



**Politecnico
di Torino**

Master of Science

Territorial, Urban, Environmental and Landscape Planning

Curriculum | Planning for a Global Urban Agenda (PGUA) | LM-48

Inter-university Department of Regional & Urban Studies and Planning (DIST)

2022-2024

**Assessment of Tokenism in Feminist Approach in
Indian Transportation and Mobility Planning Systems**

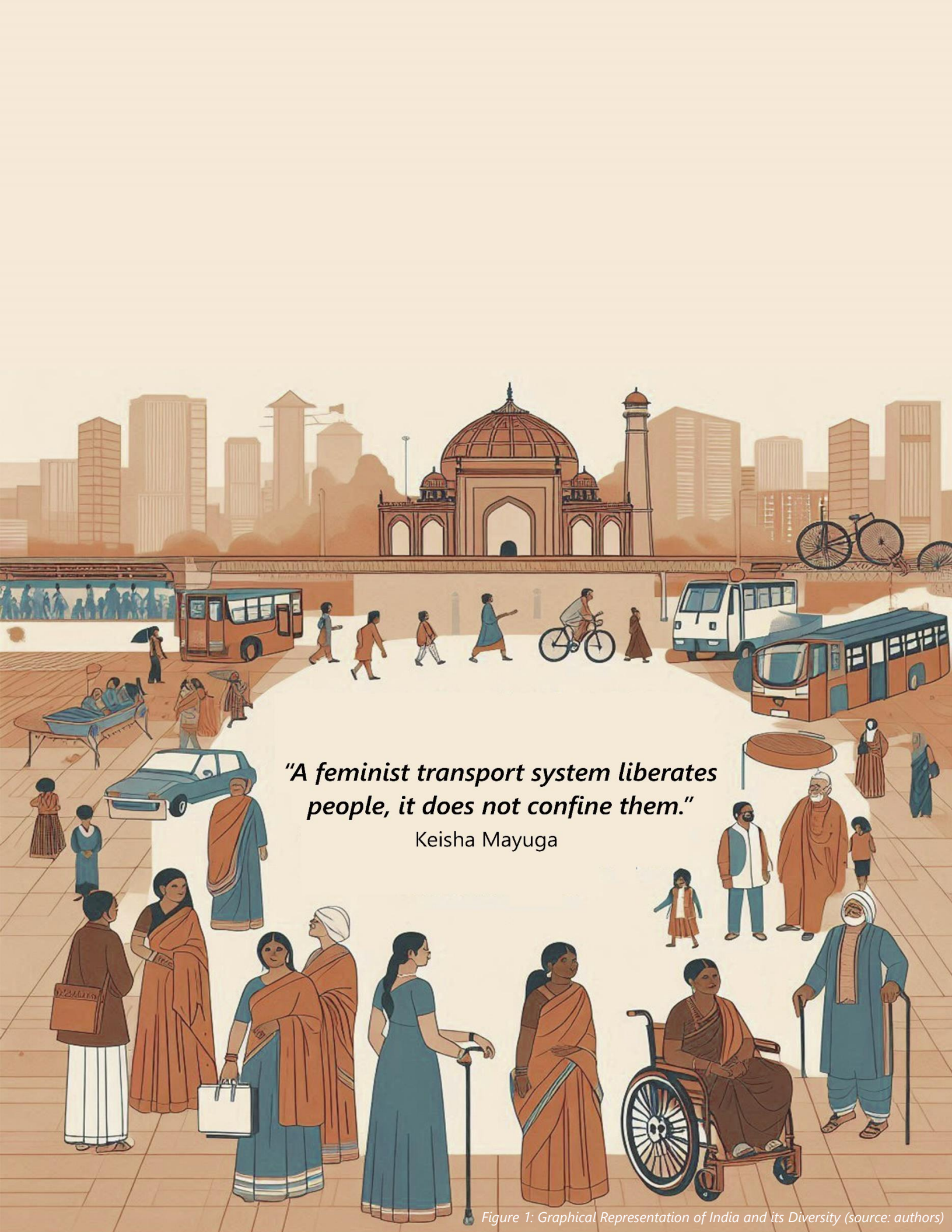
Addressing the Inclusivity and Intersectionality Needed.

Authors

Nishu Satish Jindal & Rishabh Srivastava

Supervisor

Camilo Vladimir de Lima Amaral



"A feminist transport system liberates people, it does not confine them."

Keisha Mayuga

Figure 1: Graphical Representation of India and its Diversity (source: authors)

Assessment of Tokenism in Feminist Approach in Indian Transportation and Mobility Planning Systems

Addressing the Inclusivity and Intersectionality Needed.



Figure 2: Keywords Cloud (source: authors)

Abstract

If the cities are the growing engines of the economy, transportation and mobility set the pace. Current transportation and mobility systems in India often neglects feminist perspectives. Feminism is a movement integral to the progress of society in terms of intersectionality and inclusivity, despite its occasional denials from some quarters. Feminist approach in urban development is often questioned due to the frequent misunderstanding of feminism essence. Scholars such as Susan Hanson and Karen Lucas have argued that inclusivity and intersectionality in planning can significantly improve urban mobility systems (Hanson, 2010; Lucas, 2012). This represents the core of the feminist approach elaborated in this research. However, the tokenism in the feminist approach in the context of Indian transportation and mobility planning needs to be addressed. It is imperative to discuss this to shape transport in India which includes everyone. Considering the crucial role of transportation system in urban planning, and its impacts on socio- economic complexities, Henri Lefebvre's concept of the "Right to the City" highlights the role of socio-economic inclusivity in urban spaces (Lefebvre, 1968). David Harvey extends this idea by emphasis of design and governance of urban spaces, which must consider diverse socio dynamics (Harvey,2008). To support a feminist approach, the research first explores the concepts of intersectionality and inclusivity within the feminist approach with the six key parameters of right to mobility (Sheller & Urry, 2006), equity, safety, affordability, accessibility and the mobility of care (Uteng, 2012). The research examines tokenism in the current transportation and mobility systems of India at two levels, with a special attention to the gaps between feminist approaches and tokenism present under the guise of feminist approach. Firstly, assessment of policies and initiatives at the national level across various states in India will be done, with a critical analysis of their effectiveness of meeting the diverse needs of the population. Secondly, the case of Delhi evaluates the tokenism in the implementation and impact of policies and initiatives specially targeted to women. Further the research briefs about the case of Vienna, Austria known as a feminist city as a reference to best practices. The research concludes with the suggestion of a six-step mechanism at the governance and policy level with respect to any region. This research contributes to both academic discourse and practical applications in transport and mobility planning, emphasizing the need for a feminist approach.

Keywords: *Feminist Approach, Tokenism, Transportation and Mobility system, Intersectionality, Inclusivity, Right to Mobility, Safety, Equity, Accessibility, Affordability, Mobility of Care*



Figure 3: Towards an Intersectional and Inclusive Mobility (source: authors)

Acknowledgement

The authors would like to express their gratitude to Politecnico di Torino, Italy and specially to the master's program of territorial, environmental, urban and landscape planning, which enabled us to work and explore in the field urban studies and planning.

The authors are grateful to Supervisor Professor Camilo Vladimir de Lima Amaral for his positive response towards this research, his constant support and guidance since the beginning of the thesis. The authors extend their sincere thanks for his availability and his willingness to always assist at any given time. He has always been approachable regarding doubts and guidance in the right direction. The authors would like to acknowledge Professor Andrea Pollio who introduced to them the concepts of urban economies and theories. And his teaching and insights on the ethical use of AI tools have been instrumental in shaping the overall research work. The authors would like to thank the specific curriculum of the subject, Global Urban geographies, which introduced the feminism movement that is applied in urban planning and studies.

The research would have been incomplete without genuine participation of the individuals who were involved in the survey and the interviews. We are in debt to all the feminists' scholars, activists and community organizations for raising awareness and providing us the literature providing the foundational base for this research. The research would not have been possible without the constant support of the authors' friends and colleagues in PoliTo. Special thanks to Mohd Yawar and Anushka Jariwala for their valuable input, comments and encouragement, all of which greatly contributed to the research. A special acknowledgement goes to dear friend, Tanvi Prithvi for her constant encouragement and positivity throughout, during the time in Torino, Italy. Heartful thanks to the individual families of the authors in India, friends and colleagues in Torino and around the world.

Lastly, but not least, both the authors, Nishu and Rishabh, thank each other for their unwavering support, knowledge and the attitude of unlearning from discussions, arguments and agreements from both sides. The past nine months of collaboration and brainstorming sessions have been an incredible learning experience.

The research represents the culmination of many individual's' efforts, support, inspiration and discourses and debates who helped the authors shape this research.

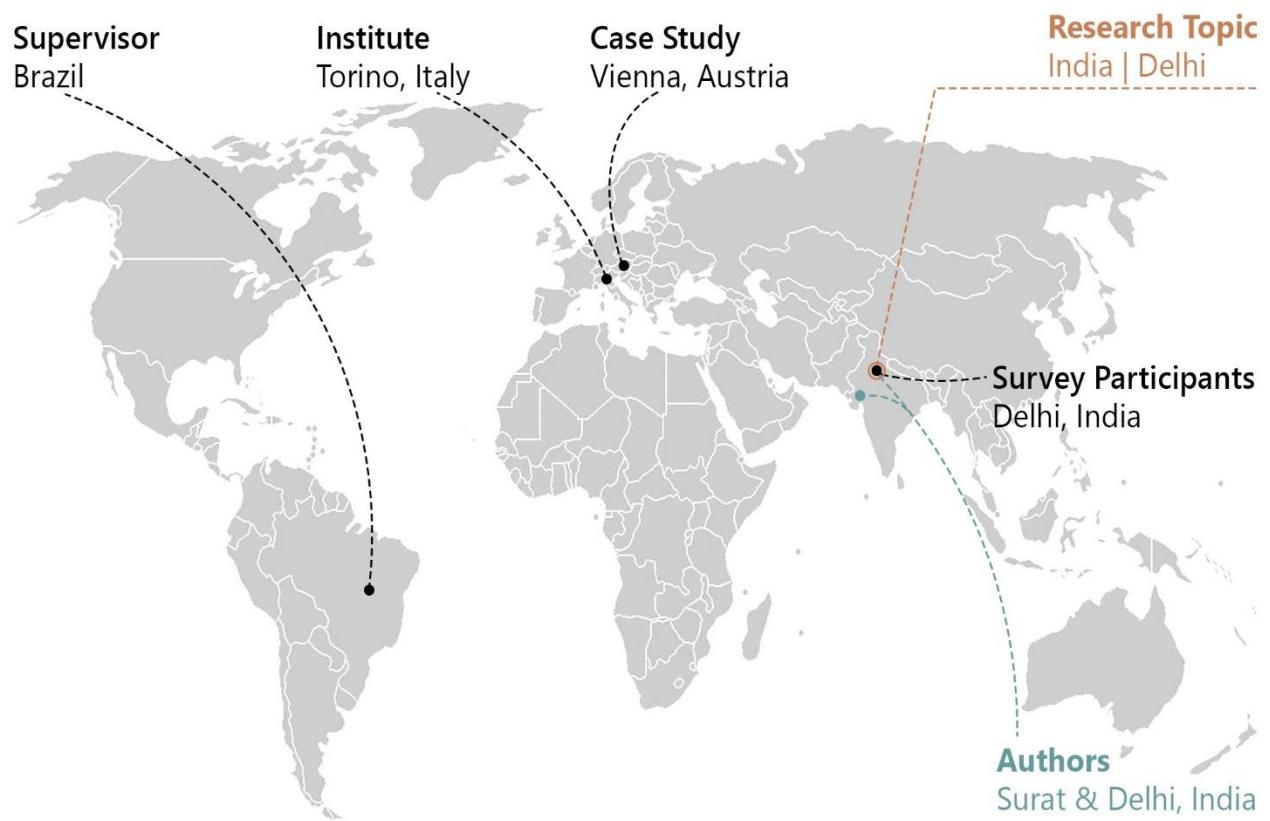


Figure 4: Map of Research Affiliations: People & Institution Involved (source: authors)

Research Affiliations

This research represents a global collaboration, bringing together insights and perspectives from diverse regions around the world. It is the result of collective brainstorming and the integration of viewpoints from both the Western world and the Global South. The study was facilitated by Politecnico di Torino, which provided a platform for researchers Nishu Satish Jindal and Rishabh Srivastava to conduct their work as part of their thesis program. The authors were guided by Professor Camilo Vladimir de Lima Amaral, who brings expertise from Brazil. In addition to the collaboration among the authors, supervisor, and Politecnico di Torino, the research was enriched by contributions from a user group of 100 participants, who provided valuable feedback, and interviewers who helped enhance the study's credibility. The perspectives from across the globe are thoroughly reflected in this research.

Rationale for the Joint Research

This master's thesis requires the combined efforts of two researchers due to the complexity and depth of the topic. The diverse backgrounds of the researchers—one from Delhi, India and the other from Surat, India, bring varied perspectives on the transportation and mobility challenges in different urban contexts. Their different gender identities further enrich the analysis, allowing for a more balanced and comprehensive exploration of the issues. By collaborating, they critically engaged with and challenged each other's viewpoints, leading to a well-rounded study that addresses the multifaceted nature of transportation and mobility planning systems in India.

Individual Contributions to the Research

Although the research was conducted based on the principle of dialogic work, certain aspects were addressed individually. Rishabh Srivastava explored the parameters of intersectionality, while Nishu Satish Jindal examined the parameters of inclusivity within the feminist approach. Survey circulation and its data collection were carried out by Rishabh Srivastava, whereas field studies and observations were conducted by Nishu Satish Jindal. Rishabh Srivastava compiled the report, while Nishu Satish Jindal contributed to the overall graphical representation.

Contents

Abstract.....	6
Acknowledgement.....	8
Research Affiliations.....	10
Rationale for the Joint Research.....	10
Individual Contributions to the Research.....	10
Abbreviations.....	17
1. Introduction.....	20
1.2 Background.....	21
1.3 Purpose of the research.....	23
1.3.1 Theoretical Exploration.....	23
1.3.2 Critical Analysis.....	24
1.3.3 Experimental & Exploratory Purpose.....	24
1.4 Problem Statement.....	25
1.5 Research Questions.....	26
1.6 Research Objectives.....	26
1.7 Hypothesis.....	27
1.8 Scope and Limitations.....	28
1.8.1 The Scope of the Research.....	28
1.8.2 The Limitations of the Research.....	29
1.9 Research Structure.....	30
2. Literature Review.....	34
2.1 What is Feminism in today's world?.....	35
2.1.1 History, Evolution, and Key Milestones of Feminism.....	35
2.1.2 Current Discourses, Debates and Misconceptions Associated.....	38
2.1.3 Intersectionality and Inclusivity in Feminism.....	41
2.2 India and its complexities: Need for a feminist approach.....	44

2.3 Feminism in India	46
2.3.1 Feminist Movements in India.....	46
2.3.2 Current Debates and Discourses on Feminism in India.....	48
2.4 Feminist Perspective in Urban Planning & India’s Approach to Feminism in Urban Planning	49
2.4.1 Feminist Urban Planning.....	49
2.4.2 India’s Approach to Feminism in Urban.....	50
2.5 Transportation and Mobility Planning in India.....	52
2.5.1 National Level	52
2.5.2 State Level	52
2.5.3 Local Level.....	53
2.5.4 Private Sector	54
2.6 Research Gap	56
3. Theoretical Framework.....	58
3.1 Feminism emphasizing Intersectionality and Inclusivity	59
3.2 Tokenism	61
3.2.1 Tokenism at a Large Scale.....	61
3.2.2 Forms of Tokenism Within a Single Target Group.....	61
3.3 Rationale to study Intersectionality and Inclusivity theory	62
3.4 Intersectionality Theory.....	63
3.4.1 Right to Mobility.....	63
3.4.2 Safety	64
3.4.2 Equity	64
3.5 Inclusivity Theory	65
3.5.1 Mobility of Care	65
3.5.2 Affordability.....	66
3.5.3 Accessibility	66
3.6 Feminist Approach to Transportation and Mobility	67

3.7 India's "Sabka Saath, Sabka Vikas" Narrative & EU policy of "Leave No One Behind"	68
4. Methodology	70
4.1 Ontological Stance	71
4.2 Epistemological Stance	72
4.3 Positionality	73
4.4 Research Design	75
4.5 Ethical Considerations	84
5. Findings and Results	86
5.1 National-Level Assessment of Tokenism in Indian Transport and Mobility Systems	87
5.1.1 Problems and Challenges on Larger scale: Specific Target Groups	88
5.1.2 Inadequacy of Intersectionality and inclusivity in Indian Transportation and Mobility Systems	94
5.1.3 Superficiality in Measures	100
5.1.4 Key Findings from the OMI Foundation's 2022 Survey	113
5.2 Assessment of Tokenism in Policies and Initiatives Targeted at Women in Delhi	116
5.2.1 Overview	116
5.2.2 User Perception Analysis	118
5.2.3 Participant's Profile	120
5.2.4 Assessment of Tokenism: Quantitative and Qualitative	121
5.3 Synthesis	133
6. The Case of Vienna, Austria	138
6.1 Involvement of Diverse Stakeholders in Decision Making	139
6.2 Assessment of Intersectionality and Inclusivity Parameter in Vienna's Transportation and Mobility Planning System	140
7. Way Forward	144
8. Conclusion	163

Bibliography	169
Appendices	180
Appendix A: Survey Questionnaire.....	180
Appendix B: Interview Request Letter	186
Appendix C: Excerpts from Interviews.....	188

