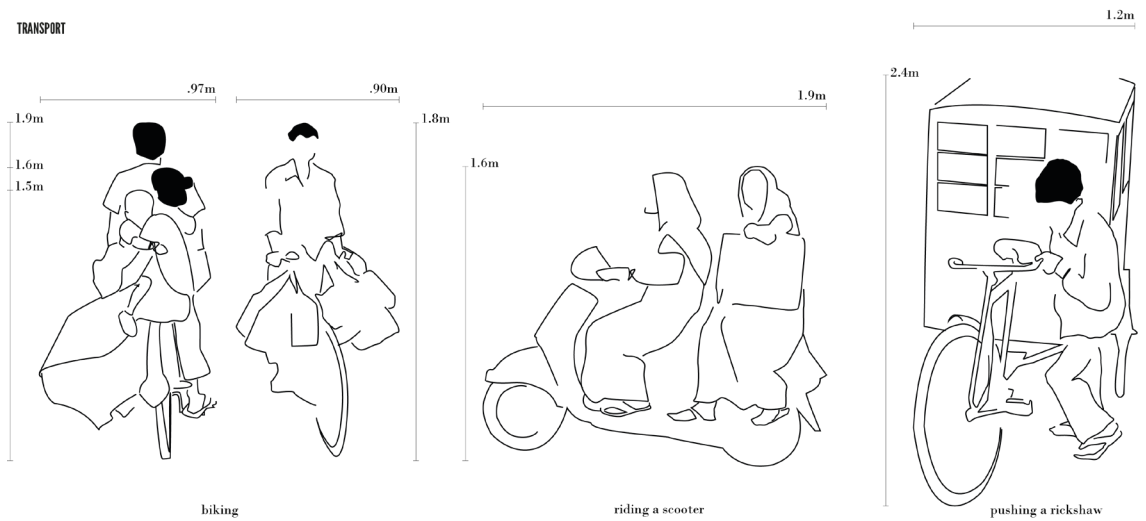


STANDARD POSES

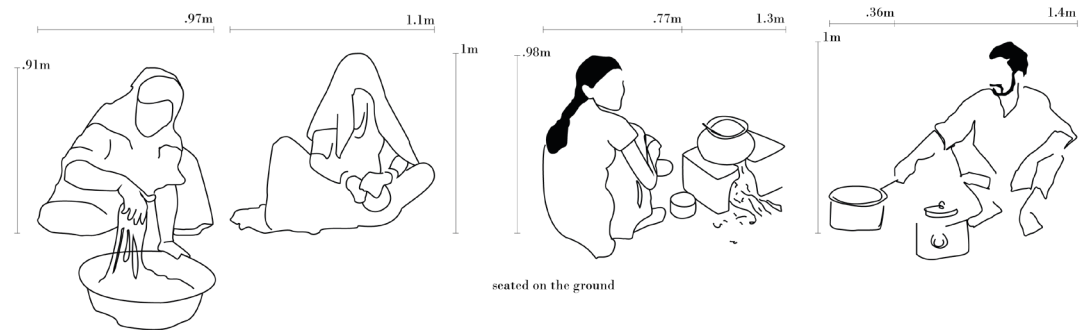




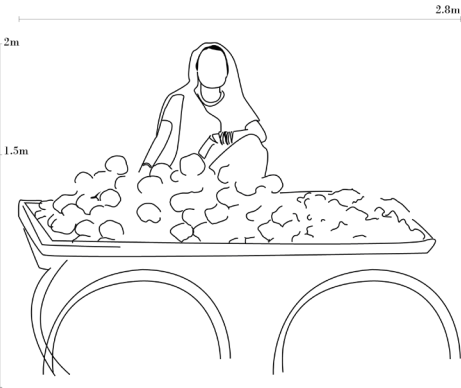
TRANSPORT



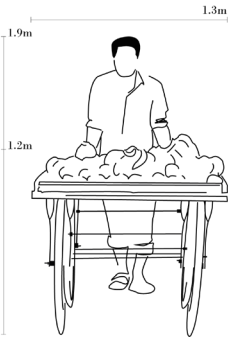
COOKING



COMMERCIAL

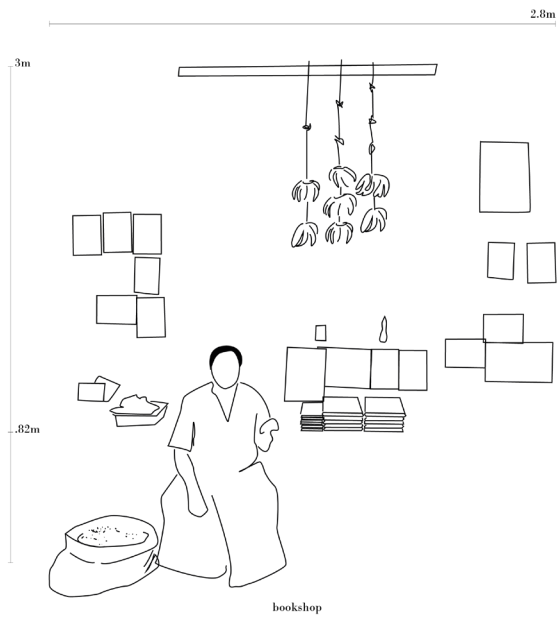
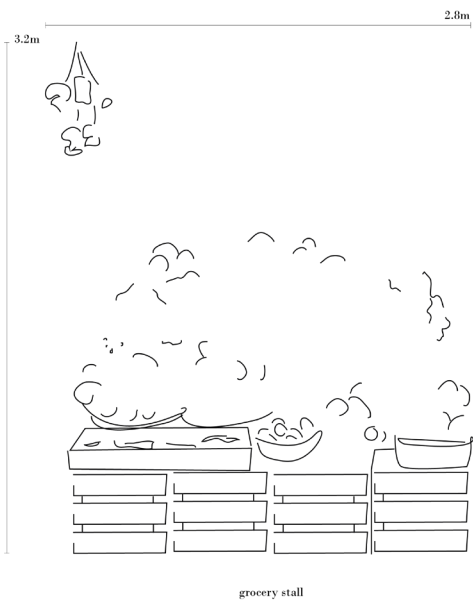


