loiter city

spatial strategies to redefine a woman's place in a public realm

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Image A: Woman appropriating public space; Source: Author

Preface

This report is explanatory documentation of the master's graduation project titled 'Loiter city'. The research aims at developing spatial strategies to redefine a woman's place in the public realm. It looks at realm rather than space to highlight that the issue at hand is quite complex and goes beyond just the spatial aspect. It falls in the intersection of spatial strategies, collaborative governance and planning disciplines. The project looks at the Indian perspective with Bangalore as the background. This graduation project is undertaken in the Studio of Planning Complex Cities, under the subsection Spatial Planning and Strategy. The report begins with providing a detailed problem field and analysis of current trends that marginalise and segregate women. The methodology showcases the complexity of the subject and derives various tools and methods to address the same. After extensive spatial and stakeholder analysis and qualitatively understanding women's experiences, the project proposes multiscalar and multidisciplinary principles for achieving gender-sensitive planning frameworks. The report contains the research proposal of gender mainstreaming and contextualising these principles to the Indian context. The approach is carried forward by exploring opportunities for collaboration and dialogue, community building and institutionalising practices that provide agency and legitimacy to women.

Acknowledgement

Abstract

Gender is a highly context-specific social construct. It explores the social relationships between men and women, a relationship in which women have been systematically subordinated (Oakley 1972). The way gender relations are defined broadly influence the conceptualisation of space and place. In a patriarchy like India, where gender inequality is deeply rooted in its culture and history, this disparity lends itself to the realm of space-making as well. Even though women account for almost half of India's population, they are still considered vulnerable and marginalised. They still have difficulty fostering an amicable relationship with the public realm which was predominantly created by and served for men. They are met with hostility, cultural taboos, violence and an exclusionary environment that doesn't account for or recognise their complex needs.

The graduation project, 'Loiter city' explores the spatial dimension of gender inequalities that result in the economic marginalisation and socio-spatial segregation of women. It examines socially constructed behaviour patterns, relationships between women and the built environment. It deals with the inequalities between gender and focuses on the spatial dimension of this inequality trying to locate socio-spatial justice through an Indian perspective.

The framework of the project is constructed using Peter Marcuse's Critical planning theory. By reviewing an extensive volume of academic research and literature on gender studies, the foundation of the project is developed. The project analyses the notions of gendered exclusions and citizenship and what it means for women to have the same legitimacy as men in the public realm. A transdisciplinary methodology is formulated which can tackle the complex issue both from the spatial and policy perspective in a multiscalar approach. By using 'Loitering' as the concept, the project envisions an operational framework that aims to change mindsets and provide more visibility to women in public spaces. The project facilitates uninhibited agency, ownership, accessibility for women and creates platforms for active participation in the co-creation of a city.

The vision of achieving legitimacy is a long, tedious and complex process that requires mobilisation of institutional capacities. For this, Gender mainstreaming is envisioned as an integral process achieved by formulating various strategies that can guide sustained change. An organisation called the Gender Lab is proposed to mainstream gender into planning and bridging the knowledge gap. This body helps in tackling opposing interests at different stages while sustaining social change. It monitors the bridging of knowledge and incentive gaps by developing alternative collaborative governance models. Women-led grassroots movements would be formalised within policymaking to boost women's participation in planning processes and influence important decisions that affect their lives. This model emphasises operational frameworks and policy initiatives that prioritise safer and accessible spaces for women. The project paves the pathway to achieve spatial justice through gender-sensitive city planning and by giving agency and ownership to women towards the cities they inhabit.

Contents

Representation of the world, like the world itself, is the work of men; they describe it from their own point of view, which they confuse with the absolute truth.

- Simone de Beauvoir

Motivation

To study the relationship between women and public sphere and their interactions seen through during a cultural paradigm shift

As a young Indian woman, I derive motivation to research the topic of gender inequality in the public realm from my own life experiences in India. Growing up in a patriarchial Indian middle-class family, I have experienced a lot of unsaid gendered expectations. Even though my parents gave me the same freedom as my brother throughout my education, career finding and lifestyle, I was still burdened with subtle gender biases and norms that have seemed quite illogical to me.

It always becomes the most apparent when I express my desire to step out into the city for pleasure or move to another city for employment. I had tighter curfews, could only go with boys by my side for protection, visit only a few places in the city and be out only during certain times of the day.

The slightest resistance would be met with an expose of all the horrific incidents women experience outside and an explanation of how 'my freedom is curtailed for my own good'. Even with the plethora of rape incidences constantly being sensationalised in the India news media, a significant deduction of the reasons behind the crime comes from 'victim-blaming'.

"Why is she there in the first place?"
"What work does a girl have at 10:00 p.m. in the night on the street?"
"Why didn't her brother or her father accompany her to keep her safe?"
"These kinds of incidents won't happen if women are taught how to be careful and in their homes."

All Indian women have learnt to accept the reality that they might be harassed, molested or in extreme cases abducted and raped. This normalisation needs to be challenged immediately because that is not what freedom of movement should entail.

Studies and instances like this make it very clear that the majority of the Indian population believe that girls and women are safest in their homes even though statistics show that domestic violence of varying degrees accounts for 94% of crimes on women. Only recently is this narrative being challenged by young girls like me who claim that these are just more ways of suppressing women's freedom in the guise of their protection.

As an urban planner, I wanted to understand the discourses behind this contentious relationships and identify why the outdoors or the public realm is painted as the 'big bad'. I want to explore the systemic discriminatory practices in the urban design discipline that need to be challenged.

This project, for me, is a way to identify where and how my field of expertise can tackle the obstacles faced by women from the lens of socio-spatial justice and better their relationship with the outdoors. I want to study the complex nature of these interdependencies to facilitate the creation of public spaces that are truly public and just and inclusive of all citizens. The project is an attempt to break the barriers that keep women subdued and their dreams unrealised.

GENDER EQUALITY
IS NOT JUST A WOMEN'S ISSUE...
IT'S A PEOPLE'S ISSUE!!

Introduction

Gender Inequality - Ways in which it manifests

Particular ways of construction of space and place are related directly and indirectly to the social construction of gender relations (Massey, 1994). The conceptualisation of space depends broadly on how gender and gender relations are defined. In this project, we study gender rather than sex since sex refers to the biological differences between men and women. Gender, on the other hand, looks at the social relationships between men and women, a relationship in which women have been systematically subordinated (Oakley 1972). The gender-aware approach is considered more appropriate in this field of research because it exposes how social relations are constructed. It explores how men and women play different roles in society, have different needs and have been subjected to different expectations came to be addressed as gendered expectations. Gendered expectations are shaped by ideological, historical, religious, ethnic, economic and cultural determinants (Moser 1989).

Even though women account for almost half of the population of the world, they are still considered vulnerable and marginalised in the majority of third world countries. They have unequal access to resources, opportunities and freedom to make their own choices depending on where they belong. Gender, therefore, is a highly context-specific social construct.

In a country like India, gender inequality is deeply rooted in its culture and history, and this disparity lends itself to the realm of space-making as well. In recent years, more and more women have stepped out in search of education and seeking employment in India. However, they still face difficulties fostering an amicable relationship with the public realm which was predominantly created and served for men. They are often met with hostility, cultural taboos, violence and an exclusionary environment that doesn't account for or recognise their complex needs.

This project deals with the inequalities between gender and focuses on the spatial dimension of this inequality trying to locate socio-spatial justice through an Indian perspective. Through this project, we try to understand culturally constructed social structures, behaviour patterns, relationships between people and the built environment. By exploring these complexities, we try to recognise how gender plays a role in segregation, exclusion of marginalised communities in society and redefine the notions of inclusion, socio-spatial justice through 'just' spatial practices.

By reading the cities through the lens of men and women differently, one can map the systemic ignorance that has led to the current disparity. The project attempts to redefine a sustainable city, by imagining gender equalities as the central ingredients. It explores the necessity of redefining traditional roles in the context of a cultural paradigm shift. It studies the importance of participation and the rights of women as a legitimate citizen. The project pushes for newly defined gender roles as catalysts for change by examining accounts of insurgencies and community-led movements across the global south that yielded positive reinforcements and safer platforms for women. It emphasises on creating operational frameworks and policy initiatives that prioritise establishing safer and accessible spaces for women which results in personal and social gains. The project explores spatial justice through gender-sensitive city planning and by giving agency and ownership to women towards the cities they inhabit.

Image 2: Traditional Gender Roles
Source: Dylan, 2017

"Oh, come on!"

Image 3: Necessity for Gender Equality in India
Source: Google Images

Gender and space

Construction of space, place and gender

GENDER INEQUALITY • - -

- - → POLITICAL ASPECT
- - → SOCIAL ASPECT
- - → CULTURAL ASPECT
- - → ECONOMIC ASPECT
- - → SAFETY ASPECT
- - → RELIGIOUS ASPECT
- - → SPATIAL ASPECT

Gender Inequality has a spatial dimension.

Particular ways of construction of space and place are related directly and indirectly to the social construction of gender relations (Massey, 1994). The conceptualisation of space depends broadly on how gender and gender relations are defined.

As Danielson (2014) puts it:

Gendered spaces are areas in which particular genders of people, and particular types of gender expression, are considered welcome or appropriate, and other types are un-welcome or inappropriate. Gendering of spaces is an important means by which social systems maintain the organization of gender. They reinforce particular ways of being a man or being a woman, and can maintain the relationships between men and women.

Context Specific - Problem Field

Context Specific - Problem Field

In the following section, a deeper understanding on the problem field within the Indian context is explored. The case study site is introduced briefly before we start analysing how gender disparity gave raise to a series of inter connected issues.

The problem field is seperated to explore each dimension in detail, however, we find that social structures are more alligned than realised. We also set out to answer these question;

A. What is the relationship between culture and gender perceptions?
B. How does gender disparity effect economy?
C. How does safety or lack of effect gendered experiences?
D. How has planning failed in creating inclusive cities?
E. How does gender disparity manifest into spatial segregation?

Fig 1: World map showing India, Source: Author

Fig 2: India map, Source: Author

Fig 3: Bangalore map, Source: Google Maps

An Indian Perspective

A brief understanding of history and changing mindsets

India is the second-most populous country in the world with nearly a fifth of the overall population. It has an estimated 1.3 billion people according to the 2019 world population prospects. The census of 2011 shows that the total number of females is 586.47 million i.e. 48.5% of the overall population. The sex ratio of India has been showing an upward trend for the last two decades.

The status of women in India has been subjected to several changes throughout its recorded history. Since the ancient period, the position of women has deteriorated significantly. This sub-ordination continues well into India's early modern period. To ameliorate women's grievances, the constitution of India includes rights like equality, dignity, freedom from discrimination and incorporates several laws aimed at governing their rights. However, the translation of these rights to reality hasn't been successful. Women continue to face significant difficulties in a patriarchal family structure, male-dominated economic sector and exclusionary public fronts.

The gender-inequality index introduced by the UNDP (United Nations Development Programme, 2010) measures the gender disparity of different nations and places India in the 108th position. As a part of the Human Development Report, it shows that the Indian gender gap index is 0.664. The report represents women's reproductive health, empowerment and labour market participation showing that women are still not as empowered and quite marginalised in their accessibility of resources. Women's issues in India form a complex web of interdependent issues that need to be deconstructed to understand the root of each problem. Gender Inequality forms the basis of systemic institutional problems faced by women.

To test out the spatial strategies, re-examine policies of urban planning, to accommodate the new demographic gender needs in a shift of cultural paradigm, Bangalore is chosen as the case study as a part of this academic project.

Bangalore, also known as the Silicon Valley of India is a south Indian city with a metropolitan population of around 11 million. It is the third most populous city with a diverse cosmopolitan population. With Texas Instruments setting base in 1985, Bangalore quickly transformed into an IT hub that saw an explosion of overpopulation with a great number of migrants from surrounding states. With economic growth of 10.3%, Bangalore is the second-fastest-growing major metropolis in India (Dave, 2017). With this transformation, Bangalore has seen a visible increase in women's participation in both formal and informal sectors.

However, this growth has also presented unique challenges like the ideological clashes between the new migrants and the native population. This development has been tremendous but sudden and resulted in spatial growth in a haphazard way. The spatial locations of different economic activities and residential sectors have also proven difficult for women to travel essentially making them spend hours together on the road.

Bangalore is also the third most unsafe city for women with cases of racing, stalking and molestation (The Hindu, 2016). With large numbers of girls and women studying and working in the city, it is imperative to re-envision mobility networks, public parks for leisure, and question the relationships between the new demographics and the built environment.

Image 4: Mensturation taboo in India

Image 6: Excerpts from Indian Judges comments on Rape

Image 7: India is the most dangerous country for women in 2018

Image 5: Burdens of family and work life on a woman

Image 8: Lawyer defending a Rape Accused

Socio-cultural Issue

What is the relationship between culture and gender perceptions?

Gender refers to "culturally-mediated expectations and roles associated with masculinity and femininity" (Lips, 2015, p.2). Worldwide, today, there is a shift in the perception of these norms associated with gender. However, the majority of India seems to be quite behind despite every gender having the rights that thrive to function for every individual's freedom and well being.

In a quest to find opportunities for a better life and possibility of alternate subjectivities, more and more women have been stepping into the public realm as established before. Since women were not identifying themselves purely based on family and husband, there was an invariable threat to the patriarchal order of society (Massey, 1994).

These changes have also transformed the fabric of the city, its inhabitants and the relationships between them. However, the city's new bodies are constantly in conflict with the original inhabitants who try to claim their authority by any violent means necessary. In a patriarchal society like India, women's freedom is curtailed to an extent because their behaviour is tied to the "honour" or "Izzat" of the family for the whole community in certain cases. This problematic notion frequently extends to their safety as well. Their freedom is restricted severely due to actual threats as well as the perception of fear. These are rooted again in the doctrine that men and women need to have different rights for their well-being. This translates to women usually being the ones who would have to give up their rights forcefully.

The idea that women have to take the onus of their safety from perpetrators invariably puts the burden back on them to behave in a certain way (Vishwanath, 2007). Women are always questioned regarding your whereabouts and their 'unnecessary' presence in the public spaces by raising calls to the gendered expectations.

The problem with gender is that it prescribes how we should be rather than recognising how we are (Adichie, 2013). Gender imitates gender. There has never been contention on women and men being biologically different. However, socialisation and visibility exaggerate these social differences. The level of socialising then becomes a self-fulfilling process.

These deep-rooted systematic resistances exacerbate the gender divide further. For instance, 23 million girls drop out of school annually due to menstruation taboos in India. Lack of toilet infrastructure, sanitary napkins and low awareness regarding menstruation are the prime causes for this.

Apart from this, Indian women are choosing to stay at home rather than working. Women's culturally affiliated roles of mother, wife, caretaker are not considered within the discipline of city planning and urban services. Even working women are expected to take on the familial roles which usually proves too much of a burden for them to balance these roles in settings that are gender blind.

In terms of negotiating their claims in public spaces, they are felt vulnerable due to gender disparity and systematic discrimination in patriarchy. The other rights associated with public spaces like the right to education, paid work and freedom to move around are also curbed. These discriminations need to be explored through the lens of human rights violations as addressed in The new urban agenda of UN habitat III in 2016.

WOMEN'S

PARTICIPATION IN INDIA'S LABOUR FORCE

(% of working age women having a paid job)

49.0% 49.4%

RURAL

AVERAGE

42.6% 42.7% 31.7%

23.7% 24.4% 27.4%

URBAN 16.6%

1993-94   2004-05   2015-16

HOW WE COMPARE WITH OTHERS

PAKISTAN	INDIA	SRI LANKA
24.6%	27.4%	35.1%

NEPAL 79.9%

CHINA 63.9%

BANGLADESH 57.4%

US 56.3%

EU 50.8%

TOI

Image 11: India's Global Parity Score

The economic case for gender parity

McKinsey Global Institute's Gender Parity Score points to where 95 countries stand on gender parity.

0.71 Western Europe
0.67 Eastern Europe, Central Asia
0.48 Middle East, N. Africa
0.61 China
0.44 South Asia (incl. India)
0.48 India
0.62 East & South-east Asia (excl. China)
0.74 North America, Oceania[1]
0.64 Latin America
0.57 Sub-Saharan Africa

These countries, grouped into 10 regions, are home to **93% of the world's female population.**

Gender inequality (1.00 = gender parity)
● High ● Extremely high

[1]Oceania = Australia and New Zealand.

All regions have a substantial incremental GDP opportunity from bridging the gender gap

Gloabal GDP opportunity, 2025
Incremental 2025 GDP to 2025 business-as-usual scenario

	Full-potential scenario	$ trillion 2014	Best-in-region scenario	$ trillion 2014
India	60%	2.9	16%	0.7
South Asia (excluding India)	48%	0.4	11%	0.1
Middle East and North Africa	47%	2.7	11%	0.6
Latin America	34%	2.6	14%	1.1
East and southeast Asia (excluding China)	30%	3.3	8%	0.9
Sub-Saharan Africa	27%	0.7	12%	0.3
World	26%	28.4	11%	11.8
Eastern Europe and Central Asia	23%	1.1	9%	0.4
Western Europe	23%	5.1	9%	2.1
China	20%	4.2	12%	2.5
North America and Oceania	19%	5.3	11%	3.1

Source: McKinsey and Co.

Image 10: India's full economic potential if gender parity is achieved

Female Labour Force Participation (%)

1990	1995	2000	2005	2010	2013	2016
34.80	35.4	33.9	36.9	28.6	27	23.70

Source: ILO via World Bank, Government of India Ministry of Labour and Employment

Image 12: Lowering rates of Women's participation

NOT LOOKING FOR WORK

Participation of Indian Women in labour force is among lowest in the world

China	60.5%	Nigeria	47.9
U.S.	561	Mexico	44.2
Russia	54.8	Bangladesh	36.3
Brazil	54.2	Pakistan	21.9
Indonesia	531	India	20.5

Sources: World Bank, International Labor Organization/Bloomberg

Image 13: FLPR compared to other countries

Economic Issue

How does gender disparity effect economy?

Beyond the realm of theory, the pursuit of gender equality has tangible and quantitative effects on the economy which affects men and women. The United Nations decade for women (1976-1985) has played a vital part in identifying and establishing women's role in contributing to the social and economic development of third world countries like India. It acted as a catalyst for re-envisioning the woman's role both in academics and also policy-making disciplines from a familial perspective to a broader understanding of the complex nature of women's employment.

On a similar path, India has been trying to positively reinforce women's empowerment in the last six decades by carefully targeting each aspect of human development. In India, education for girls has been at the forefront of the progressive agenda from the 1970s (National policy on education, 1971). Although the literacy levels are still low, there has been significant progress towards educational attainment within both the sexes. Since 1981, the gender gap in literacy has been decreasing (Bhattacharya, Goswami, 2017).

Another important push for women's empowerment started since the 1990s with the formation of various self-help groups and NGOs like Self Employed Women's Association SEWA. These organisations played a major role in the advancement of women's rights in the employment sector of India. The underlying rationale that women need to be empowered and their economic opportunities and interests need to be safeguarded to achieve independence forms the core of this movement. Women were also considered untapped resources which would in turn make a significant contribution to the economic development of the nation. These groups

have rallied for a wide range of income-generating projects along with the government efforts for providing an operational framework for women's well-being and accessibility to opportunities. However, any efforts attempted to challenge the authority of a dominant group by claiming their territory and the systemic retaliation has proved extremely sinister and threatens to potentially set back growth by decades. Doreen Massey (1994) states:

"Metropolitan life itself seemed to throw up such a threat to patriarchal control. In general terms, what is clear is that spatial control, whether enforced through the power of convention or symbolism, or the straight- forward threat of violence, can be a fundamental element in the constitution of gender in its (highly varied) forms."

In India, since the economic liberalisation of 1991, the GDP has been steadily increasing by about 6-7% per year. However, the women's labour force participation rate (LFPR) has fallen from 42.7 per cent in 2004 to 23.2 per cent in 2018 creating a unique paradox(Ministry of statistics and programme implementation, India, 2019). India can benefit the most from ensuring gender parity in the work sector according to the study 'The Power of Parity: How advancing women's equality can add $12 trillion to global growth'. The study finds that bridging the gender gap in the workplace would facilitate a substantial increase in the GDP throughout the world. Economists have estimated this bridge would be especially beneficial for India and could increase the country's GDP by another 2.9 trillion by 2025.

Even with such evident benefits of women entering the workforce, it is still not readily accepted as it challenges the traditional norms of masculinity and femininity.

WOMEN'S SAFETY OUTDOORS

| **26**% are harassed on streets | **81.6**% complained of staring/ leering | **20.5**% stopped using public transport | **45.4**% started wearing hijab to avoid stalking |

India most dangerous nation for women: Poll

Naomi Canton

London: India is considered to be the most dangerous country in the world for women, according to a poll by Thomson Reuters Foundation published on Tuesday.

The survey ranks India as more dangerous for women than war-torn Afghanistan and Syria, which came in second and third place, respectively. India is also seen as more dangerous for women than Somalia, which came fourth and has been mired in conflict since 1991, and Yemen, which came eighth and is suffering from an urgent humanitarian crisis.

A total of 548 global experts on women's issues, 43 of whom are based in India, were asked questions relating to risks faced by women in six areas: healthcare, access to economic resources and discrimination, customary practices, sexual violence, non-

sexual violence, and human trafficking.

India came out worst over-all, and specifically worst for women in human trafficking, sexual violence and in relation to cultural, religious and tribal traditions.

When the London-based philanthropic arm of Thomson Reuters carried out the same poll in 2011, India was ranked fourth, ahead of Pakistan. This time Pakistan, in sixth place, was considered safer than India for women.

"There was an outcry in India after the 2012 Delhi gang

rape, so you would have thought things would have improved, but that does not seem to be the case even though new laws have been introduced and more women are reporting sexual crimes," said Thomson Reuters Foundation CEO Monique Villa.

In this poll, India ranked specifically as the most dangerous country for sexual violence against women, which included domestic rape, rape by a stranger, sexual harassment and the lack of access to justice in rape cases.

Full report on www.tot.in

AT RISK?

2018	2011
1 India	1 Afghanistan
2 Afghanistan	2 Democratic Republic of Congo
3 Syria	3 Pakistan
4 Somalia	4 India
5 Saudi Arabia	5 Somalia

Thomson Reuters Foundation poll for most dangerous countries for women

Infamous capital

Delhi had the highest crime rate in the country with 1,050 crimes committed per one lakh of the population as listed under the Indian Penal Code

Surge in crime
The number of crimes committed against women increased in 2017 by 6% compared with 2016 figures and by 9% compared with 2015 figures

RATE OF TOTAL COGNISABLE CRIME (PER 1 LAKH OF THE POPULATION)
44   1,050

Delhi **1,050**
Jharkhand **130**
Nagaland **44**
Kerala **656**
Tamil Nadu **256**

Rape Map
Number of reported cases and percentage of convictions in 2011

	Conviction rate
NORTH Uttar Pradesh	56.4
Rajasthan	26.1
Haryana	23.4
Delhi	41.5
Punjab	36.3
Jammu & Kashmir	8.3
Himachal Pradesh	22.3
Uttarakhand	54.5
Chandigarh*	42.9
SOUTH Andhra Pradesh	11
Kerala	15.4
Tamil Nadu	20.4
Karnataka	19.8
Puducherry*	0
NORTH Assam	23.3
EAST Tripura	11.9
Meghalaya	0
Mizoram	80.7
Manipur	100
Arunachal Pradesh	17.4
Nagaland	84.2
Sikkim	55
WEST Maharashtra	20.3
Gujarat	14.7
Goa	28.6
Dadra & Nagar Haveli*	0
Daman & Diu*	n.a.
CENTRAL Madhya Pradesh	23.6
Chhattisgarh	24.5
Jharkhand	39
EAST West Bengal	11.5
Odisha	23.2
Bihar	24.8

6,227
2,246
2,174
5,243
4,409
3,894

Image 14: Rape culture in India.

Safety Issue

How does safety or lack of effect gendered experiences?

A defining characteristic of violence against women is its ordinary and continuous nature (Vishwanath, 2007). When we talk about violence, while acknowledging the more gruesome and horrific incidents, it is the everyday occurrences in more subtle forms that make it so prominent. This type of continuous violence in daily lives restrict, control and structure women's movements and experiences. If women have to instinctively fear for their safety every time they step out of their houses, it proves that their most basic of rights, their freedom of movement as enshrined in the constitution is not being met.

This normalisation of violence becomes a major disservice to women and men alike. This normalisation forces us to examine violence within the frame of rights and its violations rather than a purely safety issue (Kannabiran, 2005). Sexual violence is one of the most important challenges facing women in India both indoors and outdoors. All facets of sexual violence and their influence on women's economic, political and professional aspects come under the umbrella of patriarchy.

Indian city's have become increasingly hostile to women. Studies have shown that India is consistently in the five worst and most dangerous nations for women in the last 5 years (Thomas Reuters, 2019). 83 per cent of women have faced some kind of harassment on Indian streets. Rape in India is the fourth most common crime against women. Around 6% of these are committed in the public realm. Delhi, the capital of India, has been voted as the most dangerous city in India for women. For the women who still venture outside, eve-teasing, molestation, harassment and in extreme cases, abduction and rape have become unfortunate possibilities

that they have come to expect in public spaces. Consequently, the home symbolises safety for women and the urban spaces outside the home threaten their well-being. This phenomenon then creates an important facet to women's experiences outdoors; fear of danger. Fear has been expressed frequently as a common element of their lives in public life. Valentine argued in 1989, -

"Feminist perspectives on the patterns of inequality in both space and culture, acknowledge fear to be a more important concept in the theory of social control than violence itself ."

Man's perception of women as in today's public space pushes for women to prove their legitimacy at all times. Women have learnt to live in this hostile environment and modify their behaviour accordingly. They live more anxiously within this new world, paranoid at every step. Several Indian women, irrespective of their age, caste, race or religion have trained themselves to hunch, hide their bodies, lower their gaze, give way to men and try and make themselves invisible (Times of India, 2020).

The presence or the lack of women on the streets exaggerates the woman's fears and their perceptions of safety which then impediments that quest for growth. Lack of street lighting on vulnerable areas, formal and informal surveillance, poor pedestrian and public toilet infrastructure, inadequate helpline services all play a major role in managing the perception of fear in women and also facilitate perpetuator's behaviour in public spaces. Physical harm is frequently cited in hindering women's access to the public spaces leading to a continued contentious relationship between women in public areas.

WHAT ARE THE REASONS GIVEN BY WOMEN FOR NOT ACCESSING PUBLIC SPACE?

SAFETY	EVE TEASING (SEXUAL HARASSMENT)	PRESENCE OF MEN	SOCIETAL PERCEPTION	TIME	FAMILY RESTRICTIONS	FAR FROM HOME	NEAR HOME
22 %	18 %	15 %	14 %	13 %	11 %	4 %	3 %

339 respondents

Image 15: Survey conducted by PUKAR, a research institute in Mumbai regarding women's access

ARE SOME PUBLIC SPACES INACCESSIBLE TO WOMEN?

YES 87 %

NO 13 %

87% of women say YES

339 responses

Image 16: Lived experiences need to be considered in planning

Image 17: Workshops for community developement

Image 18: Indian women to become further marginalised amidst urbanisation and gender-neutral planning

Gender gap index (Equality = 0.0)
- 0.00 - 0.09
- 0.10 - 0.19
- 0.20 - 0.29
- 0.30 - 0.39
- 0.40 - 0.49
- 0.50 - 0.59
- 0.60 - 0.69
- 0.70 - 0.79
- No data

Data Year: 2014

Image 19: Survey of World Economic Forum, 2015 ranks India 108 according to 2015 gender Gap Index.
Image 20: SDGs to be included in planning initiatives, Women demographics

5 GENDER EQUALITY

SUSTAINABLE DEVELOPMENT GOALS

ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

GLOBALLY

1 IN 3 WOMEN HAVE EXPERIENCED SOME FORM OF PHYSICAL OR SEXUAL VIOLENCE IN THEIR LIFETIMES

IN INDIA

ONLY 65.46% OF THE WOMEN ARE LITERATE, AS COMPARED TO 82.14% OF MEN

ENROLMENT OF GIRLS IN PRIMARY EDUCATION 100% BUT 74.6% WOMEN ARE NOT ENROLLED IN HIGHER EDUCATION

WOMEN HOLD ONLY 11% OF SEATS IN THE LOK SABHA BUT 46% IN PANCHAYATI RAJ INSTITUTIONS

CHILD SEX RATIO IS 919 FOR 1,000 BOYS

48.5% POPULATION OF WOMEN BUT ONLY 27.4% WOMEN ARE IN WORKFORCE

Political Issue

How has planning failed in creating inclusive cities?

All built spaces structure social relationships, by categorising people into inhabitants, visitors, refugees and strangers. It separates sections with power and those who lack power. Space itself can be bifurcated into 'inside' and 'outside' (Markus, 2007). Depending on who is and is not allowed to inhabit it, space can be quite political in nature. If this character of space is approached from the lens of gender, it then becomes evident that the asymmetric power relations between men and women have led to male-centric versions of how cities should be or should function.

It has been widely established that conventional city making discipline and its urban governance do not recognise women as producers or active shapers of the urban realm, even though women are the most prominent uses of urban spaces and public facilities (Cities for Women). This has led to the design or the production of cities centred around men even though cities promise the delivery of equal opportunities and emancipation for all genders. Urban structures have been developed without meaningful participation, acknowledgement or interpretation of women.

For this reason, Indian cities have come to be acknowledged through a dual-lens: oppressive alienating elements coexisting with liberating humanizing ones (Markus, 2007). Looking at gendered realities, it is now becoming increasingly apparent that men and women are currently being benefited from the urban realm significantly differently. These benefits are shaped by the prevailing constructions of gender. The pre-existing notions of gender and its institutional expressions have constrained women's freedom and liberty to access social, economic and political resources in a city. In the era of insurgence, piecemeal short time solutions are offered to tackle pressing issues like safety and mobility instead of recognising the need for serious restructuring of cities to transform them for better inclusion. This shows that there is an immediate need to transform the planning institute from inside while continually holding them accountable from outside (Beall, 1996).

The necessity to look at women's issues as human rights issues that relate to democracy, participation is not recognised at the higher levels of decision making. People without the lived experiences of seclusion as in marginalised communities wouldn't be capable of understanding the challenges for the umbrella of inclusion. The rigid top-down planning initiatives that are implemented go unchallenged or unscrutinised from the lens of gender. Intelligent choices about urban governance or public policy are currently only aided by political and economic interests rather than social, humanitarian and cultural realities.

The implications of planning decisions are poorly understood and don't account for an assessment framework by which values can be measured, ranked and translated into future designs (Davidoff, 2007). Lack of women at higher levels of policy-making would continue to reflect in the absence of value-based gender-inclusive strategies no matter how inspiring community-led movements are. If the knowledge and incentive gaps are not bridged, no real change or radical solutions can be expected.

Image 21-26: Pictures depicting gendered spaces in the Indian Context

Spatial Issue

How does gender disparity manifest into spatial segregation?

Looking at the issues mentioned in the previous chapters, it becomes clear that the gender disparity in Indian society heavily dictates behaviour patterns and spatial relations as well. For many young men and women, cities offered anonymity, space and freedom to escape the burdens and expectations of families and communities and provided ways to look for alternate self-interests. Woman's ability and right to access and use public spaces are dependent on the kinds of boundaries imposed upon them due to the nature of space and its usage.

Even with increased political and economic visibility, women have it automatically got on the legitimacy to be in public spaces (Phakde, 2007). The notion that women are illegal users only pushes the exacerbating realities of non-inclusive urban spaces. Women, to a large extent, are only seen moving from one point to another for work. They are always in transit. They do not share the same ownership as men.