List of Figures

Figure 1: Graphical Representation of India and its Diversity (source: authors)	3
Figure 2: Keywords Cloud (source: authors).....	5
Figure 3: Towards an Intersectional and Inclusive Mobility (source: authors)	7
Figure 4: Map of Research Affiliations: People & Institution Involved (source: authors) ...	9
Figure 5: Research Structure (source: authors).....	30
Figure 6: Suffragettes Advocating for Women's Right to Vote (source: Britannica).....	35
Figure 7: A gist of Feminism, by Kamla Bhasin (source: authors)	40
Figure 8: Disparities in the Indian context (source: authors).....	45
Figure 9: Excerpt from "The Just City" by Fainstein (source: authors).....	51
Figure 10: Graphical Representation of the Research Gap (source: authors).....	55
Figure 11: Feminism emphasizing on Intersectionality and Inclusivity (source: author)...	60
Figure 12: Quest for Intersectionality and Inclusivity (source: authors)	62
Figure 13: Three Parameters of Intersectionality (source: authors)	63
Figure 14: Three Parameters of Inclusivity (source: authors).....	65
Figure 15: Six Parameters of a Feminist Approach	67
Figure 16: Chart for Six Phases of Research Design (source: authors).....	75
Figure 17: Observation sites and Checklist for Delhi (source: authors).....	79
Figure 18: Profile of the 3 Informants (source: authors)	80
Figure 19: Pictorial Representation of frequent Headlines (source: authors)	89
Figure 20: Dilemma of Urban Poor (source: authors)	90
Figure 21: Illustration of Realities for Rural Populace (source: authors)	91
Figure 22: Everyday Humiliation Faced (source: authors).....	93
Figure 23: Typical Policies and Initiatives in India (source: authors).....	100
Figure 24: Visuals of Indian Transportation and Mobility (source: OMI Foundation)	112
Figure 25: Cluster Assessment (source: OMI Foundation Report 2022).....	114
Figure 26: Participant's Profile (source: authors)	120
Figure 27: Preference of Transport Mode (source: authors).....	121
Figure 28: Mode of Transport Used (source: authors).....	121
Figure 29: Awareness about Initiatives and Policies	121
Figure 30: Perception (source: authors)	121
Figure 31: Percent of Policies and Initiatives Accessed (source: authors)	121
Figure 32: Proportion of women travelling alone (source: authors).....	123
Figure 33: Harassment Index (source: authors).....	123

Figure 34: Safety factors Perception (source: authors).....	123
Figure 35: Safety perception in Mobility Chain (source: authors)	124
Figure 36: Percent of Women experiencing Harassment (source: authors)	124
Figure 37: Women affected by time of travel (source: authors).....	126
Figure 38: Career Impact due to Transportation Issues (source: authors).....	126
Figure 39: Visibility of Female Staff (source: authors).....	126
Figure 40: Perspective on Government's Efforts (source: author)	126
Figure 41: Perception on Government's Effort (source: source)	126
Figure 42: Last mile Connectivity Modes (source: authors)	128
Figure 43: Point of view for Improvement zones (source: authors).....	128
Figure 44: Women's Assessment (source: authors)	128
Figure 45: Cost Range of Daily commute (source: authors).....	130
Figure 46: Assessment of Costing by Women (source: authors)	130
Figure 47: Women's Experience with Public Buses (source: authors)	130
Figure 48: Women's Perception on Accessibility for all (source: authors).....	130
Figure 49: Women's everyday dilemmas in Delhi transportation.....	132
Figure 50: Synthesis of the Assessment of the Six Parameters (source: authors).....	133
Figure 51: The Gravity of the Situation as reflected (source: authors).....	136
Figure 52: A glimpse of the Transportation Systems in Vienna	141
Figure 53: The 6 Step Approach Proposed (source: authors)	145
Figure 54: Vision and Integration of Theory, Practice and Research (source: authors) ..	146
Figure 55: Vision including Two concepts and Six Parameters (source: authors).....	147
Figure 56: Context Analysis and Study of Existing Scenario (source: authors)	149
Figure 57: Problem Tree (source: authors).....	150
Figure 58: Objective Tree (source: authors).....	151
Figure 59: Exemplar of a Prototype (source: Shakti Foundation)	152
Figure 60: Stakeholder Engagement Process (source: authors).....	154
Figure 61: User Group Study (source: authors)	155
Figure 62: Proposal of Creating Committees (source: authors)	156
Figure 63: Handbook Proposal (source: authors).....	157
Figure 64: Example of Excerpts from a Possible Handbook-1 (source: ITDP India)	158
Figure 65: Example of Excerpts from a Possible Handbook-2 (source: ITDP India)	159
Figure 66: Implementation and Monitoring zones (source: Shakti, modified: authors)..	160
Figure 67: The vision for Intersectionality and Inclusivity (source: authors).....	161
Figure 68: Towards an Intersectional and Inclusive Mobility (source: authors).....	168

Abbreviations

AS: Atal Sarige

BMTC: Bangalore Metropolitan Transport Corporation

BRTS: Bus Rapid Transit Systems

DMRC: Delhi Metro Rail Corporation

HUDCO: Housing and Urban Development Corporation Ltd

IGLHRC: International Gay and Lesbian Human Rights Commission

IRCTC: Indian Railway Catering and Tourism Corporation Ltd.

ITDP: Institute for Transportation and Development Policy

KPI: Key Performative Indicator

LGBTQIA+: Lesbian, Gay, Bisexual, Transgender, Intersex, Queer/Questioning, Asexual +

MARD: Men Against Rape and Discrimination

MAVA: Men Against Violence and Abuse

MoHUA: Ministry of Housing and urban Affairs

MoRTH: Ministry of Road Transport and Highways

NGO: Non-Government Organizations

NHAI: National Highways Authority of India

NHRC: National Human Rights Commission

NITI: National Institute for Transforming India

NIUA: National Institute of Urban Affairs

NMT: Non-Motorized Transport

NSSO: National Sample Survey Office

NUTP: National Urban Transport Policy

OMI: Ola Mobility Institute

PMGSY: Pradhan Mantri Gram Sadak Yojna

PPP: Public-Private Partnership

PWC: Price Waterhouse Coopers India Ltd.

RLB: Rural Local Bodies

SC & ST: Scheduled Caste & Scheduled Tribe

SDGs: Sustainable Development Goals

STA: State Transport Authority

TERI: The Energy and Resource Institute

UITP: International Association of Public Transport

ULB: Urban Local Bodies



CHAPTER 01

Introduction

1. Introduction

This section defines the base for the research, by a brief background, setting the purpose of this study and problem statement. The section lays the foundation of the content of the research by identifying the research question and the objectives of this study. The readers are given a brief about the scope and limitations of the research.

1.2 Background

One of the critical components of urban planning which influences socio-economic dynamics and quality of life within a society is transportation and mobility systems. Efficient and inclusive transportation systems can significantly enhance access to opportunities, resources, and services, thereby promoting economic growth and social well-being (Geerlings, Shiftan, & Stead, 2012). India being a diverse country is characterized by layered diversification in terms of socio-economic, cultural and geographical dimensions, and there is a pressing need for an approach that acknowledges and addresses this complexity (Tiwari, 2011). The research suggests that incorporating feminist approach to transportation and mobility planning in terms of inclusivity and intersectionality can effectively address and reduce the disparities (Law, 1999).

The transportation and mobility systems in India has often superficially incorporated feminist perspectives. At times, these measures fail to address the diverse needs of various societal groups, resulting in being tokenistic in manner. Tokenism¹ refers to minimal or symbolic gestures towards performative inclusivity and intersectionality without substantial commitment to genuine change (Kanter, 1977). These gestures undermine the potentiality of truly intersectional and inclusive transportation policies and initiatives and further perpetuate existing inequalities into the system.

It is imperative to have a brief idea about the global outlook and link of transportation ethics to understand these inequities. Fundamental human rights such as the right to mobility are intrinsically linked to the proactive concept of mobility of care. And these together cannot ignore equity, safety, accessibility and affordability in transportation system. These rights emphasize the importance of enabling individuals to access essential services and care responsibilities (World Bank, 2010). The European Union's significant efforts to advance the hegemonic perspective in the transportation sector can be advantageous to India. The European Union demonstrates the importance of addressing transport inequities through policies that are intersectional and inclusive in nature and cater to the needs of everyone, leaving no one behind (European Union Agency for Fundamental Rights, 2020). This aligns with Sustainable Development Goal 11.2, that aims to "By 2030, provide access to safe, affordable, accessible and sustainable transport system for all, improving road safety, notably by expanding public transport, with the

¹ The term Tokenism will be further explained in the Chapter 04 comprising the Theoretical Framework for this research.

special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons” (UNSDSN, n.d.).

Using the feminist lens, the authors will explore the complexities and intricacies of Indian transportation and mobility planning. The specific focus of the study would be to address the tokenistic phenomena in the above-mentioned sector. The study aims to contribute to the development of transportation and mobility systems that are equitable, safe, accessible and affordable for all members of society. Through a critical analysis and examination of national and local policies and initiatives, this research will highlight the inevitable need for a feminist approach which goes beyond tokenistic measures and addresses the root causes of inequalities in transportation.

The objective of the research is to critically examine the presence and the impact of tokenism in feminist approach applied Indian transportation and mobility system at two levels. Firstly, the study will assess the policies and initiatives undertaken by various states in India for a selective group of society, highlight tokenism at the national level. And critical analysis of some of the state policies to address the tokenism within them. Secondly, the qualitative and quantitative assessment² of the policies and initiatives undertaken in Delhi would be done. The focus would be on the specific target group of females. Evaluation of tokenism within such policies and initiatives along with their execution will be showcased. This analysis will elaborate on the gaps and the needs in the current transportation planning system in Delhi, India. The results of the on-field work, surveys and the interview will further support the argument which will be determined on the six parameters of intersectionality and inclusivity explained in the research.

Additionally, a brief study of Vienna’s transportation and mobility system will be included as it is often referred to as feminist city. Finally, the research concludes with the suggestion of a six-step mechanism at the governance and policy level, relevant to the specific context of India.

² The authors conducted interviews and circulated questionnaire along with field observations. The methodology section will further elaborate the same.

1.3 Purpose of the research

The purpose of the study is considered in three dimensions that are theoretical exploration, critical analysis, and experimental/ exploratory purpose. The study will provide an analysis of the tokenism present in feminist transportation and mobility planning in India. This section will lay out the specific objectives under all three dimensions. This will outline how the aim of the research will contribute to the academic discourse and practical applications in terms of the feminist approach in the Indian transportation and planning sector.

1.3.1 Theoretical Exploration

This will focus on testing the existing theories and principles related to the feminist approach to transportation planning, providing insights into the subject matter.

- The study will test the theoretical predictions of feminist urban planning principles within the context of India's transportation and mobility system.
- The research will examine specific policies and initiatives and aim to elaborate existing theories by explaining how feminist approaches are applied or neglected in transportation and mobility systems and how tokenism exists within them.
- It will also determine the feasibility of conducting similar research and assess their practical aspects by including the availability of data, resources and stakeholder engagement.
- The study will seek to apply feminist urban planning approaches to India's context particularly within the diverse socio-economic and cultural settings.
- Through a detailed analysis, the research will support or disagree with the existing explanations and predictions about the effectiveness of feminist approach in the policies and initiatives implemented in India.
- It will help in identifying the gaps and issues that require further investigation and thus shaping the direction for future research.
- Throughout preliminary analysis and interaction with target groups via interviews and survey, the research aims to generate new ideas and hypothesis about the effectiveness of the current transportation policies in India.
- The study also aims to connect specific issues in Indian transport and mobility system with broader feminist principles and demonstrate the application and relevance of these theories.

- The research will compare different explanatory framework in the literature and identify most effective explanation for the feminist approach towards the transportation planning.

1.3.2 Critical Analysis

This involves the lens of criticism towards the existing initiatives and policies implemented and their impact on the target groups. The analysis will address tokenism based on the six parameters³ of intersectionality and inclusivity.

- The study's purpose is to generate the familiarity with basic facts, settings and concerns by explaining the current landscape of transportation and mobility planning in India. This involves identifying the feminist approaches with intersectionality and inclusivity as key focus.
- The critical analysis will generate a mental picture of the conditions by gathering the data and insights which will include challenges and opportunity to integrate the feminist approach.
- The state of the art will be critically analyzed with the detailing of policies and initiatives and their impacts on various societal groups. This will provide a detailed and accurate picture.
- It will also analyze the situation with respect to the context of India and provide information on the socio-economic contexts which influences the transportation planning in India.

1.3.3 Experimental & Exploratory Purpose

By combination of theory and critical analysis, the research aims to explore different potentialities for feminist approach in Indian transportation and mobility planning system. The study seeks to elaborate on the extent of tokenism at various levels, identify best practices and propose a six-step mechanism⁴ on region specific governance level for creating intersectional and inclusive transportation and mobility systems. The findings are expected to contribute to both academic discourse and practical policy making in transportation and mobility planning.

³ Six Parameters include Right to Mobility, Equity, Safety, Accessibility, Affordability and Mobility of care. These have been explained throughout the research.

⁴ Six Step Mechanism is elaborated in Chapter 7 of the research.

1.4 Problem Statement

Tokenism within the feminist approach in transportation and mobility systems typically refers to as minimal or symbolic implementations and impacts towards inclusivity and intersectionality. It signifies the substantial lack of commitment to genuine change. This approach which is superficial and tokenistic is further complicated by the diverse socio-economic, cultural, and geographical landscape of India. India demands an intersectional and inclusive feminist lens to transportation planning. As a result of the prevailing tokenism in the feminist approach, the Indian transportation and mobility system remain inequitable, unsafe, unaffordable, inaccessible for all segments of society.

In India, transportation planning has often integrated feminist approach in a superficial manner. This results in tokenistic measures that fail to address the fundamental and mere basic challenges faced by India's diverse populations. This issue is evident at national level and can be evidently analyzed even when efforts target specific groups, for instance, initiatives for women⁵ in Delhi, where initiatives are frequently drafted and implemented half-heartedly. This tokenism at different levels, both at the national level and in the case of specific target groups, leads to inadequacies and ineffectiveness in transportation and mobility solutions. The initiatives do not fully meet the needs of the intended stakeholders.

This research aims to critically analyze and assess the legislative and executive actions taken under the guise of a feminist approach in the current transportation and mobility systems of India. The study will evaluate the impact of initiatives and policies on diverse populations and identify the gaps which prevent the establishment of a genuinely intersectional and inclusive transportation framework in India. Through this analysis and assessment, the research seeks to address the tokenism in feminist approach and seeks to initiate a discourse for implementation of more effective strategies to create an intersectional and inclusive mobility systems in India. A system that will cater to the needs of all societal layers.

⁵ It should be noted that the authors have mentioned "women", just for the purpose of giving an instance. The research includes all the other groups, like urban poor, rural population, elderly, differently abled, children and others, to address the tokenism in feminist approach.

1.5 Research Questions

The research will revolve around primarily 3 Questions to develop a better understanding and insight of the issue of tokenism in the feminist approach in Indian Transportation and mobility systems. The questions are as follows-

Question 01

To what extent are the initiatives and policies, even when focused on a specific target group, implemented in the guise of a feminist approach, and to what degree do they fall short, resulting in tokenism?

Question 02

Are the current policies and initiatives in the Indian transportation system, purportedly conducted under a feminist approach, genuinely addressing the diverse needs of the population?

Question 03

Can a feminist approach, which emphasizes on intersectionality and inclusivity, promote the right to mobility, equity, safety, affordability, accessibility and mobility of care for all segments of society in Indian transportation and mobility systems?

1.6 Research Objectives

The objectives of the research, in coherence with the research questions, are as follows-

Enhance Knowledge and Awareness

- To raise awareness among the stakeholders, especially among the users, about inclusivity and intersectionality in transportation and mobility systems.
- To contribute to the academic and practical understanding of feminist approaches in Urban planning, particularly in the context of Indian transportation and mobility systems.

Critically Analyze current Initiatives and Policies

- To raise awareness among the stakeholders, especially among the users, about inclusivity and intersectionality in transportation and mobility systems.
- To contribute to the academic and practical understanding of feminist approaches in Urban planning, particularly in the context of Indian transportation and mobility systems.

Evaluation of Impacts of the Initiatives and Policies

- To understand the effects of the initiatives and policies on groups other than the target group of any initiative, assessing inclusivity and intersectionality in the system.
- To investigate the positive and negative impacts of feminist policies on the target group of females, in the case of Delhi Transportation system.

Identify Gaps and Shortcomings of Tokenism

- To address the shortcomings and limitations of feminist approaches, currently applied in transportation and mobility systems of India.
- To analyze how tokenistic approaches fail to address the fundamental challenges faced by diverse population of India.

Promote an Intersectional and Inclusive Feminist Approach

- To explore the potential of a feminist approach, emphasizing intersectionality and inclusivity, with 6 parameters of Right to mobility, equity, safety, affordability, accessibility and mobility of care for all.
- To ensure that such an approach includes everyone, addressing the diverse socio-economic dimensions of India

Way Forward with a 6-step Mechanism

- To propose a framework, acting as a prototype for any region of India, to integrating Intersectionality and Inclusivity in Indian Transportation and Mobility Systems.

1.7 Hypothesis

The research hypothesizes that the integration of feminist approach in transportation and mobility systems of India is predominantly tokenistic. There is a lack intersectionality and inclusivity. While existing initiatives and policies, often branded as feminist in nature, are superficial measures and fail to address the complex socio-economic diversity of the Indian populace. This tokenism in the feminist approach do not enhance intersectionality and inclusivity and additionally creates further disparities. It is posited that a feminist approach, with a lens of intersectionality and inclusivity in the Indian transportation and mobility systems will address the right to mobility, equity, safety, affordability, accessibility and mobility of care for all segments of the society. This Hypothesis will be supported by critical analysis of the current policies and initiatives, their impacts and the tokenism within them. It is expected that a way forward with 6 step approach will act as a framework to integrate Intersectionality and Inclusivity in Indian Transportation and Mobility Systems.

1.8 Scope and Limitations

The scope and limitations of the research are defined for the readers to have a brief about the extent to which the study will cover the assessment and to what extent this research can be utilized further due to the constraints.

1.8.1 The Scope of the Research

The scope of the research is divided into categories with respect to the scale of study, the literature used which considers the lens of intersectionality and inclusivity in feminist approach, policies and initiatives which reflect the tokenism for each target groups identified for this research, data collection and a way forward from now.

Geographical Focus

The study focuses on the national level Transportation and mobility systems in India, with the specific quantitative and qualitative study of initiatives and policies in Delhi. An analysis of the transportation system in Vienna, Austria is done. A way forward for Indian context is developed to act like a prototype for any region.

Theoretical Framework

The research uses the feminist perspectives which emphasize on intersectionality and inclusivity. Six parameters are considered which include Right to Mobility, Equity, Safety, Accessibility, Affordability and Mobility of Care.

Initiatives and Policies

Assessment on national level with respect to city and state policies is conducted to assess the tokenism at larger scale. Specific case of Delhi, with target group of women, is analyzed through interviews and survey results, to assess the tokenism at a smaller scale.