selling vegetables

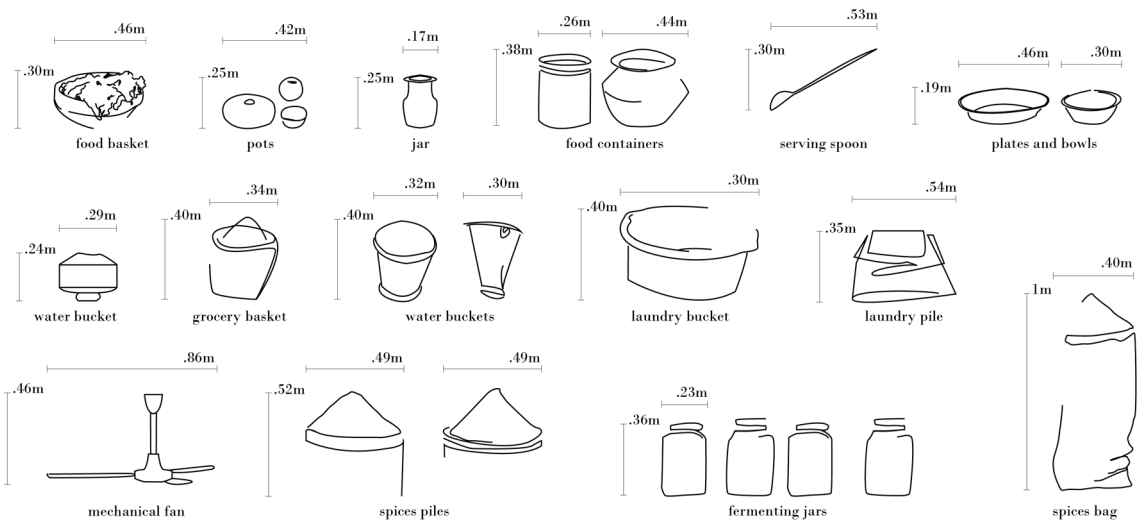


selling fruits



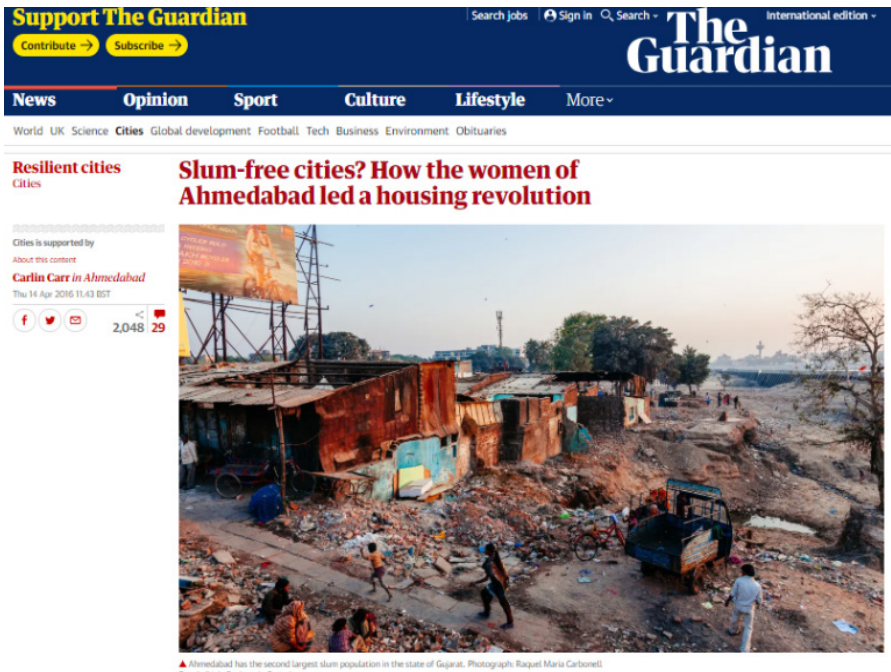


UTENSILS AND OTHER OBJECTS



6. Case studies

To start with the process of an alternative for the standard slum re-developments, I analysed several case studies, most of them led by NGOs, with an emphasis on participation and women consideration



Mother Theresa Nagar,
Pune, India

Bamboo and cloth
1:1 mock- ups of the
dwellings

Insitu Slum Rehabili-
tation Project under
BSUP (Basic Services
for Urban Poor),
JNNURM, Yerawada,
Pune



«The individual houses as well as the buildings constructed under BSUP in Mother Teresa Nagar have terrace access and they are also secured with parapets. There is a small space for sitting outside the individual houses. Some of the residents have a sit out made of concrete outside their houses which they use for sitting, washing clothes and utensils.»

«One of the good things about Mother Teresa Nagar unlike Gandhi Nagar is freedom of girls to move around in the community, and participate in celebration of major festivals.»²⁷

These in-situ redevelopments exemplify top down approaches, operated in collaboration with the local and future dwellers. Thanks to 1:1 mock-ups of the dwellings and physical models, people could participate in the design and express their needs. These processes turned out to be successful, with a persistence of community bonds and a great appropriation of the new constructions

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