Women's presence in a public space needs to be justified by a purpose. The act of loitering or claiming public space for themselves is not readily accepted. Because of the gendered expectations, a plethora of gendered spaces can be seen in any Indian city.

Spaces have seen bifurcation in terms of women's use that depends on function and time and dictate where women can and they cannot be. Places where women can demonstrate purpose like educational institutions, religious centres, vegetable markets are considered the only appropriate areas for them to inhabit.

Public plazas, beaches, residential parks can only be inhabited by women if they can demonstrate a purpose or if they are accompanied by someone.

Having to produce legitimacy forces women to curtail their movements in public spaces or be there only when necessary creating an imbalance in the physical characteristics of urban spaces. This ignores the realities of many working-class and middle-class women who have to navigate through different kinds of public spaces through the day, including roads, buses, parks and other spaces like the school, the workplace and the hospital (Hill, 1996).

Public spaces are often not as open as they should be for women. Where we can find groups of men or a single man sitting by themselves in a park or hanging out by the bus stop, women are usually accompanied by kids or men to manufacture legitimacy (Vishwanath, 2008). This makes the experience of women largely different than that of men in public spaces. There is also a temporal quotient to the relationship between women and public spaces. Malls, shopping streets and bus stands are some examples.

For instance, the familiar busy street at night provides a different and hostile atmosphere for women creating a sense of fear if it's deserted. It then becomes important to address these issues in urban planning because "spaces that cause fear, restricts movements and thus the community's use of space. Lack of movement and comfort is a form of social exclusion" (UNHabitat Women in Cities International, SIDA, Huairou Commission, and CISCSA, 2008).

Problem Focus and Research Questions

Problem Focus and Research Questions

The problem analysis carried out through the lens of gender and its various inter-relationships, specific problem focuses were identified.

A. Gender in Society and Culture
B. Gender in Economy
C. Gender in Safety
D. Gender in Politics
E. Gender in Space

An analytic framework is designed to tackle these interdependent issues. This next section derives the problem statement, project aim, main research question and sub-research questions of the project. These research foundations will be the starting point for the analysis and design stages of the project.

Women - Illegitimate users of public space

Image 27: Women's pleasure seeking activity is considered offensive

Problem Statement

Exploring the urgency of impending women's issues in a public realm

In a predominantly patriarchal society like India, women have had historically well-defined roles in the private realm of home and family and an ambiguous relation with the public sphere due to cultural barriers (Moser C, 1989). They were dictated to remain in traditional gender roles that have systemically limited their access and appropriation of the public realm. They were traditionally excluded from active participation, governance and co-creation of cities. As a result, what we see today are women struggling to create a niche for themselves in what is shaped to be a men's world.

Cities are spatial and organisational expressions of social relations which are based as much on power and conflict as on cooperation and consensus (Beall J, 1996, p.10). It meant that the needs of Indian women have often been ignored. Even though in current urban societies, political and economic visibility has brought increased access to public space, it does not automatically mean that women enjoy unrestricted rights to the public spaces in a city (Phakde S, 2007, p.186).

Since the 1970s, the women's movement in India focused solely on the struggle against violence and often ignored the 'rights to belong'. It overlooks the notion that the quest for pleasure strengthens the fight against violence because it then frames it in the language of rights rather than protection (Phakde, 2007). It resulted in women's rights in public spaces limited to their mobility or work. For women, lack of demonstration of visible purpose or any act of pleasure-seeking in a city is problematic and offensive.

" The demands of the new bodies in the city are often met with conflict and dissent manifesting into violent encounters further restricting accessibility and mobility for women. Additionally, the strategic and practical needs of women have been ignored making public space uncomfortable and impractical to provide real inclusion to women."

Therefore, creating safer and accessible spaces is important to facilitate personal and social gains by giving agency and ownership to women towards the cities they inhabit.

Systemic Resistance		Economic Disadvantages
Cultural pushback	**Implication of bias**	Safety of Self
Conflicts of identity		Invisible in Planning

Problem Framework

Fig 3: Cycle of gendered expectations

Since India's economic liberalisation of 1991, even with its GDP steadily growing, the female labour force participation rate (LFPR) has fallen from 42.7% in 2004 to 23.3% in 2018 creating a unique paradox (Ministry of statistics and programme implementation, India, 2019). However, it is important to note that this data misinterprets the actual contribution of women to the Indian society since most Indian women take on domestic roles which are not accounted for (Moser, 1989). This sexual division of labour exploits women's contribution because most of the work on the domestic and community front is unpaid in nature (Hayden, 1981).

Women have had historically well-defined roles in the private realm of home and family and an ambiguous relation with the public sphere due to cultural barriers (Moser, 1989). It traps them in a vicious cycle where their absence from the public sphere makes their needs not accounted for. Since their needs are not catered to, it becomes difficult for them to gain agency over the public realm. Due to the increase in the average income of Indian household, it is women who choose to continue to stay in the domestic sphere due to the gendered norms and expectations (Statista Research department, 2020), reinforcing the existing gender ideals.

Problem Framework

Fig 4: Problem Framework

The problem framework looks at the existing norms that are prevalent in our society and how they have contributed to the unfair distribution of resources and infrastructures resulting in social marginalisation, spatial fragmentation and economic inconsideration. With rapid urbanisation, most of the infrastructure and urban policies revolve only around a certain section of society both in terms of gender and economy. Women's mobility patterns which are widely different from men's like trip chaining, stopping at more places while travelling through a city have been ignored. Lack of integrated mobility forces women to venture in unsafe pedestrian networks i.e. lack of footpaths, designated cab stands or bus stands etc. The fact that women are usually accompanied by children or the elderly makes them even more vulnerable.

Their resting points, waiting points and the pedestrian networks don't reflect their needs. Neighbourhoods that are often quite monotonous create barriers for inclusion and movement. Women have to travel far distances for work, fulfilling their domestic duties and even to relax. The lack of diverse functions and people within the neighbourhood forces women to stay indoors because travelling far distances is often a burden. As fewer women are present in policy-making and urban governance disciplines, women-needs become invisible in planning and there is a gap between the women's lived experiences and how they are being represented in planning. The lack of agency adds to the perception of the legitimacy of women in public spaces which further exacerbate the existing gender divide.

Research Aim

Fig 5: Research Aim

The project argues that there is an urgent need to rethink the existing planning and design disciplines through a gender perspective and study their implications on women's role in Indian society. It challenges the current scenario of gender-neutral planning that ignores the critical and vulnerable position of women. These systems do not aim to relieve the plight of women in public spaces where they often feel like intruders. The project argues that the perceptions of the right to the city, inclusivity and diversity do not account for the existing patriarchal power relationships, which are deeply rooted in ethnic, cultural and gender-related biases against women. It tackles the notions of gendered exclusions and explores various discourses around citizenship and what it means to have legitimacy for women. The project aims to illustrate the scope and application of inclusive gender policies in urban design and planning disciplines to facilitate a just, safe and collaborative environment for women that would tackle the systemic socio-cultural and political resistances in Bangalore, India.

Research Aim

Fig 6: Three aspects of the research aim

To achieve the legitimacy of women in the public spaces, we look at three aspects: Societal, Physical/ Spatial and Governance dimensions. These aspects adress the cultural, economic and environmental factors affecting women's behaviour in the public realm. This alligns with the right to participate, appropriate and belong to the cities. While addressing the societal factor, the project aims to develop policies that aim at gender sensitisation, frameworks to facilitate ownership and agency of women over their neighbourhood. Also, the aspect of safety is acknowledged through behaviour studies.

In the spatial dimension, we address the mobility needs of women by looking at networks at a city scale, accessibility of different resources and infrastructure and develop inclusive neighbourhoods and public spaces. As mentioned earlier women's voices need to be heard at a policy level. For this, we aim to create platforms for capacity building, policies interventions aiming at communicative and engaged planning. It aims to recognise the knowledge gap and propose strategic frameworks to empower women's position as legitimate users of the public realm by giving them agency to co-create cities.

Research Questions

Developing the research questions through radical approaches

Paul Davidoff and Peter Marcuse have developed radical planning theories that questioned the 'professional knows best' attitude by facilitating systems of voluntary services, setting up community planning and design centres and participating in legislative advocacy and maintaining a commitment to participation and democracy (Marcuse, 2008). This project takes inspiration from the approaches of advocacy and critical planning to question the existing oppressive trends and developing alternate 'just' spatial planning systems. Marcuse in his critical planning theory identifies four phases of social activism within the planning discipline.

Analyse
Expose
Propose
Politicise

The research questions formulated will broadly align with these phases to achieve radical solutions of engagement and inclusion in the end. It allows for collaboration and discussion amongst planners and marginalised women communities and organisations that would advocate for recognising women's role in society and giving them agency to demand their necessities in the future.

Why Analyse?

Men and Women are undeniably different biologically, however, socialisation exaggerates the differences, which then becomes a self-fulfilling process.

Why Expose?

The problem with gender is that it prescribes to how we should be rather than recognising how we are.

Why Propose?

Gender blind approaches that don't account for power dynamics, systemic discrimination and oppressive relationships are a disservice to women.

Why Politicise?

Today, there are more opportunities for women than previously ever compared because of changes in policy and changes in the law which are very important. However, what matters, even more, is a change in our attitudes and mindsets about what we believe and what we value about gender.

quotes by Chimamanda Ngozi Adichie, 2013.

Research Questions

How can **gender-inclusive urban planning** create a framework for a just and equitable society for women in Bangalore?

PROBLEMS

SQ1. What are the different cultural taboos and gendered expectations prevalent in urban spaces that **alienate and endanger women**?

SQ2. How does the private development's idea of safety and comfort influence the **quality of the public edge and women's experience**?

NEEDS

SQ3. What are the systemic deficiencies in planning systems that build barriers for women from different economic backgrounds towards **equitable ownership and access** to opportunities?

SQ4. How do planning and decision making systems operate within the **asymmetric power relations** between genders in India?

STRATEGIES

SQ5. What are the spatial strategies and design principles that can create conditions for gender equality in public spaces, while offering higher **safety, acceptance and accessibility** to resources?

GOVERNANCE

SQ6. How can collaborative governance structures bridge the gap between the **grassroots initiatives and policy-making systems** in ensuring gender sensitivity in cities?

POLICY

SQ7. How can an empowerment approach advocate and encourage the restructuring of traditional gender roles and provide **women legitimacy** within the public realm?

SQ8. What is the alternate scope of spatial planning in the context of gender disparity and oppressive practises to **facilitate socio-spatial justice**?

Analyse
Expose
Propose
Politicise

**Methodology
Chapter**

Methodology

This chapter presents the research and design methodology that was chosen to address the problem field and the context of the study, analysis and the design intervention phases of the graduation project. Firstly, an overall research framework chart was developed to lay down the steps of research and design. It also delves into the methods and methodology of a theoretical, analytical and normative understanding of the problems that are presented.

MOTIVATION + RELEVANCE	Gender discrimination and Systemic oppression

PROBLEM FIELD	Socio-Spatial Dimension of Gender Inequalities

KEY WORDS	*gender vulnerabilities, gender roles, safe and inclusive cities, spatial governance, spatial justice*

PROBLEM STATEMENT

In a predominantly patriarchal society like India, women have been historically dictated to remain in traditional gender roles that have systemically limited their access and appropriation of the public realm. Under the currents trends of economic liberalisation, even though political and economic visibility has brought increased access to the public realm, it has not automatically provided women with unrestricted rights or a sense of legitimacy in the public spaces of a city. The demands of the women in the city are often met with conflict and dissent manifesting into violent and traumatic encounters that further restricts accessibility and mobility for women.

RESEARCH AIM

To illustrate the scope and application of inclusive gender policies in urban design and planning disciplines to facilitate a just, safe and collaborative environment for women that would tackle the systemic socio-cultural and political resistances in Bangalore, India. The project aims to recognise the knowledge gap and propose strategies to empower women's position as legitimate users of public realm.

How can gender-inclusive urban planning create a framework for a **just and equitable society** for women in Bangalore?

RESEARCH QUESTION(S)

SQ1. What are the different cultural taboos and gendered expectations prevalent in urban spaces that **alienate and endanger women?**

SQ2. How does the private development's idea of safety and comfort influence the **quality of the public edge and women's experience?**

SQ3. What are the systemic deficiencies in planning systems that build barriers for women from different economic backgrounds towards **equitable ownership and access** to opportunities?

SQ4. How do planning and decision making systems operate within the **asymmetric power relations** between genders in India?

SQ5. What are the spatial strategies and design principles that can create conditions for gender equality in public spaces offering **higher safety, acceptance and accessibility** to resources?

SQ6. How can collaborative governance structures bridge the gap between the **grass-roots initiatives and policy-making systems** in ensuring gender sensitivity in cities?

SQ7. How can an empowerment approach advocate and encourage the restructuring of traditional gender roles and provide **women legitimacy** within the public realm?

SQ8. What is the alternate scope of spatial planning in the context of gender disparity and oppressive practises to **facilitate socio-spatial justice?**

RESEARCH APPROACH	Normative Reasoning - Exploratory Approach

RESEARCH METHODOLOGY
Deductive

METHODOLOGY FRAMEWORK	*TRANSDISCIPLINARY RESEARCH; ANALYSE - EXPOSE - PROPOSE - POLITICISE*
THEORETICAL FRAMEWORK	**Right to the Gendered city** Critical Theory + Adaptive systems + Transversalism [Western Universalist vs Local Relativist]
CONCEPTUAL FRAMEWORK	[Triple role + LOITERING] **X** Feminist Urbanism **= LEGITIMACY OF WOMEN** RIGHT TO [PARTICIPATE + BELONG + APPROPRIATE + **CO-CREATE**]
ANALYTICAL FRAMEWORK	Safety/ Accessibility/ Ownership Spatial Systems / Governance Systems / Societal Systems

MULTISCALAR ANALYSIS

global trends → indian perspective → city scale → urban/local scale

[inequalities in global south] [systemic oppression] [cultural pushback] [heightened vulnerabilities]

Multiscalar design and planning strategies and Implementation of tool kits

STRATEGIES

Urban/ Local Scale	City Scale	Governance Level
Gender inclusive spaces	Technology based design interventions	Phasing of strategies
Safety guidelines	Stakeholder participation	Policy Implementation
Spatial re-appropriation	Proposal of strategic framework	Collaborative planning

CONCLUSION

IMPACT ASSESSMENT INDICATORS
Evaluation + Reflection + Recommendation
Scope and Limitations/ Discussions/ Knowledge gap analysis/ Ethical, social, societal relevance/ SDGs in research field

Research Framework

Setting up a framework for the research project

This methodology chapter provides an overview of the framework derived for setting up the research project. The project uses a deductive approach by presenting a hypothesis and links it to various notions and theories to support the argument. The chapter begins with a quick revision of the project's relevance, premise and background of the problem field and subsequently lists the research aim and questions.

The project takes an exploratory research approach with normative reasoning. A suitable volume of literature forms the foundation of the thesis by providing the theoretical framework. It presents qualitative and quantitative understanding which would then form the basis of an inductive research underpinning, a conceptual framework is established. This approach would also help in identifying the problem areas that would be later looked at in detail to provide suitable interventions. These strategies are formulated with the help of case studies and a closer understanding of the context.

These steps and variables will then contribute to achieving a set of goals related to providing legitimacy for women in the public space, ensuring their well-being and facilitating opportunities for co-creating cities. The outcomes include formulating planning and design strategies at different scales. To conclude, the proposed interventions are evaluated through impact assessment indicators.

MOTIVATION
Gender discrimination and Systemic oppression

PROBLEM FIELD
Socio-Spatial Dimension of Gender Inequalities

LOCATION
Bangalore, India

PROBLEM STATEMENT
- systemic opression and limited access to the public realm
- restricted rights and sense of **illegitimacy**
- **conflict and dissent** towards women manifesting in sexual and other forms of violence perpetuating fear

RESEARCH AIM
To illustrate the scope and application of inclusive gender policies in urban design and planning disciplines to facilitate a **just, safe and collaborative environment** for women that would tackle the systemic socio-cultural and political resistances.

RELEVANCE
societal relevance
scientific relevance
ethical relevance

EVALUATION
Impact Assessment Indicators

LEGITIMACY
citizenship and participation

ANALYSIS

RESEARCH QUESTION(S)
How can **gender-inclusive urban planning** create an operational framework for a just and equitable society for women in Bangalore, India?

SQ1 SQ3 SQ5 SQ7
SQ2 SQ4 SQ6 SQ8

RESEARCH FRAMEWORK
notions-methods-theories-concepts

ANALYSE - EXPOSE - PROPOSE - POLITICISE

TRANSDISCIPLINARY RESEARCH METHODOLOGY

RESEARCH BY SPATIAL INTERVENTION

RESEARCH BY LIVED EXPERIENCES

RESEARCH BY LITERATURE   RESEARCH BY CASE STUDY

- Gender, Culture and Space
- Socio-Spatial Justice

- Policy Implementations
- Grassroot movements

- Study of Indian Context
  Documentary and News
  Stakeholder Analysis
  Policy Study   SQ6
- Site Specific Research
  Mapping/ Sketching/ Pictures
  Space-time Mapping
  Data Collection
  Local knowledge Collection
  Safety Audits
  Context Analysis   SQ5

- Experimental Methodology
  Ethnographic Research
  Anecdotal Evidences   SQ1
  Excerpts from Women
  - poems
  - drawings
  -route maps
  - letters to men
  Emperical Study   SQ2
- Study of spaces, Perceived, Conceived, Lived
  Material dimensions of social activities and interaction study
  Intangibilities and Principles

  Literature Review   SQ8
  Article Review
  Theoretical Review
  Methodological Review
  Socio-cultural Anthropology
  Policy Analysis and Comparision SQ4

  Desk Analysis
  Data Analysis   SQ3
  Social Media Research
  Expert Interviews   SQ7
  - field of gender study
  - field of spatial studies
  Qualitative Analysis

CONCEPTUAL FRAMEWORK

GENDER MAINSTREAMING

OUTCOMES

DESIGN PRINCIPLES

MAIN OBJECTIVES

SPATIAL DIMENSION
SOCIETAL DIMENSION
GOVERNANCE DIMENSION

strategic development for women as co-creators
ownership/accessibilty/safety

Urban Livability
Integrated Mobility
Vibrant Neighbourhoods

Capacity Building
Gender Impact Assessment
Stakeholder Collaboration

Methodology Framework

Understanding the relationship between different methods developed

The strenuous relationship between women and the public sphere is specifically noticeable when paying close attention to the existing gender spaces, newspaper articles regarding violence on women and social anthropology in India. To understand this imbalance and the conflict that stems from systemic practises, it is important that we explore, understand and synthesise this broader problem field by reflecting on various notions, theories, concepts, methods and approaches that are linked to this field.

The research methodology is carried under four broad methods.
Research by Literature
Research by looking at Case Studies
Research by Spatial Intervention
Research by Lived Experiences

This project provides a unique setting to dive into experimental analysis since it largely deals with perceived, conceived and lived spaces. A variety of methods and tools will be used that each aim at answering a specific research question.

To get a deeper understanding of the problem statement, I aim to deconstruct social and societal norms, intangible power relations and further explore the fundaments of complex socio-cultural relationships of gender and the built space with the help of various theories, concepts and case studies.

Sub Research Questions

Analyse

SQ1. What are the different cultural taboos and gendered expectations prevalent in urban spaces that **alienate and endanger women**?

SQ2. How does the private development's idea of safety and comfort influence the **quality of the public edge and women's experience** in it?

NEEDS
1. Activating public edges
2. Co-creation of urban spaces

ELEMENTS
1. Cultural taboos and gendered expectations
2. Intersectionality of gender and economic backgrounds

OUTCOME

With these sub-questions, a qualitative assessment of the behaviour patterns of women in public spaces will be carried out. We would identify the impact of gender and the unsaid rules that are followed by women when they step outdoors. Certain spatial barriers will be identified that would be addressed through spatial interventions at later stage. Further, the project would also conduct a thorough analysis of the needs of women coming from various social sections that need to be included in planning disciplines.

RESEARCH METHODS

Research By Lived Experiences:
1. Qualitative Analysis (Questionnaires, Surveys, Data Collections)
2. Experimental Methodology (Ethnographic Research, Excerpts from women)

Research By Literature:
1. Literature Review
2. Socio-Cultural Anthropology study

Research by Spatial Intervention:
1. Safety Audits
2. Space-time Mapping

SCALES

Macro scale
City level - Societies at large (Indian society)

Meso Scale
Neighbourhood level - Groups, Communities and Institutions

Micro Scale
Street level - Social Interactions of individuals

ASPECTS

Spatial · Experience

Sub Research Questions

Expose

SQ3. What are the systemic deficiencies in planning systems that build barriers for women from different economic backgrounds towards **equitable ownership and access** to opportunities?

SQ4. How do planning and decision making systems operate within the **asymmetric power relations** between genders in India?

NEEDS
1. Equitable Ownership
2. Systemic reevaluation of services

ELEMENTS
1. Systemic deficiencies in planning systems
2. Asymmetric power relations

OUTCOME

With these sub-questions, the project aims to map out the planning systems' failure to represent all sections of the society. A brief understanding of the historical context of planning systems in India with a strong patriarchal influence is explored in detail. A qualitative assessment of the hierarchical structures of governance is carried out to understand the operability of different stake holders in today's context. A matrix of opportunities and barriers is made to facilitate better negotiation when envisioning women's rights in public spaces.

RESEARCH METHODS

Research By Case Studies:
1. Qualitative Analysis (Desk Analysis, Discourse Analysis)
2. Expert Interviews - Stake holder mapping
3. Social Media Research

Research By Literature:
1. Literature Review
Gender Study and Spatial Study
2. Policy Analysis and Comparison,

SCALES

Macro scale
City level - Societies at large (Indian society)

Meso Scale
Neighbourhood level - Groups, Communities and Institutions

ASPECTS

Spatial · Governance

Sub Research Questions

Propose

SQ5. What are the spatial strategies and design principles that can create conditions for gender equality in public spaces, while offering higher **safety, acceptance and accessibility** to resources?

SQ6. How can collaborative governance structures bridge the gap between the **grassroots initiatives and policy-making systems** in ensuring gender sensitivity in cities?

NEEDS
1. Safety, Acceptance and Accessibility to resources
2. Gender Equality and Gender Sensitivity

ELEMENTS
1. Spatial Strategies and Design Principles
2. Collaborative Governance Structures

OUTCOME

With these sub-questions, the project aims to formulate new strategies with active collaboration from experts and citizens that would represent everyone's interests. By understanding the systemic issues at hand, the project would propose multiple spatial interventions at selected locations where they can then be tested out. An assessment framework of these interventions would be established for qualitative measurements. With the help of theoretical review, the practical benefits of collaborative governance structures will be identified. The project aims to create platforms to hold these collaborations and conflict resolutions.

RESEARCH METHODS

Research By Spatial Intervention:
1. Context Analysis
2. Formulating Strategies and Interventions
3. Local Knowledge Collection

Research By Case Studies:
1. Policy Implementations
2. Stakeholder Analysis
3. Grass-root movements
(Successful interventions - small scale)

SCALES

Macro scale
City level - Societies at large (Indian society)

Meso Scale
Neighbourhood level - Groups, Communities and Institutions

Micro Scale
Street level - Social Interactions of individuals

ASPECTS

Spatial · Experience · Governance

Sub Research Questions

Politicise

SQ7. How can an empowerment approach advocate and encourage the restructuring of traditional gender roles and provide **women legitimacy** within the public realm?

SQ8. What is the alternate scope of spatial planning in the context of gender disparity and oppressive practises to **facilitate socio-spatial justice**?

NEEDS
1. Comprehensive Policy changes with Gender Mainstreaming
2. Collaborative Governance Structures

ELEMENTS
1. Institutionalising Change
2. Spatial justice for women

OUTCOME

With these sub-questions, the project aims to identify alternate forms of governance. It advocates for the importance of a change in the mindset to achieve real transformation in practices. It aims to create platforms that would give agency to women of all sections to voice out their grievances and needs that would challenge the existing systems. By developing an operational framework for gender inclusive planning, we look at the scope for addressing gender equality.

RESEARCH METHODS

Research By Case Studies:
1. Qualitative Analysis
(Desk Analysis, Discourse Analysis, Expert Interviews)
2. Expert Interviews - Stake holder mapping
3. Social Media Research

Research By Literature:
1.Gender Study and Spatial Study
2. Policy Analysis and Comparison,

SCALES

Macro scale
City level - Societies at large

Meso Scale
Neighbourhood level - Groups, Communities and Institutions

ASPECTS

Spatial · Governance

Milestones timeline chart:

Months: sep oct nov dec jan feb mar apr may jun jul

Project phases: 00 → P1 → P2 → P3 → P4 → P5

MILE STONES

PROJECT PHASES

01 ANALYSE
- Graduation Orientation
- Background Research; Hypothesis
- - Problem statement
- - Research Aim, Questions
- Deriving Methodology
- - Theoretical Framework
- - Conceptual Framework

02 EXPOSE
- Analytical Framework
- Multi-Scalar Analysis
- Preliminary conclusions
- Expert Interviews and Surveys
- Stakeholder Analysis

03 PROPOSE
- Identify hotspots
- Field work and interviews
- Synthesis of Analysis and Conclusions
- Design and Planning Testing
- Limitations

04 POLITICISE
- Gender Mainstreaming
- Stakeholder Analysis
- Institutional and Operational Strategy
- Project phasing

05
- Evaluation - Assessment Framework
- Design refinement
- Final report
- - Conclusions
- - Further recommendations

OUTCOMES
- PROBLEM CONTEXT -
- KEY CONCEPT DEFINITIONS -
- PRELIMINARY THEORIES -
- DRAFT RESEARCH FRAMEWORKS -
- FINAL RESEARCH FRAMEWORK -
- CASE STUDY ANALYSIS -
- STRATEGIES -
- SITE STUDY FINDINGS -
- FINAL TESTING -
- STAKEHOLDER PROPOSITIONS -
- CONCLUSION -
- REFLECTION -

Phasing of the project

Developing a timeline to accomplish milestones

This research project would work in a non-linear time frame, where reframing the problem statements and creating feedback loops would keep adding to the research further and leaves room for correction and improvement. As mentioned before, we address the problem field through the lens of critical planning developed by Peter Marcuse in four phases; Analyse, Expose, Propose and Politicise.

We analyse the problem at hand by addressing the inter-dependent relationships between gender and society, expose the systemic challenges that have marginalised women and the cultural resistance that is aiding them. The theoretical and conceptual frameworks help us to propose strategies that would offset these implications of bias and provide a more inclusive framework for radical changes to take place.

Finally, most of the grievances of women have been addressed by and rallied for by insurgent groups, community-led protests and NGOs working to support women's causes in India since the 1970s. So politicising the strategies developed through collaboration and conflict resolution will form the latter phase of this project. We then look at the impact assessment frameworks that provide feedbacks on these strategies to become more flexible and adaptive.

Transdisciplinary Research Methodology

Theories and Analysis

This chapter explains the various analytical methods applied under each research methodology that contribute towards building the problem framework, conducting analysis and constructing a strategy matrix in the end. The various aspects of the research are often interdependant. The chapter is destructed under the follwing methods-

- Research by Literature review
- Research by Spatial study and Intervention
- Research by Lived Experiences
- Research by Case study

This chapter outlines the various theories used in developing a theoretical and conceptual framework. These theories are then translated into design strategies that would be applied towards the later stages of the research.

Notions to Theories

Gathering the theoretical knowledge from the Literature Review

SOCIO-SPATIAL JUSTICE
- Citizenship and Participation → spatial appropriation
- Safety of Self → adaptive systems

GENDER AWARE APPROACHES
- Gender in Planning → planning as a spatial mirror
- Gender, Culture and Space → mummifying cultures

Fig 7: Notions and theories used in the project

The project examines a broad volume of literature to look at planning practises under oppressive systems, universal notion of human rights and how it conflicts with cultural structures. It aims to derive an operational framework that works within the Indian context. Here are some of the theories and their definitions that we would apply later to formulate a strategic framework and design interventions in this project. These are further explained in the theoretical framework chapter in detail.

Gender Planning in the Third World

Strategic gender needs -
- identifies women's subordinate position to men in their society.
- Their content changes between different cultural contexts.
- They relate to gender divisions of labour, power and control and may include issues such as legal rights, domestic violence.
- These needs present the '*universalist*' viewpoint.

Practical gender needs
- identifies needs in their socially accepted roles in society.
- do not challenge the gender division of labour or women's subordinate position in society, although rising out of them.
- response to immediate perceived necessities, identified within a specific cultural context,
- inadequacies in living conditions, water provision and health care
- Practical gender needs reflect a '*relativist*' viewpoint

Culture, Human rights and Planning

Western Universalist
- human rights by international law to be the right held equally by every individual by virtue of his or her humanity, and for no other reason

Local Relativist
- different civilizations have different cultures, which need to be understood and judged within their own terms.

Tranversalism
- Plurality of choices
- Transversalism is a form of a 'dialogue'
participants bring awareness of their own roots and identities
- flexible in mentally changing places with a man or woman who has a different role or identity in their society

Theoretical Framework

Gathering the theoretical knowledge from the Literature Review

Fig 8: Theoretical Framework

Mummifying Cultures

- Power relations have spatial expressions
- Serves as a double control over minorities in general and women in particular.
- 'Mummifying' cultures, or changing cultures (Gasper, 1996).

Role of cultural norms in planning

- The relationship between those with power and those maintaining cultural practice is often one of conflict (Yuval-Davis 1997)
- Planning as a 'spatial mirror' of power relations in society
- Planning is carried out by the powerful and dominant cultural majority, serve to control space
- Control the well- being of both men and women, even cultural minorities.

Why Loiter?

- The desire for rights of freedom and pleasure overshadowed by their struggle against violence.
- Wome's movement from the 1970s focused on raising awareness and reforming the law on the myriad issues of overt violence against women (Phakde, 2009).
- There was a failure to recognise that the quest for rights like freedom and pleasure are deeply connected with the struggle against violence.

Advocacy and Pluralism in Planning

- Determinations of what serves the public interest, in a society containing many diverse interest groups, are highly contentious in nature.
- planning must be structured and practiced to account for unavoidable bifurcation of the public interest.

This research talks about gender inequalities and discrimination in the public realm using India to highlight the experiences of women in a developing world. The theories and the research used to gain insights into this issue are, however, not limited to the Indian experience. The emphasis on understanding the existing social contracts under the umbrella of patriarchy calls for recognition as a global challenge.

India is a patriarchal society that defined women's roles in the functioning of society from the ancient period. The position of women underwent significant deterioration and their subordination continued well into India's early modern period ("Women in India," n.d.). Traditionally, women's roles were only defined within the domestic realm of home and family while they shared an ambiguous relationship with the public sphere due to cultural barriers (Moser C, 1989). By being dictated to remain in traditional gender roles, women have had systemically limited access and appropriation of the public realm. Over the last few decades, Indian cities, their inhabitants and the discourses around them have seen a great transformation. Due to globalisation, India witnessed migrations of vast sections of the population from rural areas to both small and large metropolises (Johri, 2020).

Besides, increased awareness and the combined efforts of government and women's organisations surrounding the importance of women's education and contribution to the economic sector has seen more women migrating as well. Cities have always promised emancipation from gender and caste-based identities, however,

the realities of the journey women often encounter question the openness and the promise of Indian cities (Roy, 2014).

Cities are spatial and organisational expressions of social relations which are based as much on power and conflict as on cooperation and consensus (Beall J, 1996, p.10). It has meant that the needs of Indian women have often been ignored while envisioning cities. They were traditionally excluded from active participation, governance and co-creation of cities. Men's roles as breadwinners, leaders and active users for the public spaces have cemented their position as the main producers of the urban realm (Hayden, 1981).