Data Collection

Both primary and secondary data are used including policy documents, field observations, interviews and surveys. At National level, secondary data is utilized and in the case of Delhi, primary data is used to support the assessment of tokenism in feminist approach quantitatively, along with qualitative analysis.

Way forward

Proposal of a 6-step mechanism for the integration of Intersectionality and Inclusivity in the Indian Transportation and Mobility Systems.

1.8.2 The Limitations of the Research

The research relies on already existing research for background and this research is valid as a snapshot to allow the readers to understand the current situation. Further studies are important to understand the progression with respect to the assessment over the time.

Temporal Limitations

The study covers a specific time and is not accountable for further changes in the transportation and mobility systems of India. Any change in policies or initiatives after the research are not reflected in the analysis.

Theoretical Applications

Applying feminist approach, which emphasize on intersectionality and inclusivity is complex and may have subjective interpretations, which vary from the study's content.

Limitations of Secondary Data & Primary Data

The research is limited by the accessibility and availability of the data, particularly in regions which have not completely documented the initiatives, policies and statistical data and often the data is not updated. The authors have conducted a survey with a sample size of 100 respondents, and 3 interviews along with field observations by the author, Nishu Satish Jindal, as permitted by the timeline of the research.

Stakeholder Engagement

Assessment in the case of Delhi relies on interviews and surveys. There might be potential biases of the respondents and can be subjective, hence the claim of accuracy is limited.

Case Specific Limitations

While Delhi is a representative case for many urban challenges in India, it may not cover the entire diversity and complexity of transportation and mobility systems, for instance rural areas. The socio-economic context of Delhi may limit generalization of the results.

Limitation of the Way forward

The way forward is proposed considering what can be done, although may face practical and political challenges in implementation due to India's complex governance structure. The study does not fully anticipate resistance to change or the logistical challenges in integrating intersectionality and inclusivity in the Transportation and Mobility Systems of India.

1.9 Research Structure

The research is divided into 8 chapters from defining the objectives with respect to the questions, literature review to find a gap, specific theoretical framework for this research, methodology, assessment results, a study of Vienna, Austria and a Way forward, with a concluding note for further research in this area.

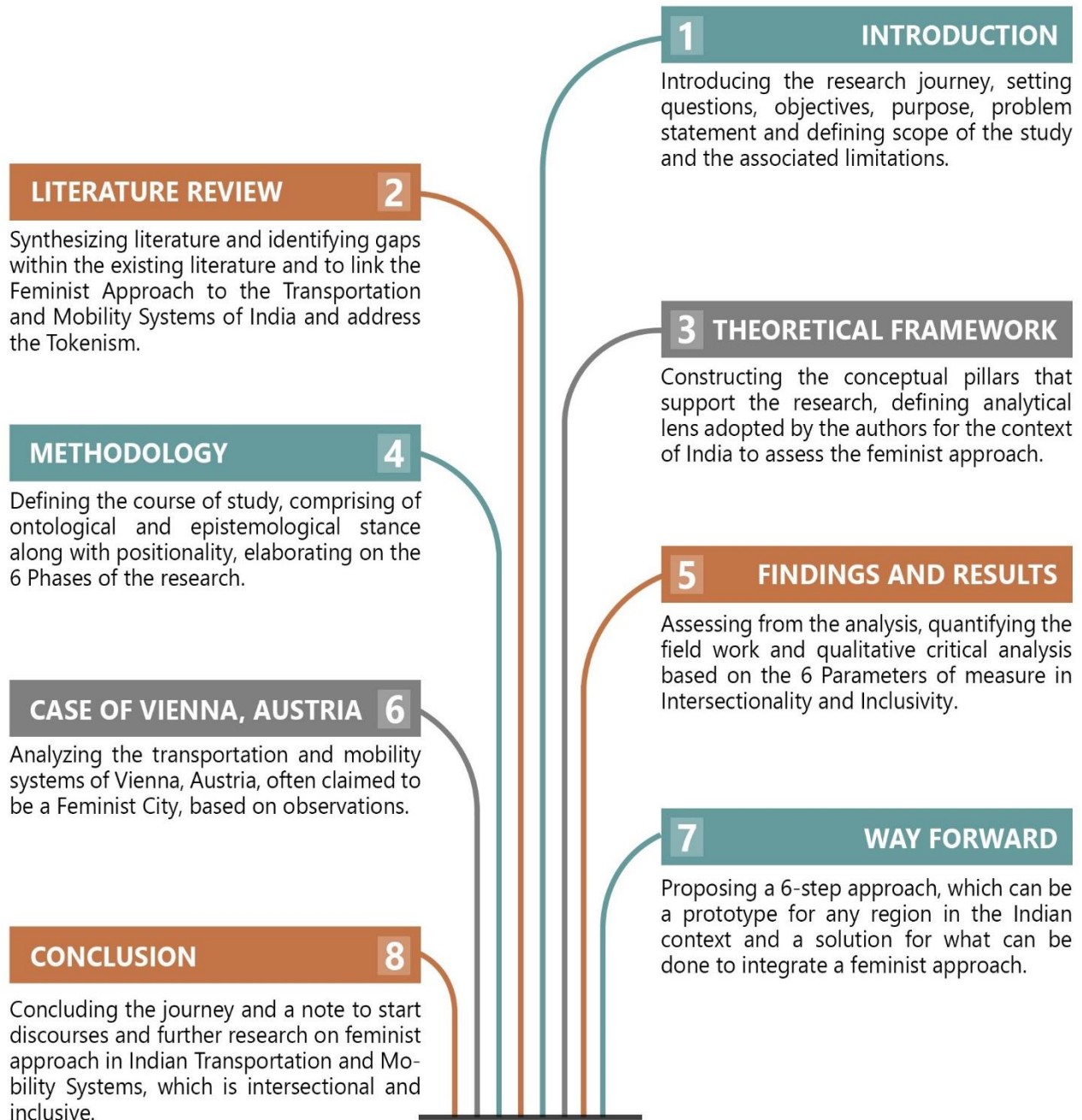


Figure 5: Research Structure (source: authors)

CHAPTER 01 | Introduction

This section as elaborated until now sets the base for the research, by defining the background, setting the purpose of this study and problem statement. The section lays the foundation of the content of the research by identifying the research question and the objectives of this study. The readers are given a brief about the scope and limitations of the research.

CHAPTER 02 | Literature Review

The objective of the literature review is to identify gaps within the existing literature and to link the feminist approach to the Indian Transportation and Mobility Systems and address the Tokenism.

After a thorough review of literature in the field of Transportation and Mobility Systems, feminist approaches and the tokenism involved, the gap in research is found. The evidence of unexplored connection among this literature is particular within the context of India.

CHAPTER 03 | Theoretical Framework

This chapter of the study will outline the theoretical foundations, and the analytical lens adopted by the authors for the context of India. The section will brief about the feminist approach which emphasizes on intersectionality and inclusivity. Six parameters of intersectionality and inclusivity will be defined in the subsection which include Right to Mobility, equity, safety, accessibility, affordability and Mobility of Care. The term Tokenism will be elaborated, which will be used throughout the research for the assessment of the Indian Transportation and Mobility Systems. A brief acknowledgement of European Union's policy of "Leaving no one Behind" with India's narrative of "Sabka Saath, Sabka Vikas" will be made.

CHAPTER 04 | Methodology

The research methodology comprises of ontological and epistemological stance along with positionality of the authors. This section will elaborate on the 6 Phases in which the research is carried out to answer the research questions and research objectives. The timeline of 9 months for the research is justified in detail in the section.

CHAPTER 05 | Findings and Results

The section is divided into two parts for the assessment of tokenism. First part focuses on the national level, with a critical analysis of the policies and initiatives in various cities and states and the second portion focuses on the case of Delhi, with qualitative and quantitative assessment of the initiatives and policies specifically for the women in Delhi. Both the levels will highlight the tokenism present at different levels in the feminist approach in Transportation and Mobility Systems of India. The analysis is based on the 6 Parameters of Intersectionality and Inclusivity as explained in the theoretical framework of the research.

CHAPTER 06 | The Case of Vienna, Austria

The transportation and mobility systems of Vienna, Austria are analyzed based on ground observations. The study of Vienna is important for the research since the city is often claimed to be a Feminist City. The research will elaborate the case of Vienna based on Intersectionality and Inclusivity as a reference point.

CHAPTER 07 | Way Forward

A Way Forward with a 6-step mechanism is proposed in this section. The approach can be a prototype for any region in the Indian context and is a solution for what can be done to integrate a feminist approach, which emphasizes on Intersectionality and Inclusivity, in the Indian Transportation and Mobility Systems.

CHAPTER 08 | Conclusion

The research concludes on a note to generate discussions, discourses and further research on the feminist approach in the Indian Transportation and Mobility Systems, which is intersectional and inclusive. The authors have addressed a gap that was until now unexplored in the Indian context and believe future studies will be done in this realm.

CHAPTER 02

Literature Review

2. Literature Review

The objective of the literature review is to interconnect and overlap the feminist approach to the transportation and mobility planning systems in India. And thereby, identify the gaps within the existing body of research.

The conceptual framework for this study starts with the concepts of feminism, an elaborate focus on history and changes that have occurred in the feminist struggle from its inception to various milestones along the way. The first part of the literature review discusses about the evolution of feminist movements, and the significant progress. Then, the study will shift to contemporary feminism and key concepts such as intersectionality and inclusivity. Next part of the research explores the socio-cultural landscape of India. This section highlights the historical development and trajectory of feminism in India. The forthcoming concerns within the feminist movements in India, the notable figures and events relevant to this context, contemporary debates, and discourses that go in defining it over the years will also be reflected upon. Further, the study investigates how, in an Indian context, these feminist perspectives can be put into practice explicitly, to impact transport and mobility planning.

Further, this discussion links transportation planning to feminist theory at the global level and particularly in India. Hereafter, an attempt has been made to evaluate the integration of the feminist agenda in transportation policies and practices in India in terms of effectiveness and inclusiveness.

After a thorough review of literature in the field of Transportation and Mobility Systems, feminist approaches and the tokenism involved, the gap in research is found. The evidence of unexplored connection among this literature is particular within the context of India.

2.1 What is Feminism in today's world?

"Are you a feminist" or " Either you are feminist or irrational". These statements often make people identify themselves and others as either staunch feminists or anti-feminists. But the question arises, are these notions correct without properly understanding the concepts and the terminologies associated with these theories? To understand it in totality, one should first study the history and evolution of the feminist movement, the feminist waves throughout, and its key milestones over the years. It becomes important to acknowledge that it is not possible to study all the literature texts available on the feminist approach. A brief mapping and creation of a cartographic overview of the relevant materials and concepts have been undertaken for an informed exploration of the topic.

2.1.1 History, Evolution, and Key Milestones of Feminism

Understanding the history of feminism necessitates having a brief gist of various waves of feminism, their evolution and the significant milestones associated with each of the waves. This can aid in linking feminism to urban practices. The development of feminist notions and activism can be traced back by analyzing the distant periods along with recognizing the accomplishment characteristic of each era. This study will explore on how the movement has adapted to the changing socio-economic and political contexts, thereby highlighting pivotal events and achievements that have shaped contemporary feminist discourse. This will make it possible to understand feminism's complexity and diversity on deeper levels, which will provide light of both its present state and its potential future directions.



Figure 6: Suffragettes Advocating for Women's Right to Vote (source: Britannica)

This section of the literature reviews aims to capture the key developments and theoretical perspectives of the feminist movements around the world. A primary focus on the major waves of feminism and their impacts will be explained in brief.

First Wave

Over the years, the history of feminism has undergone significant changes. It began in the late 19th century and continued to the early 20th century. The feminists involved campaigned about the right to vote, right to education, property rights and many more legal issues.

Few of the key milestones of the wave include the Seneca Falls Convention in 1848, which was the first women's rights convention in the United States, and the ratification of the 19th Amendment in 1920, which granted American women the right to vote (Flexner & Fitzpatrick, 1996). Key figures that played an important role in this movement were Susan B. Anthony, who famously declared, "*Failure is impossible*," and Elizabeth Cady Stanton, who asserted, "*We hold these truths to be self-evident: that all men and women are created equal*," (Flexner, 1959).

Second Wave

The issues that were raised during the entire movement included issues such as sexual harassment, gender roles, reproductive rights and workplace rights. This wave began around 1960s and continued till 1990s, with focus on broader range of social issues. The slogan which was infamously used during the campaign was "The personal is Political", which led to significant changes in the legislation such as Title IX in 1972. This legislative change prohibited discrimination based on gender in education programs. This also helped in legalizing abortion of the United States. Publication of "The Feminine Mystique" in 1963, which is authored by Betty Friedan is one of the most credited works in promoting public activism during the time. Key figures that played an important role were Friedan who stated, "*No woman gets an orgasm from shining the kitchen floor*" and Gloria Steinem, who remarked "*A woman without a man is like a fish without a bicycle*" (Friedan, 1963; Evans, 2003).

Third Wave

This wave addressed the diversity of women's experience from various socio-economic backgrounds. It began in the 1990s because of the shortcomings of the second wave. The campaign focused on inclusivity and intersectionality of women, regardless of their sex,

gender, race or any class. The wave called for a more individualistic approach to feminism and recognized the complexity of identities. The key milestone of this wave includes Anila Hill's testimony in 1991, which drew attention to sexual harassment prevalent in the workplace. Another one was the Riot Grrl movement in 1990s, where she combined the feminism issues with punk music and culture. The key figures that played a crucial role were Kimberlé Crenshaw, that introduced the concept of intersectionality⁶ and Rebecca Walker who proclaimed, "*I am the Third wave*" (Walker, 1995; Crenshaw, 1991).

Fourth Wave

The entire focus of this wave was on the issues such as body shaming, rape culture and sexual harassment through digital and social media⁷. The wave emphasized on rights of marginalized people of society and intersectionality within the feminist movement. It began in 2012 with series of campaigns like #MeToo, which was initiated by Tarana Burke in 2006 and brought attention to the prevalence of sexual violence. Another campaign called Time's up was launched in 2018 which was to address systemic inequalities and injustices in the workplace. Key roles were played by Emma Watson's call to action "*If not me, who? If not now, when?*" and Tarana Burke's statement "*You are not alone*" (Gill & Scharff, 2011; Banet-Weiser, 2018).

All the waves of feminism highlight the evolving nature of this movement and showcase how it has adapted to various changes in society. It also reflects on the role and use of technology and social media in promoting diverse experiences of the women across the globe. Thus, the brief insight into the historical contexts in the entire movements helps us with an important perspective on the current feminist discourse and its future trajectories.

⁶ Intersectionality in Feminism, by Crenshaw, will be elaborated in further subchapters.

⁷ Social media platforms like Facebook, Instagram, Twitter (now X), Threads, Reddit, Snapchat, WhatsApp, Hinge, Tinder, Bumble and others working on similar parameters.

2.1.2 Current Discourses, Debates and Misconceptions Associated

Feminism has been present since the 19th century, despite this presence, contemporary feminism has fragmented in unprecedented ways. Today, feminism is linked by different perspectives by different groups and a single definition or meaning doesn't exist. The core principles of feminism are lost in the literature, as feminism today is interpreted through digital mediums, protests and statements that often deviate from the original struggles. Moreover, feminism has also been categorized into various strands like soft feminism or hard feminism. This fragmentation has led to various misconceptions and criticisms, becoming the highlight of ongoing debates and discourses. Understanding these misconceptions is important for a detailed view of the entire movement. Some of the misconceptions are explained in this subsection.

Feminism is only about Women

One of the most common debates is that feminism is only concerned with the issues of women. Although the movement started with the aim of addressing gender inequality, today's feminism takes into consideration a broader range of social concerns. Feminism stands for the rights of everyone including marginalized groups, individuals or communities segregated because of race, caste, class, sexuality, and ability (Crenshaw, 1989). Intersectionality is a key concept in modern feminism and highlights how different forms of discrimination intersect and affect individuals differently. This broader aspect shows that feminism is about dismantling all forms of inequalities, not just related to gender (Collins & Bilge, 2020).

Feminism is irrelevant in Post-Feminist Societies

Often a perception that feminism is obsolete is prominent. There is a belief that a "post-feminist" time has come, and gender equality has been achieved as seen on a superficial level. This perception often overlooks gender disparities in various domains, such as the gender pay gap, gender-based violence at home and imbalance in decision making (Bates, 2016). Inequalities still exist, and these are not limited to just gender, hence making the continued relevance of feminist movements necessary (Flood, 2019).

Feminism ignore Men

One of the most common misconceptions is that feminism neglects the challenges faced by men. In this situation, men do not realize that Feminism challenges patriarchy not because of the oppression it creates on women, but also with respect to the issues that

men face due to patriarchy. The traditions often set parameters for women and men both and feminism stands against this. Studies show how patriarchy harms men by enforcing toxic masculinity and pressure them into specific roles, for instance, men are the providers (Kimmel, 2018). Thus, feminism, in current times, aim to dismantle this oppressive structure for the benefit of all.

Intersectionality weakens the Feminism Cohesion

Kimberlé Crenshaw (1989) introduced intersectionality to Feminism by addressing that there are various forms of oppressions which are linked. This introduction of intersectionality to feminist discourse is often criticized by scholars, in a sense, that it dilutes the focus of feminism. Intersectionality includes various aspects like class, race, sexuality, and other form of marginalization along with gender and these should be considered in understanding an individuals' experiences and in totality leads to effective policymaking (Collins & Bilge, 2020).

Feminism is Western-Centric

A misinterpretation among the scholars in global south including India is that Feminism emerged from west and is for west. It needs to be acknowledged that the current feminism does recognize global viewpoints. Global south had various attempts to reform the society for women, and other marginalized and vulnerable sects but not under the name of feminism, but the aims have been same. The theories of feminism might have developed in the west, but contemporary feminism discusses issues globally. Chandra Talpade Mohanty (2003) emphasizes that there is a need for decolonizing feminist theory and incorporating voices from the Global South to create a movement which is more inclusive.

Feminism is Homogeneous

Academically, feminism is sometimes considered as a homogeneous movement and defined as a movement having a single agenda. This simplification of the movement is detrimental since it ignores the diversity within the feminist thought. It includes various strands like liberal feminism, radical feminism, Marxist feminism, ecofeminism, and others. Each of them is important in its own way and depending on the context in which they are used to make reforms. Each strand has distinct priorities, principles and methods of reformations, but altogether contribute to a vast and layered discourse (Tong, 2013). This multiplicity and complexity need to be acknowledged to understand the adaptation of the feminist theories and practices in the right path.