Urban planning becomes a spatial mirror that reflects the power relations in society. Planning is carried out by the powerful and dominant cultural majority and it serves to control space. Men in India are the culturally dominant group who control the way cities and spaces are designed. Through planning, they control the well-being of both women, themselves and even the cultural minorities. As a result, what we see today are women struggling to create a niche for themselves in what is shaped to be a man's world.

The project is based in a patriarchal society like India where gender-based discrimination is normalised and is a part of the cultural fabric. So it is important to understand the shortcomings of the western universalist ideals of citizenship rights. The right to the city by Lefebvre doesn't account for the asymmetrical power relations in the patriarchal society.

A significant aspect of the project is understanding the various needs of women that need to be met to ensure a certain level of equitable development. From the paper Gender Planning in the Third World by Caroline Moser, we can categorise women's practical and strategic gender needs. This is a particularly vital differentiation that is used in the project because it addresses the inherent attitudes in various cultures.

Strategic gender needs -

They identify women's subordinate position to men in their society and differ based on different cultural contexts. Strategic needs relate to the gender divisions of labour, power and control and may include issues such as legal rights, domestic violence. They come from a viewpoint that total emancipation should the ultimate goal and would require strategies that push this vision. These needs present the 'universalist' viewpoint.

Practical gender needs -

On the other hand, practical gender needs do not question women's position in any particular society or challenge the notions of biases. They only identify the needs in their socially accepted roles in society. They do not challenge the gender division of labour or women's subordinate position in society and works at a level that can still cater to women's needs with culturally agreeable responses. They rise out of these culturally acceptable roles. They respond to immediately perceived necessities, identified within a specific cultural context like inadequacies in living conditions,

water provision and health care. Practical gender needs reflect a 'relativist' viewpoint.

These differentiations relate closely to Tovi Fenster's Culture, Human rights and Planning of western universalist ideals and local relativist notions. To that end, the project adopts a transervalist approach that encourages a plurality of choices. Collaborations between formal and informal institutions that can facilitate a form of dialogue in the policy and planning disciplines should be adopted. This brings about flexibility in decision making without conforming to strict identities prescribed to men and women.

This dialogue is particularly vital while questioning the cultural norms in planning. The relationship between those with power and those maintaining cultural practice is often one of conflict (Yuval-Davis 1997). So, prolonged efforts to regain a position of equality needs critical positioning and advocacy. Peter Marcuse's Critical planning theory is adopted in this regard where the issue at hand would be deconstructed in four phases: Analyse, Expose, Propose and Politicise. The sub research questions are formulated under these categories.

Finally, Paul Davidoff's Advocacy and Pluralism in Planning complements the critical analysis and the aspect of achieving a dialogue by determining the public interest. In a society containing many diverse interest groups, planning decisions could be highly contentious in nature. In these cases, planning must be structured and practised to account for the unavoidable bifurcation of the public interest.

LOITERING - *RECLAIMING SPACE*
Shilpa Phakde

PRIVATE REALM
Participation as ' ENTITLEMENT'

RIGHT TO PARTICIPATE

RIGHT TO APPROPRIATE

TRIPLE ROLE OF WOMEN
Caroline Moser
Reinforcing gender stereotypes: Methods of Oppression

organisational role
self organisations, protest groups

productive role
income earners (formal + informal)

formulation ← → implement ●

policy making ← → grass-roots ●

● mobility ● → *accessibility*

● **safety** *rights*
fear & violence

reproductive role
child bearing, resource management

cultural resistance   duty

RIGHT TO BELONG

visibility/ changing mindsets   *pleasure seeking*

PUBLIC REALM
Participation as ' EMPOWERMENT'

RIGHT TO CO-CREATE

AGENCY FOR WOMEN

Jo Beall

Fig 9: Conceptual Framework

[Triple role of women + LOITERING as an act of resistance] X Feminist Urbanism   = LEGITIMACY OF WOMEN

RIGHT TO [PARTICIPATE + BELONG +APPROPRIATE + **CO-CREATE**]

- -

The conceptual framework is derived from ideas and theories during the literature review.

Gendered Roles: Rights and Protection

One of the most significant contributions acknowledging gender roles in the field of planning in third world countries comes from the Moser framework (Moser, 1989). The framework identifies that women in third world countries have triple roles. Firstly, the reproductive role where women act as caregivers with childbearing

and rearing responsibilities. They are also required to maintain the functioning of the house in instances of limited resource availability. Secondly, the productive role where women are the secondary and primary income earners. Research has shown that there is an increase in the number of women-headed families, especially in low economic sections (Buvinic, 1986).

Finally, the community managerial role where self-organised groups of women volunteer to maintain the infrastructure and resource management in their communities Moser (1989). Even

Conceptual Framework

Developing a roadmap towards legitimacy

though it provided an incredible operational framework for planning for women, the Moser framework doesn't account for women's need to transform into roles of co-creators of cities. It fails to recognise the need for them to transition into roles of legitimate citizens where they become active producers of the city.

The Triple role theory only recognised women from their position as a domestic figure trying to contribute to the betterment of their home lives. Their interactions with the city or public realm would be to serve their family lives. Therefore, we need to study their participation within the public realm at a greater depth to understand what their partnership and contribution mean to urban development. One useful consideration in addressing this is to examine the difference between participation as entitlement and participation as empowerment (Borner s et al, 1945). Moser's triple role theory looks at women participating in the urban life for their social-economic emancipation and to better their lives rather than acknowledging that they would also benefit from taking on the new roles as workers, active bystanders, clients and pleasure seekers of the city (Beall, 1996).

Gender and Need for Planning Framework

With women's movement, the desire for rights of freedom has always been overshadowed by their struggle against violence. This movement from the 1970s focused on raising awareness and reforming the law on the myriad issues of overt violence against women (Phakde, 2009). It challenged the systemic violence plaguing women and demanded their safety and emancipation. However, there was a failure to recognise that the quest for rights like freedom and pleasure are deeply connected with the struggle against violence.

Gender: Citizenship and Human Rights

Jo Beall (1996) says, participation as entitlement refers to how citizens, both men and women access resources, opportunities and infrastructure for their well-being and also to serve their households and communities. These align directly with women having

historically created niches for themselves; a private safe space even while in public spaces just to access basic services (Levy C, 1992).

On the other hand, participation as empowerment is a collaborative process where citizens can organise themselves aiming for change. It gives the citizens leverage to negotiate and articulate their interests which contribute towards transforming the urban fabric. Women have been historically alienated in these processes of organisational and operational disciplines at higher levels of governance and forced to take on these roles at a smaller and more informal scales (Young, 1998).

Gender: Co-creators and Agency

The project aims to scale up the basic requirements for women to help them progress beyond their domestic roles. For each position that Moser identified, new alignments are formulated. Women in their productive roles, i.e. the women who work, need unconditional accessibility than just mobility and their safety needs should be viewed from the lens of rights and freedom.

The community organisational role that the women usually take on only happen at a grassroots level in the majority of cases and there is a knowledge gap between the lived experiences of women in their everyday lives and the policy-making disciplines. It questions the inclusion of women only in the implementation stages of a project. It advocates for their voices to be heard during the formulation of new spatial interventions.

By using 'Loitering' as a concept of reclaiming mens' public realm, the project envisions frameworks to change mindsets and provide more visibility to women in public spaces. The project provides frameworks to transform women's usage of public areas not just to fulfil their domestic duties but rather to seek pleasure and actively contribute in producing and transforming urban fabrics. These strategies are aligned with the rights of women and one of the ways the project aims to do it is to give them uninhibited agency, accessibility and platforms to actively participate in the co-creation of a city.

Linking Conceptual Framework to Space

Deriving the outcomes

Capacity Building
Workshops for training
Platforms for discussion

Gender Impact Assessment
Local Community consent
Bridging the knowledge gap

Stakeholder Collaboration
Policy changes
Gender-aware planning

GOVERNANCE

SOCIETY

SPATIAL

BRIDGING THE GAP

IDENTIFYING ENTRY POINTS

Urban Livability
Quality of life
Well- being of women

Integrated Mobility
Account for trip chaining
Last mile connections

Vibrant Neighbourhoods
Inclusive Recreation spaces for women
Safe Pedestrian areas

Fig 10: Bridging the gap between space and society

Linking Conceptual Framework to Space

Linking different aspcets of society

The role of women in society and the rights for their transformation is extremely complex and has multiple facets to it. The way the project would address these issues is through three dimensions: Spatial, Experiential and Governance. The role of the urbanist here is to identify the links to land the project spatially and create strategies and frameworks concerning the built environment.

It would mean, we would look at women's everyday lives and their most important and vulnerable relationships within the built environment and the public sphere. We would also look at providing operational frameworks to provide agencies and address the knowledge gap and provide suitable interventions to bridge this gap.

By inspecting at the problem framework, we address the spatial dimension through:

Urban livability:
The women's well being, access to safety measures, their comfort while acting as caretakers, ease of movement within a city, infrastructure for their needs would be addressed. Their usage of the city for purposes like recreation and relaxation would add to the quality of their experiences in the public sphere. Loitering as an action cements their belonging. So the project aims to create areas inclusive and especially for women to be outdoors.

Integrated Mobility:
Women have different mobility needs than men. Trip chaining is where women have multiple stops on their everyday journey. The last mile connection refers to the journey from public transport to their homes and work and this constitutes an integral yet vulnerable part of their journey through. These areas will be looked at to identify problems and propose integrated solutions to ease their movement.

Vibrant Neighbourhoods:
Women tend to not have access to certain areas due to the long distances. It is therefore important to create neighbourhoods that cater to their needs and provide a diverse environment of people. It will also help maintain safety in the neighbourhood. The inclusive and diverse neighbourhoods will better the relationship that women share.

For the governance dimension, the project will look at
Platforms for Capacity building:
Women's issues need to be brought to the forefront of policy and there are already systems in place to ensure that women can be trained for higher levels of office. At a community level, women need to be equipped to identify the problems at hand and receive resources to formalise these issues.

Gender impact assessment framework:
Like an environment assessment framework, every new infrastructure project should look at the impact it will have on women's experience. Flyovers, blank compound walls and new construction projects contribute to a feeling of unrest and make women feel more vulnerable. A framework would help understand the experiences of women and get a hold of what needs to be improved both qualitatively and quantitatively.

Stakeholder collaborations:
In India, the hierarchy of organisations proves very cumbersome for people to navigate. The various infrastructure organisations and the existing women's development foundations need to come together to bridge the knowledge gap.

Target User Groups

INCOME GROUPS:
1. Domestic help
2. Street Vendors
3. Pourakarmikas - Street Cleaners

AGE GROUPS:
1. College Students
2. School girls

SOCIAL GROUPS:
1. Women with her kids
2. Women travelling for work
3. Women volunteering for
community development

Analysis by Survey

Women's Qualitative relationship with Bengaluru

A detailed questionnaire was circulated online among women from three Indian cities - Delhi, Ahmedabad and Bengaluru. The choice of these cities was based on their safety ratings in India, with Delhi being the most dangerous city for women and Ahmedabad, one of the safest cities for women. The exercise helped in placing Bengaluru in the relation between the two.

Bengaluru suffers the most from vulnerabilities arising during navigating through the city. However, women are more aware of helplines and redressal forums compared to the other two. An initial comparison of the results between these three has supported the hypothesis that gender issue is prevalent in every major Indian city in varying degrees. It manifests in different ways, but no city is close to achieving gender equality or gender safety.

The questionnaire aided in understanding women's everyday experiences and their relationship with the city better. Women from various age groups and demographics have participated in this survey. The results are analysed to understand the various aspects of women's everyday life and their interaction with the city.

In this section, we take a detailed look at Bengaluru's survey results. The questions were formulated under five principles as shown below. They relate to livability, safety, accessibility, mobility etc. Around 200 women of all age groups took the survey and the questions are presented in Appendix I. The results are synthesised and presented in this chapter.

Demographic Information -

96.9%

women
men

AGE

21 - 78 YRS

EDUCATION

12th Grade - Post Graduate Level

OCCUPATION

Students
Professionals
Home makers

DURATION OF STAY

1 year - 56 years
Lived whole lofe, Native Bengalurean

Five parameters:

INTERACTION WITH
THE CITY

SAFETY IN
THE CITY

NAVIGATING THROUGH
THE CITY

NEIGHBOURHOOD
MANAGEMENT

AWARENESS
AMONG WOMEN

96.9%

women
men

**Research by
Lived Experiences**

Interaction with the City

Women's Qualitative relationship with Bengaluru

Even though 81.5% of women who have taken the survey answered that they would like to enjoy the outdoors as a part of their social life, only 41% can go out as much as they want to. These women mostly go outside for educational and employment purposes. Loitering, taking a stroll by the shopping street, visiting a park alone are some activities they would like to but are not yet feasible and comfortable for most women.

12%
81.5%

- Yes
- No
- Not much

Q1. Other than work related outings, do you like spending time outdoors?

58.2%
41.8%

- Yes
- No

Q2. Are you able to go out as much as you would like?

Q3. If no, what prevents you from going out as much as you like?

Too far	68.3%
Bad Connectivity	41.3%
Cultural Issue	9.5%
Too Expensive	39.7%
Not Engaging	14.3%
Not Safe	50.8%
No Time	41.3%
Not Interested	7.9%

One of the main reasons mentioned for not being able to enjoy the city is the accessibility of recreational places. The activities are either too far or have poor public transportation systems. The neighbourhoods don't have engaging activities. Time, economic feasibility are important aspects as well. More than half of the women expressed that another hindrance is the perception that outdoor recreational activities are unsafe for women.

Q4. Rate these spaces in Bengaluru in terms of -

	1	2	3	4	5
Distance needed to travel					
Ease of Access					
Infrastructure					
Supporting Amenities (Toilets etc.)					
Cleanliness					
Kid-friendly					

Outdoor recreational activities are rated under the parameters of distance, access, infrastructure etc. As seen from the table, almost all the parameters are rated significantly low. It shows that the neighbourhood planning lacks in creating vibrant and engaging activities for women. The recreational areas are maintained poorly, do not have gender-sensitive amenities and are unfriendly to kids and the elderly.

Q5. What are the kinds of spaces do you visit other than education/employment centres?

Parks	70.7%
Cafes/ Bars	93.5%
Religious Places	63%
Entertainment	73.9%
Markets	70.7%
Public Services (Hospitals, Banks)	56.5%
Libraries	1.1%

The graph shows the areas that women in Bengaluru enjoy visiting. Owing to the pub culture and the food streets, cafes and restaurants are amongst the most visited for socialising. Parks like Cubbon park are also among the more engaging activities but they only visit outdoor areas with families or kids. It also gives a glimpse of the possible functions necessary for a neighbourhood to become engaging and vibrant.

Interaction with the City

Women's Qualitative relationship with Bengaluru

The pie chart shows the temporal relationship. Half of the women do not step outdoors after 9 pm. There are various reasons for this;

Cultural resistance, Safety concerns, Not engaging in activities and General lack of acceptance towards women outdoors at night.
This shows that functions along with time dictate women's experiences in cities.

34.4%
15.6%
22.2%
27.8%

- 17:00 - 19:00
- 19:00 - 21:00
- 21:00 - 23:00
- 23:00 - Past midnight

Q6. What is the latest time you stay outdoors?

Q7. What are the reasons for not staying outside longer?

Not allowed	37.2%
I have a curfew	50%
The neighbouhoods scare me	71.8%
I am busy	71.8%
No activities to go to	74.4%
Not interested	56.4%
I dont feel safe	5.2%
Fewer cabs available	1.3%
Dangerous to drive after midnight	1.3%

It is interesting to note that women employ various techniques to feel safer while walking arounD in the cities. Some of these are:

1. Wearing covered clothes
2. Using phone to avoid eye contact
3. Take longer safer routes to reach a destination
4. Following curfews
5. Walking with male family members
6. Using private transport
7. Walking in groups
8. Installing safety apps
9. Carrying pepperspray
10. Informing others of where abouts

These self-regulating activities are defensive against predatory behaviour in the public realm. They act as safety bubbles around women. However, it also means that women are never really engaging with their surroundings. The outdoors are just a means for them to get from one point to another. The pressure of taking the onus of their safety disconnects them from enjoying, loitering and interacting with the neighbourhood and the city.

Q8. What kind of cultural expectations do you face based on your gender when in public areas?

Some Incidences

Getting groped while walking on the road

It was past midnight and me and friend were next to the Brigade Road. and few men crossing our way called us many things and followed us for a long way, it was very disturbing and panicking situation.

Once I was travelling back home from another religious place by auto rickshaw at 5am morning with my kid. The driver was very rude and was asking for more money suddenly

Not being helped when stranded with a flat tire

I was once groped on a public bus and when I raised an alarm, no one bothered doing anything while the man walked away leering at me.

Being groped while walking, and being flashed while walking

Unruly behaviour of motorists even if they are wrong, harrassment at signals by vendors, transgenders

While traveling on a local bus (BMTC) i got molested. It was almost a two hour bus ride and the harassment went on for the entirety of it. I was young then and got quite scared. The worst part of the whole ordeal was that there were several men (including an uncle who was traveling with me) who witnessed it and acknowledged that they could see what was happening but still close to shrug it off. And it wasn't the only time. Honestly i still try to avoid using buses.

Too many to write

Bag snatching when I was out with a female friend near Churchsteet. Incident happened at around 11:30pm while we were walking back to the parked car.

Once few men in street harrased with bad words, throwing stones and shouting

I was harrassed in a a bus while traveling and language being a barrier people especially drivers are bit rude

I can't recall any since I try to repress these memories. Worse I have faced in other cities in India like Delhi, Calcutta, and Bombay

Indecent behavior by men in a public place. No access to help

People staring and making me uncomfortable

The autorickshaw drivers coming really close even when you clearly state you don't want an auto

Once standing at a busstop, a guy was deliberately inappropriately touching my shoulder, I ignored thrice as those were busy hours, thought it would be by mistake but when he tried again I instantly slapped him and shouted at him badly. Then people there handled him and soon my bus came and I left.

Safety in the City

Women's Qualitative relationship with Bengaluru

The figure on the left identifies several encounters of harassment experienced by the women who have taken the survey. Out of 200 women, more than 75% have shared their experiences of harassment on the streets. It shows how ingrained the issue is.

14.1%
81.5%

Yes
No
Not Sure

Q9. Do you think there are places in the city that are and feel unsafe for women?

Q10. If yes, what makes them unsafe?

Only men in streets	37.2%
Crime rates	50%
Lack of street lights	71.8%
Deserted Streets	71.8%
Lack of surveillance	74.4%
Bad Infrastructure	56.4%

According to the figure on top, 81% of women admit that Bengaluru has places in the city that are and feel unsafe for women. The graph shows the main reasons for the perception of fear and feeling unsafe. Lack of lighting, passive and active 'eyes on the street' are the main reasons.

Getting harassed on the streets has become a normal experience in everyday social life for around 90% of women. This normalisation, as discussed before, adds to the restriction of women's movement and reinforces a sense of illegitimacy in the public realm. The way they experience the city is filled with fear, caution and strategic mobility patterns. These realities are widely different from that of men.

Q11. How often have you faced any kind of harassment on the streets?

27.8%
42.2%
20%

Never
Occasionally
Sometimes
Often
Always

Q12. Where have you experienced harassment?

71.2% walking
57.6% public transport
42.4% public space

Most of these incidences have occurred on busy and deserted streets, public transport and waiting areas, while walking or simply standing. However, the survey shows that harassment while walking is the most common occurrence. Using public transportation is the next vulnerable area. Since most women depend on public transport and walk in their last mile, these area needs to be studied in further detail and suitable interventions need to be proposed.

loiter city: spatial strategies to redefine a woman's place in a public realm

Q13. Do you prefer walking in your city?

57.8%

42.2%

● Yes
● No

In this chapter, we take a look at women's travel patterns within the city and the experiences they face while travelling. The previous analysis has shown that women feel the most vulnerable while walking due to high incidences of harassment. This explains why only half the women would feel comfortable and prefer walking in the city.

Q14. What are the reasons that deter you from walking?

Too far	19.7%
Lack of Infrastrcuture	86.9%
Cultural Issue	6.6%
Fear of Harassment	29.5%
Not interested	6.6%

Apart from the fear of harassment, another major contributing factor is the lack of safe and gender-inclusive pedestrian infrastructure. This includes a lack of footpaths, signages, streetlights, safe crosswalks and pedestrian junctions.

In instances where these amenities are present, they are poorly maintained, broken and rate very low as shown. Since women usually travel with dependents, these aspects of walking make them even more vulnerable.

Q15. Rate Bengaluru on how safe it is to walk based on -

		bad		good
🚦	Traffic Lights	bad	●	good
▦	Footpaths	bad	●	good
🚶	Crossing the main roads	bad	●	good
🚕	Hailing a Cab	bad	●	good
🚉	Getting to public transport	bad	●	good

Q16. Rate Bengaluru on how easy it is to navigate based on the presence of -

		difficult		easy
🗺	Maps	difficult	●	easy
✛	Street directions	difficult	●	easy
▤	Street signs	difficult	●	easy
🚏	Street lights	difficult	●	easy
P	Parking spaces	difficult	●	easy

Digital maps are used for navigation while walking. They are reliable and comfortable to use. However, these maps are only available for women from economic backgrounds that can afford smartphones.

It doesn't cater to women from low-income neighbourhoods. In these areas, other information dissemination systems like physical signages, street directions rate quite poorly. Lack of parking spaces is a huge issue in public areas.

Q17. How safe or comfortable do you feel moving around the city with someone?

		vulnerable		safe
🚶	Alone	vulnerable	●	safe
👭	Female friends	vulnerable	●	safe
👬	Male friends	vulnerable	●	safe
👪	With children	vulnerable	●	safe
👥	With the elderly	vulnerable	●	safe
👨‍👩‍👧‍👦	With family members	vulnerable	●	safe

While analysing dependency, it was evident that women feel most vulnerable while walking alone or with their children. They feel most secure in the presence of male friends and male family members. Most of the time, they only get permission to travel if they are accompanied by someone. This dependency on others is just another way of reinforcing restrictions against women's freedom of movement.

Most women who took the survey stated that cycling and walking are the most vulnerable ways of travelling. They prefer driving private transportation like cars and bikes to avoid travelling in public transport. However, this isn't feasible for women from low-income backgrounds who are forced to walk in unsafe neighbourhoods putting them at a greater disadvantage.

Q18. How vulnerable do you feel using the following modes of transport?

Most Vulnerable   Most Safe

🚲 🚶 🛵 🚌 🛺 🚊 🚗

Q19. How safe or comfortable do you feel at the waiting areas of -

Very Uncomfortable   Highly Safe

Auto-rickshaw stands	
Bus stops	
Metro stations	

Q20. Rate public transport facilities in Bengaluru based on -

⚙	Ease of Access	·	●	⬤	●	·
$	Economic Feasibility	·	⬤	●	●	·
🛡	Safety	·	⬤	●	●	·
〰	Frequency of Public Transport	·	●	⬤	●	·
📍	Last mile Connection	·	●	⬤	●	·

Most women do multiple trips called trip chaining every time they step out of the house. It means that they spend a considerable amount of time in bus stops and waiting areas of public transport. Auto stands are informal, and not planned, creating unfavourable and conditions while travelling. Metro stations that are being designed in the last few years keeping this in mind do a much better job of providing a secure environment for women.

The graph on the left shows consistent poor ratings for the various amenities of the transportation infrastructure in Bengaluru.

Neighbourhood Management

Women's Qualitative relationship with Bengaluru

Q21. Do you feel safe in your neighbourhood?

Gated Communities	Apartments	Independent Houses

Q22. What percentage of women are in the organisation committees?

- No womer
- 0-25%
- 25-50%
- 50-75%
- 75-100%

27.4%
9.5%
8.3%
51.2%

While analysing the living conditions, types of residential neighbourhoods, the community management and women's perception of safety, some clear patterns emerged. Most women who lived in gated communities felt much safer than those who were living in independent houses. Privacy, presence of security and a sense of ownership and belonging contributed to this perception. These residential developments are managed by neighbourhood committees, apartment associations, local governments or by the municipality. Even though women make up about half of the population in these neighbourhoods, they are not represented in such organisation committees. In most of these organisations, less than 25% of the working members for women. This affected how approachable the committees were for discussing issues and as an extension, how friendly and comfortable the neighbourhoods are.

Awareness about Safety

Women's Qualitative relationship with Bengaluru

Q23. Are you aware of the safety initiatives for women in your city/ neighbourhood?

69.6%
30.4%

- Yes
- No

Q24. Are there any forums to report issues of safety and access?

55.4%
9.8%
34.8%

- Yes
- No
- Not aware

Q25. How safe or comfortable (accessible) do you feel approaching these forums?

38.9%
9.7%
20.8%
23.6%

- 1 (not accessible)
- 2
- 3
- 4
- 5 (accessible)

These graphics show that the awareness about the safety forums, grievance redressal mechanisms and related organisations among women is quite less. Due to the lack of awareness and the stigma around reporting harassment, most of these forums are not accessible. They don't function efficiently and their reach is very low. Women find it tedious, scary and overwhelming to approach these agencies to report any crime. They are vulnerable and internalise trauma and harassment. This normalisation creates changes in the way they engage with the outdoors and the way they behave in public spaces. These forums need to become more accessible to women from all economic backgrounds and the stigma surrounding sexual violence should be addressed.

Conclusions from Survey

To study the relationship between women and public sphere and their interactions seen through during a cultural paradigm shift

Main issues identified from surveys and questionnaires

Crime rates	Deserted streets with monotonous barriers	Lack of designated auto stands	Vulnerability while travelling with kids and elderly
Lack of lights in parking areas	Public transport unsafe due to crowd sizes	Broken pedestrain infrastructure like side walks	Walking in the city is unsafe, uncomfortable
Bad connectivity to the recreation spaces	Extremely vulnerable while walking and in cycle	Only paid activities for recreation.	Lack of activities for women at night
Lack of shaded walkways in monsoons	Women not aware of safety forums	No engaging activities for women	Women feel unsafe walking alone in the streets

- Design Aspect
- Governance Aspect
- Planning Aspect
- Capacity Building

Conclusion

By synthesising the results, a key sub research question under Analyse is answered:

SQ1. What are the different cultural taboos and gendered expectations prevalent in urban spaces that alienate and endanger women?

From the results, we can conclude that the main areas of concern for women are while they are navigating through the city. They feel extremely vulnerable while walking, waiting for public transport and during the last mile connections. Mobility is an important aspect that influences women's behaviour outdoors. Women living in gated communities feel safe and the presence of women in managerial positions adds to this perception. The research would hence be focusing on those parameters more spatially in later sections.

Limitations

The main limitation of using a methodology involving online questionnaires is its reach. It was accessed only by educated and professional women who came from similar cultural and economic backgrounds. These women have access to smartphones, and so the results acquired through this survey do not account for the experiences of women from weaker economic sections who do not have access to technology. Achieving diversity in economic and social backgrounds was not possible.

Physical meetings and interviews were conducted during the fieldwork phase to analyse the experiences of women from low-income backgrounds. Most of the women who took part in this survey can navigate through the city using their resources. However, these resources are not readily accessible to women from weaker economic sections.

Stakeholder
Analysis

Stakeholder Analysis

In this chapter, we take a look at different stakeholders involed in this complex subject. We have the hierarchy, understand the gaps and map them spatially. The various grassroots organisations are also mapped and case studies of their projects are studied in more detail.

Stakeholder Mapping

Understanding the two strutures of governances

SCOPE OF THE PROJECT

POLITICAL DIMENSION

GOVERNANCE

POLICIES

SPATIAL INTERVENTION

CAPACITY BUILDING

Scope of the project

Fig 12: Scope of the project

PUBLIC SECTOR
Ministry, Taluks

WOMEN'S ISSUES

X

No formal Collaboration

bottom - up approach

PRIVATE SECTOR
Education, Emplyment sectors

CIVIL SOCIETY
Women's Activists, NGO's, NPO's Independent Grassroot movements

PUBLIC SECTOR
Ministry, Municipalities

Top-down approach

INFRASTRUTURE

Permission

PRIVATE SECTOR
Individual developers, Construction companies,

CIVIL SOCIETY
Citizen Organisations, NGO's, Urban Labs

STAKEHOLDERS FOR SOCIAL GOVERNANCE

STAKEHOLDERS FOR SPATIAL GOVERNANCE

Fig 13: Identifying two structures of governance

Stakeholder Mapping

Identifying the gaps and proposing collaboration

ADDRESSING THE GAPS

Fig 14: Collaborative governance model across the domains

To address gender sensitive urban planning in Bangalore, two structures and the stakeholders of governance that are responsible for decision-making are mapped; Social (women) and spatial. Both the structures had three branches, the public sector, the private sector and the civil society. In the aspect of social governance, there is a healthy mix between the top down decision making and also bottom up grassroot movements that collaborate at local scales.

The infrastructure decisions of Bengaluru are top down and are done without understanding the ground reality of most of the citizens let alone women. In addition to this, no formal collaboration between the two structures are identified while mapping. There is a gap in knowledge, resource allocation and a holistic vision to ensure women's safety and legitimacy in the public area. Any semblance of collaboration only happens at the city and ward scale.

However, small-scale cosmetic solutions are not enough to achieve a paradigm change. The project aims to propose a formal collaborative governance where the momentum and the data of the grassroots movements could aid in the formulation stages of policy making.

MINISTRY OF HOUSING AND URBAN AFFAIRS (MoHUA)

Authority over the formulation and administration of the rules and regulations and laws relating to the housing and urban development in India

planning and mobility

TOWN AND COUNTRY PLANNING ORGANISATION

CENTRAL PUBLIC WORKS DEPARTMENT

URBAN DEVELOPMENT DEPARTMENT KARNATAKA (UDDKAR)

Govt. of Karnataka
Responsible for urban civic matters and overseeing new developments

DIRECTORATE OF URBAN LAND TRANSPORT

Responsible for overseeing all the urban land transport initiatives in Urban/ Local Planning Areas

KARNATAKA STATE POLICE (KSP)

KARNATAKA STATE ROAD TRANSPORT CORPORATION (KSRTC)

KARNATAKA PUBLIC WORKS DEPARTMENT (KPWD)

KARNATAKA POWER TRANSMISSION CORPORATION (KPTCL)

BCP	BTP	BBMP	BDA	BRDA	BMTC	BMRCL	BWSSB	BESCOM
Law-enforcement agency	Traffic Police	Civic amenities, infrastructure	Principal planning authority	Autonomous body of the metropolis	Public transport bus service	Rapid transit system serving	Responsible for sewage disposal and water supply - Roadworks	Electricity transmission and distribution company - Lighting

COUNCILORS OF WARDS

CITIZENS

National Level
State Level
City Level
Ward Level

Fig 15: Stakeholder Hierarchy in Infrastructure and Planning

Structure of Spatial Governance

Studying the complexity of relationships between various stakeholders

BBMP/ BDA
Pavements
Cycle Lanes
Roads

Parking
Street Vendors
Building Heights/ FAR/
Setbacks/ Zoning Use

BWSSB
Water mains
Storm Drains
Sewer Lines

BMRCL
Mass Transit

BMTC
Bus service
and bus stops

Bangalore Traffic Police
Traffic Lights
Auto Service

BESCOM
Street Lights

BBMP
Street Furniture
Trees
Street Signage

Signage on buildings
(shopboards and
hoardings)

Fig 16: Spatial Representation of the stakeholders in Bengaluru Source: EMBARQ

The flow chart represents the hierarchy of infrastructural decision making in Bengaluru. It shows the complex top down governance model starting from the central government where most decisions are taken at the higher levels. This often leads to either ignoring or lack of understanding of the ground realities of people's experiences. The citizens are often at the lowest levels with little to no say in the planning processes. This complex nature of various infrastructural, design and planning elements with their respective responsible governing bodies overwhelm the citizens, both men and women. This system proves to makes the municipal bodies unapproachable and results in evolution of third party NGOs for bridge that gap at local levels. The section above shows the complex nature of the stakeholder involvement in the urban design and planning discipline in Bengaluru.

MINISTRY OF WOMEN & CHILD DEVELOPMENT

Responsible for social & economic empowerment of women, develop an environment free from violence and discrimination

Women's empowerment and gender equity

NATIONAL COMMISION FOR WOMEN (NCW)

RASHTRIYA MAHILA KOSH (RMK)

DEPARTMENT OF WOMEN AND CHILD DEVELOPMENT

Govt. of Karnataka
Responsible for mainstreaming gender concerns in policies, like Gender-budgeting

STREE SHAKTI

Progress through Women Empowerment; Self-reliance through income generating projects

SANTHWANA

Provide counselling; help to women who are victims of violent atrocities

THE KARNATAKA MAHILA ABHIRUDDI YOJANE (KMAY)

To ensure Gender Equality and to bring women in mainstream of development.

HOSTEL FOR GIRLS

Encourage education among rural girls

STAIRYA YOJANE

Provide financial aid within stipulated time

GELATHI

Services for women affected by violence

GENDER BUDGET

Addressing various development indicators

STATE

Safe and suitable accommodation

SWADHAR GRUHA

Rehabilitation Scheme in difficult circumstances

National Level
State Level
District and Taluk Level
City Level

Fig 17: Stakeholder Hierarchy in Women's Issues

Structure of Social Governance

Studying the potentiality of grass-root movements

Fig 18: Logos of relevant NGO's

The branches of social governance for women often concentrate on the more sinister instances of violence like rape, dowry deaths, physical and sexual assault that victimise women. Most of the existing laws in place aim to provide rehabilitation, medical and financial assistance for the victims. The ministry at the national level oversees these legislations making it a top-down approach and these schemes strive to encourage economic emancipation for women. The various branches at the city scale collaborate to ensure the application of strategies developed at the higher levels of governance. For instance, schemes like STREE SHAKTI help setting up local businesses to generate economy for women.

However, women's safety in public areas and a pre-emptive action appears missing in the governmental schemes at every single level. In that area, informal institutions at the city level take independent mobilized action. Some of these grassroots organisations are shown on the left. These forums are aimed at liberating and destigmatising women's presence in the public realm. Their service range from providing counselling and legal assistance to workshops that can increase skill development and gender sensitization. Some organisations like Durga empower women by giving them tools to conduct a qualitative analysis of the neighbourhoods, safety audits and engage with the local authorities. At the city level, there is considerable collaboration within these institutes and with the local municipal bodies. Since municipal bodies like BBMP and BDA often lack resources and the time to conduct surveys and questionnaires, these NGOs and NPOs provide volunteers to do the same and publish reports. The governing and the civic bodies use these reports later to formulate a plan of action for suitable interventions.

Impact Partners

Identifying the formal and informal institutions for the sustenance of the project

Knowledge Stakeholders

The knowledge partners include contract-based government supportive organisations and independent think tanks that work in the field of urban development and women's empowerment. These organisations conduct independent research, generate momentum at the grassroots level. They possess significant insights and technical expertise to contribute towards the implementation of interventions.

Fig 19: Mapping knowledge stakeholders

Fig 20: Mapping financial stakeholders

Financial Stakeholders

The financial contribution would come from National and International Grants, Government bodies, Multinational Corporations and their Corporate Social Responsibility wing and Social Entrepreneurs. These stakeholders will be important contributors to funding and sustaining targeted schemes and projects.

Impact Partners

Case Study no.1

Understanding the grassroot movements

DURGA - WOMEN'S SAFETY ; Tapping into the strength of people

EDUCATE + SENSITIZE + RECLAIMIZE + ENGAGE + COLLABORATE

EDUCATE+ SENSITIZE

Proactive thinking → Planning > Reacting → Innovate +Idealize

through voice labs | methods of expression
gender, behavior

PILOT PROJECTS

Voice labs set up in Universities and schools to address gender equity and influence the student girl community to become self-reliant.

20 women trained in phase I. Phase II - 200 and subsequently 3000 students trained.

Collaboration : Local Schools + Universities

RECLAIMIZE

CAPS → identify → create curiosity → engage citizens

citizens for auditing public spaces

train the women to conduct safety audits

PILOT PROJECTS

Providing tools to local citizens for carrying out audits. Documenting safety audit report to present to the Local municipality requesting necessary interventions.

PARKS

access from bus stops, toilets, dark spots, security, entrances, lighting

POLICE STATIONS

surveillance, accessibility, nature of the space

Collaboration : BBMP | Collaboration : Ward members | Collaboration : BCP

Case Study no.1

Understanding the grassroot movements

ENGAGE

DARE → engagement strategy → deep training → active bystanders

citizens for auditing public spaces

bus and auto drivers | bus conductors | vendors
fruit vendors, shop owners

PILOT PROJECTS

Gender sensitization workshops conducted with BPAC to bus drivers and conductors for becoming active bystanders who can respond for help.

Collaboration : BMTC | Collaboration : Unions | Collaboration : BPAC

COLLABORATE

DURGA ALARMS → creating safe conditions in public transport

PILOT PROJECTS

150 BMTC buses set up with trigger buttons called 'DURGA ALARMS'. Connected to the patrolling vehicles for immediate crime prohibition

Collaboration : BMTC | Collaboration : BTP

PROBLEMS

Parks lack surveillance, safety concerns due to dark spots.	Policy makers prefer CCTV's and police patrolling for safety	Lack of street lights and security on the streets.	Police stations are unwelcoming. Women hesitate to approach.
Parks are not accessible at all times. Not located suitably.	No active bystanders. Eyes on the streets need to be redefined	Cultural biases in drivers and conductors who are mainly men.	Movement happens only in the grassroot level.

Case Study no.2

Understanding the grassroot movements

BPAC: ADVOCACY AND AWARENESS; B.SAFE: WOMEN'S SAFETY AND EMPOWERMENT

B.Mobile + **B.Safe** + **B.Accountable** + **B.Green** + **B.Clip**

Transport and Mobility | Safety and Accessibility | Governance and Policy | Sustainability | Civic Incubation, 200 trained people in the wards

METHODOLOGY

ADVOCACY → **ACTION PLAN** → **AWARENESS**

ADVOCACY
- Gap Analysis
25 women leaders in a constituency
- Micro ward Analysis
Spatial Analysis tools for women
- Capacity Building
Train women for empowerment

ACTION PLAN
- Stakeholders
Involved from the beginning
- Report Preparation
Information from the analysis + Reports from other Stakeholders
- Pilot Projects
With the new inputs and solutions

AWARENESS
- Knowledge Track
Workshops
- Field Track
Surevy and Questionnaire
- Awareness Track
College Students, Community Heads, Cab drivers/ Vendors

PILOT PROJECTS

Safety Audits conducted by trained women in 10 different areas;
Parks, Markets, Bus stops, Metro Stations

Action Plan submitted for Shivaji Nagar and Mahadevpura
Issues addressed: Lighting, Security

Gender Sensitivity training -
Phase I: 11000 drivers and conductors
Phase II: 16000 drivers

Collaboration : BCP

Collaboration : BBMP

Collaboration : BMTC

PROBLEMS

All economic groups are not represented	Metro - an intimidating space for weaker economic sections	BBMP, no resources for revamp to become participatory	Lack of integrated mobility across transport systems
No public consultation while envisioning new projects	New technological innovations - cultural drawbacks	No evaluation criteria for infrastructure projects	Power dynamics in play during Union discussions

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Case Study no.3

Understanding the grassroot movements

MOD: URBAN PLANNERS IN BENGALURU

At the city level

Citizen forums (Local Citizens) **+** **Independent Agencies** (NGO's / civic) → **PLAN OF ACTION** — appeal for change → **Court** — *Independent stay order*

→ **Local Government**

Specialists/ Planners | MOD

requires intervention

active collaboration

BDA | **BBMP**

propose independent plans

passive collaboration

informed planning

Private Investors (Floating Tenders)

Policy Changes — *Short / Long term*

EXAMPLES

Pilot Projects - Sewer line clean up in central Bengaluru	Fighting for underground metro lines to save trees	Lake Rejuvenation project in Bengaluru

PROBLEMS

Planning body BDA has no government mandate	No policy maker in the planning process	BDA, not a transparent body with democratic process	95% men in the top level of governance.
No gender assessment as a main parameter for planning	Reaction approach prevents holistic planning	Top-down planning often clashes with the citizens interest	Any contention to the existing plan needs a tedious trial

Analysis by Interviews

To study the relationship between women and public sphere and their interactions seen through during a cultural paradigm shift

NGOS AND EXPERTS WORKING ON WOMENS ISSUES	Amrita MOD, Bengaluru	What is the role of an urban planner?
	Siri BPAC, Bengaluru	What is the methodology for community engagement?
	Monika DURGA, Bengaluru	What are the parameters for safety audits?
	Ananya Ramesh WRI INDIA, Bengaluru	Relationship between mobility, digital urbanism and safety
	Sushma BPAC, Bengaluru	Representing the unheard and Identifying the regulatory loopholes for true inclusion
	Sonali Vyas SAFETIPIN APP, Delhi	Identifying vulnerabilities in bengaluru through the safetipin app

ADDITIONAL INTERVIEWS REGARING POLICING AND OUTREACH	Sophiya CEPT Thesis, Ahmedabad	How to engage resident women with local economy to make them active contributors to the public realm?
	Katie Pyle JANAAGRAHA, Bengaluru	Developing methodology for including citizens to develop community awareness
	Sarah WORLD BANK, Chennai	Safecity project in Chennai, India. Developing Genderlabs for holistic interventions
	Sneha VIDHI LEAGUE, Bengaluru	Developing impact frameworks of new infrastructure on gender experiences
	BUILT EMPATHY, Bengaluru	Values of serving the marganalised and representing the voices of unheard.

Fig 21: Table showing all the interviews conducted

Conclusions

To identify the existing planning processes and adress their capacities and limitations

Main issues identified from stakeholder analysis and expert interviews

Contention to the existing plan needs a tedious trial	Power dynamics in play during Union discussions	95% men in the top level of governance.	Planning body BDA has no government mandate
No gender assessment parameter for planning	Reaction approach prevents holistic planning	Top-down planning clashes with the citizens interest	BDA, not a transperant body with democratic process
All economic groups are not represented	Cultural biases in male drivers and conductors	BBMP, revamp to become participatory	Police stations are unwelcoming to women
No public consultation while envisioning new projects	Technological innovations - cultural drawbacks	No evaluation criteria for infrastructure projects	Co-ordination clashes between stake holders

Design Aspect   Governance Aspect   Planning Aspect   Capacity Building

Fig 22: Table of identified problems

As a part of the research methodology, a series of interviews and policy analysis were conducted to answer the sub research questions under the step expose.

SQ3. What are the systemic deficiencies in planning systems that buildbarriers for women from different economic backgrounds towards equitable ownership and access to opportunities?

SQ4. How do planning and decision making systems operate within the asymmetric power relations between genders in India?

Due to the Covid pandemic and the restrictions against meeting in person, all the interviews were conducted online. These interviews are qualitative and gave detailed insights and contextual issues that exist in Bangalore relating to women's issues.

Through this, stakeholders and their capacities were mapped. A wide range of experts, specialists and police officers were consulted to get an understanding of the workings of the existing systems and their limitations. It was important to look at the issue through the lens of different stakeholders to understand and address where points of commonalities could be achieved.

In this regard, some of the important problems that were identified are lack of representation, lack of transparency in the municipal bodies and poor coordination due to the hierarchy of administrative structures and stakeholders. The interviews also shone a light on the various efficient grassroots movements that exist in Bangalore. Their capacities will be utilised while proposing institutional changes to the existing planning process in this research.

**Research by
Spatial Analysis**

Spatial Analysis

In this chapter, we take a look at the context of Bengaluru both in terms of space and governance. The chapter showcases the transition of Bengaluru into a growing, powerful agglomeration. By understanding the morphology, infrastructure and amenities of the city and by highlighting the problems that come up with such rapid urbanisation, we try to identify the vulerable areas that need intervention for ensurings women's rights and safety. Some of the research looks at -

1. How did Bengaluru grow?
2. How safe is Bengaluru for women?
3. Where do women work?
4. How do women travel?

1990   2000   2010   2015

BBMP Boundary

Major Roads

BDA Boundary

Fig 23: The urban expansion of Bangalore over the last 30 years

Source: TOI

Bengaluru - Context study

Understanding the population and the infrastructure of the region

Source: Forecast*: BDA Master Plans 2015 (Scenario Indicators)
Census: Directorate of Census Operations - Karnataka, Census 2011 (Provisional Population Totals)

Fig 24: Population explosion in Bengaluru over the last 100 years

1951   2011

INDIA
Population — 3.35X
Urban Population — 6X

KARNATAKA
Population — 3.15X
Urban Population — 5.3X

BANGALORE
URBAN DISTRICT
Population — 7.65X
Urban Population — 7.65X

BANGALORE URBAN
AGGLOMERATION — 11X

Fig 25: Population growth in Bengaluru compared to country and state

The Bengaluru metropolitan region is the richest, busiest and most well connected agglomeration in karnataka. The region has been divided into three districts, Bengaluru Urban, Bengaluru Rural and Ramanagaram district. The urban Bengaluru is well connected to the main cities around it through extensive transportation infrastructure.

Due to the IT boom in Bengaluru starting from the 1970's, there has been an explosion of population in the Bengaluru metropolitan region. The Growth pattern in the BMR is characterised by Bengaluru City as the urban core and small urban nodes all around as satellites developed along the radial road network in the region.

Fig 26: Map showing the various types of economic areas in Bengaluru

Legend:
- Industrial Area
- Hi-tech IT Zone
- Government Area (Including military area)
- CCD, CBD
- Railway Station
- A Administrative Centre

Source: Census of Bengaluru, 2018

Map labels: To Airport, To Goa, To Chennai, To Mangalore, To Mysore, Kanakpura Road, To Pondicherry, Sarjapura Road, Yelahanka, Peenya, Rajaji Nagar, Cantonment, Vijayanagar, Chickpet, Indira Nagar, White field, Koramangala, Banashankari, Jaya nagar, Electronic city

Scale: 0.00, 8km, 16km, 24km, 32km, 40km

Evolution of Bengaluru

Mapping the evolution of the city with economic concentrations at each stage

pre independence

1800 - 1900
Cottage Industries
Home as the production base

1900 - 1947
Railway line and electric power
Textile mills

Labels: Mysore spinning, Minerva mills, Binny mills, Indian institute of science

post independence

1947 - 1960
Research & Education institutions
Defence Industry
Public sector Enterprises

Labels: BEL, HMT, NGEF, Defence services, HAL

post independence

1960 - 1980
Small scale industries
Garment industries

Labels: ISRO, Small scale industries, NAL

neo-liberalisation

1980 - 2010
IT Corridor
Garment Industries
HAL Bangalire Airport

Labels: Mechanical & garment industries, HAL Bangalore Airport, IT & Electronis industries

2010
NICE Corridor
Outer Ring roads

Scale: 0   5   10km

Fig 27: Evolution of Bengaluru

Fig 28: Map showing the employment density per sqkm in Bengaluru

PEENYA
2160

CBD
7207

OLD AIRPORT
ROAD
3537

WHITEFIELD
2513

MADIWALA
BTM
4466

To Airport
To Chennai
To Goa
To Mangalore
To Mysore
Sarjapura Road
To Pondicherry
Kanakpura Road

Source: WRI, Bengaluru

Economy of Bengaluru

Identifying the economic participation of women

Source: Census report of Bengaluru, 2018

Fig 29: Percentage of women working in different sectors

SI.No	Type of Sector	Percentage of women employees in each sector
1	I.T	32
2	Education	18
3	B.P.O	25
4	Banking	10
5	Insurance	8
6	Marketing	1
7	Others	6
	Total	100

Fig 30: Census report of women employees in Bengaluru

Bengaluru has two main industries: Manufacturing and Service. The service industries contributed maximum of about 62% of total employment and 38% contributed by manufacturing industries. Starting from 1970's, Bengaluru witness an IT boom that resulted in around 80% of global IT companies basing their operations and R&D centres in the city. This saw a paradigm shift in working conditions from blue collar jobs to white collar jobs that further boosted women's economic participation. Most of these industries are located in the whitefield area and along old airport road. Around 32% of working women are employed in the IT sector making it the largest divison of women labour force. However, the IT industry approximately has 25% women which is still considerably less (Pani and Singh, 2012). This difference in the makeup of the industry also indicates the male-dominated IT industry which aids in the gender biased planning that the city has undergone. The choice to investigate this sector and the planning stems from this hypothesis.

Fig 31: Map showing the Neighbourhood typology in Bengaluru

Source: Census of Bengaluru, 2018

Residential Development of Bengaluru

Highlighting the differences in the two wards

Fig 32: Map showing the inner and outer wards

Image 28, 29: Images of housing typologies Source: Google Images

The expansion in Bengaluru is rapid and unplanned constantly engulfing the smaller villages around it. This expansion has also seen a change in the morphology of Bengaluru's planning with the city divided into inner and outer wards. These wards have stark differences in their neighbourhood scales and spatial planning. The inner wards of Bengaluru have low rise high-density buildings, planned in a grid, with high green cover and amenities situated close by suitable for pedestrian movement. The newly developed outer wards have private developments with high rise high-density buildings with no green spaces, vegetation and active street life. Due to this, most of the vulnerable areas identified are along with the outer wards.

Fig 33: Map showing different modes of transport in Bengaluru

0.00   8km   16km   24km   32km   40km

To Airport

To Goa

To Chennai

To Mangalore

To Mysore

Kanakpura Road

To Pondicherry

Surjapura Road

Yelahanka
Peenya
Rajaji Nagar
Vijayanagar
Cantonment
Majestic
Indira Nagar
White field
Banashankari
Koramangala
Jaya nagar
Electronic city

Main Bus stands
Metro Station
Metro Station with parking
Railway Station
Interchange Station
Phase I
Phase II
Main Bus routes

Source: BBMP

Infrastructure of Bengaluru

To study the different modes of transportion used by women

Image 30: Majestic Bus stand

Image 31: Metro station above the busy MG Road

Image 32: Lack of Auto stands

Source: Google Images

Image 33: No designated cab parking

Bengaluru has an extensive public transport network including the Metro Rail service (BMRCL), public buses (BMTC), autos and privately run cabs like Ola and Uber. Women With the increase in population leading to extreme congestion and traffic, the municipality has been pushing for more robust public transport services. The main issues that women face are the lack of integrated mobility systems which forces them to use multiple modes of transport for a single trip. It leads to confusion, exhaustion because women tend to travel to more than one destination when they step out of the house. Another important concern is the lack of designated auto parking or car parking areas in the city. It becomes difficult to hail a cab or an auto and results in unsafe pedestrian situations like crossing the roads. Except the major metro stations, the smaller stations do not have parking for two wheelers making it difficult for women to make transfers. The Metro stations in Bengaluru are also found to be intimidating for certain sections of people.

Gender and Travel

How do men and women travel differently in a city?

Fig 34: Men and women travel patterns

Women's mobility needs are complex than men since their trips include availing services like housecare, childcare, education and health facilities other than employment and education. The tendency to shift to private mode of transport would increase tremendously if the public transport systems are unsafe and the ease of aceess is difficult. Women are also often accompanied by the elders of family and the children because of their child rearing and domestic responsibilities. More than 30% of the women responded that they tend to travel with dependents, with only 16% of men responding they do so. In Bengaluru, 94% of the total trips made by men were conducted on a daily basis trips. For women, only 87% of the trips were made on a daily basis (WRI report, India). This could be explained by the fact that women travel a lot less than men for work and more than men for purposes such as shopping, recreation and religious purposes, which do not happen on a daily basis.

Journey Patterns

Understanding the Lastmile connection

Fig 35: Single trips

Fig 36: Single trip involving a transfer

Fig 37: Complex journey with multiple destinations

Lastmile Connections:
Last mile connection refers to the final leg of travel from the public transport to the destination. Most women hail an auto or walk this distance. This seems to be one of the vulnerable points since pedestrian infrastructure is a big concern in the transport network in Bengaluru.

Transfers:
The public transport facilities in Bengaluru require transfers, where women have to wait or walk towards the next mode. These inter immediate hatls are not addressed in teh current planning systems. Lack of proper toilets in waiting areas, broken bus stand with no lighting, safety concerns are frequently cited as the problems.

Since, women travel to multiple destinations at once, their journey patterns become extremely cumbersome and complex. Multiple modes of transport, lack of information, crowd sizes all affect their experience in the public realm.

Fig 38: Safety rating of Bengaluru

Source: SAFETIPIN APP

Bengaluru - Safety Aalysis

To study the safety levels of Bengaluru using safety audit.

Fig 39: Pie chart showing the overall rating under the nine parameters

Fig 40: Average audit parameters in bengaluru (on a scale of 3)

This section shows the spatial analysis of Bengaluru done through the lens of safety. Safetipin is a map-based mobile phone and online application that provides safety related information collected by users and by trained auditors.

Safety Audit
A Safety Audit is a participatory tool for collecting and assessing information about perceptions of safety in public spaces. The audit is based on nine parameters – Lighting, Openness, Visibility, Crowd, Security, Walkpath, Availability of Public Transport, Gender Diversity and Feeling.

Using this information, multiple vulnerable zones are identified and the parameters that helps zoom in into areas of further intervention are listed. Each parameter, however, doesnt have the same weightage in terms of the quality of space.

The Safety Score of a point is a reflection of the perception of safety at that particular location. 34% For each audit point it is a number between 0 and 5, 0 being Poor i.e. Very Unsafe and 5 being Excellent in terms of overall safety. For the sake of clarity, only the pins with extremely low rating under the given parameters are mapped. The overall score for each parameter is indicated in the pie chart next to the map.

Bus Stops

How safe and comfortable are the bus stops?

Fig 41: Map showing bus stops with low rating and high vulnerability

Bus stops Rating
● 0/5
● 1/5

Source: SAFETIPIN APP

Image 34: Poorly lit bus stops are main reasons of deterrance

Image 35: Lack of designated bus stops cause confusion and are unsafe

A total of 1,881 bus stops were audited. The level of lighting, condition of the walkpath, visibility and presence of people around the bus stops after sunset effect the rating. More people were found at bus stops that are high rated in terms of visibility. Wome were willing to walk extra to reach a bus stand that had more diverse crowd and was visible even in the night. Waiting by a poor-lit bus stand at night was a big concern for women.

Public Transport - 1.8/3

How is the public transport infrastruture - auto stands/ bus stops/ metro?

Fig 42: Map showing public transport with low rating and high vulnerability

Public Transport Rating
● 0/5
● 1/5

Source: SAFETIPIN APP

Fig 48: Rating of Public transport

Image 36: Lack of designated auto stands are uncomfortable for commuters.

Image 37: Dimly lit metro parking is a safety hazard.

Transport refers to the ease of accessing any mode of public transport i.e. metro/bus/auto/taxi etc. and is measured in terms of the distance to the nearest mode. It also looks at the supporting amenities like parking, lighting, integration and clear demarkation of different modes of public transport and pedestrain feasibility.

Lighting - 2/3

How visible and safe are the spaces at night?

0km ——— 40km

Fig 50: Overall rating of Lighting

6%
18%
35%
41%

Image 38: Poorly lit footpath due to street light only on one side

Image 39: Inadequate illumination due to street lights being hidden among trees

Lighting Rating
● 0/5
● 1/5

Fig 43: Map showing areas with no to less lighting

Source: SAFETIPIN APP

Lighting measures the amount of brightness/ illumination at a place and ranges from Dark to Bright. A place can be lit with street lighting or from other sources. Most of the main roads of the city are well-lit, however some streetlights were found to be non- functional. The east region which is being new deveoped has multiple areas with dark spots.

Visibility - 1.2/3

How visible and safe are the spaces at night?

0km ——— 40km

Fig 52: Overall rating of Visibility

15%
28%
23%
34%

Image 40: Unused Land along the large stretches results in poor visibility

Image 41: High boundary walls acting as barrier on the streets

Visibility Rating
● 0/5
● 1/5

Fig 44: Map showing areas with low visibility

Source: SAFETIPIN APP

Visibility refers to how visible one is to others. Following the principles of 'eyes on the street', it comprises of transparency of shops and houses along with the presence of street vendors and hawkers. Visibility in the city of Bengaluru has been rated 1.2/3. This is due to high boundary walls at certain new constructions, dead walls and vacant edges that result in poor visibility.

Gender Usage

How diverse and open are the public spaces in Bengaluru?

Fig 45: Map showing areas with less diversity

Source: SAFETIPIN APP

Gender Usage Rating
- 0/5
- 1/5

This parameter relates to the diversity i.e. the percentage of women and children amongst the crowd. This increases as a consequence of safety perception. Bengaluru, as a whole, rates very low in terms of this diversity. We can see women and children in residential areas especially during peak office hours and school hours. At night, the outdoor spaces are mostly occupied by vendors and commuters who are men and this causes a sense of unrest in these areas. Most women come out only for a particular activity and rush back home. They don't stay out or loiter as much as men.

Walk Path - 1.9/3

How safe and comfortable is the pedestrian infrastructure?

Fig 46: Map showing areas with bad pedestrian infrastructure

Source: SAFETIPIN APP

Walk Path Rating
- 0/5
- 1/5

Fig 55: Overall rating of Walkpaths

Image 42: Broken infrastructure. Flooding issues in the footpath.

Image 43: Large Cavity in a footpath.

Walkpath indicates whether a person can comfortably walk at a place. This could refer to the quality of a pavement or space along a road. Though most of the city has a fair availability of footpath, the condition are bad. The low ratings are due to existing unpaved or no pavement along the main roads.

Fig 47: Map identifying vulnerable areas

vulnerable areas

Identifying Vulnerable Areas

Overlapping the women's economic destinations with vulnerable areas to identify local points of interventions

Image 44: Picture showing the recreation lake area in Bellandu

Image 45: Brigade road in CBD for shopping and offices

Image 46: M.G.Road in the CBD with a clash of pedestrian and parking areas

Image 47: Koramangala footpaths under construction near the parks

Image 48: Mid-rise dense neighbouhoods in Whitefield area
Images showing different areas of intervention   Source: Google Earth

Image 49: Domlur area without proper footpath for pedestrains

Fig 48: Identified vulnerable areas

▲ Indira Nagar
◀ Bellandur

Strategic Areas for Further Analysis

Identifying vulnerable areas to analyse at multiple scales

Based on the spatial and safety analysis of Bangalore, multiple vulnerable neighbourhoods were identified. Keeping in mind the limitations of the time and scope of the project, two of these areas within Bengaluru would be studied further in more detail.

Strategic Area one is Bellandur, an old suburb that has been transformed due to the IT sector boom. The urgent need for urbanisation resulted in unplanned developments causing fragmentation across social and economic lines. Strategic Area two is Indira Nagar, a lively planned neighbourhood with active commercial developments and residential areas.

In both these areas, the influence of economic and social backgrounds on women's behaviour and mobility patterns is analysed. It also addresses how spatial and non-spatial elements impact their behaviour in public spaces. The project focuses on the aspect of last-mile connectivity of women's travel. It encompasses public transport infrastructure, walkability within the neighbourhood and modes of transport. The analysis would also examine ways in which current urban planning trends have ignored women's needs.

Both areas are very different in their developmental models, economic status and educational backgrounds. These areas represent diverse spatial conditions, gender behaviour and gender bias normalisation prevalent across Bangalore. By comparing and contrasting the two chosen areas, we can broadly understand the contextualities and create strategies that could be transferred to other contexts in the future. We then test the derived spatial strategies at neighbourhood and local scales. The inferences discovered at this stage could be used as the foundation for further discussion.

Strategic Area A - Bellandur

Spatial Analysis - Bellandur

This chapter presents a detailed analysis of Bellandur. It takes a closer look at the area's demographics, safety and infrastructure and their influence on women's relationship with the public spaces. Looking at the area from a gendered perspective, we examine the last mile connectivity, mobility patterns of women and gender behaviour. This chapter also addresses the spatial manifestation of income inequalities and their influence on women's perception of safety and mobility patterns. Some areas of research presented are -

1. Do women have access to public transport?
2. What is the main mode of transport for women?
3. How does gender-blind planning affect women from lower-income areas?
4. What are the different spatial conditions that obstruct women's accessibility?

Strategic Area A - Bellandur

Bellandur

Understanding the influence of economic backgrounds on women's behaviour

Fig 49: Map showing the extents of Bellandur

Bellandur is a suburb. It was initially a rural area at the outskirts of Bengaluru and since has seen a sharp rise in population due to the IT boom and the establishment of IT parks in the area. It has several lakes. However, only a few are accessible by public. The area has several gated communities and private developments along with older villages with poor infrastructure. The contrast is evident from a newly developed street to an older neighbourhood. The outer ring road of Bengaluru passes through Bellandur, making it an important transit area.

It is also an important work destination for women across the city working in the IT sector. Bellandur has a population of 80,180, with 22,368 households. The population of Bellandur increased by 290.60% from 2001 to 2011 (BBMP census, 2015). This type of growth resulted in unstructured planning, economic inconsideration, highly motorised roads, fragmentation of neighbourhoods and poor pedestrian infrastructure. This growth highly affects women due to their dependence on walking and public transport for movement.

Residential Areas

To study the income distribution across the area

High Economic Area   Middle-Upper Economic Area   Lower Economic Area

0.00   500m   1km   1,5km   2km   2,5km   3km   3,5km   4km   4,5km

Fig 50: Map showing residential areas of different incomes

This map shows the division of neighbourhoods based on their income status. It is a well-known residential location for the employees of the IT parks in the area and has seen several new residential developments in recent years. Around 80% of these new developments are purchased by IT employees. It is also home to slums inhabited by migrant workers who work in the construction industry. Apart from this, the villages which were once at the outskirts of Bengaluru are now a part of Bellandur. These villages remain low-income neighbourhoods with poor infrastructure.

Business Centres

To identify the main economic hotspots that attract women

IT Park   Commercial Area

0.00   500m   1km   1,5km   2km   2,5km   3km   3,5km   4km   4,5km

Fig 51: Map showing the economic centres

This map shows the commercial and IT sector of the area. They form the heart of the locality, with residential areas surrounding them. The outer ring road cutting across the area provides a major infrastructure boost to this region. Women travel from across the city to work in the IT hub. All of the commercial establishments are along the outer ring road. These provide recreational activities for the visitors and inhabitants as well. The commercial activity reduces towards the inner regions creating monotony in the neighbourhoods and dead streets.

Infrastructure

To examine the accessibility and inclusivity of public transport towards women

Bus Stops   – – – 5 min walking radius   Auto Stands

0.00   500m   1km   1,5km   2km   2,5km   3km   3,5km   4km   4,5km

Fig 52: Map showing the bus stops in the region

The outer ring road provides good connectivity to the rest of Bengaluru through its bus infrastructure. The map above shows the bus stops along the road with the walking radiuses marked. Women depend on public transport more than men as established before. From the map, it is evident that the internal neighbourhoods to the east of the ring road are not at walking distances to the bus stops. There is also a lack of wayfinding infrastructure making women vulnerable to bus delays or cancellations. There are also no auto stands or designated cab services to help women cover shorter distances forcing them to walk uncomfortable lengths to reach their destinations.