Feminism is solely focused on Identity Politics

Feminism is often criticized since it has the tendency to be overly focused on political identity. This comes with the expense of a broader spectrum which needs to be addressed. However, the feminist scholars have always refrained from this and have been addressing structural inequalities, including social, economic and political dimensions. There have been implications of feminism and misinterpretation on the basis that it is based on individuality of a community, but the roots of feminism always highlight how intersecting identities influence individuals' experiences of oppression and privilege (Nash, 2008). Feminism focuses on the dependencies of a group with the others and vice versa.

All these discourses, debates and misconceptions are enough to understand that it is challenging to define feminism in a single definition. It is imperative to link feminism with the context and current landscape. This decoding will help in aligning the research to familiarize the importance of feminism and feminist approaches in urban development of cities. However, if one tries to decipher these misconceptions together, it becomes obvious that everyone needs a feminist approach which is intersectional and inclusive and which bring everyone on a common ground to accept the feminist approach. The commonalities across these diverse misconceptions, discourses and discussions form the rational and acceptable core of the feminist approach, which the next chapter focuses on has been captured beautifully by the Indian feminist activist, Kamla Bhasin⁸.

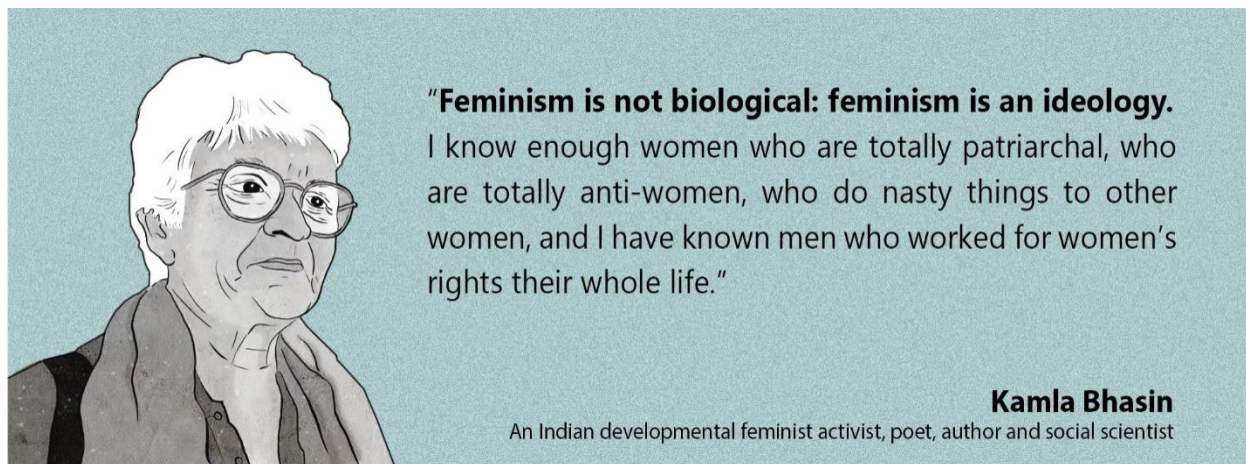


Figure 7: A gist of Feminism, by Kamla Bhasin (source: authors)

⁸ Kamla Bhasin was a prominent Indian feminist, author, and social activist known for her powerful advocacy of gender equality, women's rights, and her role in popularizing feminist discourse in South Asia through her writings and grassroots work.

2.1.3 Intersectionality and Inclusivity in Feminism

For a long time, Feminism has been associated with the struggles and hardships of the women's rights and gender equality. Yet, in the contemporary world of today, feminism extends beyond the previous gender streaming. At present times, it tries to address various forms of socio-economic and cultural inequalities. The literature review of this section talks about the current perspective on feminism that is the importance of intersectionality and inclusivity. By reviewing and analyzing the works of feminist scholars, this section highlights about the modern-day feminism, the rights of all marginalized sections of society. Thus, it tries to promote a more nuanced approach to social justice.

Over the last few decades, the concept of feminism has evolved beyond its traditional meaning and causes. Earlier, it focused on gender inequality and related issues, modern feminism at present advocates for a broader range of issues including race, class, sexuality and ability (Crenshaw, 1989). The feminist scholar at present understands the need to address all forms of oppression and not being limited to just women's issues. For instance, Hooks (2015) that feminism is a movement to end sexism, sexism exploitation, and oppression and covers a wide range of social justice issues.

One of the most significant shifts in modern day feminism is the recognition of intersectionality and inclusivity. The term 'intersectionality' was coined⁹ by Kimberlé Crenshaw (1989). It examines how various forms of discrimination and inequalities intersect and multiply which ultimately affect individuals from all walks of life. This approach has gained momentum in recent feminist discourse, which highlights the need for a more inclusive and comprehensive framework for understanding social justice (Collins & Bilge, 2020).

Intersectionality in Feminism

Mere acknowledgment of the intersecting identities cannot exist in isolation, intersectionality offers to represent all women and marginalized groups in totality. Thus, Intersectionality becomes an important part of modern feminist theory. It provides a framework to understand the individuals' diverse experiences, various forms of discrimination faced by them based on race, gender, sexuality, class, and other social categories (Crenshaw, 1989).

⁹ Crenshaw introduced Intersectionality in her paper titled "*Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics.*"

The intersectionality framework helps to understand how overlapping identities in society can have their unique experiences of oppression as well as privilege. Crenshaw's (1989) works on this subject matter was important in its examination of how gender and race intersect to affect the lives of black women. Since then, intersectionality has been applied to various contexts, including disability rights, socio-economic disparities, and LGBTQIA+. Cho, Crenshaw, and McCall (2013) argue that to address the complexities and realities of marginalized groups, the decision-makers, and policymakers must consider the concept of intersectionality.

Inclusivity in Feminism

A feminist approach that is inclusive acknowledges that marginalized groups have complex realities and tries to address these realities by addressing the complexities of each group. There is a fundamental point of feminism in which we are not to create a scale or rating that identifies who is worse off or who is better off, but rather recognize that there are a range of perspectives and voices, not just a monolithic perspective of women. According to feminist theory, inclusivity promotes the rights and wellbeing of everyone, regardless of their identities or backgrounds. According to Puar (2017), inclusiveness must consider the specific needs and challenges of marginalized groups. Consequently, spaces should be created that welcome all and ensure that no one is left behind¹⁰.

Feminism, Intersectionality and Inclusivity Together

When feminism, intersectionality and inclusivity are combined in a framework, it can help solve the problem of social issues in a better manner. Overlapping and interconnected forms of oppression can be tackled through this integrated approach. Using the lens of intersectionality within the feminist theory can help understand the complexities and intricacies of exclusive to a greater extent. As conceptualized by Kimberlé Crenshaw (1989) in her works, this perspective becomes important in recognizing the experiences of targeted groups in society. For instance, the experience of women in society is not monolithic, but each of them faces unique challenges and hardships.

Inclusivity in this framework advocates for an open system catering to multiple and diverse perspectives and experiences. It challenges the norms that promote further exclusions and thus aims to foster belongingness. It emphasizes creating a surrounding

¹⁰ European Union policy of "Leaving no one behind"

where all people would feel that their voices are heard and have access to equal opportunities (Ahmed, 2012).

Collin and Bilge (2020) argue that to identify the root causes of inequalities, it is important to understand the complexities of intersecting identities. By employing the intersectionality and inclusivity in feminist theory, it is possible to develop effective and equitable solutions to social problems.

Scholars such as Nash (2008) further add to the similar viewpoints. She highlighted that the intersectional feminism challenges the traditional definitions of feminist theory. She pushed for more inclusive and intersectional methods to address and solve the issues in society.

The overall section synthesis that both the elements are equally important in feminist theory. Intersectionality in feminist theory reveals the complexities of exclusive, addressing to different forms of oppression. It talks about how these oppressions overlap and compound owing to different factors. Whereas Inclusivity emphasizes the need to create an open and welcoming system that accommodates and considers the experiences, needs and wants of all individuals. Combining both elements¹¹ with feminism provides a powerful framework that can help policy makers and decision makers to have better understanding and frame strategies to cater to diverse groups.

¹¹ Intersectionality and Inclusivity in the Feminist Approach have been mentioned here as a combination to provide a framework for decision makers. This discussion is the key to the research and will be referred in depth in the critical analysis and assessment.

2.2 India and its complexities: Need for a feminist approach

India represents a complex, layered society owing to its cultural, religious, and linguistic diversity, which Amartya Sen describes as “*a microcosm of the world's cultural diversity*” (p. 10). This wide range of identities is both the source of richness and the root cause of a host of social and economic problems. The Indian society has a complex fabric, it comprises of multitude of ethnic groups in India, with hundreds of languages, religions, and cultural practices that combine to create a complex mosaic of Indian society. However, this diversity has also been a leading factor in the manifestation of social stratification and economic disparities, articulating the historical and contemporary dilemmas of this country in its quest for inclusive and equitable development.

Recognizing the complex social fabric of India, where problems are linked to historical contexts and cultural identities, is essential to addressing the disparities in the Indian context (Sen, 2005). Another issue that persists in India is the economic disparities amongst the population. When this factor is combined with the cultural and various social groups in India, at times it is evident that creates a cycle of deprivation and marginalization for some groups. Similarly, cultural norms and economic dependencies reinforce gender-based disparities, so that women remain relatively far behind in such areas as education, employment, and political participation. Complexity is clear in various forms, such as the caste system, gender-based inequality, and variations between different regions.

A feminist perspective, which addresses multiplicities of oppressive experiences, is critical in tackling the root causes that engender social and economic inequalities. Diverse perspectives and plural voices, especially those of women, children, and vulnerable and marginalized communities, incorporated into the decision-making process, will assist in making policies more responsive and equitable. This approach fosters social justice and enhances the unified strength of society, promoting resilience (Hooks, 2000).

India needs to establish a framework that will ensure that the benefits of development reach the underprivileged segments of the population and move beyond the common economic picture of rich getting richer and poor getting poorer (Say, as cited in George, 1879). India has the potential to move towards a fair and inclusive society by recognizing its heterogeneity and addressing the challenges that come with it, allowing everyone to contribute to the country's progress (Nussbaum, 2011) and avail benefits of all resources of the nation.

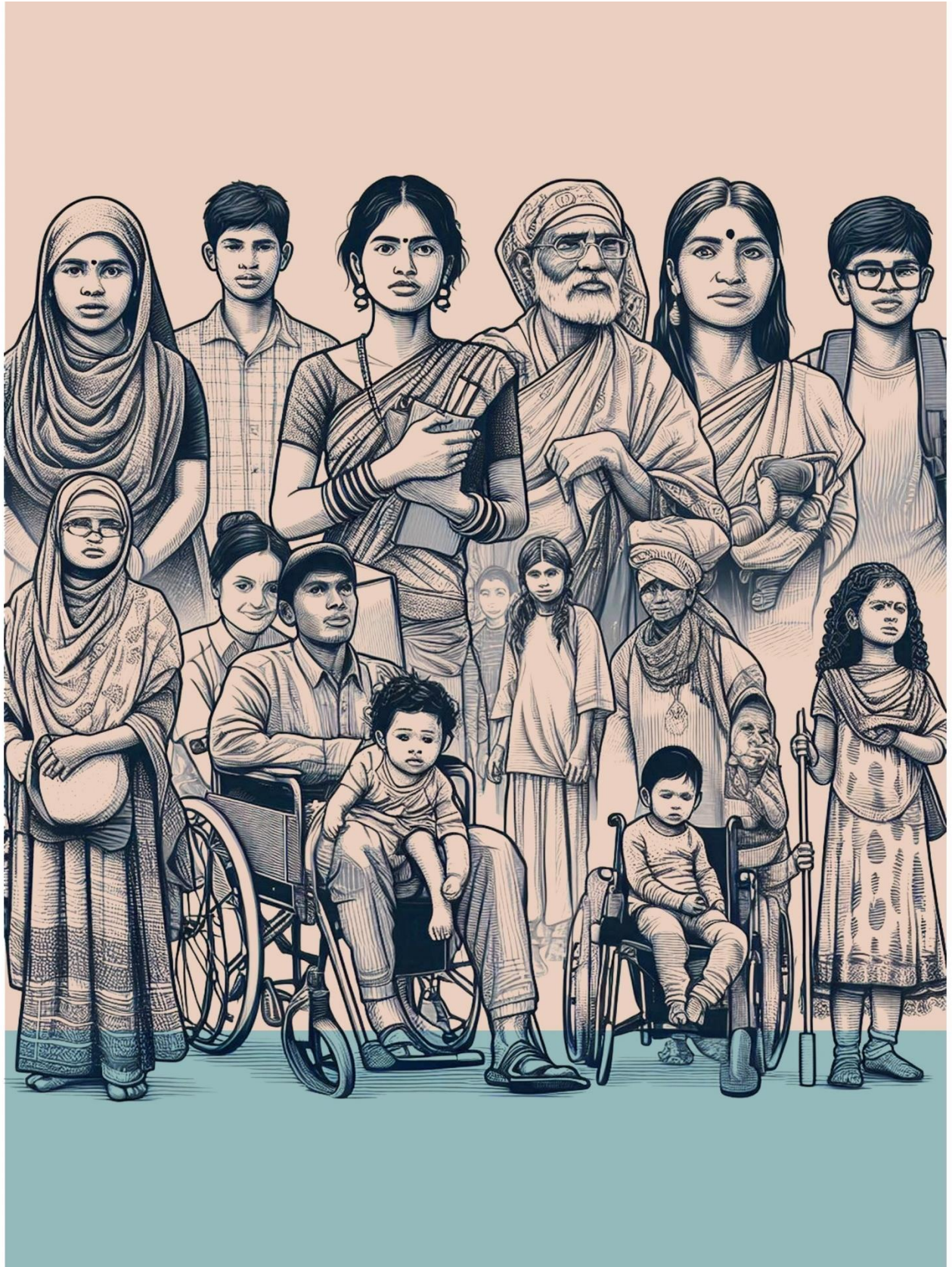


Figure 8: Disparities in the Indian context (source: authors)

2.3 Feminism in India

Over the decades, India has witnessed movements that have led to significant changes, which have helped in diminishing the above-mentioned differences and disparities. Out of all these efforts and movements, Indian feminism has been trying to progress for years to bring in some real change. To understand various feminist movements in India and how it differs from global feminism, it is required to study it from lens of India.

2.3.1 Feminist Movements in India

Feminism in India have a vast and complex history. The development of the movement has evolved through different phases mirroring the country's broader social, economic, and political changes. The movements might not have been termed in the bracket of feminism but have bought significant reforms. The movement started in the late 19th and early 20th centuries, influenced by the social reform movements. Early Indian feminists were involved in raising issues related to child marriage, sati (the practice of widow immolation), and women's education. The feminist movement rose during the Indian independence struggle in which women were an important part of the anti-colonialism fight against the British (Forbes, 1999). After the independence of the country, the feminist movement in India started to work on more wide issues like legal rights, political participation, and economic empowerment. The 1970s and the 1980s were particularly significant, marked by renewed attention on violence against women, reproductive rights, and the intersectionality of caste, class, and gender (Bhuthalia, 2002).

Understanding the various movements during the history of India is necessary, especially those that have affected significantly the different sectors in society.

The Social Reform Movement

The 19th-century social reform movement laid the foundation of feminism in India. Raja Ram Mohan Roy, with his other fellow reformers, worked for the eradication of sati and child marriage and propagated ideas on female education and widow remarriage.

The Indian Independence Movement

In the early 20th-century Indian independence movement, women were actively part of the struggle, with their leaders, such as Sarojini Naidu and Kasturba Gandhi. Another prominent figure who is celebrated to date for her bravery and leadership is Rani Lakshmibai, who was the queen of Jhansi. She single-handedly fought with the Britishers

during the freedom struggle till her last breath. A huge amount of women's participation in the freedom movement highlighted the need for gender equality and women's rights (Forbes, 1999).

The Chipko Movement

An environmental protest done in the 1970s, the Chipko Movement had a women-dominated base in rural areas and raised voices against deforestation and irreversible development activities. Activists campaigned for stricter laws and greater awareness, leading to amendments in the Dowry Prohibition Act (Agnes, 1999).

The Anti-Dowry Movement

The anti-dowry movement caught momentum in the 1980s with the only agenda to counter the increasing rate of violence and murders due to dowry. Activists called for better legislative provision and sensitization, hence the changes in the Dowry Prohibition Act (Agnes, 1999).

The Shah Bano Case

The Shah Bano case of 1985 is one case that has been said to mark a before and after in the history of feminism in India. Shah Bano, a Muslim lady who was denied alimony after divorce, led to a public outcry regarding the rights of women at divorce and the controversy of state legislation over religious laws. The case brought with it massive legal reforms and increased awareness of the legal rights of women (Agnes, 1999).

The Nirbhaya Movement

The Nirbhaya Movement of 2012, sparked after the brutal gang rape and murder of a young woman in Delhi, had far-reaching effects, including monumental legal reforms in terms of providing harsher laws against crimes of sexual violence and fast track courts for speedy hearing of rape cases (Bhasin, 2011).

The current literature indicates that feminism in India has been mainly concerned with the rights of women. However, it can also be seen that the reforms were for women to stand against the patriarchy, and these not only resolved issues for women, but also men. Thus, delving deeper into the past and the contextual nature of India during certain major events in history, it could be projected that feminism played important role in addressing critical issues in society. The movement today in India is broadening to accommodate elements of inclusivity and intersectionality in terms of caste, class, and religion.

2.3.2 Current Debates and Discourses on Feminism in India

It is imperative to study the ongoing debates and discourses that positively advance feminism, emphasizing intersectionality and inclusivity rather than being solely gender-based or strictly female-oriented. These discourses demonstrate a clear shift from patriarchy, and an openness to feminism, without endorsing matriarchy, often considered as the front face of feminism among people influenced by mediums like social media. This shift towards an intersectional and inclusive feminism shows the importance of rights for everyone, the role of men and the inclusiveness needed in the current social atmosphere.