Outer Ring Road

Studying the vulnerabilities of women while travelling

High wall   Poor infrastructure   Not enough set back to walk

No crosswalks   no lanes for distinguishing

Vacant land | Broken footpath | Service road | Bus stop | Overbridge | Underpass | Overbridge | footpath | Service road | Private property

Corrugated edges   Poor infrastructure   High density motorised traffic   lack of safe crossings   over crowding   no lanes for distinguishing   poles in the way

No crosswalks

Vacant land | Broken footpath | Service road | Bus stop | Motorway | Bus stop | Service road | Broken footpath | Private property

Fig 53: Sections of the outer ringroad showing poor pedestrain conditions

From the safety analysis, one could observe that the outer ring road rated extremely low in visibility, footpaths and public transport. Women are extremely vulnerable while crossing the roads and availing public transport due to the lack of safe pedestrian infrastructure. Lack of zebra crossings, footpaths obstructed by poles and male overcrowding at bus stops makes women feel uncomfortable. Basic services like ramps, street lights, surveillance systems are absent, affecting the safety of women.

In certain instances, there are no designated bus stands. Women are forced to stand by the side of highly motorised roads with kids waiting for a bus. The footpaths are not designed keeping in mind the caregiving activities of women. They are usually accompanied by children and the elderly while travelling as discussed before. The footpaths are not wide enough to accommodate the dependants. Dead walls and overcrowding around the vendor activities bank the edges of the footpaths leaving no space for walking in certain instances.

Image 50: Image showing lack of safe crossings for women

Image 51: Image showing unsafe pedestrian infrastructure

Internal Mobility Patterns

How are the women travelling inside the area?

IT Park ⬛ Commercial Area ⬛ High Economic Area ⬛ Middle-Upper Economic Area ⬛ Lower Economic Area

0.00 500m 1km 1,5km 2km 2,5km 3km 3,5km 4km 4,5km

Fig 54: Map showing mobility of women witin the area

This map shows the internal travel patterns of women within the region. A significant percentage of women from the lower-income areas work in the IT parks, new residential developments and the higher income areas as domestic help. Their travel is limited to the surrounding areas of their home. It shows the symbiotic relationship between the two economic backgrounds. As they do not have access to any form of private motorised transport, they don't travel long distances. They walk to their work and hence are most vulnerable if the pedestrian infrastructure is absent or unsafe and non-inclusive. They bear the brunt of gender blind services more than women from higher-income neighbourhoods.

External Mobility Patterns

How are the women travelling to other areas of the city?

IT Park ⬛ Commercial Area ⬛ High Economic Area ⬛ Middle-Upper Economic Area ⬛ Lower Economic Area

0.00 500m 1km 1,5km 2km 2,5km 3km 3,5km 4km 4,5km

Fig 55: Map showing the accessibility of bus services to women from different economic backgrounds

This map shows the overlay of bus stops and walking distances on the different income areas. Women depend on public transport significantly more than men in these areas. However, the last mile connectivity of this region is not conducive to women's needs. The travel distances, particularly for the women of the lower and middle-income areas are quite far. Shorter modes of transport like autos and cab services are too expensive for these women forcing them to walk long distances. This has been identified as a significant reason that curbs women's mobility during fieldwork.

Neighbourhood Scale (Meso)

Economic Distribution

Studying the neighbourhood scale

0.00   450m   900m   1.35 km

IT Park   Higher Economic Res. Area   Lower Economic Res. Area

Fig 56: Map showing the zoom-in with economic distribution

This section studies the neighbourhood configurations, relationships between old and new developments and their morphology. The analysis helps to examine the influencing factors on the last mile connectivity of women. It also shows how income, gender and mindsets play a role in defining women's role in the public realm. The area selected for the mesoscale zoom-in houses the old village, new gated communities and IT parks. The analysis examines how women from these contrasting backgrounds move, experience the neighbourhood and access basic services. It also identifies governance, spatial and cultural factors that affect women's mobility and restrict their movement.

Access

How open is the neighbourhood?

Fig 57: Map showing openness

- - - Limited access   ——— Open access

This map shows the road network in the selected area. Low-income housing is open with people being able to freely move within. Most of the new roads are privatised with only main roads connecting the new private developments. The larger footprints of these developments block access to pedestrians. Women are forced to take longer routes to travel which are inherently planned keeping cars and other motorised transportation in mind. The planning system fails women who have no access to private transport or are dependent on male family members to travel. Since most women from low-income areas walk, the new planning systems ignore their livelihoods and don't cater to their practical needs.

Fragmentation

How are the new developments fracturing the area?

Fig 58: Map shows private developments

Private Developments   Gates   ——— Compound walls

The neighbourhood with its gated communities and private developments, that emphasises so much on safety and security, fragments the entire area. These developments have long extents of walls with only one or two entry points mainly aimed at cars. Due to their presence, the low-income area also becomes a walled city with access cut off by the surrounding new developments. The neighbourhood isn't open, with roads and walls acting as boundaries to separate people. Women have to negotiate with these tangible and intangible barriers every day. to avail resources and access work for their livelihoods. These barriers also create dead spaces that do not have any activities that cater to pedestrian needs.

Image 52: Images showing difference in quality and maintenance

Stakeholders

Who are responsible for maintaining the road networks?

0.00   450m   900m   1.35 km

Fig 59: Map identifying vulnerable areas

—— Municipality   – – IT Parks   —— Ind. Res. Developers

This map shows the various stakeholders that operate within the neighbourhood. The contrast between a private and a municipality-owned road is very evident. The figure exposes the contrast in the design, maintenance and quality of the road infrastructure. In the BBMP roads, there are no footpaths or shaded pathways to withstand harsh climates. Basic amenities like street lights which are an important aspect of safety are missing. There are no eyes on the street and the only commercial activities outside the city campuses cater to men. On the contrary, the road inside an IT campus is extremely well developed and has suitable pedestrian infrastructure. However, even in this scenario, no activities open up onto the road. The road becomes empty and deserted at night and as a result, women prefer to walk longer distances through streets that have the presence of shops and people.

Image 53: Image showing kids playing

Old developments - Low Income

Understanding the morphology of the older settlements

Fig 60: Map identifying vulerable areas

Older Areas — Roads

12M

Private   Public   Private

Fig 61: Section A

14M

Private   Public   Private

Fig 62: Section B

The older developments have an open road network with functions along the main roads. The commercial activities on the ground floor provide interaction, openness, and 'eyes' on the street increasing the quality of the neighbourhood. In the residential areas, the low-rise housing and less vehicular movement provide space for constant activities like kids playing on the streets or women interacting with each other activating the street.

Image 54: Image showing lack of activities

New developments - High Income

Understanding the morphology of the new developments

Fig 63: Map identifying newly developed areas

New IT Developments　　Private Developments　- - Access Road

Fig 64: Section A

Private　　Public　　Private

10M

Fig 65: Section B

Private　　Public　　Private

17M

The new developments have become increasingly insular. The high-income communities prefer gated developments to provide safety, security and a sense of belonging within the walls. Consequently, the road becomes dead with just walls on both sides. There are no vendors present since the visibility is extremely low. The habitants use cars whereas the domestic help who travel from nearby communities walk in these dead streets feeling vulnerable. Long stretches of the compound wall completely cut off the life from inside with the public edge.

Comparision - Low Income

Analysing the impact of socio-economic backgrounds on women

Fig 66: Map identifying the main access

Maintained by the municipality
Extremely poor condition
Main modes - Walk till bus stops,
two wheelers

Lower income areas — Main road of access

most used

least used

Fig 67: Main modes of transport

Fig 68: Active public life

Main road

Fig 69: Visibility across the road

Comparision - High Income

Analysing the impact of socio-economic backgrounds on women

Fig 70: Map identifying main access

Maintained by the IT parks
Good condition
Main modes - Car

Maintained by municipality
Good condition
Main modes - Car

Maintained by municipality
Bad condition
Main modes -
Car (Higher eco.)
Walk (Lower eco.)

High income areas — Main road of access

most used

least used

Fig 71: Main modes of transport

Fig 72: Active public life

Main road

Fig 73: Lack of visibility across the road

Mapping Gender
Spatially

Spatial Analysis - Gender and space

In the section, the relationship between space and gender is examined. The area has different edge conditions that influence the movement of women. When walking, certain conditions in physical infrastructure impact women's experiences and their perception. Their presence can cause women to completely avoid certain routes or maintain caution. By examining these conditions, we can categorise elements, spatial conditions and walking routes into a spectrum. It would help in broadly quantifying the experience of the last mile connection of any given road.

The categories are -
1. Active deterrents
2. Unwelcome - Masculine spaces
3. Welcome - Comfortable spaces

Active Deterrants

Vacant lands
Corrugated edges
Broken footpaths
Construction sites

Image 55: Barren edge conditions with no footpaths and demarcations

These pictures document conditions that women actively try to avoid while walking alone. They invoke fear and discomfort. In most circumstances, women choose to take longer routes that are well lit and have the possibility of interactions rather than shorter distances with these conditions. Unfortunately, in the selected neighbourhoods, domestic help and women from low-income neighbourhoods are forced to encounter these situations every day while walking to work or for availing bus services.

Image 56: Temporary corrugated edges act as deterrants

Unwelcome - Masculine

Traditional tea stalls
Motorworks and garages
Meat stores
Alcohol and cigarette shops

Image 57: Alcohol shops are looked at as a source of nuisance and unwanted behaviour

These functions see the gathering of men who loiter in front of them to avail themselves services or to interact with each other. Women change their walking directions to escape moving close by these stores. Unwarranted behaviour and the fear of gender-based harassment by the opposite sex are seen as the main reasons. Lack of balance in gendered spaces creates a sense of domination by one group over certain stretches of the street.

Image 58: Garages that have taken over the footpath

Welcome - Comfortable

Street vendors
Temples
Parks
School waiting areas

Image 59: Fruit vendors by the side of temples are welcoming to women

These are the areas where women feel the most comfortable. They are culturally acceptable for religious and recreational purposes. Parks and recreational activities are women are typically less and are quite far. Most of the parks in the neighbourhood are privatized and women from low-income households don't have access to these. Since these are not as prevalent as masculine activities, it creates a gender imbalance.

Image 60: Designated parks for women and children

Image 61: Lack of street lights, footpaths and sheltered walk ways

Unpleasant edge conditions

Synthesising and mapping hostile edge conditions

Fig 74: Dead compound walls that hinder visibility while walking.

Fig 75: Barren lands that are not properly demarcated or regulated.

Fig 76: A row of shops with masculine activities that don't cater to women and sees a lot of gendered activity.

Fig 77: The shops that open up to the road and has groups of men loitering and obstructing the footpaths

Zoom-in - Local Scale

Lastmile connection

Mapping the lastmile and its character

Junction1: Transport hub

250 mts

5 min radius walk to the bus stop

350 mts

285 mts

Junction2: To the lake

285 mts

School and temple campus

350 mts

Junction 3: To the Ringroad

1.5 km long

Fig 78: Map of the zoom-in area for street analysis

This section examines one of the most important access routes for women from lower-income areas. It provides a unique context to test out the strategies derived at the later stages. The total length of the road is 1.5kms which should usually take about 15 minutes to cover from the end to the nearest main road. However, due to poor infrastructure and uncomfortable edge conditions, women take about 25 minutes to cover this distance. The nearest bus stand is at a distance of 200 metres from the main road. The neighbourhood contains several schools and temples. There are no intermediate connections that cut across due to the presence of large gated communities. The pedestrians have to walk long routes to reach their destinations. This chapter takes a deeper look at the experiences of women while walking and the factors that influence them.

First Look

Analysing the infrastructure quality and walkability

Fig 79: Map showing points of vulnerable edge conditions

Broken footpaths
Corrugated edges
Lack of shaded pathways

Lack of footpaths
Lack of shaded walkways
Unwelcome masculine activities
Bike parking on the streets

Tree provides natural shade
Presence of vendors
Combined with the waiting
areas of the school

Shops occupy the footpaths
No space to walk
Men loitering outside the shops

Image 62: Image corresponding Point A

Image 63: Image corresponding Point B

Image 64: Image corresponding Point C

Image 65: Image corresponding Point D

Fig 80: Section A-A

10M

Private | Semi | Public | Semi | Private

Fig 82: Section C-C

12M

Private | Public | Private

Fig 81: Section B-B

10M

Private | Semi | Public | Semi | Private

Fig 83: Section D-D

14M

Private | Public | Private

Mapping Gendered Spaces

How welcoming is the neighbourhood towards women?

Fig 84: Map showing women-friendly spaces

■ Buildings frequented by women

Mapping Gendered Spaces

How comfortable is the walking experience along the street?

Fig 85: Map showing women-deterring spaces

▬ No shop fronts/ Broken footpaths ▬ Vacant lands/ Corrugated sheet edge ▬ Shopfronts with plinth

Gendered Behaviour

How visible and safe are the spaces at night?

Image 66: Women standing behind the public edge to interact with each other away from the public eye.

Image 67: Men standing at the junction of the road to interact with each other.

Image 68: Women walking away from the shops on the road

Gendered Behaviour

Fig 86: Wall section 1

There is no clear distinction between the setback of the building and the footpath. Men occupy the setback area waiting to avail services prompting women to walk on the road. The boundaries are not defined and taken over by one party.

Fig 87: Wall section 2

In certain cases, the footpaths are occupied for display purposes. The footpaths don't function efficiently for pedestrians. These obstruct walking patterns and force women to walk on the roads with no clear demarcation.

Fig 88: Plan depicting behaviou

The area has a lot of collective points that men can interact in. However, there are no definite spaces on the road for women to do the same. Due to this, women are seen to stay within the private edges to socialise and don't come out as much.

Fig 89: Plan depicting change in women's movement

Shade, arrangement of functions and the gathering of men affect the walking paths of women. They have to keep changing directions or crossing roads to be able to walk comfortably. They are in constant clash with elements forcing them to alter their behaviour.

Gender and Time

Men standing   Men walking   Women standing   Women walking

Time - 9 AM

Time - 6 PM

Time - 12 PM

Time - 9 PM

MOBILITY ANALYSIS

Walkability

Infrastructure

Last mile Connectivity

URBAN LIVEABILITY

Maintenance

Safety - crime & Sexual Assault

Well being & Health

QUALITY OF THE NEIGHBOURHOOD

Programs

Engagement

Building functions

Fig 90: Star rating of the neighbourhood

Bellandur's Rating

How does the neighbourhood fare?

SOCIETY

Urban Liveability — Maintenance / Safety - crime & Sexual Assault / Well being & Health

BRIDGING THE GAP

Integrated Mobility — Walkability / Infrastructure / Last mile Connectivity

SPATIAL

Vibrant Neighbourhoods — Programs / Engagement / Building functions

Fig 91: Principles derived from conceptual framework

The chart on the left represents the rating of the area under the spatial principles derived after the conceptual framework (refer image above). Each of the principles has three parameters.

To determine the quality of the overall mobility experience, walkability, infrastructure quality and last-mile connectivity are measured. To evaluate urban liveability, maintenance of the physical infrastructure, safety from crime and sexual assault and well-being and health of the women are measured. To determine the quality of the neighbourhood, we measure the existing programs, engagement of women with the functions and access to important services. After the analysis, it is clear that the area rates extremely low in the aspects of mobility and liveability.

Strategic Area B - Indira Nagar

Spatial Analysis - Indira Nagar

This chapter presents a detailed analysis of Indira Nagar. It takes a closer look at the area's demographics, safety and infrastructure and their influence on women's relationship with the public spaces. Looking at the area from a gendered perspective, we examine the last mile connectivity, mobility patterns of women and gender behaviour. This chapter studies a relatively well-planned area compared to Bellandur and identifies how gender stereotypes and gender norms perpetuate gender inequalities.

Indira Nagar

Understanding the influence of mindsets on women's behaviour

Fig 92: Map showing the extent of Indira Nagar

Indiranagar is a cosmopolitan locality, developed as a BDA layout in the 1970s (Bangalorean, 2013). It is a well-known residential and commercial hub of Bengaluru. The 100ft road has a significant number of shopping amenities and is a major commercial attraction for women. The area is well connected to facilities all around and is developed in layout method with areas allocated to residential parks. The contrast between the noisy busy city edge and the quiet residential neighbourhood is quite evident.

Indira Nagar's parks are maintained by BBMP and the Local Resident Welfare Association. The cosmopolitan nature of the area with well-educated residents adds a positive layer when looked at from a gender perspective. Women walk freely at nights because they are comfortable with the neighbourhood and the infrastructure is well maintained. However, gender-inclusive amenities are still not prolific. Major walking routes for women are not able to meet the basic standards for women's protection. The nuanced discrimination is persistent.

Strategic Area B - Indira Nagar

Infrastructure

Analysing the accessibility of public transport

Indiranagar has an important arterial road. The 100ft road serves as a major connector of different areas to Indiranagar. The map above shows the bus stops along the road with the walking radiuses marked. Women visiting the commercial areas depend on public transport. From the map, it is evident that the area is well connected to the bus networks which are all located at walking distances from the residential neighbourhoods, commercial activities and educational institutions. The presence of auto stands helps in covering shorter distances.

Legend:
- Bus Stops
- 5 min walking radius
- Auto Stands

Fig 93: Map showing the bus stops in the region

Infrastructure

Analysing the accessibility of public transport

Indira Nagar has a metro station constructed recently as a part of the phase 1 Namma Metro, a Rapid Mass Transit System in Bengaluru. Due to long walking distances to the metro, women prefer hailing cab services or autos to cover this distance. Lack of auto stands and parking services is a major issue for women travellers. Lack of safe pedestrian junctions also raises problems while travelling with dependents.

Legend:
- Indira Nagar Metro Station
- Metro Line

Fig 94: Map showing the metro station and its accessibility

Image 69: Image showing areas for recreational activities

Recreation areas

Examining the areas of leisure

Indiranagar has several residential parks that are accessible to all residents. These parks are used for walks and exercises by all age groups. On closer observation, there are also specific grounds that are occupied completely by men. Boys are quick to claim the outdoor areas whereas, girls of similar age spend their time in parks serving families and diverse populations. Girls and women feel more comfortable in these types of mixed group parks. The lack of women-centric parks displays the inherent bias in planning. These grounds should be designed to encourage girls to participate and bridging the gap and breaking stereotypes.

Fig 95: Map showing the residential parks in Indira Nagar

Gendered Behaviour

How visible and safe are the spaces at night?

Image 70: Large open playgrounds are completely occupied by men of all ages. Girls don't feel comfortable playing here.

Image 71: The other parks are meant for families, the elderly and kids. These areas are more welcoming for women.

Image 72: An important lastmile connection next to the drain

Lastmile connection

Analysing the walking experience along the street

The path next to the Nala, or the drain is an important last-mile connection for pedestrians. It connects the arterial roads to the internal neighbourhoods. This road is frequented by women more than men who depend on public transport to travel and walking is their only means to access public transport. This road's pedestrian infrastructure is poor, with no footpaths, streetlights and eyes on the street. This road becomes very dark at night and women avoid travelling on this route and choose longer routes to get home. Lack of vendors makes this space dead and the smell from the open drain adds another layer to the discomfort.

| 0.00 | 500m | 1km | 1,5km | 2km |

Fig 96: Map showing the extent of the Nala

MOBILITY ANALYSIS

Walkability

Infrastructure

Last mile Connectivity

URBAN LIVEABILITY

Maintenance

Safety - crime & Sexual Assault

Well being & Health

QUALITY OF THE NEIGHBOURHOOD

Programs

Engagement

Building functions

Fig 97: Star rating of the neighbourhood

Indira Nagar's Rating

How does the neighbourhood fare?

SOCIETY

SPATIAL

BRIDGING THE GAP

Urban Liveability

Maintenance
Safety - crime & Sexual Assault
Well being & Health

Integrated Mobility

Walkability
Infrastructure
Last mile Connectivity

Vibrant Neighbourhoods

Programs
Engagement
Building functions

Fig 98: Principles derived from conceptual framework

The chart on the left represents the rating of the area under the spatial principles derived after the conceptual framework (refer image above). Each of the principles has three parameters.

Indiranagar rates well on almost all of the parameters. The main problem areas are the lack of shorter modes of transportation, parking areas specifically for women. Introducing these services would boost women's presence in the public areas. Footpaths, safe and inclusive junctions, public toilets and shaded walkways are important factors that influence walkability. There are also dead edges that should be activated through community organisation and situating vendors at strategic points.

Conclusions and Comparisions

Outcomes and Impressions

In this chapter, both the areas are compared under the established parameters. The analysis exposed both nuances and glaringly obvious issues with both the neighbourhoods and the discriminatory attitudes towards women. The results are synthesised to formulate spatial, policy and institutional strategies

Road Hierarchy - Comparison

Arterial Road

Sub-Arterial Road

Collector Road

Local Streets

One of the important aspects in which both the areas differ is their road hierarchy. Indira Nagar is well-planned, with suitable functions and scales on each of the roads. The transition from the public edge to the quieter residential neighbourhoods is supported by commercial activities, interactive spaces and vendor activities. On the contrary, Bellandur's haphazard planning is quite evident. Most of the roads are privatised, and the morphology of those that have open access is not conducive for walking. The transitions are often sudden. The local streets in the new developments are becoming dead spaces due to the lack of any activity and the enclosures of private developments.

Fig 99: Road hierarchy of Indira Nagar

Fig 100: Traffic hierarchy comparision

Fig 101: Road Hierarchy of Bellandur

Road Hierarchy - Comparison

1,5m   7 m   1,5m

LOCAL STREET

2 m   12 m   2 m

COLLECTOR ROAD

2,5m   10 m   10 m   2,5m

SUB - ARTERIAL ROAD

8 m   3 m   12 m   2 m   12 m   3 m   5 m

ARTERIAL ROAD

Fig 102: Road Hierarchy of Indira Nagar

1,5m   7 m   1,5m

LOCAL STREET

2 m   12 m   3 m

COLLECTOR ROAD

1 m   17 m   1 m

SUB - ARTERIAL ROAD

2 m   7 m   1,5 m   22 m   2 m   7 m   1,5 m

ARTERIAL ROAD

Fig 103: Road Hierarchy of Bellandur

Indira Nagar   Bellandur

MOBILITY ANALYSIS

Walkability | Infrastructure | Last mile Connectivity

URBAN LIVEABILITY

Maintenance | Safety - crime & Sexual Assault | Well being & Health

QUALITY OF THE NEIGHBOURHOOD

Programs | Engagement | Building functions

Fig 104: Comparision of spatial aspects

Analysing the issues

Comparing the neighbourhoods

	Indira Nagar	Bellandur
Presence of vendor activity	✓	✓
Mixed use neighbourhoods	✓	✗
Access to infrastructure for women	✓	✗
Access to recreational spaces for women	✓	✗
Vibrancy in residential areas	✓	✗
Presence of green areas and trees	✓	✗
Designated places for girls for recreation	✗	✗

	Indira Nagar	Bellandur
Parking for women	✗	✗
Road hierarchy	✓	✗
Active street life	✓	✓
Unconditional acceptance for women	✗	✗
Discriminatory attitudes	✗	✗
Non-spatial elements of gender discrimination	✗	✗
Positive behaviour towards complete equality	✗	✗

Fig 105: Comparision of social aspects

Compared to Bellandur, Indira Nagar has a lot of positive spatial aspects. However, on closer inspection, it is clear that the area deals with subtler forms of gender discrimination. When the area does well in spatial aspects, it fails in the non-spatial and behavioural components. There is a constant confirmation that areas like playgrounds and recreational spaces are male spaces. Gender stereotyping and normalisation of this behaviour leads to discrimination. It raises some important questions regarding spatial and non-spatial aspects and their influence on spatial segregation along gender lines.

Addressing gender inequalities is an issue that has to go beyond just looking at the spatial configurations and tangible elements. One shouldn't overlook the impact of non-spatial cues and behavioural aspects. Just solving the spatial issues doesn't automatically translate to achieving legitimacy for women. This prejudice needs an institutional change at political, planning and policy levels, and changing mindsets of people is just as important. The interventions formulated should reflect the complexities of these issues and be able to develop a comprehensive and robust plan of action.

Problem Matrix

The Problem Matrix presents an overview of the main issues identified from the extensive analysis. These issues are classified under the domains of design, governance, planning and capacity building. It is evident that gender-sensitive urban planning is very complex, and it needs a holistic approach of various disciplines working together at different scales.

Main issues identified from the research methodology

Stakeholder Analysis and Expert Interviews	Contention to the existing plan needs a tedious trial	Power dynamics in play during Union discussions	95% men in the top level of governance.	Planning body BDA has no government mandate
	No gender assessment parameter for planning	Reaction approach prevents holistic planning	Top-down planning clashes with the citizens interest	BDA, not a transparant body with democratic process
	All economic groups are not represented	Cultural biases in male drivers and conductors	BBMP, revamp to become participatory	Police stations are unwelcoming to women
	No public consultation while envisioning new projects	Technological innovations - cultural drawbacks	No evaluation criteria for infrastructure projects	Co-ordination clashes between stake holders
Spatial Analysis	Lack of functional toilets in public spaces and parks	No planners in the poicy making process	Lack of cheap meeting points for women	High compound walls obstruct views of the people
	Metro - an intimidating space for weaker economic sections	Lack of integrated mobility across transport systems	Movement happens only in the grassroot level.	Safe city project from a protectionist approach
	Parks lack surveiallnce, safety concerns due to dark spots.	Policy makers prefer CCTV's and police patrolling	Lack of street lights and security on the streets.	Number of women decrease in the night
	Parks are not accessible at all times.	No active bystanders and eyes on the streets	Complex public transport systems seem confusing	Certain economic classes are not involved in discussions
Surveys and Questionnaires	Crime rates	Deserted streets with monotonous barriers	Lack of designated auto stands	Vulnerability while travelling with kids and elderly
	Lack of lights in parking areas	Public transport unsafe due to crowd sizes	Broken pedestrain infrastructure like side walks	Walking in the city is unsafe, uncomfortable
	Bad connectivity to the recreation spaces	Extremely vulnerable while walking and in cycle	Only paid activities for recreation.	Lack of activities for women at night
	Lack of shaded walkways in monsoons	Women not aware of safety forums	No engaging activities for women	Women feel unsafe walking alone in the streets

Design Aspect   Governance Aspect   Planning Aspect   Capacity Building

Fig 106: Comprehensive table of the problems

Principle Matrix

From the conceptual framework, we derived principles that translate governance and spatial interventions to bettering women's role in society. In the next chapter, strategies are formulated under each of these principles. These strategies main at mainstreaming gender and follow a multi-scalar approach and when applied collectively, they create a framework of change. These strategies would be phased to involve various stakeholders and slowly bring about social change and action. The project envisions a society where women are free to make choices, claim space for themselves and eventually, change the perception of their illegitimacy.

SOCIETY

GOVERNANCE

Stakeholder Collaboration
Policy changes
Gender-aware planning

Capacity Building
Workshops for training
Platforms for discussion

Gender Impact Assessment
Local Community consent
Bridging the knowledge gap

Vibrant Neighbourhoods
Inclusive Recreation spaces
Safe Pedestrian areas

SPATIAL

Urban Livability
Quality of live
Well- being of women

Integrated Mobility
Account for trip chaining
Last mile connections

Fig 107: Principle Matrix

Gender Mainstreaming

Sustaining and institutionalising change

An important aspect of this graduation project is to understand how gender equality can be sustainably implemented and enforced in the public realm. Gender mainstreaming is an internationally embraced strategy towards realising gender equality in all facets of society.

According to the European Council, Gender mainstreaming is defined as:

"The (re)organisation, improvement, development and evaluation of policy processes, so that a gender equality perspective is incorporated in all policies at all levels and all stages, by the actors normally involved in policy-making."

It is important to contextualise gender mainstreaming into the Indian context by identifying entry points, opportunities and op-erabilities of institutions. Through the fieldwork and expert interviews, the project uncovered the extensive network of grassroots organisations that are largely dependent on the local knowledge, activism and drive. To sustain this, the collaboration of informal institutions' knowledge and formal institutions' capacities becomes extremely crucial. To carry forward the vision of creating legitimacy for women, the strategies proposed should be amplified and replicated with the help of a robust gender mainstreaming framework.

For efficient gender mainstreaming into policy, there is a need to develop strategies that are informed by existing institutions, their hierarchies, processes and modes of operation. To mainstream gender into development organisations, strategies can be divided into institutional strategies and operational strategies (Jahan,R., Mumtaz, S. 1995).

GENDER MAINSTREAMING

Institutional Strategies
- Structural Changes to Departments
- Gender Perspective in National Development Policy
- Gender Budgeting in every Development Agenda

Operational Strategies
- Alterations to existing policies
- Policies, guidelines and Programmes for women
- Multi-stakeholder collaboration through operability

Fig 108: Classification of strategies

Strategies for Gender Mainstreaming

State Level

Overseeing Authority

Urban Finance and Infrastructure development Corporations
Home Department
Transport Department
Social Welfare

Citizen + Policy +
Organisation Sphere

Working members

City Level

Gender and M&E specialist
Communication specialist
Policy specialist
Urban planner
Mobility and Transport specialist
Local Women Representatives (different for each neighbourhood)

Citizen + Organisation +
Delivery Sphere

Neighbourhood Level

External Agencies

NGOs
Knowledge partners

Local Communities

Women residents
Local vendors
Street cleaners

PPPs

Private Employers
(IT Parks, malls)
Private residential developers

Fig 109: Structure of the Gender Lab

Institutional Strategy - Gender Lab

Structure of the Gender Lab

To sustain and enforce gender mainstreaming, the project proposes an integrated body called "Gender Lab". This body functions by enhancing the capacity of institutions and formulate projects that would facilitate social change. It has working members who are specialists in the fields of policies, transport, communication and gender studies. It clubs the expertise of urban development and social welfare for women becoming a point of commonality. The working committee is overseen by members of the urban infrastructure ministry and home ministry departments at the state level to monitor its progress.

The Gender Lab is envisioned as a part of the 'Safe cities' projects funded by the Central and the state governments to make Indian cities safer for women. The existing proposals are purely cosmetic and functions from a protectionist perspective like increasing CCTV cameras and police patrolling. Nirbhaya fund, dedicated to supporting projects ensuring women's safety is underused (The Hindu, 2019). There is a need for an operational framework that can enhance opportunities. This organisation provides the possibility of systematically achieving integrated and holistic results through urban policy. It aims to sustain this movement by being bridging the knowledge gap between formal and informal institutions.

Gender Lab, along with the local municipal corporations like BBMP and municipal wards identifies areas that require immediate intervention. These areas are then examined critically with the help of local women and NGOs with the tools to conduct surveys and analysis. Local women become key stakeholders and their voices are used as instruments for change. The body identifies potentials for PPPs, cross-disciplinary action and encourages avenues for engaged planning. An action plan would be created that lists spatial, capacity building and policy interventions.

At the neighbourhood level, the projects would be carried out by external agencies and suitable NGOs. The monitoring and evaluation specialist of the working committee would monitor the projects. Gender Lab body is an instrumental organisation that would land policy decisions from a top-down governance structure and contextualises them to suit the needs of local neighbourhoods with different capacities and barriers. Citywide changes are also proposed at macro-scales like integrated transport systems. Pilot projects will be implemented in neighbourhoods with different contexts, and their results monitored with an assessment framework. These projects would then be amplified to reach other areas in a sustained manner.

Operational Strategies

Deriving strategies at policy level

Operational strategies facilitate incorporating a gender perspective into social programmes, policies at all scales and planning debates. They also involve setting an agenda that includes providing guidelines, training programmes, special research projects and tools, that aim at capacity building and skill development for women at grassroots levels (Kanji, 2003). To implement operational strategies, multidisciplinary collaborations from various stakeholders are necessary. These are further divided and implemented at different scales and phases.