Equal Rights for Everyone

A significant trend in the feminist discourse in India is the awareness and for equal right for all individuals, transcending gender-specific demands. Gender is considered as the subset of individuality and community when there is an emphasis on human rights. Feminist scholars and activists also argue that focusing on women's issues may create further gender binaries and disparities and ignore the broader context of inequality faced by all the genders (Sarkar, 2020). This feminist approach is intersectional and inclusive.

Role of Men in Feminism

The involvement of men in the feminist movement has always been an area of discussion. There has been an increase in realization that to achieve gender inequalities and remove other societal disparities, an active participation of men is required. Initiatives that engage men and boys in discourses about gender stereotypes, toxic masculinity, or benefits of gender equality for all, are the need of the hour. Programs like the "Men Against Violence and Abuse" (MAVA) or "Men Against Rape and Discrimination" (MARD) aim to transform traditional notions of patriarchal power and promote an inclusivity (Dasgupta, 2019).

Debates on Intersectionality and Inclusivity in Feminism

One of the central discourses in contemporary Indian feminism is the need for intersectionality and inclusivity. Intersectionality considers the overlapping and intersecting nature of discrimination, such as those based on gender, class, caste and religion. Activist are spreading awareness that Indian feminism must address the experiences of marginalized groups, including Dalit women, tribal women and LGBTQIA+ individuals (Narayan, 2019). This approach challenges the misconception of homogeneity in feminism and invites discussion and actions for a feminist approach which emphasizes on intersectionality and inclusivity.

2.4 Feminist Perspective in Urban Planning & India's Approach to Feminism in Urban Planning

Urban planning influences the functionality and the development of urban and rural regions. It impacts significantly on the quality of life and accessibility of resources of the residents. As stated by Doreen Massey, Urban space is a site where many inequalities are reflected and experiences based on one's identity, irrespective of the context of social stratification (Massey, 1994). All users do not experience the city in the same vein. Differences in class, caste, gender, religion, sexuality, age, disability, and marital status, among others, often result in myriad forms of exclusion and discrimination in the city (Visakha, 2023). A feminist approach takes cognizance of the multiplicity of differences and is sensitive to how they interact with tokenistic approaches to disproportionately affect some people more than others in their access to and autonomy in the city. A feminist perspective in urban planning advocates for inclusivity and intersectionality to be included so that the needs of every societal group are taken care of by urban environments. In this background, the following section examines on how India has embraced the urban planning class through the lens of feminism.

2.4.1 Feminist Urban Planning

Contemporary Urban planning should cater to diverse needs and wants of citizens. As all the aspects in an urban setting are indirectly or directly linked with each other. Therefore, it becomes imperative in today's time to take into consideration all the sects of society. The approach which considers feminist urban planning becomes crucial when it comes to making cities more inclusive and equitable. It questions the traditional paradigms within urban planning, which in most cases prioritize economic growth over social equity.

Among the pioneering publications in this light is by Dolores Hayden- "*What Would a Non-Sexist City Be Like?*" (1980), for example, critiques about the prudence of planning that overlooks the diverse experiences of urban residents. Hayden emphasizes the aspect of formulating an urban design that will encourage social diversity and individual occupation of their roles and responsibilities; she calls for communal living arrangements and the availability of public amenities like childcare and healthcare.

Susan Fainstein's idea of the "*Just City*" (2010), on the other hand, advocates for "Just City" Urban Planning that focuses on justice, equity, and democracy. Fainstein bases her principles of diversity, democracy, and equity on the goals of feminist urban planning. She

underlines the requirement of incorporation of diverse perspectives into processes of urban planning in order that cities are just and inclusive for all their inhabitants.

Michaela Hordijk et al. have undertaken research on feminist approaches to urban planning. In *"Resilience and the City: Change, (Dis)Order and Disaster"* (2014), it is mentioned that urban resilience should have gender-sensitive approaches integrated with it. Their study highlights the gendered experience of the residents in cities configures their vulnerabilities and coping mechanisms; therefore, such disparities call for inclusive urban design and planning.

Meanwhile, Karen Lucas (2012) has conducted extensive research on transport and social exclusion. Her study underscores the importance of identifying that various social identities coalesce to decide the transportation system for and the mobility options available to an individual. As explained by Lucas, urban planning must be carried out while making a close consideration of the diversified group comprising women, elderly, and the low-income sections so that the transit could be equitable and accessible.

2.4.2 India's Approach to Feminism in Urban

There has been a technocratic and gendered approach to Indian urban planning that mostly took an oversight position for the specific needs of marginalized groups, especially women, LGBTQ+ persons, the aged, and other vulnerable communities. Over the years, there has been a realization that the framework for Indian urban planning must incorporate diversity with an inclusive and intersectional perspective.

Urban planning in India, therefore, cannot be seen merely as a speculation and management of urban growth. According to urban theorist Ananya Roy, urban planning in India is the management of land and other resources in dynamic processes of informality. In other words, India's planning regime is informalized because of its pronounced deregulation, ambiguity, and exception. That city planning often exercises breaking of law, where some unauthorized developments are demolished and some protected and formalized. Although informality is usually equated with poverty, Roy insists that India's own regime of planning operates in a condition of deregulation.

Bhan (2016) further discusses that in the context of urban poverty and inequality within Indian cities, there exists a real need for an inclusive urban planning with sensitivity to the intersectionality of social identities. He argues that urban policies at times fail to address

the complex realities of marginalized groups, due to which members of these groups are often excluded from the benefits of urban development.

Swati Chattopadhyay (2012) elaborates on the intersection of gender and space in urban India. Her work highlights the ignorance of the requirements and experiences of women, often in the design of urban spaces. She expresses how such spaces lead to a built environment that can be exclusionary and unsafe. Chattopadhyay talks about the need of a feminist reimagining of urban spaces which considers the experience and identities of all citizens. On a larger scale, Malini Ranganathan (2017) further explores urban governance hierarchies in context with caste, class and gender. She expresses that Urban and Regional planning in India mostly exacerbate disparities rather than alleviating them, since the role of societal hierarchy is there. Ranganathan demands for a reframe of governance structure to ensure inclusivity and respond to the needs of all citizens, particularly those from marginalized communities.

Moreover, Shahana Chattaraj (2012) criticizes¹² certain initiatives in Mumbai, India. Her research focuses on how certain policies often marginalize the urban poor and increase socio-economic disparities and explains the role of participation of marginalized communities in decision making.

From the literature review of India's approach to feminism, it can be deciphered that a feminist approach which emphasizes inclusivity and intersectionality is needed in the urban and regional planning of India.

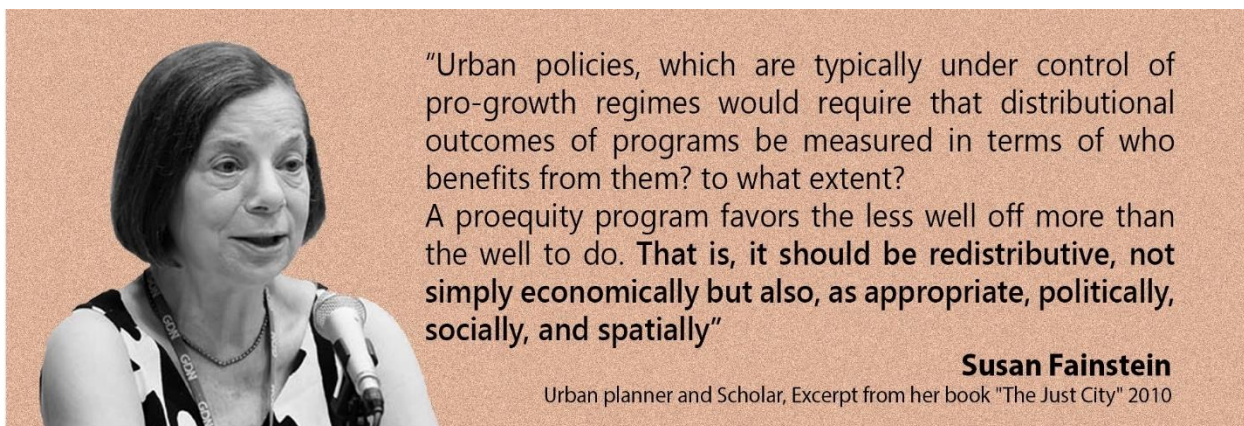


Figure 9: Excerpt from "The Just City" by Fainstein (source: authors)

¹² The critical analysis specific to the case of Mumbai, India are reflected by Shahana Chattaraj in her papers like "Shanghai Dreams: Urban Restructuring in Globalizing Mumbai" and "Informality and State Jugaad How Urban Governance Works in Mumbai".

2.5 Transportation and Mobility Planning in India

Transportation and Mobility Systems in India work in at multiple levels in a hierarchical structure and involve National, State and Local levels of governance. Each level has different responsibilities and addresses each other in terms of policies, initiatives and regulations. These have distinct authorities, along with the private sector in totality shape the country's transportation and mobility infrastructure and policy development. This section of the literature review gives a brief overview of the entire structure of the system. A detailed analysis with respect to the policies and initiatives drafted by cities and states will be assessed in the Findings and Results.

2.5.1 National Level

At the national level, the primary governmental bodies in charge of the transportation and mobility systems along with other developments are the Ministry of Road Transport and Highways (MoRTH) and the Ministry of Housing and Urban Affairs (MoHUA). The responsibility of MoRTH is related to national highways and road safety, while urban transport policies, including metro, rail and bus rapid transit systems (BRTS) come under the jurisdiction of MoHUA. These ministries formulate national policies, allocate funding, coordinate with state governments, and promote research and development to improve transportation systems (Geerlings, Shiftan, & Stead, 2012). Primary institutes at the national level include the National Highways Authority of India (NHAI), which is concerned with the development, maintenance and management of national highways and Indian Railway Catering and Tourism Corporation Ltd. (IRCTC) which manages the rail transport network important for both passengers and freight movement. Urban Development authorities like the Housing and Urban Development Corporation Ltd. (HUDCO) are also involved in managing infrastructure development like metro stations in cities. The national level's primary role is to set the time framed goals in transportation and mobility network of India and provide the regulatory framework and financial support from the National or State budget to implement these projects across the country. The National Urban Transport Policy (NUTP), 2006, and initiatives like the Smart Cities Mission promote sustainable and inclusive development (Ministry of Housing and Urban Affairs, 2014).

2.5.2 State Level

State governments at the state level, with the coordination of their respective transport departments, implement the national policies. The state manages state highways and intra-state transport and mobility systems. State Transport Authority (STA) is the

associated body in every state that regulates private and public transport services like Redbus, Flixbus, Delhi Metro Rail Corporation (DMRC) in the case of Delhi and other state government services. The key responsibilities of the state are to implement the national policies into state specific regulations with respect to the demography. The state is responsible for developing and maintaining infrastructure, managing public transport services and implementing traffic measures to ensure efficiency and safety (Tiwari, 2011). Institutions at the state level include State transport departments, which control the implementation of transportation policies and infrastructure projects and the STAs regulate public and private transport services. Adaption of national policies to state level and further channelize them to city and local level is managed by the state authorities. They need to make sure that transportation infrastructure meets the specific needs of their populations. State highways, roads, railways, buses and other public transportation systems and their policies come under the jurisdiction of the state.

2.5.3 Local Level

At the local level, the municipal corporations and Urban Local Bodies (ULBs) are mandated with planning for urban transport and mobility system and developing the infrastructure. These local authorities oversee public transport systems, local roads, and traffic management strategies. They maintain infrastructure like bus stops, auto stands, metro stations, public parking spaces and others ensuring that urban transport services meet the needs of the urban population (Mohan & Tiwari, 2000). At the local level, key institutions are municipal corporations which are responsible for the management of urban infrastructure and service delivery, including local transport, and ULBs with the coordination of regional planners are responsible for local development projects. They control the implementation of the policies and initiatives laid down by the State and city. These local transport authorities are in charge of the operations and regulations of public transport systems within the city which impact the daily and regular life of the citizens. They also regulate the policies with respect to public transportation like E-rickshaws, autos, taxis, city buses, metros and their schedules. They issue licenses to the drivers and allocate public vehicles like autos and buses to them. Their tasks include developing local transport networks and defining zones of the mode of vehicles. In a broader sense, these local authorities are the main actors in implementing transport policy and related infrastructure measures. They operate metropolitan buses, subways, and local roadways as well as carry out traffic management steps designed to enhance and facilitate mass transit services.

2.5.4 Private Sector

Public-Private Partnerships (PPPs) are the key medium for the link of private sector with the government at the National, state and local level. In context of India, Private giants like Adani and Reliance industries collaborate with government to develop critical transport infrastructure projects such as metros, airports, highways and bus rapid transit system (BRTS). Also, at times the development of road networks and highways are offered to infrastructure companies like Global Infrastructure Company, India. GMR has developed in total of 1814 kms¹³ of roads and highways in India (GMR Group, n.d.). These partnerships enable leveraging of private investment and technical expertise to enhance the efficiency of infrastructure. At state level, Private bus operators like Red bus, Flixbus and others are integral to providing urban and intercity and interstate transport services, where public transport is not feasible. At the local level, private companies like Ola, Uber, BlablaCar, Rapido and other similar platforms work in coordination with the public transportation network. Research institutions run by private sector like Ola Mobility Institute play a crucial role by providing mobility related research to improve transportation policies and initiatives at all levels.

Despite having hierarchical structure involving various stakeholders and private players, the transportation sector in India still faces various challenges. Due to the lack of regional vision, there is a gap in coordination at all levels of government. This limitation leads to socio-economic biases which favor the selected groups and neglects the marginalized groups. For ensuring an intersectional and inclusive transportation and mobility planning systems in India, it is important to involve stakeholders from all community groups, especially the marginalized ones.

¹³ The count of kilometers of road network in India represent the lanes and not the entire stretch of road. For instance, 1 Km of road with 2 lanes is considered as 2 kilometers of road network developed.

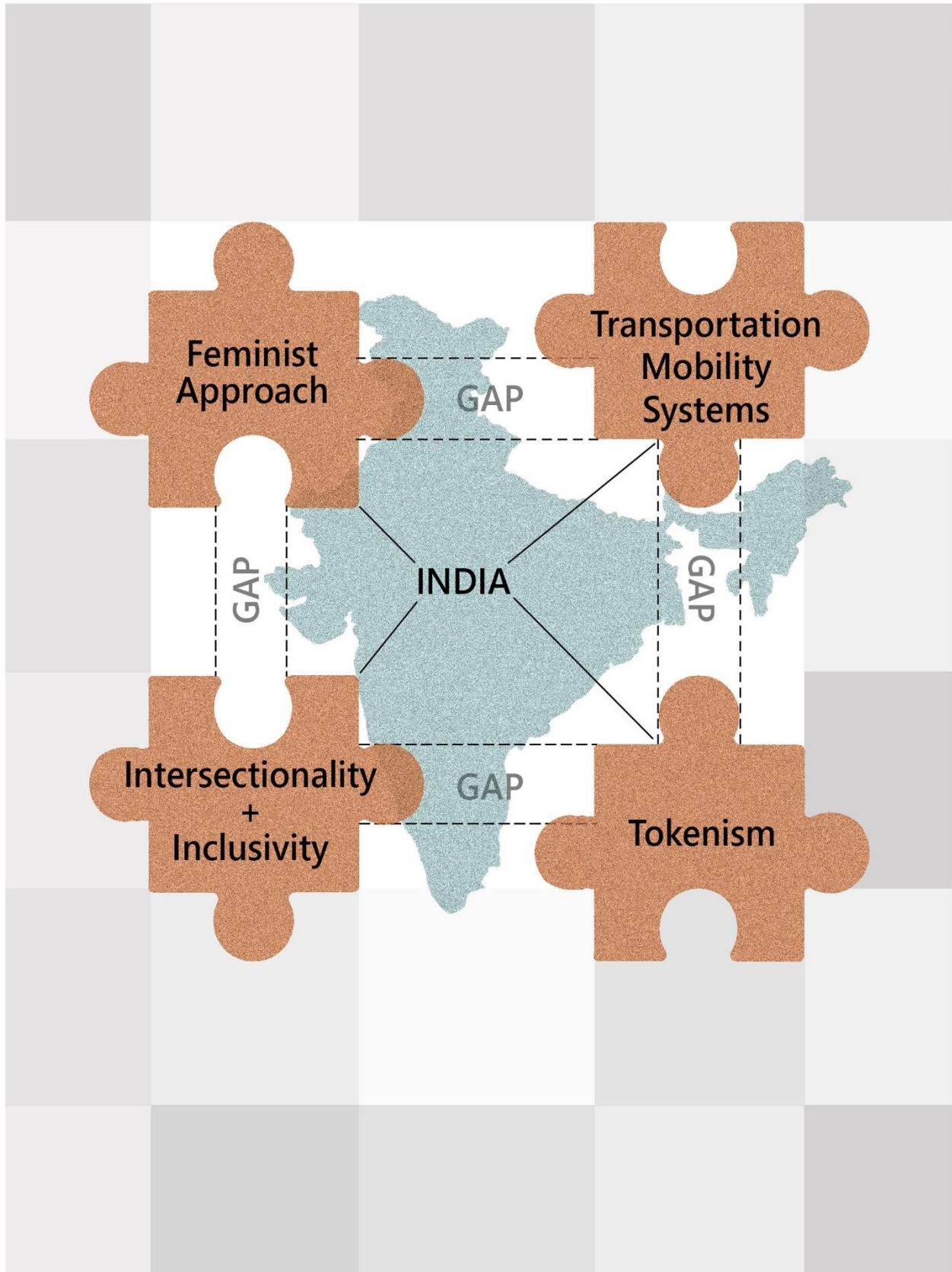


Figure 10: Graphical Representation of the Research Gap (source: authors)

2.6 Research Gap

Despite the significant progress in feminist movements in India, there remains a critical research gap. The gap¹⁴ concerns to **the extent to which the feminist approaches in Indian transportation and mobility planning systems are inclusive and intersectional or merely tokenistic**. The feminist approaches and discourses have not been applied to the various sectors in India. One such sector that can benefit from the approach but has not been explored through this lens is the Transportation and Mobility Planning Systems in India.

These are the concerns that highlight this gap:

- For a country like India with its layered divisions, it becomes necessary to avoid a one-size-fits-all approach as it fails to address the wider range and unique needs of various sections of society. The transportation and mobility sector in India fails to understand the intersection and overlapping nature of various factors such as socioeconomic, cultural, or geographical contexts.
- Through the literature review, it was examined that most often the policies and initiatives undertaken in transportation and mobility planning in India just target the selective groups, ignoring the others. Furthermore, it does not take into consideration key concepts like intersectionality and inclusivity which are important for effective transportation planning. Due to the superficial implementation of feminist approaches in the sector, the implementation of policies and initiatives is often tokenistic.