In this project, the operational strategies are classified into four parts. They are policy interventions, programmes, guidelines and spatial actions that are necessary for building a gender-inclusive society. Each of the strategies reflects at least one of the six principles derived through the conceptual framework. The facilitation of these strategies is monitored by the Gender Lab through various collaborative processes. These strategies are derived after extensive case study reviews and best practices across the world and in India. Each of the four parts adresses principles and qualities from conceptual framework.

Fig 110: Classification of Operational Strategies

Fig 111: Linking strategies to principles

Part 1 - Policies

Deriving strategies at policy level

1. Private Public Partnerships (PPPs)

PPP is a cooperative agreement among public and private sectors, typically for long terms. In Bangalore, several municipal bodies responsible for infrastructural and welfare development will work together with corporate businesses like the IT parks in the Bellandur region. It would include the completion of projects and delivery of services to women.

Taking advantage of these schemes that have existed and served over the last two decades, the research project highlights the urgent need to set agendas that tackle women-centric issues.

The partnerships work well when the technology, innovation and funding from the private sector combine with the public sector's incentives on women's issues, time and budget.

In this project, the private developers of housing communities are also involved in setting a gender agenda. All new developments of residential and commercial activities should result in safe and inclusive neighbourhoods through negotiation, regulation and assessment by the implementing agencies under the Gender Lab.

Living

P1A. Subsidized housing

The IT companies should provide subsidised housing for 40% of single women employees within a 2 km radius. Most families can afford the housing in the surrounding areas but single women cannot. They travel long distances to reach work. The IT companies should lease out hostels or studios for the women employees.

Stakeholders: IT developments + BDA + Housing Board

Accessibility

P1B. Provisions for street vendors

All private residential developments should have specific areas demarcated outside for informal vendor setups to encourage interaction. This space should also be used for setting up temporary market yards to engage with nearby local producers.

Stakeholders: National Vendor Association + BDA + Housing Board

Ownership

P1C. Entry for pedestrians

Any private development is more than 6 acres of land should provide entry points for pedestrians to cross for work at fixed places as easement rights. It can be controlled by regulated by ID cards, specific walk paths and surveillance systems.

Stakeholders: BBMP + BDA + Private Housing Boards + GL

Engagement

P1D. Women vendors

Ensure at least 40% of women vendors outside the corporate premises if women make up more than 35% of the workforce.

Stakeholders: IT developments + BDA + National Vendor Association

2. Municipal Body Collaborations

The city of Bengaluru has clear hierarchies of several Municipal bodies that work in different domains. It is vital to achieving cooperation and collaboration amongst these bodies to ensure the safety and inclusivity of women in the city. These partnerships work at both city and neighbourhood levels.

The projects are overseen and formulated n collaboration with the Gender Lab and the experts from the safe city projects. They would be done in phases in smaller neighbourhoods that will act as catalysts for further amplification.

Safety

P2A. Hoysala Mobile Police checkpoints

For areas that are not fully developed yet and deserted roads behind private developments that are more than 1.5km in length having very few commercial activities looking within, temporary mobile police checkpoints should be installed for surveillance. These roads are still used by women from lower income backgrounds to access work. These mobile check points shouldn't become another hindering element. Gender-sensitive amenities like seating areas, toilets and CCTVs should be provided for accountable.

Stakeholders: BCP + BDA + BESCOM + BBMP

Mobility

P2B. Provision of Autostands

Main bus stands should have designated auto stands and share auto systems to cover the last mile. Clearly marked cab waiting areas should be provided as well to reduce clashing. In case of no space, auto stands should be provided within 400 metres of existing bus stands.

Stakeholders: Auto Rickshaw drivers union + BMTC + BTP + BDA

Assessment

P2C. Gender Assessment

Every new development should also be assessed in terms of women's safety and inclusivity. This includes checklists including lighting, points of access, compound wall edges, ease of access and movement and presence of security guards. The larger infrastructural projects should also be audited for pedestrain access, designated vendor areas activating the public edges and footpaths for safer walkability. In case the development fails to meet the standards, permissions should be revoked.

Stakeholders: Local citizens, NGOS, BDA, Private developers

Part 2 - Programmes

Deriving strategies at policy level

1. Corporate Social Responsibility (CSR)

Corporate Social Responsibility is an international business regulation that aims to contribute to societal goals. In India, they involve charitable nonprofit agendas to tackle ethical issues concerning education, health, the safety of vulnerable groups. Bellandur houses several business parks like Ecospace and Global Tech Park, to name a few.

Through incentives and regulations, these international corporations should contribute to the Safe Cities project that aims to tackle women's issues. It could be done through volunteering, funding or conducting educational programmes to raise awareness in the local neighbourhoods.

Development

Pr1. Infrastructure Development

Corporates should extend their CSR funding to contribute to the infrastructural maintenance, like road construction, pedestrian amenities to the surrounding neighbourhoods that house the women cleaners and maintenance workers.

Stakeholders: Corporate Organisations + BBMP + Public works Dept

Empowerment

Pr2. Women skill enhancement with SEWA

The companies should contribute towards skill-enhancing activities that empower women and senior citizens in the surrounding low-income areas. Priority should be given to special programs that impart training and workshops to promote self-employment for women.

Stakeholders: SEWA + Corporate Organisations + Welfare depts

Capacity Building

Pr3. Using local schools as leverage

Corporates should take partial financial responsibility for the infrastructure of schools in their neighbourhoods. They should engage with local schools (Anganwadis) to develop them into educational centres for men and women. The schools could become areas for gender sensitisation workshops conducted by NGOs to change mindsets of local business owners, patriarchs of families, street vendors, local developers etc.

Stakeholders: IT Developments + NGOs + Anganwadis + GL

Training Programmes

Pr4. Civic Participation

Training programmes should be conducted as a part of CSR for teachers and local women through nonprofits like BPAC. These programmes should provide specific tools to conduct safety audits, surveys and raise awareness about their rights and responsibilities as citizens.

Stakeholders: IT Developments + BPAC + Durga + Local communities

Part 3 - Guidelines

Deriving strategies at policy level

Interaction

G1. Vendor Zones

Bi-weekly events outside the enclosed gated communities to bridge public and the private edge. Every neighbourhood will have specific hotspots in their development plans that will host biweekly vegetable markets and local handicraft stalls from surrounding areas.

Stakeholders: National Vendor Association + BBMP + Private dev.

G2. Enclosures

All the compound walls of the gated communities, Private commercial and residential developments should facilitate visibility. The compound walls can only be solid uptill the height of 4ft (1.2mts). Beyond that they should enable 60% transparency through fences or piers. Maximum height of the enclosure cannot be over 5.5 ft.

Stakeholders: Urban Design firms + BBMP + Private dev.

Ownership

G3. Guerilla Urbanism

Community organsiation events like tree-planting, school installations, mural paintings should be conducted monthly to foster interaction, visibility of women and kids and increase the quality of the neighbourhoods.

G4. Training in Civic Representation

NGOs and civic organisations will also train women to become local representatives. These women will represent women-centric issues like lack of access, walkability and debate their needs at local municipality levels as a part of the developmental agenda.

G5. Fieldwork

Bi-monthly citizen meetings with inhabitants, NGOs, Gender Lab and the local representatives to map out neighbourhood problems.

G6. Delivery programmes

Townhall meetings should be set up as a part of delivery programmes that are spear headed by the Gender Lab at the neighbourhood level.

Stakeholders: Gender Lab + Durga + BPAC + Local Ward Councilors

Walkability

G7. Setback guidelines

All setbacks for commercial buildings should be strictly monitored. The minimum setback distance from footpaths would be 1.5meter. Additional space for loitering and interacting should be taken from the building footprint and not from the footpaths.

Stakeholders: BBMP + Private dev. + Public Works Dept.

G8. Pedestrian Infrastructure

All the roads should be redesigned to facilitate safe pedestrian movement. The roads follow TENDER S.U.R.E road guidelines developed in Bengaluru by Janaa Urban space. Clear vendor zones will be marked out next to walking paths. The footpaths will be uninterrupted by vendor activities and spill out areas.

Stakeholders: Janaa Graha Urban Space + BBMP - Road division

Inclusivity

G9. Gender sensitive Amenities

In pedestrian dominated areas, shaded areas and seating should be provided for every 500 meters for women and women with dependants. At least one public toilet with proper lighting should be provided for women for the length of 1.5km in busy commercial areas.

Rest areas and toilets should be provided for women street cleaners, municipality workers and local women vendors.

Stakeholders: BESCOM + BBMP + Ward corporations + KUIDFC

Safety

G10. Information Dissemination

Every bus stop should provide information dissemination systems for women of all economic backgrounds. Amenities like free wifi, telephone services to call emergency numbers or alarm buttons to seek help in distressful situations should become mandatory. Colour-coded wayfinding systems to the nearest auto stands, metro stations and important landmarks.

Stakeholders: BMTC + Durga + BESCOM + BCP

Part 4 - Spatial Strategies

Spatial Strategies

Spatial strategies are developed as a part of the operational strategies. After analysing and synthesising both the areas, spatial strategies have been developed for different scales under the aforementioned principles. In this section, each strategy is explained in detail and the required actions or intervention to apply the strategy are specified. The stakeholders responsible for implementing these strategies are identified.

Reduce vulnerabilities through integrated transport systems

Deriving strategies for the city scale

1A - Incorporate shorter modes of transportation into the existing frameworks of public transport

The current transportation systems are efficient in covering long distances and linear trips. However, women travel to multiple destinations in their journey resulting in trip chaining. They walk for longer distances, spend more time and money on their trips. They are particularly vulnerable while hailing shorter modes of transport. This strategy proposes that designated auto stands and cab areas should be provided next to the bus stops to make travel more inclusive and accessible to women.

Stakeholders: Auto Rickshaw drivers union + BMTC + BTP + BDA

1B - Introduce new infrastructure systems to cater to the needs of women from diverse economic backgrounds

New infrastructure systems should be implemented that cater to specific women's needs. In low-income areas where bus stops aren't easily accessible, women can't pay the high fares of auto-rickshaws. For these areas, there should be share autos that cover smaller distances for minimum fares. In other instances, bus stops should provide women-only parking facilities, so private transport can be used for covering short distances. It particularly helps in commercial areas where there's a shortage of parking space and women are forced to park in dark and dingy places.

Stakeholders: BMTC + BDA + BBMP

1C - Upgrade existing bus stops to include safe and gender inclusive amenities

The existing bus stops should go beyond just functioning as waiting areas. Women travel for long hours with dependents. Most bus stops are occupied by men and don't provide enough space for women. Separate waiting areas should be set up for women which should have these amenities. Public toilets, ramps, surveillance systems, internet access to call emergency numbers in instances of harassment are some of the features that should mandatorily be integrated with the existing bus stops. The bus stops should be helpful pause points rather than deterrents in women's travel.

Stakeholders: BMTC + BDA + BBMP

1D - Strengthen wayfinding and information dissemination systems to ensure safety and accessibility

Wayfinding systems are important to help women plan their travel for the day. In most instances, information like bus delays and change in bus routes are never accessible. For women with smartphones, information should be disseminated through apps that provide bus routes and time delays along with safety information. For women without access to phones, the bus stops should act as a single point information centre with colour-coded routes marking the nearest auto stands, bus stations, landmarks and police stations. The bus stops should display emergency information and guidelines to help women safeguard themselves.

Stakeholders: BMTC + BESCOM + BBMP + BCP + DURGA (NGO)

Protect pedestrian mobility through robust street networks

Deriving strategies for the neighbourhood scale

2A - Create lanes for continuous pedestrian movement unobscured by sidewalk activities by creating clear divisions

Most women cover their last leg of their journey on foot. The pedestrian infrastructure should be well defined with clear boundaries marked between the private and the public edge, setbacks and footpaths. Vendor activities and crowd gathering spaces should be created away from footpaths so women can walk freely without having to change their patterns due to overcrowding. The footpaths shouldn't clash with the vendor activity and subsequent of men on streets.

Stakeholders: Vendor Association + BBMP + JanaaGraha (Tender S.U.R.E)

2B - Ensure safe and functional junctions and crossings for caregivers and dependants

In both areas, there are no designated pedestrian crossings at junctions. Women often make multiple stops while walking. There should be definite points on the street where they can cross the road comfortably to access their needs. There should be safe and functional crossings so women feel safe and comfortable while walking with dependants.

Stakeholders: BBMP + Road works Dept

Protect pedestrian mobility through robust street networks

Deriving strategies for the neighbourhood scale

2C - Reclaim and allocate spaces for pedestrians by ensuring one directional parking in local streets

In smaller internal streets, most of the space is being occupied by car parking. This strategy proposes that in these streets, more space should be given to informal pedestrian activities rather than car parking. By creating one-directional parking spaces, it opens up space for interacting, gathering, walking and playing. It increases the diversity of the space by promoting vendor activities that can act as 'eyes on the street'. The parking direction alters each week.

Stakeholders: BBMP + BDA + Housing Board

2D - Introduce policies to enforce clear hierarchy of street networks in new developments

In new developments, there is no clear distinction in the morphology of external and internal roads. The transition of walking from a busy public edge to the internal roads is sudden. It results in a decrease in the quality of the neighbourhood. The road hierarchy should be reinforced to ensure comfortable last-mile connections for women. It helps in establishing vendor zones, commercial areas and quiet areas. Through this hierarchy, the scale of the street becomes more human-centric towards the internal areas.

Stakeholders: BBMP + BDA + BCP

Reconfigure the urban morphology for vibrant neighbourhoods

Deriving strategies for the neighbourhood scale

3A - Update zoning laws and regulations to promote mixed activities to maintain healthy distribution of gendered spaces

To promote women's presence and their active engagement with the public space, inclusive activities catering to their needs should be created. Commercial buildings with only masculine activities should be reorganised to include other functions that would serve women, children, families and diverse users. These buildings should have facilities that feel welcoming to women. Private developers should be incentivised to promote mixed uses to maintain healthy distribution.

Stakeholders: Zoning Board + BDA + Private Developers

3B - Re-engage gated communities with the public edges creating open but bound spaces

The presence of gated communities creates inherent segregation in public areas. The compound walls cut off visibility and interaction to the public edge making women outside more vulnerable. The physical design of the compound wall should achieve at least 60 per cent transparency to create a visual connection. Various activities can be proposed outside the gated communities twice a week like the Sunday farmers markets that bring out the inhabitants and increase interactions with the surrounding areas.

Stakeholders: Private Developers + BDA + Vendor Association + BBMP

Reconfigure the urban morphology for vibrant neighbourhoods

Deriving strategies for the neighbourhood scale

3C - Maintain a human scale while designing public frontages

Maintaining a human scale while designing urban frontages adds value to the public space by connecting people and streets. Human scale creates livelier and dynamic urban streets. The streets that act as important last-mile connections should encourage women's interactions. They should ensure the presence of functions and settings that are suitable for an average woman to easily use in terms of size, shape and scale. The frontages should be welcoming to women and foster the perception of safety, accessibility and inclusivity.

Stakeholders: Monitoring Specialists + Private developers + BBMP

3D - Regulate informal masculine spaces to control and maintain safety

Informal masculine spaces cause fear of walking in women, especially in deserted areas. Removal or addition of functions in informal spaces can't be dictated. The strategy isn't to formalise these small establishments. It is to increase the perception of safety around these types of informalities. In areas like this, there should be some form of surveillance to protect women. This could be achieved by installing CCTVs to monitor activities and create a sense of safety. Until these areas are fully developed, mobile police checkpoints should be installed to surveil unwarranted behaviour.

Stakeholders: BBMP+ BCP + Local Communities

Integrate and upgrade vulnerable edges for safety and inclusivity

Deriving strategies for the neighbourhood scale

Integrate and upgrade vulnerable edges for safety and inclusivity

Deriving strategies for the neighbourhood scale

4A - Revitalise vacant lands and abandoned lots through community organization

Community organisation is an important aspect of bringing the neighbourhood together and giving equal access to women to express their opinions and raise their voices. Social awareness programmes, workshops for capacity building can be organised in vacant lands for temporary use. This helps in preventing additional infrastructure costs to build new structures for gathering people. Women can drive community organisation programmes by implementing weekly schemes to promote neighbourhood activities.

Stakeholders: BBMP+ BDA + Knowledge Centres + Local Communities

4B - Promote softer barriers and edge conditions to increase visibility and perception of safety

Safety analysis of the area shows low levels of visibility that increase the perception of fear. Compound walls, corrugated sheets, blank walls, low tree covers are all contributing factors to this parameter. For women's safety, softer barriers that can maintain eye level connections, compound walls that facilitate visual interactions should be adopted in designing edges. Private developments, urban designers and architects should have clear set of rules on designing enclosures for gated communities. Basic standards of transparency should become mandatory.

Stakeholders: BBMP + BDA + Private Developers + Design Think tanks

4C - Activate dead edges by promoting street vendor activities, community participation and recreational areas

Dead edges along the deserted streets, new constructions and gated communities should be activated by creating vendor zones, children's play areas or resting areas for women and the elderly. Spontaneous activities that can facilitate interaction among diverse populations should be encouraged. Vendors in India have various protection schemes and thes should be applied to creating definite vendor zones and they should not be hindered by the municipal organisations in efforts to clean the streets. Rather, they should be actively engaged.

Stakeholders: Local Communities + Vendor Association + Parks Dept.

4D - Upgrade and meet the basic standards of safety and accessibility along the walkways

The standards of pedestrian infrastructure should be upgraded to meet women's needs. The footpaths should be made wide enough for women to walk comfortably with dependants like children and the elderly. There should be safe pedestrian crossings at junctions. The walkways shouldn't be obstructed by any activities. Existing loitering activities work mostly for men due to cultural expectations. Vendor zones and activities that encourage men's loitering should be demarcated separately from the footpaths.

Stakeholders: Road work departments + BBMP + Janaagraha

Enrich women's engagement with the built environment

Deriving strategies for capacity building

Enrich women's engagement with the built environment

Deriving strategies for capacity building

5A - Extend vendor laws to accommodate at least 30 percent women vendors outside private developments

Street trade is a significant source of livelihood for poor urban working women. Street vendors should be encouraged to set up their workplaces outside the gated communities and private developments. Through mandate, at least 30 per cent of these vendors should be women. Women vendors attract women customers of these private developments and add diversity to the street. Economic centres with at least 40 per cent women employee population should facilitate women vendor zones outside their establishments.

Stakeholders: National Vendor Association + Private developers + BDA

5B - Identify and repower cultural hotspots to become women centric zones

Temples, parks and schools are a few public spaces that are culturally and socially appropriate for women to visit. These areas should be reenvisioned to become cultural hotspots that provide women-centric activities, skill development workshops. They should become gathering spaces for women to interact regularly by encouraging them to step out into the public realm.

Stakeholders: Knowledge Centres + Temple Trust + Local communities

5C - Promote gender sensitization through creating mixed activities designed for both genders of various age groups

An important aspect of increasing women's engagement with the built environment is to normalise their place in the public realm. It is possible to achieve this by providing avenues that they can claim for themselves. An empty playground is automatically used by boys and men. Girls choose to spend time in parks with families since they don't have a place for themselves. This inherent mix that encourages the dependency of girls on families should be challenged. It could be done by proposing mixed activities for both the genders at the same place by clearly designating space for girls.

Stakeholders: NGOs + Training centres + Local communities

5D - Reclaim leftover spaces for adding value through guerilla urbanism practices for women

The abandoned lots of any neighbourhood reduces the quality and the value of the neighbourhood. They are also active deterrents for women. These lots and leftover spaces should become canvases for guerilla urbanism to bring the community together. Urban farming and greenifying streets can help in coping with extreme climates. Additionally, these types of projects will create opportunities to increase participation, engagement and the perception of ownership amongst women. It makes them the co-creators of these smaller lots which can be further amplied to promote community organisations at higher scales.

Stakeholders: IT developments + BDA + Housing Board

Timeline

Phasing of the strategic actions

The strategies developed in the previous chapter need efficient phasing to achieve sustained change over a long period. Creating social change is a long and tedious process. It requires various catalyst activities to trigger social expectations and demands for change.

To that end, the timeline has four phases,
Initiation
Catalysation
Implementation
Amplification.

The activities in the initiation stage would trigger dialogue and debate. The continuous conversation becomes the catalyst for demanding a change in the way planning works. To address the issues with current trends, new interventions would be introduced in the implementation stage.

Each phase is planned for one and a half years. After every phase, there is an assessment of the impact of these strategies. The qualitative and quantitative evaluation of the impact in the pilot areas would be studied and then amplified to the other regions of Bangalore as well. The whole timeline starts with setting up the Gender Lab which oversees the formulation, implementation, monitoring and assessment of the individual strategies and their collective impact by closely working with the local communities. The strategies and actions are classified into supporting, trigger and key actions. These actions are defined for short, medium and long term.

Phase I · Phase II · Phase III · Phase IV · Phase V · Phase VI · Phase VII · Phase VIII

INITIATION · **CATALYSATION** · **IMPLEMENTATION** · **AMPLIFICATION**

KEY ACTIONS
- P1C: Entry for pedestrains
- P2B: Integrated auto stands
- P2C: Gender assessment
- Pr3: Local schools
- Pr4: Civic participation
- G2: Enclosures
- G5: Fieldwork
- G7 - G10: Gender sensitive infrastructure

TRIGGER
- P1B: Provisions for street vendors
- P1D: Women Vendors
- Pr2: Women skill enhancement
- G3: Guerilla urbanism
- G4: Training in civic representation

SUPPORTING
- P1A: Subsidized housing
- P2A: Mobile police check points
- Pr1: Infrastructure development
- G1: Vendors zones
- G6: Delivery programmes

Setting Up Gender Lab · Pilot Projects in Area A · Future Areas of Intervention
- S1A - S1D: Integrated transport
- S3A - S3D: Urban morphology
- S2A - S2D: Pedestrian mobility
- S4A - S4D: Safe and inclusive edges
- S5A - S5D: Women's engagement

INSTITUTIONAL CHANGES AT ORGANISATIONAL AND POLICY LEVEL

assessment · assessment · assessment · assessment

Fig 112: Timeline for gender mainstreaming

**Applying Strategies -
Neighbourhood Scale (Meso)**

Testing out Strategies at Meso Scale

In this chapter, the strategies that are formulated would be applied at the meso-scale to the overall neighbourhood. These interventions aim to increase accessibility, safety, mobility and engagement of women with the built environment. The chapter presents a synthesis of the current planning trends, their shortcomings and the issues identified in the analyse chapters. It showcases the application of proposed strategies and interventions.

Existing planning trends

Dead streets with no eyes on the street

Fig 113: Current planning trends- Open structure, Centipede

Fig 114: New gated communities breaking the openness

Fig 115: Longer walks in deserted streets as a result

Fig 113: The traditional development trends follow a centipede pattern with clear hierarchies of streets and active public edges that facilitate interaction. amenities are located in walkable distance and the neighbourhoods are open for foot traffic.

Fig 114: The introduction of private developments leads to the cutting up of these open areas. These developments have compound walls that become closed edges. The planning mainly caters to the needs of automobiles. Pedestrians, especially women pedestrians and their vulnerabilities are ignored.

Fig 115: The compound walls contribute to two consequences. The public edge is dead due to the lack of vendor activities and informal gatherings. Women from low-income backgrounds have to go around these compound walls, walking twice the amount to cover the same distance.

Proposed planning trends

To study the relationship between women and public sphere and their interactions seen through during a cultural paradigm shift

Fig 116: Active and passive surveillance on dead streets

Fig 117: Repowering network of women-friendly activities

Fig 118: Integrating shorter modes of transport with existing infrastructure

Fig 116: The newly developed closed edges should become more active. They should be bound but open to activities ensuring lines of visibility. They should contribute to the quality and vibrancy of the surrounding neighbourhoods by encouraging mixed-use functions that facilitate interaction.

Fig 117: To re-engage women with the public realm, the activities that serve women, families and children should be re-powered. They should become part of a socio-cultural network that can add value to the neighbourhood and encourage women to access the area freely.

Fig 118: To cover long distances in unfriendly conditions, shorter modes of transport should be integrated with existing bus and metro networks. Cheaper modes of transport like share autos can be implemented with fixed pickup points. Since these are mobile, the demand for auto stands would be tackled.

Infrastructure

Movement within the neighbourhood

| 0.00 | 450m | 900m | 1.35 km |

Legend

- - - - Main Pedestrian access
- —— Main Auto paths
- ◯ Entrances for pedestrians
- 🚻 Rest rooms
- 🚐 Share auto pick up points
- 🚐 Integrated Auto stands
- 🚌 Bus stop
- —— Proposed road

Fig 119: Masterplan showing proposed pedestrian network

Master Plan

Achieving vibrancy and liveability

| 0.00 | 450m | 900m | 1.35 km |

Legend

- Community organisation
- Guerilla urbanism
- Vendor areas
- Private parks
- Mixed Use buildings
- Lake
- New Developments
- - - - Proposed Pedestrian access
- —— Existing Pedestrian access
- IT parks

Fig 120: Masterplan showing networks of activity and engagement for women

Pedestrian Network

Existing access points and gates

0.00   450m   900m   1.35 km

Gates

— Pedestrian path

Fig 121: Existing pedestrian network

Pedestrian Network

Proposed access and foot fall

0.00   450m   900m   1.35 km

○ Access for pedestrians

— Proposed pedestrian network

○ Gates

— Pedestrian path

Fig 122: Proposed pedestrian network

interventions - meso scale

loiter city: spatial strategies to redefine a woman's place in a public realm

Walking Paths

Shorter walking distances for women from low income neighbourhoods

0.00 — 450m — 900m — 1.35 km

- - - Existing pedestrian path

Fig 123: Current path to the Gated community

0.00 — 450m — 900m — 1.35 km

Point A
Point B

- - - New pedestrian path

Fig 124: Proposed interventions reduce walking distances to the Gated community

The women from low-income neighbourhoods have two main destinations of work, the gated communities and the IT parks. Currently, they walk around 1.5 km to 3 km one way to go to their work due to the limited access and the closed boundaries of the gated communities. Due to the proposed pedestrian access points into the private developments, these walking distances would be cut down by half. They also walk inside a well developed residential neighbourhood which would increase the perception of safety and relieves their discomfort of walking in dead streets.

Walking Paths

Shorter walking distances for women from low income neighbourhoods

0.00 — 450m — 900m — 1.35 km

Point A
Point B

- - - Existing pedestrian path

Fig 125: Current path to the IT parks

0.00 — 450m — 900m — 1.35 km

Point A
Point B

- - - New pedestrian path

Fig 126: Proposed interventions reduce walking distances to the IT parks

These maps show the walk to the IT park. Currently, the women from the low-income neighbourhood have to walk all the way to the outer ring road to reach their destination. In the proposal, they use the pedestrian network that passes through their neighbourhood. This network has low vehicular density, calmer traffic zones and playgrounds and the lake that engage them with the built environment.

Pedestrian Movement

Proposing amenities along the walkways

At the mesoscale, a pedestrian network is proposed on top of the existing vehicular networks to increase walkability, safety and accessibility. Along this path, multi-functional buildings that increase interaction and add value to the neighbourhood are proposed. Important interventions include conditional access through gated compounds and gender-sensitive amenities like helplines and restrooms along the main pedestrian access. These aim to mitigate safety and climate concerns.

Fig 127: Proposed pedestrian network with amenities

Legend

- ▢ IT parks and MNCs
- ▢ Residential buildings
- ▢ Mixed use buildings
- ▬ Main pedestrian access
- ⊙ Walking path
- ⊙ Rest Areas
- ⊙ Rest rooms

Shared Auto Points

Proposing gender-sensitive transit areas

The existing bus stop is not within walkable distance for most of the houses in the neighbourhood. It forces women to walk long distances or depend on male family members to go around. To address this, an economically feasible share auto system is proposed with continuous movements that target low-income neighbourhoods. An integrated auto and bus stand is proposed on the ring road. Within the neighbourhood, instead of fixed auto stands, there will be designated pick up points. These pick up points would also act as information dissemination systems, provide helplines in distress and wayfinding signages to increase accessibility.

Fig 128: Proposed share auto network with fixed pick up points

Legend

☐ Residential buildings
━ Main Auto paths
✛ Signages
⊗ Helplines
🚐 Share auto pick up points
🚐 Auto stands
🚌 Bus stop

Areas of Empowerment

Engaging CSRs for local development

The map shows the IT companies in the area that would fund infrastructure development and women empowerment schemes under the CSR programme. These schemes target the enhancement of the quality of life for women in neighbouring low-income communities. Existing hotspots like temples, schools and recreational parks would be re-powered to act as workshop and community areas. Reconfiguring existing structures reduces the need to develop new infrastructure in the beginning phases.

Fig 129: Existing hotspots to be repowered into empowerment centres

Legend

- Corporate Social Responsibility
- Workshops
- Play grounds
- Areas for engagement
- School zones
- Temple zones
- IT Parks

Local Organisations

Engaging local women for building positive relationships

To create conditions for women to move freely within the neighbourhood, there is a need to develop a sense of ownership and responsibility within them. This is done by proposing bi-weekly events of community organisation events like planting trees, painting murals, cultural events and creating installations. For this, we identify vacant lands and abandoned lots. These areas would benefit in two ways:

1. Bringing the communities, men, woman and children together and creating a sense of ownership in the neighbourhood.
2. Increasing the visibility of women and giving them legitimacy in the community and formalising their participation at the policy level.

Fig 130: New network of green pockets for community engagement

Legend

- Community organisation
- Guerilla urbanism
- Vendor zones
- Vacant lands for community engagement
- Vendor areas
- Local residents

**Applying Strategies -
Local Scale**

Testing out Strategies at Street Scale

In this chapter, the spatial strategies and the operational strategies that were developed in the previous chapters would be tested out at local scale in the first area, Bellandur. Interventions are proposed for two different pedestrian accesses that are frequented by women. They aim to tackle the issues of safety, accessibility, ownership and an immediate necessity for changing mindsets and holistically create a more inclusive environment. These interventions would be conducted in phases and would be visualised at the street scale.

Image 73: Image of the last mile connection

Street 1 - Last Mile Connection

Applying strategies to create inclusive and safe neighbourhoods for walking

Challenges

1. The street has poor pedestrian infrastructure. Therefore, it takes 25 minutes to walk its 1.5km length in hot and extreme conditions.

2. The area offers no recreational spaces for women. Women and kids have no places to relax, interact or spend time comfortably.

3. The schools and temples should become new nodes for both spatial and women's development.

4. All of the existing informality is created by and purely serves men. It shows clear domination over the street by not extending the same freedom to women.

Objectives

1. To address economic barriers, increase awareness amongst women about their rights and gender sensitisation among the citizens of the locality.

2. To create shared spaces and communal institutions with women as main stakeholders.

3. To align and incentivise the private developers interests in contributing towards these goals.

Funding

CSR by IT parks, Nirbhaya funds, Development banks, Gender welfare

Internal Stakeholders

Local women, BWSSB (Road works), BDA, Bengaluru municipal corporation, Advisory board on women's well being.

Key Plan

External Stakeholders

NGOs, Knowledge partners like BPAC, Vidhi League, Eco space, Global Tech Park, Safe cities project implementors.

VISION

A vital last-mile connection for women that facilitates walking, comfort and ownership over the area. It is developed with the collaboration of local communities and municipality, creating a distinct identity that will serve the interests of women from weaker economic sections by helping them become self-reliant and legitimate.

Phase I

Creating Shorter modes of transport

Strategies used:

1A - Integrated transport systems

1C - Gender Sensitive Amenities

1D - Wayfinding, information systems

2C - One directional parking in local streets

Legend

 One way parking on local streets

 Auto stands

 Share auto pickup points

 5 min walking radius

 Signages at junctions

Fig 131: Map showing transport interventions

300m 600m 900m 1200m 1500m

1B

1D

1D

2C

2C

1D

5 min walking radius

1C

Share Auto - Pick up point

1D

1D

interventions - street 1

loiter city: spatial strategies to redefine a woman's place in a public realm

Phase II

Pedestrian Infrastructure

Strategies used:

2A - Continuous pedestrian movement

2B - Safe and functional junctions and crossings

2D - Clear hierarchy of street networks

Policies:

Private Public Partnerships (PPPs)
P1C. Ownership - Entry for pedestrians

Programmes:

Corporate Social Responsibility (CSR)
Pr1. Development - Infrastrcuture Development

Legend

- ----- Proposed Pedestrian connections
- ▬▬ Main vehicular route
- ● Proposed acess points for pedest
- ⊗ Safe junction
- ----- Pedestrian connections
- ▨ IT Praks contributing to CSR
- ▬▬ Lastmile connection

Fig 132: Map showing pedestrian infrastructure

loiter city: spatial strategies to redefine a woman's place in a public realm

Phase III

Capacity Building

Strategies used:

5B - Identify and repower cultural hotspots

5C - Promote gender sensitization

Programmes:

Corporate Social Responsibility (CSR)
Pr1. Development - Infrastrcuture Development
Pr2. Empowerment - Women skill enhancement with SEWA
Pr3. Capacity Building - Using local schools as leverage

Legend

- 🟧 Existing schools as workshop areas
- 🟥 Existing temples as community hotspots
- 🟩 Proposed parks and recreational spaces
- --- Pedestrian connections
- ↔ Main pedestrian axes

Fig 133: Map showing existing cultural hotspots

Phase IV

Community Building & Ownership

Strategies used:

4A - Revitalise through community organization

4C - Activate dead edges by promoting activities

5D - Reclaim leftover spaces through guerilla urbanism

Guidelines:

G1. Interaction - Vendor Zones

Legend

- ▮ Existing schools as workshop areas
- ▮ Existing temples as community hotspots
- ▨ Guerialla Urbanism sites
- --- Pedestrian connections
- ▬ Vendor Areas
- ● Vendor impact zones

Fig 134: Map showing vendor zones

Last Mile Connection

Transforming the Morphology

Fig 135: Section A - Before

14m

Fig 136: Section A - After

2m 2m 6m 2m 2m

Legend

- Existing schools as workshop areas
- Existing temples as community hotspots
- Guerialla Urbanism sites
- Pedestrian connections
- Vendor Areas
- School
- Temple
- Vendor areas
- Seating

Fig 137: Map showing interventions on the lastmile

Vendor areas

Seating

Helpline

Vendor areas

New access

Share auto pt

Workshops

Public toilet

Seating

Green route to school

Green route to lake

New access

Playground

interventions - street 1

Street 1 - Before

Existing conditions that are not conducive for walking

Fig 138: Image of the existing lastmile connection

Street 1 - Impression

Applying strategies to activate dead spaces

Fig 139: Image of the lastmile connection with proposed strategies

Impression - After

Prioritising pedestrians and their experience

Community organisation projects
to encourage participation

Proposing activities that
cater to women needs

3A

Slow vendor
loitering zone

Wayfinding
Signages

Waiting, gathering
area for women

1B

1D

2A

4D

2B

Fig 140: Creating various zones of movement

Creating uninterrupted
walking zones

Reducing the road width for vehicles

Creating uninterrupted
walking zones

Image 74: Image of the pedestrian access

Street 2 - Access Route

Applying strategies to create safe pedestrian conditions

Challenges

1. The street is the back entrance for the automobiles of gated communities and IT parks.

2. It has no suitable amenities for working for women construction workers, domestic help and women cleaners.

3. No activities on the street making it completely deserted and dead. The road has no 'eyes on the street'.

4. The road is an active deterrent for women, however, they use this route due to the lack of an alternative.

5. Absence of lighting and safety amenities for women.

Objectives

1. To increase visibility on the road by applying direct and passive 'eyes on the street'.

2. Facilitate a sense of safety and security for women pedestrians.

3. Shortening walking distances to workplaces

4. Provide alternatives to avoid using underdeveloped roads which are not conducive for walking

Funding

CSR by IT parks, Nirbhaya funds, Development banks, Gender welfare

Internal Stakeholders

Local women, BWSSB (Road works), BDA, BBMP, BESCOM, Bengaluru City Police, Women's welfare department.

Key Plan

0.00   1.35 km

Street 2

External Stakeholders

NGOs, Knowledge partners like BPAC, Vidhi League, Eco space, Global Tech Park, Safe cities project implementors.

VISION
An important access route for women from weaker economic sections to reach work that provides safety and security from active deterrents. It is a pilot initiative on designing an underdeveloped road and the temporal aspects of fostering inclusive activities and creating gender-sensitive infrastructure.

Phase I

Visibility and Security

Policies:

Municipal Body Collaborations
P2A. Safety - Hoysala Mobile Police checkpoints

Legend

- ▦ Existing Gates
- ▪ Check Point
- ▦ Existing Undeveloped Area
- ▬ Important Access to Work
- ── Compound Walls
- ◎ Signages at Junctions

Strategies used:

The morphology of this street makes it extremely unsafe for women to walk. It raises the need for active surveillance like the mobile police checkpoint. The checkpoint would be temporary and will have a clear line of visibility until the road develops in subsequent years due to new communities and activities.

To make this checkpoint more approachable and friendly and not be another deterrent, other amenities like toilets and rest stops and women constables will be present. The infrastructure development of this road will be overseen by CSRs of the IT parks. It should be redesigned keeping pedestrians in mind and should follow Tender SURE guidelines.

1D - Wayfinding, information systems

2A - Continuous pedestrian movement

Phase II

Activating the street

Policies and Guidelines:

Private Public Partnerships (PPPs)
P1B. Accessibility - Provisions for street vendors
P1C. Ownership - Entry for pedestrians
P1D. Engagement - Women vendors
G2. Interaction - Enclosures

Legend

- ▦ Existing Gates
- ▦ Proposed Entry for Pedestrians
- ▬▬ New Pedestrian Access
- ▪ Public toilet
- ▦ Existing Undeveloped Area
- ▪ Vendor Areas
- ┄ Redesigned Compound walls
- ── Line of Visibility
- ▪ Places for Women Vendors

Strategies used:

4B - Softer barriers and edge conditions

4C - Vendor activities and community participation

5A - At least 30 percent women vendors

Phase III

New planning principles

Fig 143: Existing condition

16m

Fig 144: Proposed condition

2,5m 1,5m   8m   2m   2m

The existing vacant land on this street will be developed to become a gated community in the future. In this phase, we imagine how a new gated community can be developed by providing access to pedestrians, create conditions for girls and women to appropriate spaces in the vicinity. Research shows that girls find it difficult to claim larger spaces for playing compared to boys. So, these smaller areas can facilitate a better relation for girls and become part of a larger network of recreational areas in the neighbourhood.

The proposed access will become the main walking path due to constant activity and the perception of safety. It will be flanked by mixed-use functions that encourage vendor activities, interaction, communication and provides passive surveillance. At this stage of development, the mobile police checkpoint becomes no longer necessary due to the activities along the street.

Play Area

Areas for Appropriation

Commercial Activities opening up to the pedestrian access

Commercial Activities opening up to the road

Market yard

Rest areas

Fig 145: Map showing the proposed future developments with the derived principles

Legend

- ⊚ Existing Gates
- ⊚ Proposed Entry for Pedestrians
- — New Pedestrian Access
- ▪ Rest Areas and Public Toilets
- ▨ Proposed Recreational Areas
- ▨ Mixed Use Buildings

- - - - Main Pedestrian Path
- —— Line of Visibility
- ▨ Proposed Community Centre
- ▨ New Gated Communities
- ▨ Apartments
- ⋯ Vendor Areas

Street 2 - Before

Dead streets with no eyes on the street

Fig 146: Image of the existing condition

Street 2 - Impression

Applying strategies to activate dead spaces

Fig 147: Image of the access after applying strategies resulting in vibrancy and interaction

Street 3 - Before

Existing conditions that are not conducive for walking

Fig 148: Image of the existing condition in street 3

Street 3 - Impression

Applying strategies to create lines of pedestrian movement

Fig 149: Image of the street after applying strategies

Operability of Gender Mainstreaming

Operability

In this chapter, we take a look at the operability of the gender mainstreaming frame-work. It provides an overview of the mechanisms that are inherent to sustain change and examines the institutional strategy of creating the Gender Lab in more detail. Caren Levy's web of institutionalisation is used as the foundation of sustaining gender mainstreaming. The framework all proposes the contextualisation to adapt the web to suit the policy environment of India.

Fig 150: Web of Institutionalisation

Institutionalising Change

Weaving the web of institutionalisation to sustain change in Indian context

The project examines how gender equality and socio-spatial justice for women can be institutionalised. Institutionalisation is the process in which social practises are sufficiently regularised and repeated so much so that they have impacted the social structures significantly (Hill & Turner, 1988).

Gender mainstreaming in a patriarchal society fundamentally represents a different set of interests compared to that of the existing organisations. It is important to recognise this conflict of interest in power relations before mandating change. 'Sustained change', is therefore a vital dimension that would deal with the rigidity in the systems and navigate through the lack of responsXiveness. The web of institutionalisation developed by Caren Levy is used as a starting point to evaluate the capacities and the shortcomings of the existing institutions.

For this, the web has been contextualised to reflect the potentials of the selected sites, the capacities and barriers of the existing planning disciplines. It is used to define the operability of the Gender Lab as an institutional strategy in the efforts to mainstream gender into planning. The web of Gender Lab starts from changing mindsets of women, to empower them to hold their representa-

tives accountable. It also addresses the capacity building of women, to develop agency to represent themselves in policy spheres.

The web addresses four spheres of action. Gender Lab acts as the central element that sustains change within this web. Citizen Sphere creates the ripple and demands change and the policy sphere responds to the issues through creating suitable policy and planning interventions. To incorporate these interventions and sustain them, fundamental structural changes in the organisational sphere become important. It includes allocating responsibilities for gender mainstreaming and altering the lens of the existing procedures needed to create change. Finally, the delivery sphere formulates and implements strategies with the oversight of the Gender Lab.

An important aspect of this web is to facilitate the involvement of the citizen sphere in the delivery system. This step clarifies the implication that delivery of projects is a top-down activity and gives clarity to the bottom-up approach which is prudent. It also reflects the collaboration between formal and informal institutions, knowledge centres and local women.

Fig 151: Web of institutionalisation with stakeholders

Identifying Stakeholders

Achieving cross collaboration across stakeholders

Fig 152: Relationship between each sphere

The chart on the left maps out various stakeholders responsible at each stage of the web. The capacities of institutions are optimised through knowledge building and collaborations across various scales. The web allows for flexibility and partnerships that are important for collaborative governance structures and practices. The image above represents the interdependence of each sphere with Gender Lab acting as the focal point which would sustain this transformation.

Role of Gender Lab

Fig 153: Gender Lab in Citizen Sphere

Role of Gender Lab in Citizen Sphere

- Identifies capacities at local levels.
- Capacity building through interactions with local communities and women.
- Organises discussions and meetings to enhance dialogue.
- Mobilises local communities by allocating NGOs to facilitate skill development and training.

Role of Gender Lab in Policy Sphere

- Assesses all new policies from a gender perspective
- Provides feedback on policies after consulting with experts
- Acts as an arbitrating agency between political representatives and citizens

Fig 154: Gender Lab in Policy Sphere

Role of Gender Lab

Roles or responsibilities of Gender Lab in multiple spheres

Fig 155: Gender Lab in Policy Sphere

Role of Gender Lab in Organisational Sphere

- Identifies areas of intervention, conceptualises and formulates strategies to implement pilot projects
- Clearly defines roles and responsibilities of each department
- Conduct gender-sensitisation training workshops within each department
- Allocates resources for projects

Role of Gender Lab in Delivery Sphere

- Monitors the progress of the programs and assesses their impact
- Collaborates with external agencies, NGOs and local communities for delivering projects
- Bridges the gap between communities and knowledge centres to develop a clear action plan

Fig 156: Gender Lab in Policy Sphere

STRUCTURE OF SPATIAL GOVERNANCE

STRUCTURE OF SOCIAL GOVERNANCE

National Level

MINISTRY OF HOUSING AND URBAN AFFAIRS (MoHUA)

Authority over the formulation and administration of the rules and regulations and laws relating to the housing and urban development in India

planning and mobility

TOWN AND COUNTRY PLANNING ORGANISATION

CENTRAL PUBLIC WORKS DEPARTMENT

MINISTRY OF WOMEN & CHILD DEVELOPMENT

Responsible for social & economic empowerment of women, develop an environment free from violence and discrimination

Women's empowerment and gender equity

NATIONAL COMMISION FOR WOMEN (NCW)

RASHTRIYA MAHILA KOSH (RMK)

State Level

URBAN DEVELOPMENT DEPARTMENT KARNATAKA (UDDKAR)

Govt. of Karnataka
Responsible for urban civic matters and overseeing new developments

DIRECTORATE OF URBAN LAND TRANSPORT

Responsible for overseeing all the urban land transport initiatives in Urban/ Local Planning Areas

KARNATAKA STATE POLICE (KSP)

KARNATAKA STATE ROAD TRANSPORT CORPORATION (KSRTC)

KARNATAKA PUBLIC WORKS DEPARTMENT (KPWD)

KARNATAKA POWER TRANSMISSION CORPORATION (KPTCL)

DEPARTMENT OF WOMEN AND CHILD DEVELOPMENT

Govt. of Karnataka
Responsible for mainstreaming gender concerns in policies, like Gender-budgeting

BRIDGING THE GAP

STREE SHAKTI
Progress through Women Empowerment; Self-reliance through income generating projects

SANTHWANA
Provide counselling; help to women who are victims of violent atrocities

GENDER LAB - EXPERT COMMITTEE

Overseeing Authority

THE KARNATAKA MAHILA ABHIRUDDI YOJANE (KMAY)

To ensure Gender Equality and to bring women in mainstream of development.

Working members

District and Taluk Level

City Level

Informal Institutions

BCP
Law-enforcement agency

BTP
Traffic Police

BBMP
Civic amenities, infrastructure

BDA
Principal planning authority

BRDA
Autonomous body of the metropolis

BMTC
Public transport bus service

BMRCL
Rapid transit system serving

BWSSB
Responsible for sewage disposal and water supply - Roadworks

BESCOM
Electricity transmission and distribution company - Lighting

HOSTEL FOR GIRLS
Encourage education among rural girls

STAIRYA YOJANE
Provide financial aid within stipulated time

GELATHI
Services for women affected by violence

GENDER BUDGET
Addressing various development indicators

STATE
Safe and suitable accommodation

SWADHAR GRUHA
Rehabilitation Scheme in difficult circumstances

Ward Level

COUNCILORS OF WARDS

CITIZENS

VIDHI Centre for Legal Policy
SAFETIPIN Supporting Safer Cities
shethepeople THE WOMEN'S CHANNEL
EMBARQ India
B.PAC Let's fix it
DURGA
WRI INDIA

Fig 157: Gender Lab as a bridge between the two structures of governance

Fig 137: Proposed Hierarchial structure for Gender Mainstreaming

Final vision

Legitimacy in the built environment

The project envisions a gender-inclusive city that engages, protects and emancipates women from gendered expectations. The section depicts the proposed temporal relationship between women and the built environment. The project envisions a city where women are free to walk at any given time of the day, a city that engages with women, provides safety, security and adds value to their life. Women are also imagined in important positions of power who can bring in their lived experiences to influence the way cities are designed. It shows the dialogue between local communities and planners to achieve a balance between top-down and bottom-up approaches.

Fig 158: Vision showing positive relationships between women and the built environment

Discussions

Further Recommendations

The methodology that was used in this research project to derive strategies and create operational frameworks is universal in its approach. The way the problems of a neighbourhood and the gaps in planning are defined could be upscaled to study other neighbourhoods and regions at larger scales. This chapter provides recommendations to carry out similar research at larger scales keeping in mind the diverse local contexts.

Identifying Planning trends at Regional Scale

Further amplication of proposals to regional scales

Private Roads —— Walkable streets ▢ New Developments

0.00   500m   1km   1,5km   2km   2,5km   3km   3,5km   4km   4,5km

Fig 159: Map of Bellandur showing current planning trends with large closed developments

The planning trends in the Bellandur region show a similar dichotomy between the old and new neighbourhoods. The centipede-like open structure that is engaging to women and provides safety and security is cut up due to the emergence of privately owned local developments. These developments promise safety, security and community amenities within their closed walls. The consequence of this is the creation of dead public edges. It ignores the needs of women from low-income neighbourhoods who are mainly dependent on walking and makes them more vulnerable while commuting.

Identifying Planning trends at Regional Scale

Further amplication of proposals to regional scales

Private Roads —— Walkable streets —— Not conducive for walking

0.00   500m   1km   1,5km   2km   2,5km   3km   3,5km   4km   4,5km

Fig 160: Map of Bellandur showing current planning trends resulting in inaccessible roads

The roads that are still accessible by the public are deserted and have no interaction or helplines to support women's daily commute. The pedestrian network is either absent or becomes too long for comfortable accessibility. Using the planning trends proposed in the previous chapters, each of these neighbourhoods can be analysed in greater detail and the strategies upscaled to regional scales. Due to the time limitation and the scope of the project, regional-scale proposals are not visualised. However, this could form the foundation for further research and recommendations.

Conclusion and
Reflection

Conclusion

The main research question for this graduation project was:

"How can gender-inclusive urban planning create a framework for a just and equitable society for women in Bangalore?"

The sub-research questions were divided into four phases based on Peter Marcuse's Critical Planning Theory: Analyse, Expose, Propose and finally, Politicise. Under the first phase, the sub research questions are

1. What are the different cultural taboos and gendered expectations prevalent in urban spaces that alienate and endanger women?
2. How does the private development's idea of safety and comfort influence the quality of the public edge and women's experience?

These questions explored the causes and the consequences of gender bias in the patriarchal society of India. These questions were answered using a qualitative assessment of the behaviour patterns of women. The findings show how political, cultural and social backgrounds influence gender behaviours today. The research also addresses how the new developments that are projected as the ideal safe spaces for women from certain socioeconomic backgrounds affect the public edges character. Next, the second phase of the research questions was related to the institutional shortcomings in this field.

3. What are the systemic deficiencies in planning systems that build barriers for women from different economic backgrounds towards equitable ownership and access to opportunities?
4. How do planning and decision making systems operate within the asymmetric power relations between genders in India?

While answering these questions, a new layer was added to the research. The research started strictly from the position of women but during the site visit, it became clear that socioeconomic status was a significant contributing layer to women's unequal status in the public realm. The matrix of domination became an important aspect and it was important to integrate with the study. The Matrix of oppression is a sociological paradigm that identifies that oppression of different social classifications, like gender, race, income, religion or age, is interrelated. While investigating the current urban planning trends developed over the recent years, it was observed

that women from low-income neighbourhoods are at a grave disadvantage and find themselves in more vulnerable positions in the public realm. Another important finding is the influence of spatial and non-spatial factors on women's behaviour. By comparing two contrasting areas, the research addresses how positive spatial planning doesn't automatically solve the issue of gender inequality. It highlights the gap in the planning systems and the importance of changing mindsets across the institutions. The next phase of questions relate to the synthesis and proposal.

5. What are the spatial strategies and design principles that can create conditions for gender equality in public spaces, while offering higher safety, acceptance and accessibility to resources?
6. How can collaborative governance structures bridge the gap between the grassroots initiatives and policy-making systems in ensuring gender sensitivity in cities?

In this stage, Strategies were developed under six principles that envision favourable conditions for women to access, participate and claim their rights in the public spaces. Finally, after formulating and proposing strategies for interventions, the project addresses how to ensure the operability of these processes, bringing us to the last phase of the sub research questions.

7. How can an empowerment approach advocate and encourage the restructuring of traditional gender roles and provide women legitimacy within the public realm?
8. What is the alternate scope of spatial planning in the context of gender disparity and oppressive practices to facilitate socio-spatial justice?

While proposing strategies to mainstream gender into planning, it became evident that along with spatial interventions, an element like gender lab is crucial to institutionalising change in the long run. Opposing interests need to be tackled at different stages while envisioning social change. It requires a robust operational framework. The collaboration of formal government institutions and informal grassroots institutions is very prudent to sustain change. Furthermore, the aim of achieving legitimacy is a long, tedious and complex process that requires mobilisation of institutional capacities. Gender Lab is envisioned as a self-sustaining body of stakeholder cooperation and collaboration in a constant dialogue with the local women who are the main drivers of change.

PERSONAL REFLECTION

All Indian women, irrespective of their social, economic and religious backgrounds, have learnt to accept the reality that they might get harassed, molested or in extreme cases, abducted and raped. The plethora of cases published in print and visual medium creates a sense of apprehension among women to step out. Apart from this, the continued normalisation of violence in its subtle forms has developed a contentious relationship between women and the public realm. It perpetuates discriminatory attitudes and gender stereotypes, further reinforcing gender inequality. It controls, restricts and challenges women's access to opportunities. When women feel unsafe and vulnerable to travel, they choose to stay home rather than avail services and opportunities themselves. The basic freedom of movement is a privilege to a lot of Indian women.

This graduation project provided me with an opportunity to critically examine various discourses and systemic constraints that led to the spatial segregation of women. To that end, this project addresses women's vulnerabilities through the lens of citizen rights, socio-spatial justice and gender equality. Through this project, I want to study the complex nature of these interdependencies to facilitate the creation of public spaces that are truly public and just and inclusive of all women.

GRADUATION TOPIC AND GRADUATION STUDIO

The graduation project was undertaken as a part of the Planning Complex Cities studio in the Urbanism track, under subsection spatial planning and strategy. The main focus of the studio is to develop integrated strategies that bridge spatial development, governance and participatory planning. It aligns closely with the graduation topic, where the research follows a critical analysis of planning systems operating in asymmetrical power relations. The graduation studio provided me with tools to analyse the spatial manifestation of gender inequality and how they situate within the existing institutional practices. The global approach to engaged planning fits well with the research project as the research mainly focuses on the context of India, situated in the global south.

The project aims to bridge the knowledge gap between formal and informal institutions and propose alternate and engaged planning frameworks that depend on collaboration, capacity building and conflict resolution. The sub-studio's tackling of issues of social marginalisation and fragmentation created another dimension to the graduation project. The spatial planning and strategy discipline goes beyond the superficial and helps in understanding the complex nature of cities. The various theories about socio-spatial justice are constantly examined, questioned and re-evaluated throughout the project in an iterative process.

GRADUATION RESEARCH, DESIGN AND METHODOLOGY

The research methodology undertaken involved methods like literature review, policy analysis, fieldwork and interviews.

RESEARCH

In this graduation project, the research and design go hand in hand in an iterative process. They are heavily inspired by each other. The literature review provided the foundation for the project and guided in developing subsequent steps. Since the relationship between gender and space is complex, research followed critical theories developed over time that address and understand the genesis of this problem. Caroline Moser's and Caren Levy's work has heavily inspired the project in its initial stages. Lefebvre's work aligning with citizenship, participation and agency helped to develop the hypothesis further. In addition to this, non-western literature by planners like Tovi Fenster was also studied. These question the western notions of universal rights and helped add another layer to contextualise the project to the global south.

FIELD WORK

The literature review yielded a strong foundation in developing theoretical and analytical frameworks that underpin the research. On-site fieldwork made up the other crucial part of the research methodology. The fieldwork experience lasted for two months and was an enlightening experience. This process helped me in landing the theoretical findings in a context and supported the hypothesis formulated.

FIELD WORK AND COVID-19 LIMITATIONS

Due to COVID-19 restrictions, all of the interviews with experts were conducted online. These interviews provided invaluable information and insights regarding the planning practices, gaps in knowledge among institutions and the shortcomings of urban design in the Indian context. On the other hand, interviews conducted with NGOs and other grassroots organisations exposed a rich network of activists leading the movement towards achieving gender equality. This formed an important aspect for the graduation project that looks at bridging the capacities of formal and informal institutions.

Through the literature review, entry points were identified for critically examining the site. The project emphasises distributive justice that focuses on the idea of fairness in the processes of resolving conflict and allocating resources. It also maintains that the best solutions are formulated through local engagement and participatory planning. However, it wasn't possible to explore these avenues practically due to the Covid pandemic in 2019-2021. Due to COVID-19, there were significant limitations during fieldwork while reaching out to women. Group discussions and workshops to enable local participation and mind mapping weren't possible due to the social-distancing guidelines in place. Since the selected area is a low-income neighbourhood, it wasn't possible to reach out to these women virtually because they did not have access to such facilities and services. After individually interviewing several women and conducting surveys, information was collated to synthesize the analysis. The area selected was a rural area with several illegal slum settlements and undocumented migrants. Due to this, most of the information regarding the demographics, sex ratio, income status and economic activities were not documented. Most police stations and government offices that could provide valuable information were either closed or had limited functioning due to the pandemic. It was difficult to reach out to the responsible officers personally. Due to the limited availability of information online, certain assumptions were made after following the general trends in crime statistics and behaviour trends in these areas.

MANAGING INHERENT BIASES

One of the important aspects that had to be kept in mind while conducting interviews is to not express any inherent biases as an urbanist. It was important not to influence the opinions of interviewees and let them reach their conclusions. Through this process, my privilege as an educated, upper-class woman also became apparent. The women in the neighbourhood treated me with the respect that they do not enjoy themselves due to my social status. By removing myself from these situations, it became clear how discrimination and segregation intensify through the matrix of domination. As a researcher, it was crucial to be an unbiased bystander, gathering information and conducting interviews, and be open to their beliefs, perceptions and inherent prejudices. There were instances where we viewed the world completely differently and some women believed that their rightful place is at their homes and men should continue to be the breadwinners and go-getters. These interactions exposed how conditioning becomes an essential tool in ensuring continuous subordination. It helped me formulate suitable strategies like platforms for capacity building and changing mindsets in the project. The findings obtained in the fieldwork helped develop strategies that are both context-specific and generic that can have universal applications.

GRADUATION PROJECT AND GAPS IN RESEARCH

In India, cities like Delhi and Mumbai have been studied extensively from a gender perspective due to the high crime rates. Bengaluru had been studied comparatively less. Only recently, new studies are coming up analysing the forms of harassment and the reasons behind them. Bellandur had always been examined from the perspective of its booming IT sector and the attractiveness of the new developments. There has been no research or documentation of the older establishments, their inhabitants and the spatial segregation due to their economic background. This project fills that gap in the research by addressing the intersectionality of gender and economic background in the low-income areas of Bangalore. Bellandur was never studied from the lens of gender before. Due to the gendered approach, planning problems became glaringly obvious, like the lack of bus stops and auto stands at walkable distances for women living in low-income neighbourhoods. It also made it obvious how certain groups of societies become invisible in planning due to their economic, social status and lack of representation. The project explores these kinds of inequalities and addresses them in detail.

SOCIAL RELEVANCE

The graduation project looks at women's role in the public realm in an Indian context. Even though women constitute almost half of the population of India, they have been historically oppressed and still do not enjoy the same rights as men.

This project doesn't aim to solve gender inequality in public spaces, rather it tries to understand how disciplines like engaged planning and critical approach can work with informal institutions to deliver a sustainable and operational framework. The hostilities that women face in the public realm cause major setbacks in their growth.

Addressing these issues in urban planning is important because

"spaces that cause fear, restricts movements and thus the community's use of space. Lack of movement and comfort is a form of social exclusion" (UNHabitat Women in Cities International, SIDA, Huairou Commission, and CISCSA, 2008).

It further includes: *Strategies, practices, and policies which aim to reduce gender-based violence (or VAW), include women's fear of crime and freedom from poverty. This includes safe access to water, the existence and security of communal toilet facilities in informal settlements, slum upgrades, gender-sensitive street and city design, safe car parks, shopping, and public transportation (UNHabitat et al., 2008).*

When issues of belonging and ownership are not addressed through the lens of gender, it results in the creation of places that are not inclusive and fail to represent diverse values and needs (Beall, 1996).

The current planning system provides a 'spatial mirror' to the power relations in the society which serves to control space and the well-being of women and other marginalised communities. This project attempts to fill the knowledge gap imperative to change the outdated mindsets in institutions and people and promote inclusive and just realities for women.

ADDRESSING SUSTAINABLE DEVELOPMENT GOALS

The graduation project strongly connects to the New Urban Agenda adopted at Habitat III in Quito, Ecuador, on 20 October 2016 (UN Habitat, 2016). It presents a broad scope for incorporating economic and social sustainability through urban development to achieve inclusive societies.

A key aspect of the New Urban Agenda is the prevention of all forms of gender-based discrimination and violence against girls and women. There are two main pillars to this goal. First, ensuring unconditional access to basic services that cater to women's

needs. Second, promoting safe networks of mobility that deter violence against women. The project's scope closely aligns with these elements at both spatial and policy levels.

SDG 5 is another stand-alone goal for achieving gender equality and empowerment for all women and girls. The project provides institutional and operational frameworks that tackle the challenges of inaccessibility, violence against women and inequalities manifesting in public spaces. By adopting the approach of gender mainstreaming, the project facilitates women's political participation and social empowerment. These goals strongly relate to SDG 10, reducing inequalities. The project addresses SDG 7, partnerships for goals, by proposing engaged planning and collaborative governance structures. It sets up platforms for sustained partnerships to achieve the vision of gender equality in the public realm.

SCIENTIFIC RELEVANCE

Gender mainstreaming in the discipline of urban policy has come to the forefront around the 1970s in the west. Extensive studies have been conducted by D.B.Massey, S.S.Fainstein and M.Roberts which looked at women's emancipation in the developed north. Only recently, since the 1990s, there has been an increased interest in addressing gender inequalities in third world countries. Researchers like Caroline Moser and Caren Levy have developed theoretical frameworks to facilitate gender in urban policy. The majority of the studies are largely theoretical and have identified the systemic issues influencing gender and planning. However, there are no successful large scale projects implemented in the global south from a planning scale. Another crucial scientific debate today is the comparison of planning by professionals versus planning by communities. The New Urban Agenda has also acknowledged women as the frontiers of change and there is a need to define what human rights would mean to women in these diverse locations. Since gender has different definitions in different contexts, the research needs to be aware of the varied social, political and cultural impacts on this issue.

TRANSFERABILITY

The spatial planning and design principles proposed in this graduation project are specific to the case of Bengaluru, India. The project follows a critical analysis of the spatial and social characteristics of the city. The research follows well-established literature in the discipline of gender and space to form an initial hypothesis. The transferability of the project relies on the fact that gender inequality is prevalent across the world. In all nations, gender inequality persists in various forms. However, the degree to which they create segregated realities in the urban realm for women is highly context-specific.

Most of the findings can be applied to other patriarchal nations where women's movements are controlled and restricted due to fear of harassment and cultural setbacks. Last-mile connection is an important aspect of a woman's journey in any Indian city. The graduation project explores the factors that influence women's mobility experiences, conducts broader research at the neighbourhood scale and analyses factors that influence women's relationship with the public realm. By studying two vastly different regions, a spectrum of issues was identified. The strategies formulated and the methodology applied would have implications in other neighbourhoods as well. Since the areas taken reflect the two extremes of spatial manifestations of gender inequality, the strategies proposed can be contextualised to suit other neighbourhoods. The methodology is flexible and can be implemented by changing variables within various contexts.

The planning aspect of the project thoroughly analyses every capacity and barrier of the existing institutions. It defines their role in mainstreaming gender. The hierarchy of the structures can be different in other contexts, however, the research puts forward methods to navigate these complex relationships. This approach could be transferred to other areas of conflict and spatial segregation as well. Engaged planning and critical planning theory can be applied as a starting point in similar studies.