Acknowledging these gaps is imperative to develop a feminist approach in Indian Transportation and Mobility Systems, assess the tokenism in it and address the intersectionality and inclusivity needed.

¹⁴ The gap referred to by the authors in the research addresses and links 4 key points as shown in the Figure 10: Feminist Approach, Transport and Mobility Systems, Intersectionality and Inclusivity and Tokenism.

CHAPTER 03

Theoretical Framework

3. Theoretical Framework

This section elaborates the grounded theories which the authors have utilized to answer the research questions. The research has used a specific lens of important concepts from the work of various scholars. As Menton (2013) notes, "Mainstream feminism has become an established framework, often excluding marginalized voices and creating whole new spaces for inclusivity and exclusive dialogues" (p. 152). On a similar note, Suarez discusses the inclusivity needed in addressing diversity in experiences (Suárez, 2018, p. 45), and Carastathis in support to Crenshaw's introduction of Intersectionality to Feminism, expresses that Intersectionality in feminist concept dissect the complexity of social identities and inequalities" (Carastathis, 2014, p. 307). To support this, the research first explores the concepts of intersectionality and inclusivity within the feminist approach with the six key parameters of right to mobility (Sheller & Urry, 2006), equity, safety, affordability, accessibility and the mobility of care (Uteng, 2012).

Further, by using Kanter's take on Tokenism, the authors critically assess whether the feminist approaches in India's transportation and mobility planning truly incorporate diverse voices and needs or merely pay lip service to the principles of inclusivity and intersectionality.

3.1 Feminism emphasizing Intersectionality and Inclusivity

The theoretical framework considers the broader context of intersectionality and Inclusivity in Feminism, specific to the work of the scholars Sheller and Urry (2006) and Uteng (2012). It takes a deviation from gender-centric and women specific analyses to inclusive viewpoints which recognize the diverse experiences and intersecting identities of individuals. The research by doing so, aims to create a more equitable and just society that acknowledges the needs of all its members.

Sheller and Urry (2006) introduced the paradigm of transportation and mobility, which challenges the static ideas of social life by a focus on people's movement, goods, information and ideas. To understand how intersecting identities perceive and experience transportation and mobility networks feminism emphasizing intersectionality and inclusivity is relevant. The transportation and mobility paradigm are coherent with intersectionality and inclusivity in feminism by dissecting how various layers of mobility are shaped. Integration of intersectionality and inclusivity systems involves the observation of how intersecting identities often impact individuals' experiences. A sense of exclusion is perceived rather than inclusivity. For example, women of schedule tribes due to their socio-economic status or appearance in some cases, may face challenges and barriers in urban settings of transportation systems. A gender-based analysis doesn't capture these aspects alone. Sheller and Urry provide a base in decoding such experiences, demonstrating that transportation mobility is about both tangible experience and intangible perceptions.

Uteng (2012) adds on to the discussion of intersectionality into transport and mobility systems by emphasizing the relevance of policies and initiatives which consider the different needs of different groups. Uteng argument is that policies and initiatives often fail to address the challenges specific to marginalized and other vulnerable communities. This often increases disparities, as evident in the case of India's transportation and mobility systems too. An individual's gender, race, economic status, age, caste and disability in transportation and mobility systems are important to consider. Keeping Uteng's work as the base, an inclusive approach to transportation policies and initiatives involves acknowledgement of the intersecting factors that impact an individual's movement. Intersectional and Inclusive transport policies aim to create systems of transportation that give people realize right to mobility, accessibility, affordability, safety and equity along with a mobility of care for all users.



Figure 11: Feminism emphasizing on Intersectionality and Inclusivity (source: author)

3.2 Tokenism

Tokenism can have various interpretations depending on the contexts of the study, and each carrying its notions and implications. In this research, the authors have, however, utilized the lens of tokenism by Rosabeth Moss Kanter. Kanter's seminal explanation of Tokenism provides a structure to examine the complexities and shortcomings within the feminist approach in the transportation and mobility planning systems of India. The theory of Kanter for Tokenism suits well for this assessment as it throws light on the gaps and disparities between superficial measures and genuine intersectionality and inclusivity.

In the context of this assessment, tokenism refers to minimal or superficial measures that project an image of performative intersectionality and inclusivity, without making a substantial commitment. Superficial measures often form isolated initiatives or policies. The efforts are parallel in a way of considering only a few segments of a complex layer of society and not intersecting efforts to attain the intersectionality and inclusivity needed for all. Addressal of the hurdles faced by different vulnerable groups by the system and society in totality is not there. Instead, these measures primarily create an appearance of accountability to diversity while the underlying power structures and inequities remain unchallenged (Kanter, 1977).

By applying Kanter's framework, the authors assess and critically analyze whether the feminist approaches in India's transportation and mobility systems incorporate diverse needs or just appear to meet the framework of inclusivity and intersectionality. These levels are:

3.2.1 Tokenism at a Large Scale

Tokenism undermines feminist efforts by involving superficial or symbolic actions to include a single marginalized or selective group without addressing their relatability with the other such groups. Tokenism is layered within these individual efforts for a selective group too. For example, efforts may be made for a particular sect while ignoring others. In this case tokenism is at a large scale.

3.2.2 Forms of Tokenism Within a Single Target Group

Even when focusing on a single target group, tokenism manifests in various ways. Efforts targeted at a specific group often reveal gaps in actual implementation or execution and sometimes even at the legislative level.

3.3 Rationale to study Intersectionality and Inclusivity theory

While intersectionality and inclusivity theory share overlapping concepts and objectives, distinguishing them is important to understand the feminist approach in this research. To ensure clarity and aptness in assessing the fulfillment of each, 6 parameters have been established. The parameters are Right to Mobility, Equity, Safety, Accessibility, Affordability and Mobility of Care. These parameters serve as a foundational framework to systematically assess and measure the extent to which intersectionality and inclusivity are realized within the context of this study. Intersectionality highlights the intricacies of exclusion by showing how various types of oppression intersect and amplify one another. Inclusivity focuses on the necessity of developing systems that are open and welcoming, considering and addressing the diverse experiences and needs of everyone. By doing so, the research maintains a nuanced and comprehensive understanding of these critical feminist concepts, thereby contributing to the broader discourse of social justice.

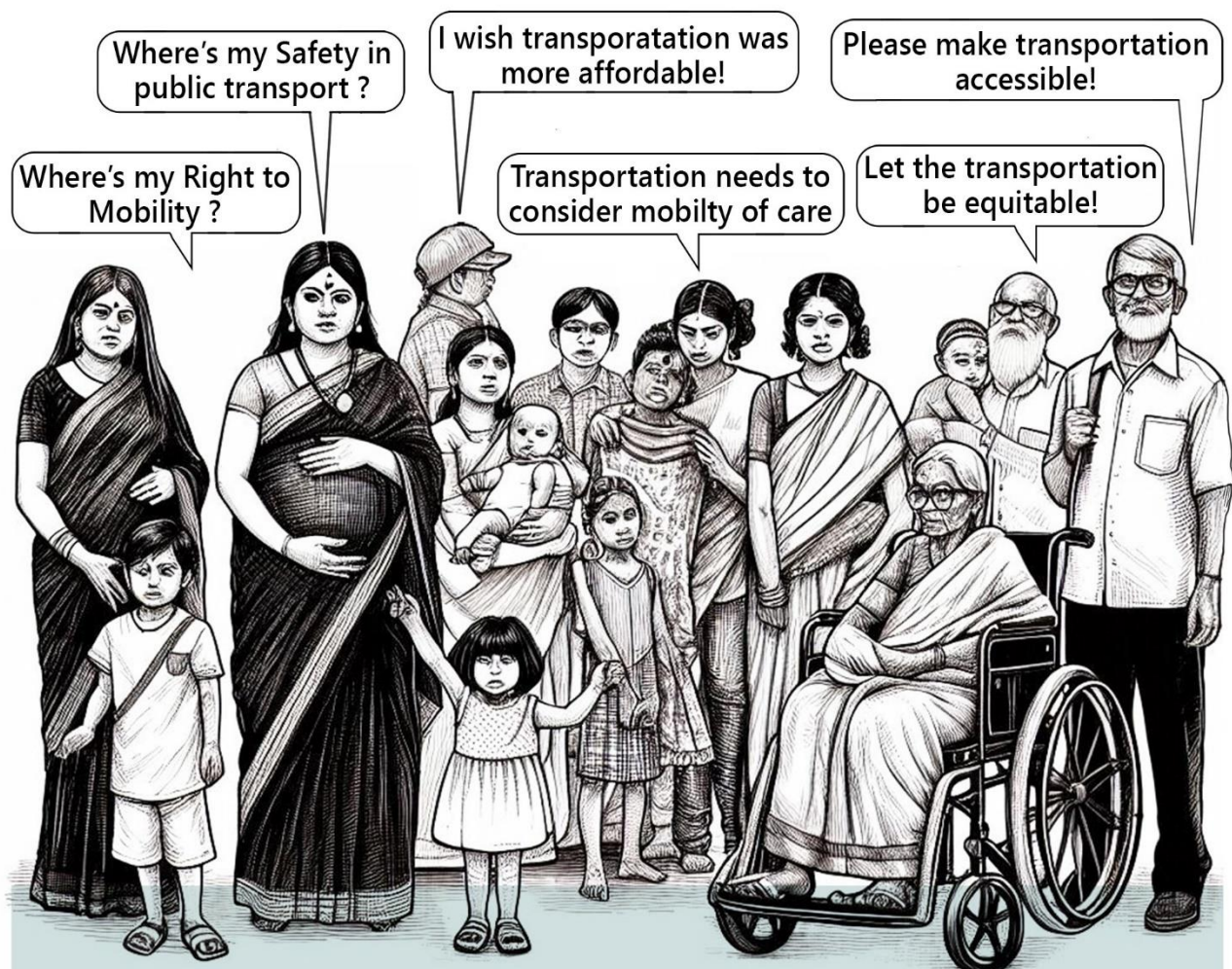


Figure 12: Quest for Intersectionality and Inclusivity (source: authors)

3.4 Intersectionality Theory

The theoretical umbrella this research utilizes is the Intersectionality theory to critically analyze the current transportation and mobility systems in India and the policies or initiatives linked. Kimberlé Crenshaw (1989) introduced Intersectionality in feminism theory, which provides a lens to decipher how intersecting social identities, such as race, caste, class, gender, religion and other such paradigms interact and overlap to create different experiences of discrimination, disparities and privileges for different people.

For this research, the framework of Intersectionality focuses on three primary parameters as a measure within the context of Indian transportation and mobility systems, namely, Right to Mobility, Safety, and Equity.

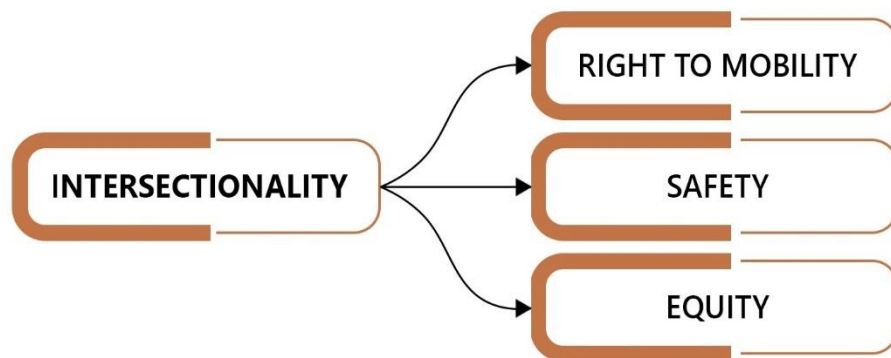


Figure 13: Three Parameters of Intersectionality (source: authors)

3.4.1 Right to Mobility

A fundamental human right that makes sure that individuals have the freedom and capability to move according to themselves, freely and access essential and basic services, opportunities and resources is the Right to Mobility. This right is in synchronization with Henri Lefebvre's (1968) "Right to the City," which emphasizes that all the citizens should have an equitable access to the opportunities and benefits of everyday city life. This idea is further extended by David Harvey (2008) who highlighted the imperativeness of considering diversity in social dynamic in the development and governance of urban spaces. Thus, the Right to Mobility is the bare minimum for everyone.

The Right to Mobility, often not recognized by a country formally, plays an important role in addressing intersectionality since it is directly impacting the ability of diverse groups to interact and navigate into urban environments. Intersectionality addresses the complexes of exclusion faced by beings who belong to overlapping and intersecting vulnerable populations and unfortunately, are often not able to demand this right.

3.4.2 Safety

Prioritizing safety as a parameter to Intersectionality, transportation and mobility systems enhance individual will to move to avail opportunities and benefits. Intersectionality Theory bifurcates how safety concerns are differently experienced by different social groups. For example, a transgender, particularly those from marginalized and vulnerable backgrounds, may face higher risks of violence and harassment in public transport (Tiwari, 2011).

As Maslow (1943) refers to safety as a state of being protected from any potential harm or injury, ensuring a secure environment, safety in transportation and mobility systems is claimed when individuals, irrespective of their identities, can travel without facing any harassment, violence, abuse or even accidents. The framework highlights the importance of creating safe transportation and mobility systems that consider the specific safety needs of women, children, elderly, and disabled individuals (Phadke and Khan, 2011).

Safety is both tangible, when it is associated with facts, and intangible, when it creates a mental image of a space being unsafe. It's the perception which is associated with urban space. It builds confidence in the public transit system among everyone. To make sure a network is safe means to address potential hazards and create a transport network where everyone can travel without fear or risk.

3.4.2 Equity

According to Litman (2002), Equity refers to fairness in the distribution of resources and the degree to which the transportation system meets the requirements of all community members. Equity is not just limited to the access of resources in transportation. It indirectly sets the platform for everyone to access any source. For instance, if a woman might have to compromise going to work due to failure in the transportation network, while for a male of the same layer of society transportation is not a barrier, here the role of equity is considered crucial.

Intersectionality shows the structural inequities embedded within transportation systems, showing how different identities intersect to produce different disadvantages (Crenshaw, 1989). The framework focuses on identifying and dismantling barriers that prevent marginalized groups from accessing equitable transportation options. It advocates for policies that promote fairness and justice in the distribution of transportation resources and services (Lucas, 2012).

3.5 Inclusivity Theory

The limitation of feminism, when it comes to using the theories in transportation and mobility systems, lead to the emergence of the Inclusivity theory with feminist approaches. Feminist approach often brackets the gender related urbanism and inclusivity widens the bracket to everyone. Inclusivity evolved through civil rights and social justice movements, emphasizing the need for greater inclusion and representation. This theoretical framework prioritizes a broader representation, makes sure that diverse needs, especially of the vulnerable and marginalized groups are integral to feminist discourse (Menton, 2013). It fosters an environment where differences are considered as strengths and promote empathy and mutual respect. It is celebrated with the consideration of the privilege to include individuals not equal to them in power dynamics. It is a sense and awareness needed with practical implications.

For this research, the framework of Inclusivity focuses on three primary parameters as a measure within the context of Indian transportation and mobility systems, namely, Mobility of care, accessibility and affordability.

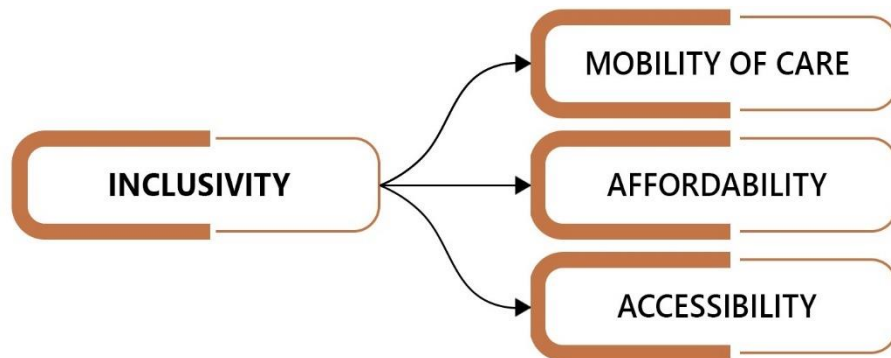


Figure 14: Three Parameters of Inclusivity (source: authors)

3.5.1 Mobility of Care

Sánchez de Madariaga coined the term “*mobility of care*” and referred to it as the unpaid work carried out by adults having responsibility of children and other non-physical autonomous individuals, as well as those activities needed for the upkeep of the home. Mobility of care captures the daily travel required to complete care labor. The concepts throw light on the extensive and essential travel connected to caregiving activities, which sustains everyday life. This is often ignored in transportation and mobility systems. The system gives images of vehicular movements rather than movements made on foot by the individual taking responsibility of home. For instance, in the Indian context where majority of women are homemakers, often short trips are made from home to children’s

schools, religious places or for errands. These do not always require vehicular systems, but an infrastructure that cares for these small mobilities. These may include vehicular movements such as rickshaws, cycling and other similar scaled vehicles. Prioritizing mobility of care in transportation planning involves recognizing and incorporating these caregiving trips, which are frequently completed as part of a trip-chain¹⁵. Ensuring mobility of care means developing a transport network that supports these essential activities, contributing to a more functional and caring transportation and mobility systems.

3.5.2 Affordability

Litman (2002) explains Affordability as the *"cost of transportation relative to users' incomes, ensuring that everyone can afford to use transportation services without financial strain"*. An affordable transportation and mobility system ensures that all the options available for a user are financially feasible to everyone at all income levels. It makes transportation inclusive for everyone irrespective of their economic status. Affordability has a crucial role to play in government services to connect all the layers of a society at a single page, that is, transportation and a step closer to reducing disparities.

3.5.3 Accessibility

Accessibility in simple terms means the reachability or an ease to access a resource. In transportation and mobility systems accessibility ensures that transportation resources and opportunities are available to all individuals, irrespective of their gender, age, disabilities, social status or geographic location. As Church and Marston (2003) state, *"Accessibility refers to the ease with which people can reach desired goods, services, activities, and destinations."* Prioritizing accessibility in transportation is the mere basic requirement for a system. A transportation network may be developed diligently but if it is not accessible by all citizens, it is not considered as inclusive. And efficient It is the addressal to the barriers that act as hurdles for people to use a service, compromises people's ability to move freely and independently.

¹⁵ Trip-chain here refers to clubbing a few errands together for a short trip. For example, in Indian context, an individual can combine, picking up groceries, going to religious place, dropping children to school, etc. in a single small trip rather than a back-and-forth movement from home.

3.6 Feminist Approach to Transportation and Mobility

The research, to this point, in the theoretical framework elaborated on the three parameters for Intersectionality and Inclusivity each. The study focuses on a feminist approach with emphasizes on Intersectionality and Inclusivity. The measures to assess the feminist approach in the transportation and mobility system, in this study taking the case of India, consider six¹⁶ parameters in total. The parameters are Right to mobility, safety, equity under the bracket of Intersectionality and Mobility of care, affordability and accessibility under the bracket of Inclusivity.

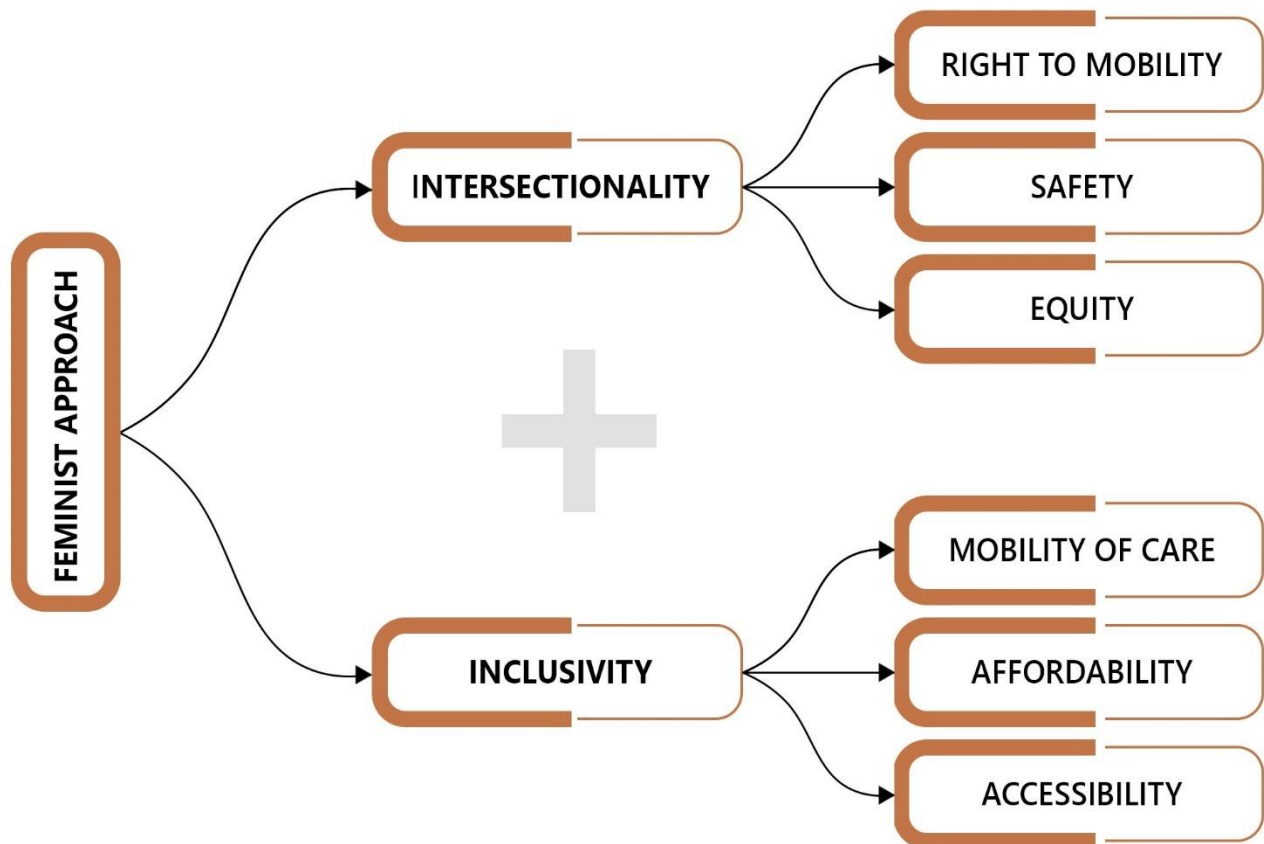


Figure 15: Six Parameters of a Feminist Approach

These measurement criteria, comprising of the 6 parameters, will be assessed individually to critically analyze the Intersectionality and Inclusivity and assess if there is tokenism in the feminist approach implied by Transportation and Mobility Systems of India.

¹⁶ It is important to acknowledge that the researchers have selected these 6 parameters for the purpose of this research, and potential to explore more parameters, in further studies, do remain.

3.7 India's "Sabka Saath, Sabka Vikas" Narrative & EU policy of "Leave No One Behind"

The literal translation of the words of the policy '*Sabka Saath, Sabka Vikas*' in English is collective efforts and inclusive development. The "*Sabka Saath, Sabka Vikas*" policy followed in India, under the aegis of the National Institution for Transforming India, goes hand in hand with the European Union principle of "*Leave No One Behind*"¹⁷ being implemented as one of the Sustainable Development Goals. Both policies emphasize inclusive development and eradication of inequality by considering and addressing all the segments of society in unison with economic growth and development.

The policy in particular addresses the marginalized and underserved communities. The policy of "*Sabka Saath, Sabka Vika*" has been conceptualized with a vision to foster inclusive development through the incorporation of various social welfare schemes and digital public infrastructure to improve the quality of life for all citizens. The essence of the same is reflected in other initiatives¹⁸ like Jal Jeevan Mission, Pradhan Mantri Awas Yojana and the Digital India Program, which aim to provide water, housing and digital connectivity to rural and remote areas respectively (www.narendramodi.in).

The European Union's "*Leave No One Behind*" policy also has the same basis, that is reduction in inequalities and inclusive growth. The policy aims to ensure that the marginalized and vulnerable groups are included in the process of development. The European Union is constantly working towards this goal and its commitment to these principles is further reflected in its policies and initiatives that focus on equitable access to services, poverty reduction and social inclusion (Pib.gov.in). Both the policies aim at the broader global agendas of sustainable and inclusive development. The same is also outlined in the 2020 Agenda for sustainable development goals. India has been on the path to localizing the SGDs and implementing them on ground levels at both national and local levels.

This research will incorporate the principle of "*Leave No One Behind*" in the subsequent chapters, in the evaluation of tokenism and in the way forward section to outline major arguments and proposals.

¹⁷ "*Leave No One Behind*" has been often used in the research to assert the idea. Use of the narrative "*Sabka Saath, Sabka Vikas*" is not feasible for the ease of the readers.

¹⁸ The initiatives mentioned are not specific to Transportation and Mobility System in India. These are the various other initiatives under the narrative of "*Sabka Saath, Sabka Vikas*".

CHAPTER 04

Methodology

4. Methodology

The research methodology comprises of ontological and epistemological stance along with positionality of the authors. This section will elaborate on the 6 Phases in which the research is carried out to answer the research questions and research objectives and for the systematic assessment of tokenism within the feminist approach in Indian Transportation and Mobility Systems. The timeline of 9 months for the research is justified in detail in this section. The study involves briefing about the available literature in the subject matter followed by developing the theoretical framework for this research. Further, the assessment of tokenism at national level and Delhi level is done through secondary data, primary data collection and analysis. The research design employs mixed method design that integrates both qualitative and quantitative approaches.

4.1 Ontological Stance

Transportation and Mobility Systems are crucial for the progress of a country and the development of a society, where disparities in terms of social and economic aspects are not present. To achieve this, it is important to understand how transportation and mobility systems can contribute and how it ensures equal access to all individuals to their rights irrespective of their background.

A constructivist¹⁹ ontological position is adopted in this research, with an acknowledgement that spaces, including transportation and mobility systems, are built through people, context and their interactions together (Berger & Luckmann, 1966). This perspective allows to understand how policies and initiatives, in this case associated to transportation, are shaped by socio-economic complexities, specifically in a layered society like India, where stratification and disparities are visible.

Around the world, a feminist approach has been utilized increasingly to address the shortcomings in transportation and mobility systems, as it emphasizes on intersectionality and inclusivity (Crenshaw, 1989). This approach recognizes the imperative need to consider intersecting and overlapping social identities, such as caste, color, religion, gender, ethnicity and other aspects in the design and implementation of transport policies (Kwan, 2012). In the context of India, a feminist approach that is intersectional and inclusive and caters to all groups is needed and not solely any specific gender. This aspect of the approach is required in the Indian Transportation and Mobility Systems.

The fundamental rights of "right to the city" and "right to mobility" (Lefebvre, 1968; Soja, 2010) are apt for the Indian context. These can be, when seen under the lens of necessities, can be enhanced through a feminist approach this research focuses on. This viewpoint can conclude many other rights under one bracket, and a more inclusive and intersectional society can be promoted. It is important to recognize that transportation and mobility systems are tangible elements that impact the daily lives of people. They are also intangible in a sense of the ability and security they provide for everyone in a society irrespective of gender, physical abilities, caste, religion and other identity aspects.

¹⁹ The authors use the term "*constructivist*", coherent with theories by Thomas Luckmann and Peter L. Berger. Their work *The Social Construction of Reality* (1966), argues that social interactions in a context construct reality, rather than reality being an objective thing existing independently of human perception.

In India, the understanding of feminism is often perceived as female-oriented, or opposite of patriarchy, that is, matriarchy. This leads to skeptical viewpoints and criticism from the general populace. However, to accumulate a broader support and acceptance among the people, it is crucial to raise awareness about the feminist approach and how this approach has the potential to bring a societal improvement and minimize disparities. When a feminist approach in transportation and mobility systems is used, it can act as a key solution in the Indian context, since transportation is a fundamental aspect that connects the entire population.

Therefore, this research constructs that transportation and mobility systems are socially constructed and should be developed with an intersectional and inclusive feminist approach to address the needs of everyone and leave no one behind.

4.2 Epistemological Stance

The research adopts an interpretivist epistemological position and focuses on the imperativeness of understanding the subjectivities and experiences. As per Geertz (1973), Interpretivism is the belief that reality is constructed socially and to comprehend it, perspectives and contexts of the individuals involved must be incorporated into it.

To address the tokenism within the transportation and mobility systems of India, the authors utilize the existing policies and initiatives, and research, including multimedia resources like YouTube videos, to provide a foundation for understanding the issue. However, to decode the tokenism, which is superficiality and symbolism in efforts, to include all groups of society, often an in-depth study is required. This can be achieved through direct engagement with the target groups and self-observations. In this case, the target group is women in Delhi.

It is essential to clarify for the research that the feminist approach forms the basis of this assessment and it is not limited to women. Instead, it provides a framework to assess the tokenism effectively. The focus on women is imperative because the experiences they face, can throw light on the broader implications of tokenism in transportation and mobility policies and initiatives, which may also apply to other groups of the society in some way or the other.

This research will also concentrate on the case of Delhi, and specifically to women in Delhi. In Delhi, policies and initiatives have been often implemented with a feminist approach.

The methodology involves interviews, personal observations, and survey with a sample size of 100 participants. These qualitative along with quantitative methods are important to capture the complexity and reality of individuals' experience and their perspectives, which are mostly ignored.

Understanding ground realities through the viewpoint of an individual's socio-economic background can result in a limited perspective. Therefore, it is imperative to engage directly with the target groups for whom the policies and initiatives are designed. By doing so, the researchers seek to reveal the personal experiences, concerns and issues faced by these individuals. This approach will help determine whether initiatives and policies are genuinely effective and targeted or merely token gestures.

Personal stories, incidences and perceptions are invaluable in providing the context and an in-depth understanding of the situation. They grant insights into the actual impact of policies and initiatives. They highlight the areas where improvements are necessary. This interpretivist approach of interaction with the individuals ensures that the research snapshots the real picture, lived realities of the people affected due to the tokenism in policies and initiatives, providing a more comprehensive and accurate assessment.

4.3 Positionality

For research of this kind, it is essential to outline the positionality of the researchers before elaborating the methodology. Potentiality here refers to the acknowledgement of the authors' background, perspectives, opinions and potential biases which can influence the research process and results. The research is conducted in collaboration by two researchers each bringing their own experiences, ideologies and perceptions to the table. The involvement of the two researchers has been a positive aspect, associated with diverse arguments, agreements, acceptances and overcoming previous ignorance.

The researchers come from different parts of India, each representing completely diverse urban context: one from a tier-one city, Delhi and the other from a tier-two city, Surat. This geographical and political diversity has exposed them to completely different scales of problems and challenges within transportation and mobility systems. Moreover, the researchers belong to different genders, which adds another layer of intersectionality to their perspectives and perceptions. Prior to the onset of this research, both the researchers had gender-specific and somewhat limited knowledge with narrow vision towards the feminist approaches in urban and regional planning. Their collaboration was seeded from

the belief that perspectives from both male and female will provide a better understanding and narration of the issues and a better temperament to exploration.

Both the scholars are Post graduate students enrolled in Master of Science in Urban and Regional Planning, 2022-2024, at Politecnico di Torino, Italy. Subjects such as Global Urban Geographies²⁰, Methodologies for Social Inclusion and Participation and Urban and Regional Economics in the curriculum exposed them to the works of scholars like Henri Lefebvre, David Harvey, Kimberlé Crenshaw, Ananya Roy, and J.K. Gibson-Graham. These studies have inculcated in them a leaning that urban planning is not merely about designing cities but planning for the people who belong there and understanding all layers of society and ensuring inclusivity is crucial.

During the preliminary research phase and literature review, the authors realized that their initial idea of feminism was limited. They unlearned their preconceived notions and learned the intersectionality and inclusivity aspects of a feminist approach and how this approach caters to everyone, irrespective of gender. This realization was further enhanced during their travels in Italy and Europe, where they observed city planning, public spaces and the interaction of people with the contexts they are in. They understood that a society is not built by the needs of just two genders alone. There are layers and a city is a collective entity that requires inclusivity and intersectionality of all members of society. This feminist approach aligns with their research aims.

While the theories of urban studies, are often considered post-development in the case of Europe but applying them to a developing country like India is imperative. Implementing these studies, research and concepts at grass root level ensures the creation of a better, equitable and just society. The authors' diverse backgrounds and academic experience have enabled them to explore and address transportation and mobility related issues through an intersectional and inclusive lens of feminist approach

By acknowledging their positionality, the researchers aim to ensure reflexivity throughout the research process, recognizing how their backgrounds and experiences shape their interpretations and interactions with the target groups for the research.

²⁰ The course, Global Urban Geographies, exposed the researchers about the concepts of Feminism in Urban and Regional Planning.

4.4 Research Design

The research design is divided into six phases as following-

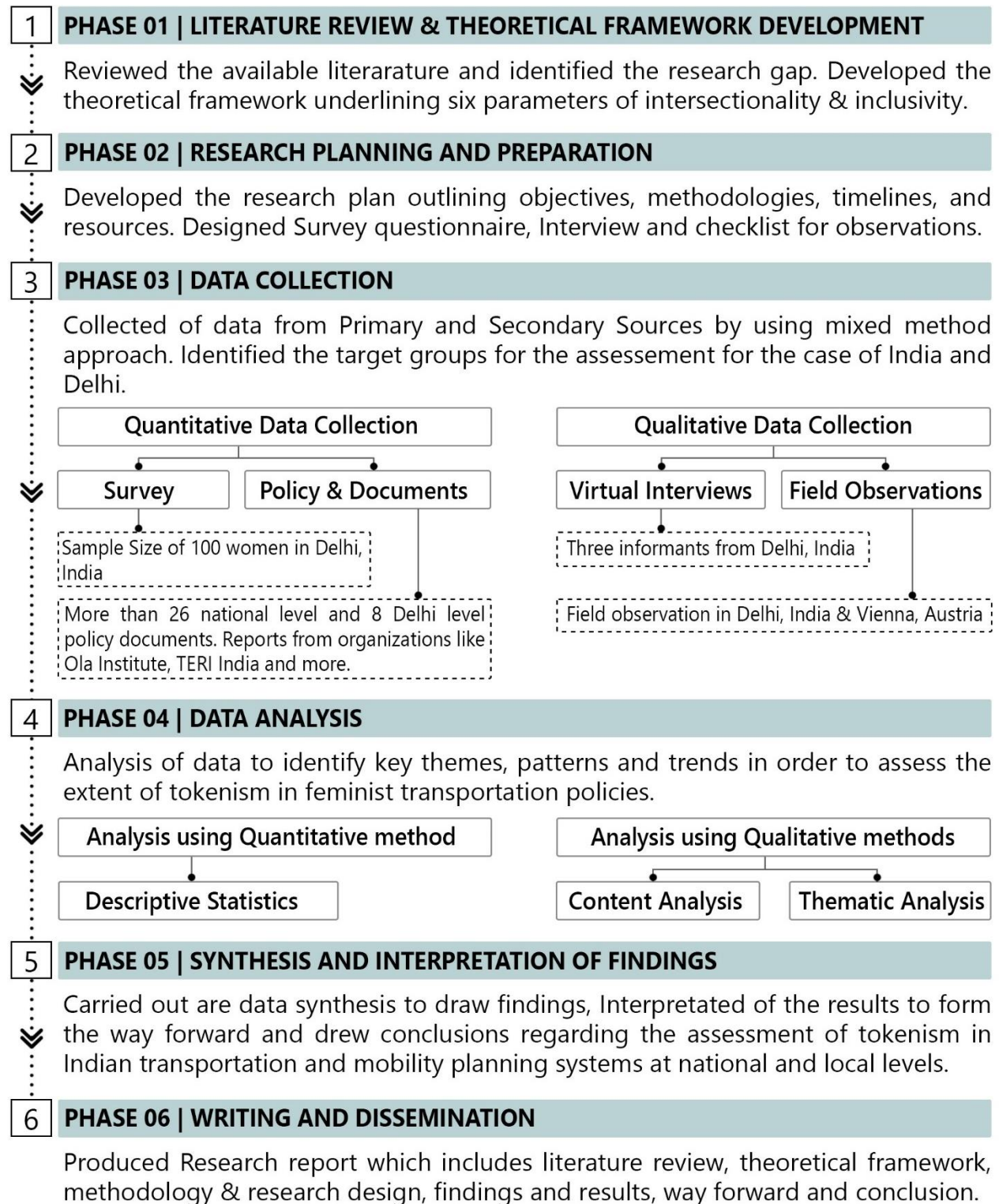


Figure 16: Chart for Six Phases of Research Design (source: authors)

PHASE 01 | Literature Review & Theoretical Framework Development

Objectives:

- To get a better understanding of feminism as a theory that is inclusive and intersectional and its implications in the urban planning sector.
- To define the lens that the research is taking in terms of tokenism in the feminist approach.
- To identify and address the gaps in the literature in context of India to direct the research and answer key questions.
- To identify key theories and concepts linked to intersectionality, inclusivity, the right to the city, equity, safety, mobility of care, affordability, and accessibility, which will guide the research.