Fig 161: Illustration showing the desired transformation of public spaces to become more inclusive and open to all genders through systemic change in planning, policy and mindsets

Source: Akanksha Jaysheel

AR3U023
Theories of Urbanism

From Grassroots to Policy Making: A Gender Perspective

Redefining Women's roles in today's Indian Cities

ABSTRACT:

Since India's economic liberalisation of 1991, even with its GDP steadily growing, the female labour force participation rate (LFPR) has fallen from 42.7% in 2004 to 23.3% in 2018 creating a unique paradox (Ministry of statistics and programme implementation, India, 2019). Binary divisions of gendered work, unrecognised domestic labour contribution to the economy have misled these statistics. Structural constraints, systemic cultural oppression and socio-economic factors of a predominantly patriarchal society are some of the main underlying reasons. Women have had historically well-defined roles in the private realm of home and family and an ambiguous relation with the public sphere due to cultural barriers (Moser C, 1989). This ambiguity results in a society were women don't have agency over the public realm.

Cities are spatial and organisational expressions of social relations which are based as much on power and conflict as on cooperation and consensus (Beall J, 1996, p.10). This has meant that the needs of Indian women have often been ignored. Even though in current urban societies, political and economic visibility has brought increased access to public space, it does not automatically mean that women enjoy unrestricted rights to the public spaces in a city (Phakde S, 2007, p.186). The demands of the new bodies in the city are often met with conflict and dissent manifesting into violent encounters further restricting accessibility and mobility for women. Therefore, creating safer and accessible spaces is important to facilitate personal and social gains by giving agency and ownership to women towards the cities they inhabit.

To this aim, this paper explores the necessity of redefining traditional roles to provide agency to women. The first section of the essay will examine the discrimination faced by women in India and identifies the systemic shortcomings of planning frameworks. The paper then looks at women's rights through the lens of participation and citizenship and how different theories have failed to address the path of legitimacy in patriarchal societies. Next, it will address the community-led movements that yielded positive reinforcements and safer platforms for women. It then concludes by reiterating the importance of women's participation in formal planning disciplines to re-envision a just city, in a quest for sustainable and equitable development.

KEY WORDS:

Right to Gendered City, Gender roles, Safe cities, Inclusive spaces, Agency.

I. Introduction: Gender and Space

Since India's economic liberalisation of 1991, even with its GDP steadily growing, the female labour force participation rate (LFPR) has fallen from 42.7% in 2004 to 23.3% in 2018 creating a unique paradox (Ministry of statistics and programme implementation, India, 2019). However, it is important to note that this data misinterprets the actual contribution of women to the Indian society since most Indian women take on domestic roles which are not accounted for (Moser, 1989). This sexual division of labour exploits women's contribution because most of the work on the domestic and community front is unpaid in nature (Hayden, 1981).

Women have had historically well-defined roles in the private realm of home and family and an ambiguous relation with the public sphere due to cultural barriers (Moser, 1989). The ambiguous relationship of women with the public realm traps them in a vicious cycle where their absence from the public sphere makes their needs not accounted for. Since their needs are not catered to and are quite different from men's, it becomes difficult for them to gain agency over the public realm. Due to the increase in the average income of Indian household, it is women who choose to continue to stay in the domestic sphere due to the gendered norms and expectations (Statista Research department, 2020). This pushback reinforces the existing gender ideals.

Particular ways of construction of space and place are related directly and indirectly to the social construction of gender relations (Massey, 1994). The conceptualisation of space depends broadly on how gender and gendering relations are defined. This paper examines gender as opposed to sex because gender examines the social relationships between men and women; a relationship in which women have been systematically subordinated (Moser, 1989; Oakley, 1972). Even though women account for almost half of the population of the world, they are still considered vulnerable and marginalised in the majority of third world countries (The global gender gap report, 2015). They have unequal access to resources, opportunities and freedom to make their own choices depending on where they belong. Gender, therefore, is a highly context-specific social construct.

Gender-aware approaches are considered appropriate in this field of research to deconstruct the complex gender relationships and study their effect on women's everyday life experiences. It explores how men and women play different roles in society, have different needs and face different expectations which we address as gendered expectations. Gendered expectations are shaped by ideological, historical, religious, ethnic, economic and cultural determinants (Moser C, 1989). These gendered expectations have often hindered women's growth, provoked varying forms of discrimination towards women who challenge their prescribed

roles and have manifested in segregated spatial realities. To tackle this systemic oppression, both in private and public realms, there needs to be an emphasis on understanding and questioning the normative roles imposed on women in our societies.

To this aim, this paper explores the necessity of redefining traditional gender roles in newly globalised cities from a feminist perspective in the context of a cultural paradigm shift. It exposes the systemic discrimination women face in the public spaces and addresses the necessity of studying the rights of women through the lens of participation and legitimacy in a society plagued with asymmetric power relations. It talks briefly about the shortcomings of the western universalist ideals of citizenship rights and examines different paradigm shifts in history caused by women who demanded empowerment, equity and economic emancipation. By studying accounts of grass-roots movements and community-led movements that yielded positive reinforcements and safer platforms for women, it talks about the importance of formalising women's involvement and addressing their needs at a policy level. Since space itself is political in nature depending on who is and is not inhabiting it, the paper argues that urban planning should be gender-aware and participatory (Markus, 2002). It then concludes by reiterating the importance of women's participation in re-envisioning a just city in a quest for sustainable and equitable development.

II. Indian Perspective: Gender and Culture

This paper talks about gender inequalities and discrimination in the public realm using India to highlight the experiences of women in a developing world. The theories and the research used to gain insights into this issue are, however, not limited to the Indian experience. The emphasis on understanding the existing social contracts under the umbrella of patriarchy calls for recognition as a global challenge.

India is a patriarchal society that defined women's roles in the functioning of society from the ancient period. The position of women underwent significant deterioration and their subordination continued well into India's early modern period ("Women in India," n.d.). Traditionally, women's roles were only defined within the domestic realm of home and family while they shared an ambiguous relationship with the public sphere due to cultural barriers (Moser C, 1989). By being dictated to remain in traditional gender roles, women have had systemically limited access and appropriation of the public realm.

Over the last few decades, Indian cities, their inhabitants and the discourses around them have seen a great transformation. Due to globalisation, India witnessed migrations of vast sections of the

population from rural areas to both small and large metropolises (Johri, 2020). Besides, increased awareness and the combined efforts of government and women's organisations surrounding the importance of women's education and contribution to the economic sector has seen more women migrating as well. Cities have always promised emancipation from gender and caste-based identities, however, the realities of the journey women often encounter questions the openness and the promise of Indian cities (Roy, 2014).

Cities are spatial and organisational expressions of social relations which are based as much on power and conflict as on cooperation and consensus (Beall J, 1996, p.10). It has meant that the needs of Indian women have often been ignored while envisioning cities. They were traditionally excluded from active participation, governance and co-creation of cities. Men's roles as breadwinners, leaders and active users for the public spaces have cemented their position as the main producers of the urban realm (Hayden, 1981). As a result, what we see today are women struggling to create a niche for themselves in what is shaped to be a man's world.

III. Gender: Public realm and Discrimination

In this section, we look at how Indian cities have become hostile environments for women. Women's participation is conditional and culturally rooted in gender identities, often not having the same ownership as men.

III.a. Legitimacy

Even though in current urban societies, political and economic visibility has brought increased access to public space, it does not automatically mean that women enjoy unrestricted rights to the public spaces in a city (Phadke S, 2007, p.186). For many young men and women, cities offer anonymity, space and freedom to escape the burdens and expectations of families and communities and provide ways to look for alternate self-interests (Johri, 2020). However, cities are often not as open and inclusive for women as they are for men. The notion that women are illegal users only pushes the exacerbating realities of non-inclusive urban spaces.

In an attempt to manufacture legitimacy, women are seen travelling in the city for specific purposes at certain times while being accompanied by kids or men. It presents a contrast to the image of a single man or groups of men sitting by themselves in a park or hanging out by the bus stop (Vishwanath, 2008). This gendered behaviour makes the experiences of women rather different from that of men in public spaces. This self-fulfilling process exaggerates the gendered differences and ignores the realities of many working-class and middle-class women. For these women, their everyday life entails navigating through different kinds of public

spaces through the day, including roads, buses, parks and other spaces like the school, the workplace and the hospital (Hill, 1996).

III.b. Safety

Another crucial deterrent of women's usage of public spaces is the increasing incidences of hostility (GGII, Human development report, 2017). Indian cities have become increasingly hostile to women. Studies have shown that India is consistently in the five worst and most dangerous nations for women in the last five years (Thomas Reuters, 2019). Eighty-three per cent of women have faced some form of harassment on Indian streets (Bharucha & Khatri, 2018). The ordinary and continuous nature of violence against women makes it defining (Vishwanath, 2007). When we talk about violence, while acknowledging the more gruesome and horrific incidents, it is the everyday occurrences in more subtle forms that make it so prominent. This type of continuous violence in daily lives restrict, control and structure women's movements and experiences. If women have to instinctively fear for their safety every time they step out of their houses, it proves that their most basic of rights, their freedom of movement as enshrined in the constitution is not being met. Fear has been expressed frequently as a common element of their lives in public life.

Feminist perspectives on the patterns of inequality in both space and culture, acknowledge fear to be a more important concept in the theory of social control than violence itself (Valentine, 1989). For the women who still venture outside, eve-teasing, molestation, harassment and in extreme cases, abduction and rape have become unfortunate possibilities that they have come to expect in public spaces. Consequently, the home symbolises safety for women and the urban spaces outside the home threaten their well-being. This normalisation of violence outdoors becomes a major disservice to women and men alike. This normalisation forces us to examine violence within the frame of rights and its violations rather than a mere safety issue (Kannabiran, 2005). These issues need to be addressed in urban planning because "spaces that cause fear, restrict movements and thus regulate the community's use of space. Lack of movement and comfort is a form of social exclusion" (UNHabitat Women in Cities International, SIDA, Huairou Commission, and CISCSA, 2008).

III.c. Accessibility

All built spaces structure social relationships. They do so by categorising people into inhabitants, visitors, refugees and strangers and separating sections with power and those who lack power. Space itself can be bifurcated into 'inside' and 'outside' (Markus, 2007). Depending on who is and is not allowed to inhabit it, space becomes political. If this character of space is approached from the lens of gender, it then becomes evident that the asymmetric

power relations between men and women have led to male-centric versions of how cities should be or should function. It has been widely established that conventional city making discipline and its urban governance do not recognise women as producers or active shapers of the urban realm, even though women are the most prominent users of urban spaces and public facilities (Cities Alliance, 2016). This has led to the design or the production of cities centred around men. Therefore, cities fail to deliver equal opportunities and emancipation for all genders. Urban structures have been developed without meaningful participation, acknowledgement or interpretation of women (Cities Alliance, 2016).

Women do not have the institutional means to have a key voice in defining urban spaces. The patriarchal systems of dominance dictate which participants' voices would be the loudest and don't allow for the explicit recognition and representation of the marginalised communities (Fenster, 2005; Young, 1998). Even in a democracy, the prominent voices tend to reproduce existing group oppression and social powers have made men dominate and become more powerful than women creating what is called the "paradox of democracy" (Young, 1998).

IV. Gender and Need for Planning Framework

Looking at gendered realities, it is apparent that men and women are currently being benefited from the urban realm significantly differently. These benefits are shaped by the prevailing constructions of gender. The pre-existing notions of gender and its institutional expressions have constrained women's freedom and liberty to access social, economic and political resources in a city. These vulnerabilities and the reasons for this discrimination are multi-layered. Indian cities have come to be acknowledged through a dual-lens: oppressive alienating elements coexisting with liberating humanising ones (Markus, 2007). In the era of insurgence, piecemeal short time solutions are offered to tackle pressing issues like safety and accessibility instead of recognising the need for serious restructuring of cities to transform them for better inclusion. This shows that there is an immediate need to transform the planning institute from inside while continually holding them accountable from outside (Beall, 1996).

The necessity to look at women's issues as human rights issues that relate to democracy and participation is not recognised at the higher levels of decision making (Beall,1996). People without the lived experiences of seclusion like the marginalised communities aren't capable of understanding the nuances involved in creating an umbrella of inclusion. The rigid top-down planning initiatives that are implemented go unchallenged or unscrutinised from the lens of gender. Intelligent choices about urban governance or public policy are currently only aided by political and economic interests rather than social, humanitarian and cultural realities (Da-

vidoff, 1965).

Therefore, it is important to understand the institutionalisation of these biases through planning frameworks. In this next section, we look at the disparity between women's roles and a failure of recognition of their contribution and multiple roles when it comes to planning. We focus on redefining the contracts of participation from the lens of marginalisation in a patriarchal society. We also take a look at what constitutes citizenship and how the notion has not included cultural biases which have been historically responsible for dictating rights to particular sections of society.

V: Gendered Roles: Rights and Protection

The United Nations decade for women (1976-1985) is responsible for highlighting the complex nature of women's roles in society. This movement brought forth the discussion surrounding women's contribution to the economic and social development of Third World countries (Moser, 1989). The Women in Development (WID) approach adopted by the United States Agency for International Development (USAID) focused on shifting the field of research around women from their familial roles to promote the rationale that women should be considered an untapped resource that can provide a sustainable economic contribution to these nations. They focused on developing a wide range of income-generating projects for women in third world countries (Boserup, 1970; Tinker, 1982; Maguire, 1984).

This phenomenon had parallelly aligned with the women's movement of India from the 1970s including social, entrepreneurial and empowerment projects that have been developed which focused on alleviating women's grievances. However, with women's movement, the desire for rights of freedom has always been overshadowed by their struggle against violence. This movement from the 1970s focused on raising awareness and reforming the law on the myriad issues of overt violence against women like rape, dowry deaths, sexual harassment, domestic violence and sati (Phakde, 2009). It challenged the systemic violence plaguing women and demanded their safety and emancipation. However, there was a failure to recognise that the quest for rights like freedom and pleasure are deeply connected with the struggle against violence.

These provisions need to be viewed through the lens of citizenship and participation rather than solely looking at protection from violence. Ensuring safety doesn't automatically guarantee unconditional access. There are broader concerns surrounding women's traditional roles in the society, their involvement in shaping the public realm through production rather than usage and also their right to belong stemming from a position of entitlement rather than empowerment.

One of the most significant contributions acknowledging gender roles in the field of planning in third world countries comes from the Moser framework. The framework identifies gender role categorisations, gender needs assessments and exposes the disproportionate control and distribution of resources (Moser, 1989). The framework identifies that women in third world countries have triple roles. Firstly, the reproductive role where women act as caregivers with childbearing and rearing responsibilities. They are also required to maintain the functioning of the house in instances of limited resource availability. Secondly, the productive role where women are the secondary and primary income earners. Research has shown that there is an increase in the number of women-headed families, especially in low economic sections (Buvinic, 1986).

Most of these women, due to lack of skill and education take up work in informal sectors, located at the neighbourhood level or even at a home level. Finally, the community managerial role where self-organised groups of women volunteer to maintain the infrastructure and resource management in their communities. Moser (1989) points out that the lack of acknowledgement of these complex roles served by women ends up with severe limitations when planning needs concerning women would have to be addressed (p.1801).

Even though it provided an incredible operational framework for planning for women, the Moser framework doesn't account for women's need to transform into roles of co-creators of cities. It fails to recognise the need for them to transition into roles of legitimate citizens where they become active producers of the city. However, the criticism is not to say that the framework isn't accurate, rather the idea that acknowledging these traditional roles would somehow provide emancipation and successful inclusion into the planning discipline is far-fetched.

The Triple role theory only recognised women from their position as a domestic figure trying to contribute to the betterment of their home lives. Their interactions with the city or public realm would be to serve their family lives. Therefore, we need to study their participation within the public realm at a greater depth to understand what their partnership and contribution mean to urban development. Historically, men and women have always used and experienced cities in different ways, and not always in ways anticipated by planners (Beall, 1996). One useful consideration in addressing this is to examine the difference between participation as entitlement and participation as empowerment (Borner s et al, 1945). Moser's triple role theory looks at women participating in the urban life for their social-economic emancipation and to better their lives rather than acknowledging that they would also benefit from taking on the new roles as workers, active bystanders, clients and pleasure seekers of the city (Beall, 1996).

VI: Gender: Citizenship and Human Rights

As Jo Beall (1996) says, participation as entitlement refers to how citizens, both men and women access resources, opportunities and infrastructure for their well-being and also to serve their households and communities. These align directly with women having historically created niches for themselves; a private safe space even while in public spaces just to access basic services (Levy C, 1992). On the other hand, participation as empowerment is a collaborative process where citizens can organise themselves aiming for change. It gives the citizens leverage to negotiate and articulate their interests which contribute towards transforming the urban fabric. Women have been historically alienated in these processes of organisational and operational disciplines at higher levels of governance and forced to take on these roles at a smaller and more informal scales (Young, 1998).

One of the most prominent voices in the discourses of new forms of citizenship and participation is Lefebvre's Right to the city. His ideology was radical in its rethinking where he doesn't define belonging to a city within a political framework like belonging to a political community, rather he formulates this based on the status of inhabitance (Lefebvre, 1991). He advocates that citizens who inhabit the city should automatically possess the right to the city. And he further classifies these rights into two important concepts - the right to appropriate and the right to participate (Purcell, 2003). As Purcell further explains, these rights are earned through fulfilling social contracts. Each person contributes to the city by meeting their obligations and responsibilities by taking an active part in urban spaces (Fenster, 2001). The disparity in the urban rituals between women and men show that women have been denied these rights repeatedly.

Framing women's issues of belonging through universal ideals like the 'Right to the city' sometimes become too simplistic and don't account for the patriarchal power dynamics in societies like India (Fenster, 2005). These power relations are multi-faceted as explained before. For instance, the right to appropriate emphasises on the unconditional use of urban space, where citizens have the right to live, play, work in, represent and characterise open spaces in particular cities (Purcell, 2003). However, the need to prove legitimacy and the inherent notion that women are only allowed in particular areas during particular times question this full and unconditional use.

Secondly, as discussed before, historically, women were hardly ever involved in playing the central roles of decision-making surrounding the production of urban space. The right to participation entails the inhabitants' involvement in institutional control over urban life. It includes the right to have agency and

control to take important decisions regarding the production and the functioning of urban spaces at all relevant scales: the neighbourhood, the local, the state, the national and the global governance (Purcell, 2003). This right allows for every urban dweller to have a voice in raising key opinions. In a patriarchal society, there is a paradox where social powers make some people more powerful than the others even in a democracy (Young, 1998). Women's contribution to political life management and operation of the city is very little and their involvement is usually witnessed and acknowledged only at a grassroots level.

VII: Gender: Participation at Grassroots

Increasingly, it becomes necessary for planners and policymakers to not be the main instruments of the transformation of cities especially while considering women's lived experiences (Beall, 1996). More often than not, women are excluded from the thought processes, conception and formulation stages of new projects. While evaluating the social footprint of these projects, gender impact assessment studies are usually never addressed. Even when the necessity of their participation is acknowledged, an ask-response model and a generalised data mining set up from various digital media platforms are utilised. It usually results in a vastly limited and unfocused input that doesn't add towards the more formal decision making processes where significant decisions are made (Cities Alliance, 2016). In the third world countries that suffer from limited resource availability like the distribution of public services and infrastructure, these disparities in outcomes affect women's safety, health, access and economic status more acutely. It hinders their growth towards achieving equal opportunities.

As Moser writes in her gender planning framework, in most of the low-income households and communities, women have often organised themselves to get involved in community managing work. These additional tasks, which are undertaken at a local scale in both urban and rural context, puts added stress on women to ensure the survival of their households (Moser, 1994). While women's role of community managing is often a response to the lack of consideration on the political front, men usually assume the community leadership roles that come within the framework of formal national politics (Moser, 1989). Men are in charge of decision making and formulating planning strategies which often ignore the plight of women's lives and women's inputs (Beall, 1996).

When re-envisioning women's roles in planning, community activism becomes an important avenue towards participation at a city level, planning and policy-making processes (Beall, 1996). Even though the right to participate and make decisions hasn't been unconditionally delivered to women, there are successful instances where women have created these platforms for themselves to bring about social, economic and political change.

One way they are able to do this is through forming women's organisations like Durga which mainly focuses on safety and gender sensitisation awareness in urban areas. They train local women to conduct safety audits in their neighbourhoods, parks and police stations to evaluate the accessibility and highlight the points of concern. They then submit these detailed reports to the planning communities and the government bodies helping them with the lack of data and resources so necessary interventions can be made (Durga, 2019). They are also responsible for creating safety alarms in public transport for women to call for help when in need (Monika, personal communication, November 11, 2020).

SPARC is another such grassroots organisation in Mumbai, India which works closely with women to boost their political awareness. They collaborate with other specialist organisations like mobile crashes to provide childcare facilities for women workers in construction sites (SPARC, 1986).

BPAC is an organisation that trains women from smaller communities to gain political entry and become ward members. They also provide workshops that aim at capacity building, develop an action plan to create awareness among citizens regarding their civil rights, especially women's rights. They also conduct gender sensitisation workshops for bus drivers, conductors, urban dwellers, hawkers and local shop owners to create active bystanders who can voice their support for women in public spaces when in need (BPAC, 2020).

Thus, the importance of women's grassroots organisations can't be overstated and their efforts are often considered valuable and important for the government and other external agencies. These are independent movements that work towards similar goals of alleviating women's troubles. However, these movements will only remain highly localised if not integrated into policy from the formulation stages. They should not only be involved at the levels of grassroots implementation phases but also be represented in the formulation stages that aim at bringing awareness, self-development and advocacy to women's positions in urban planning disciplines. Women should be in a position where they can negotiate their rights and hold politicians and planners accountable.

One such example is Sweden's campaign for better political responsiveness for women's issues. Large sections of women came together within the political sphere to hold political parties accountable for placing women's issues higher on their agenda (OECD, 1995). This challenge gained intense media coverage and women succeeded in creating a platform to voice their opinions.

The danger of not addressing the complex roles of women and formalising them is two-fold. One, there is an inherent danger of women just confining themselves into the self-help organisations.

It can often lead to a confrontation between the protest groups and the establishment and more often than not, institutes would be allowed to abdicate the responsibility for facilitating basic urban needs (Beall, 1996).

This leaves women in vulnerable positions where they are forced to manage their community without the support of political and professional representations. Second, since the women make up the rank and fill voluntary unpaid positions of community work, women's community roles are not identified and acknowledged as an economic variable. Since these roles are seen just as an extension of their more natural domestic roles, they're often ignored by planners and are hence not valued. It leads to dire consequences for women with their contribution becoming invisible and their needs not addressed in operational frameworks and planning systems.

VIII: Conclusion: Gender and Agency

The paper exposes how deep-rooted cultural definitions of gender roles inhibit women's journey towards economic emancipation and freedom in the public realm of India. The complex notions of gender relations in this patriarchal society have resulted in deeply segregated spatial realities. The analysis shows that women have to intrinsically fear every time they step out, prove their legitimacy to belong outdoors and struggle to access platforms for opportunities, agency and more formal disciplines of planning. By studying the Moser gender framework, it identifies how the roles prescribed by Moser don't create opportunities for them to fully transition into the role of a citizen with rights to the city. It also engages with the Lefebvrian notion of the right to the city and examines from a feminist perspective.

To ensure the rights of entitlement and empowerment, society shouldn't function to serve the interests of only one group. Many of the issues that women face today in the public realm can be linked back to their gendered rights and expectations that are rooted in culture and history. Men and women enjoy the city differently and also have different accesses to the decision-making processes (Fenster, 2005). To bring more women into the public realm, structural changes in how we understand gender norms need to take precedent. We have to redefine women's roles in societies from purely domestic to the role of a citizen who has the legitimacy to participate, appropriate and co-create cities. This ensures that there is a transformation in place to change the status of marginalisation of women when it comes to public decisions.

The implications of planning decisions are poorly understood and fail to account for an assessment framework by which values can be measured, ranked and translated into future designs (Davidoff, 2007). Lack of women at higher levels of policy-making would continue to reflect in the absence of value-based gender-inclu-

sive strategies no matter how inspiring community-led movements are. If the knowledge and incentive gaps are not bridged, no real change or radical solutions can be expected. If women are not given agency to voice their opinions regarding the shaping of the urban realm, the ambiguous relationship would continue to reinforce the existing stereotypical gender roles. The essay concludes by identifying important changes brought on by the grassroots movements and advocates for a need to formalise these voices within policymaking to influence important decisions that affect women's lives.

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Around 200 women of all age groups took the survey of all age groups and these are the questions posed. The limitation of this survey is that it couldn't reach all economic classes due to technological constraints.

What gender role do you prescribe?:
Age:
Profession:
How long have you approximately lived in the city?:

ACTIVITIES IN THE CITY

1. What is your main purpose of going into the city/ stepping out of the house?
   a. Education
   b. Employment
   c. Recreation
   d. Errands for home/ family
   e. Health
2. How often do you step out in a week for the following purposes:
   a. Self Care(jogging/)
   b. Activities with kids
   c. Activity with friends
   d. Activity with family
   e. Activity with pets
   f. Family Maintenance (Grocery shopping/ hospitals/ schools)
   g. Education / Employment
3. Does your city offer places for recreation with your family?
4. What kinds of spaces do you visit other than education/employment centres?
   a. Parks
   b. Cafes/ restaurants/ bars
   c. Religious places
   d. Entertainment (Theatres/ Libraries)
   e. Markets
   f. Public services (Hospitals/ Banks)
   g. Other
5. Rate these spaces in terms of?
   a. Distance
   b. Ease of access (physical, opening hours,
   c. Infrastructure
   d. Supporting Amenities (Toilets)
   e. Cleanliness
   f. Kid-friendly
6. Do you visit these places frequently?
7. Other than work relating to family, do you like spending time outdoors?
8. Are you able to go out as much as you would like?

9. What prevents you from going out as much as you like? Select all that count
   a. Too far
   b. Bad connectivity
   c. Cultural issue
   d. Too expensive
   e. Not engaging
   f. Not safe
   g. No time
   h. Not interested

NAVIGATING THROUGH CITY

10. Do you prefer walking in your city?
    a. Yes
    b. No
    c. Already do
    d. Not much
11. If yes, rate the experience
12. If no or not much, why?
    a. Too far
    b. Lack of Infrastructure
       i. No Sidewalks
       ii. No Shaded pathways
       iii. No Pedestrian-friendly areas
    c. Cultural issues (ex)
    d. Fear of harassment
    e. Not interested
13. Rate your city on how safe it is to walk-
    a. Traffic lights
    b. Footpaths
    c. Crossing the main roads
    d. Hailing a cab
    e. Getting to public transport
14. Rate the public transport in your city
    a. Ease of access
    b. Economic
    c. Safety
    d. Frequency
15. Rate the last mile connection between the public transport to your home?
16. What is your main mode of transportation? And how often?
    a. Walk
    b. Cycle
    c. Scooty/Bike
    d. Private car
    e. Metro / local train
    f. Bus
    g. Taxi / Auto-rickshaw

17. How vulnerable do you feel using the following modes of transport?
    a. Walk
    b. Cycle
    c. Scooty/Bike
    d. Private car
    e. Taxi / Auto-rickshaw
    f. Bus
    g. Metro/ local train
18. How safe or comfortable do you feel at the waiting areas of -
    a. Auto-rickshaw stands
    b. Metro stations
    c. Bus stops
19. How safe or comfortable do you feel moving around the city?:
    a. Alone
    b. With female friends
    c. With male friends
    d. With children
    e. With the elderly
    f. With other family members
20. What safety measures do you take while moving around the city?
21. Rate your city on how easy it is to navigate based on the presence of -
    a. Maps
    b. Street directions
    c. Street signs
    d. Street lights
    e. Parking spaces

SAFETY

22. Do you think there are places in the city that are unsafe for women?
23. If yes, what makes them unsafe?
    a. Men
    b. Crime rates
    c. Lack of street lights
    d. Deserted streets
    e. Lack of surveillance
    f. Bad Infrastructure
24. How often have you faced any kind of harassment on the streets?
25. Where has this occurred?
    a. Public transport
    b. Walk
    c. Others (please specify)
26. What is the latest time you stay outdoors?
    a. 17:00 - 19:00
    b. 19:00 - 21:00
    c. 21:00 - 23:00
    d. 23:00 - Past midnight

27. What are the reasons for not staying outside longer?
    a. Not allowed
    b. I have a curfew
    c. The neighbourhoods scare me after dark
    d. I am busy
    e. No activities to go to
    f. Not interested
28. Do you change your behaviour when you are outdoors?
29. Do you face cultural expectations based on your gender when in public areas?
30. If yes, can you briefly explain some of these?

AWARENESS

31. Are you aware of the safety initiatives for women in your city/ neighbourhood?
32. If yes, can you name a few?
33. Are there any forums to report issues of safety and access?
34. How safe or comfortable do you feel approaching these forums?

NEIGHBOURHOOD MANAGEMENT

35. What kind of community do you live in?
    a. Gated community, row houses
    b. Independent houses
    c. Apartments
    d. Hostels / Paying guest services
36. Are you aware of who handles the responsibility to maintain your community or neighbourhood?
37. If yes, who is it?
    a. Neighbourhood committee
    b. Municipality
    c. Local government
38. What percentage of women are usually in these organisation committees?
    a. 10 -25 per cent
    b. 25 - 50 per cent
    c. 50 - 75 per cent
    d. 75 - 100 per cent
39. Do you think your neighbourhood is friendly to women?
40. Who can you approach for solving issues?

DESCRIPTIVE QUESTIONS

41. Could you describe your worst experience in a public space?
42. What would your ideal day out look like?
43. List three things that you really like about your city?

Appendix II: Safecity Project

1. Delhi   3. Mumbai   5. Bengaluru   7. Ahmedabad
2. Kolkata   4. Chennai   6. Hyderabad   8. Lucknow

Fig i: Map showing the cities in the first phase of Safecity projects

#1 *Surveillance equipments*

#2 *Network connectivity*

#3 *Datacenter (servers, storage, applications)*

#4 *Command viewing centers*

#5 *Collaborative monitoring*

#6 *Change management and capacity building*

Building urban safety through urban vulnerabilities reduction

Building urban safety through urban planning, management and governance

Improving the governance of safety

Pillars of safer cities

PROTECTIONIST AND JUDICIAL APPROACH

The major components of the Safe City project include :

1. Setting up an Integrated Smart Control Room;
2. Setting up Pink Out-posts (exclusively administered by Women police) for facilitating ease of filing complaint by women;
3. Pink Patrols of Women police;
4. Setting up Women Help Desks in all Police Stations with Counsellors;
5. Augmentation of existing Asha Jyoti Kendra;
6. Implementing Safety measures in buses, including Cameras;
7. Improving Street Lighting in identified Hot Spot areas;
8. Setting up Pink Toilets;
9. Integration of Women power-help line with single Emergency number

STAKEHOLDERS

FUNDING - The project would be implemented as a Centrally Sponsored Scheme with Centre and State sharing the funding in 60:40 ratio.

LOGISTIC AND TECHNOLOGICAL STAKEHOLDERS-
Regulatory authorities I Technology providers
Network or telecom service providers
Original equipment manufacturers (OEM)
Channels I Operation and maintenance players

USERS - Government bodies, industries, commercial and residential entities

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Appendix III: Amenities

Highest Rating Wards
Lowest Rating Wards

Fig ii: Map showing the wards with highest and lowest ratings of parks and playgrounds

Above 6
3- 6
0 - 3
No data available

Fig iii: Map showing the wards ratings with respect to public toilets

PLAY GROUND

Ward	19	169	21	75	80
Score	8	8	7	7	7

Ward	5	9	12	16	18
Score	0	0	0	0	0

PARKS

Ward	43	78	107	110	160
Score	10	10	10	10	10

Ward	3	14	32	38	41
Score	1	1	1	1	1

Thank you