Activities:

- First part of the Phase 01 is the Literature Review: To understand the state of art of feminism around the globe and in India, various academic journals, books, policy documents, and other relevant literature were reviewed. Literature available on the feminist approach in urban planning and the transportation system in India has also been studied.
- The second part of Phase 01 is Theoretical Framework Development: The framework is developed based on literature review. The focus has been on tokenism, intersectionality and inclusivity theories to establish an argument for further research.

PHASE 02 | Research Planning and Preparation

Objectives:

- To design a data collection instrument and prepare for fieldwork, survey and interviews.
- To prepare a research plan using qualitative and quantitative data to answer the research questions.
- To process the entire planning and preparation of research thesis by considering the limitation of the presence and timeframe of the authors.

Activities:

- It included designing of survey questionnaire, interview and checklist for observations.

- It included development of a research Plan outlining objectives, methodologies, timelines, and resources required.

PHASE 03 | Data Collection

Approach:

A mixed-method approach is considered in this thesis. Both primary and secondary sources are used for collecting qualitative and quantitative data aspects to address the research questions. Primary sources are explained in detail in the upcoming sections. Secondary sources like YouTube, news articles and online websites of various institutions and organizations are used for the research work. The assessment of the issue of tokenism is done at two levels. For the national level assessment in India, the research relies on secondary sources for data due to certain limitations.

For the assessment of Delhi, India, a combination of primary and secondary sources is employed to examine tokenism in the state's policies and initiatives when directed towards a targeted group. This dual approach of data collection allows a comprehensive examination of tokenism by providing extensive data that can add to the credibility of the research. For the study of Vienna, Austria, the research utilizes primary and secondary data sources.

Objectives:

- To collect qualitative and quantitative data from various primary and secondary sources for India and Vienna, Austria.
- To extract and collect data of various targets group for the national level assessment of tokenism in feminist approach in Indian Transportation and mobility planning system.
- Gathering qualitative and quantitative data from the target group for the case of Delhi. The data collection was primarily done via interviews, surveys and fieldwork observation.
- To ensure that the data collected is inclusive and comprehensive that captures a broad spectrum of perspectives and varied experiences.

Identification of the Target Groups:

- For the assessment at national level, the primary target groups include urban poor, rural population, disabled, elderly, children, women and LGBTQIA+ community.

- In case of assessment at Delhi level, the target group is women of varied age groups, educational levels, economic status and diverse caste backgrounds. The target group includes diversity as it is essential to understand the extent of tokenism in the feminist approach used through the lens of intersectionality and inclusivity. This will in turn help highlight the effectiveness of the current policies and initiatives curated for a target group of society.

Activities and Methods Used:

1. Qualitative Data Collection

Qualitative data collection methods utilized in the research are virtual interviews with informants and field observations.

A. Observations

For the case of Delhi, India: All the observations²¹ were conducted through the lens of intersectionality and inclusivity of the feminist approach. The observations were conducted by the author, Nishu Satish Jindal, to understand the challenges faced by the target group. In the case of Delhi, the observations provided valuable insights into the daily commuting experiences of women within the various transportation modes. The observations were conducted at multiple transportation sites, including buses, taxi cabs, autorickshaws, Metros and footpaths.

The study made by the on-field observations were all viewed through the lens of intersectionality and inclusivity parameters discussed in the theoretical framework. All the observations and data collected via interviews served as a primary and firsthand comprehension of the transportation challenges and experiences faced by women in Delhi.

²¹ Logical consideration for the case of Delhi: It is important to address the fact that among the two authors involved in this research, only one was able to conduct the field observations. Both the researchers involved in this thesis reside in Italy. Due to the logistical constraints, only one of them was permitted to travel to Delhi for the on-field study and data collection. The researcher that travelled to Delhi conducted detailed observations over a period of month to gather substantial data.



METRO AT DELHI, INDIA

Settings: Platforms, inside the trains, and metro stations.
Parameters observed: Crowd density, accessibility features, commuter behavior & interactions.



PUBLIC BUSES AT DELHI, INDIA

Settings: Bus stops, inside the buses, and bus routes.
Parameters observed: Boarding & alighting, seating arrangements, & general atmosphere.



CABS & TAXI IN DELHI, INDIA

Settings: Ride experiences, pick-up and drop-off points.
Parameters observed: Availability, comfort levels, interactions between drivers & passengers.



AUTOS & E-RICKSHAWS IN DELHI, INDIA

Settings: Auto stands, in-transit experiences.
Parameters observed: Negotiation of fares, route selection, and passenger safety measures.



FOOTPATHS IN DELHI, INDIA

Settings: Areas surrounding transport hubs, pedestrian pathways.
Parameters observed: Pedestrian flow, safety, and the condition of footpaths.

Figure 17: Observation sites and Checklist for Delhi (source: authors)

For the case study of Vienna, Austria: Visual Site visit of three days was conducted by both the researchers in Vienna, Austria²². This helped in acknowledging a broader perspective in understanding the transportation dynamics. It is also important to notify that the case study was conducted in a general manner and was not typically focused just on transportation systems. However, the observations and the research from Vienna are integrated into the overall analysis and are only directed towards the transportation and mobility of the city.

²² The study of Vienna is important for the research since the city is often claimed to be a Feminist City.

B. Virtual Interview with informants

Semi structured virtual interview was conducted for three informants on Zoom. Each interview lasted approximately for one hour. The use of a remote and virtual platform provided flexibility and convenience to both the researchers and the informant. The informants were at their discretion to enable/disable the video settings as it was optional. This way, anonymity and privacy were maintained throughout the research to protect the identity and follow the ethical concerns. The selection criteria for the three informants were based on the varied backgrounds and their different use of Delhi's transportation and mobility system. Distance, mode and timings along with their basic demographics were the few factors considered. The breakdown of the interview informants is as below.




INFORMANT 01	HOMEMAKER
	<p>Background: A homemaker responsible for various household tasks.</p> <p>Transportation Use: Primarily for short-distance errands, including grocery shopping, visiting religious places, picking up children, walking the dog, and medical appointments.</p> <p>Mode of Vehicle: E-rickshaws, walking, cabs, and autos.</p> <p>Travel Pattern: Inconsistent, varying between weekdays and weekends, with multiple daily commutes.</p>
INFORMANT 02	PROFESSIONAL EMPLOYEE
	<p>Background: Works at a Multinational company (MNC).</p> <p>Transportation Use: Long-distance commute to workplace, with additional travel for business meetings & social engagements.</p> <p>Mode of Vehicle: Metro, walking, Taxi & cabs, and autos for last-mile connectivity.</p> <p>Travel Pattern: Consistent weekday travel with some variations for work-related events and occasional weekend outings.</p>
INFORMANT 03	NIGHT SHIFT WORKER
	<p>Background: Works at Business Process Outsourcing (BPO) company.</p> <p>Transportation Use: Regular night-time travel to & from her workplace, with additional commutes for errands and social activities.</p> <p>Mode of Vehicle: Company-provided shuttle service, bus, autos, and carpool bikes.</p> <p>Travel Pattern: Consistent night-time travel with occasional daytime commutes for errands and social engagements.</p>

Figure 18: Profile of the 3 Informants (source: authors)

2. Quantitative Data Collection

A. Surveys

The sample size considered for the survey is 100 women in Delhi India. The Survey was conducted for the assessment of tokenism in the policies and initiatives undertaken for women in the transportation sector. Structured surveys were distributed via Google Forms to collect data on the six parameters of intersectionality and inclusivity considered in the research. The survey consisted of 32 multiple-choice questions, designed to gather objective data on these key areas.

Survey Design and Distribution

The survey was designed in a manner that included multiple choice questions to access the right to mobility, safety, equity, mobility of care, accessibility and affordability for woman in Delhi.

- **Sampling method used:** The survey was circulated and distributed among friends and family members who have lived or are currently living in Delhi, India. The participants included in the survey must have resided in Delhi for a minimum of two years. The survey included the women who are the active users of various transportation modes in Delhi, India. The consideration of selecting the women from varied backgrounds, occupations, and age group becomes imperative to understand the challenges faced by each of them.
- **Content:** The survey included personal information and a consent box ensuring consensual participation from the target groups. The personal information of all the participants is kept confidential and anonymized to protect their privacy.

B. Policy and documents

This qualitative study involved studying and collecting data from the national and state level transportation policy documents of India. A few reports from organizations like Ola Institute and TERI, India have also been studied to get perspective into the subject matter. More than 26 national level and 8 Delhi level policy documents²³ have been studied for the assessment of tokenism in the feminist approach to the Indian transportation and mobility system.

²³ The policy documents referred are mentioned in the Bibliography Section.

PHASE 04 | Data Analysis

Objectives:

- To analyze qualitative and quantitative data, identify key themes, patterns, and trends.
- To assess the extent of tokenism in feminist transportation policies.
- To make grounded theories based on thematic data analysis.

Activities:

The analysis of all the data collected is undertaken using qualitative and quantitative assessment methods. The descriptive statistic procedure has been used in analyzing data quantitatively. In the analysis of qualitative data, thematic and content analysis methods have been utilized.

A. Data Analysis Using Quantitative Methods

Descriptive Statistics: It is used to consolidate the survey data into identifying key findings of the experiences of target group in Delhi. The statistics collected were based on the six parameters of intersectionality and inclusivity. That is accessibility, affordability, safety, equity, right to mobility, and mobility of care related to the transportation system.

B. Data Analysis with Qualitative Methods

Content Analysis: It will be used to analyze policy documents based on six parameters of intersectionality and inclusivity theories.

Thematic analysis: It will be used to bring out the key themes and major findings associated with tokenism in feminist approaches through the analysis of interview transcripts and on-field observations.

PHASE 05 | Synthesis and Interpretation of Findings

Objectives:

- To integrate the findings and results into a comprehensive narrative of the research
- To formulate a way forward based on the data results and findings from the study of Delhi and India. The research also explores the Vienna model with a focus on intersectionality and inclusivity. The overall findings will help in providing informed future trajectories suited to accommodate the specific needs of the target groups in India. These combined sections will help in drawing through conclusions and help in generating potential discussions in the subject matter.

Activities:

Activities carried out are data synthesis to draw findings, Interpretation of the results to form the way forward and draw conclusions regarding the assessment of tokenism in Indian transportation and mobility planning systems at national and local levels.

A. Data Synthesis

Findings and results will be integrated to provide a complete picture which will help in understanding tokenism in feminist transportation planning.

B. Interpretation of Findings

The interpretations of all the findings are done through the lens of intersectionality and inclusivity parameters discussed in theoretical framework.

C. Conclusion Development

Conclusions are draw and remarked on the extent of tokenism and its impact on transportation and mobility planning systems of India. Further, this comes the base for drafting way forward, which focus on inclusivity and intersectionality in feminist approach.

PHASE 06 | Writing and Dissemination

Objectives:

- To draft and structure the entire research accurately in a detailed report.
- To translate the research findings into a way forward which can help to inform further research works in a similar field of work.

Activities:

A. Report Writing and Preparation

In the research report, graphical representation of the survey results and key concepts has been done for the ease of readers. Produced the research report which included all the chapters²⁴.

B. Academic Dissemination

Prepared the research for the submission to academic journals and presentation at PoliTo, Italy, to contribute to the broader academic discussion on the topic.

²⁴ As mentioned in the Research Structure, Chapter 1.9.

4.5 Ethical Considerations

Ethical considerations are important for this research as it involved a particular section of the society that is women in case of Delhi, India. It becomes crucial to protect the participants and to ensure the integrity²⁵ of the research. The research followed the below mentioned moral and ethical principles throughout.

The thesis has adhered to the PoliTo guidelines and ethical considerations throughout the research. The work is aligned with the regulations on research integrity as outlined by PoliTo and advocated by the European Commission to uphold the highest ethical standards. This commitment ensures that the research is conducted responsibly, transparently, and with full accountability.

Informed Consent

Participants were properly briefed and informed about the research objectives, methods, and potential implications before the interview and in the survey forms.

Confidentiality

Participants and the informants' identities have been kept confidential and the data are anonymized for their privacy.

Respect for Participants

The rights and cultural values of participants were respected in conducting the survey and interviews.

Avoidance of Harm

No participants and informants were forced, harmed or subjected to harassment during the research process. Participants and informants were at their discretion to opt out of research if they experienced any kind of discomfort.

²⁵ Note: During the field observations in Delhi, a few pictures were clicked by the author, Nishu Satish Jindal. However, for the anonymity of the passengers, in different modes of transport, images are used only for the reference of the authors and not attached in the research report.

CHAPTER 05

Findings and Results

5. Findings and Results

This section of the research will discuss the assessment of tokenism in feminist approaches in Indian transportation and mobility systems in two main parts. First part of the findings and results will be focused on national level and second part will be specifically focused on the case of Delhi, India. The overall synthesis will investigate tokenism across various levels and within different target groups.

5.1 National-Level Assessment of Tokenism in Indian Transport and Mobility Systems

The forthcoming study will investigate the occurrence of tokenism on a national scale. As discussed in the literature review and theoretical framework, it is important to understand the feminist approach which emphasizes all groups of the society. It becomes imperative to look these concepts beyond the traditional focus on females, when it comes to the application in transportation and mobility planning systems.

Even though there are efforts of regulatory bodies, these initiatives frequently fail to achieve their intended outcomes. At times, this often results in the marginalization of significant groups of the society. The inconsistency in the implementation of policies and initiatives, while serving certain political interests, overlooks the needs of others. Thereby, underscoring the necessity for a critical evaluation of tokenism at the national level. The primary focus groups for this assessment include urban poor, rural populations, differently-abled individuals, the elderly, children, women, and LGBTQIA+ communities²⁶.

In this chapter, the focus will be to scrutinize national level tokenism by analyzing how the initiatives and policies are often fragmented. This ultimately undermines the feminist approach in the planning sector. Rather than consolidating policies and initiatives nationally, there are parallel efforts that contribute to the ongoing existence of tokenism. It is important to acknowledge that addressing any issue requires a macro-level approach that extends beyond the individual groups to encompass a wider context.

The chapter will be subchapter into four sections. First subchapter will focus on specific target groups and explore their issues. It will also provide a critique of the policies on a larger scale concerning these groups. The next subchapter will discuss the various shortcomings in the current efforts such as the lack of intersectionality and inclusivity in addressing social identities. It will further critique the disparities in participation in decision-making processes and ignorance in addressing apt concerns. This will shed light on the prevalence of tokenism and the root causes of the failure to implement a feminist framework into the transportation system. The third subchapter of this section will document various efforts made by the government across different states in India. It will provide insight into the policies and initiatives undertaken, and the superficiality in the

²⁶ It should be noted that the target groups defined in this research are in accordance with the existing data available; however, there are far more multiple layers in the Indian context.

measures along with the critical analysis of the associated problems. The last subchapter will offer an examination of the OMI Foundation's 2022 survey. It will provide credible quantification to support this section, reinforcing the research parameters related to intersectionality and inclusivity at the national level.

5.1.1 Problems and Challenges on Larger scale: Specific Target Groups

In this section, the research will explore the mobility challenges faced by diverse groups. This analysis is essential to address tokenism with the feminist approach on transportation and mobility systems at the national level. It will provide a detailed analysis of the disparities affecting these target groups in the current scenario. The groups accessed are urban poor, rural populations, disabled individuals, the elderly, children, women, and LGBTQIA+ communities.

Mobility Challenges for Women

The mobility needs and patterns of men and women differ significantly. Women walk longer distances and make frequent, shorter trips with more stops to combine multiple tasks (World Bank, 2018). According to the World Bank, women engage in more non-work-related travel than males and are more likely to be accompanied by someone during the trip. For example, women in India turn down employment opportunities further away from home in favor of lower-paid local opportunities if the public transport system is unreliable or unaffordable (Institute for Transport and Development Policy, 2017).

In over two decades, women work force participation in India fell from 34.8% to 27% (IndiaSpend, 2017). In fact, the female labor force in India declined by 19.2 million individuals from 2004 to 2012 (Luis A. Andre et al., 2017). As per the report by FIA foundation, women are more affected when access to employment, education or basic services are located far away from their place of residence (FIA, 2016). As evident from the statistical data and the reports, the decline in their participation in various sectors can be attributed to the inadequate availability of transportation service to women.

Various studies across the world addresses that the safety is a major concern for women in public spaces, including public transportation (Safetipin,2017). Women remain at the constant risk of theft or assault while at the bus stop or within the vehicle, and to the threat of being sexually harassed, either physically or verbally (United Nations, 2016). According to a study conducted by a women's NGO Jagori, around 54% of the women feel unsafe and vulnerable in public transport and bus stops (Jagori, 2011). A study in

Bhopal, India revealed that 51.4% of women faced sexual harassment while using public transport and 49% of men have witnessed women being harassed (FIA, 2016). As per the survey findings of a study done by Safetipin, accessing and using the transportation in India is a challenge for a lot of women across various cities. 12% of women do not go out after dark and 10% of work have stopped using public transportation due to the safety concerns (Safetipin, 2017). To overcome the challenges of personal security, women generally develop their own coping mechanisms, which include, refraining from travelling on certain routes, or at night alone, to carrying pins while travelling on the bus for self-protection (ITDP, 2018). Addressing to these challenges faced by women adversely impacts their growth and overall development in life.

To address the growing challenge of women's safety and security, the Government of India created the 'Nirbhaya Fund' over 2013–16. A total of Rs 31 billion was allocated for the installation of CCTV Cameras and Live GPS Tracking, reserving first coach for ladies in Delhi Metro, operating special ladies' buses and dedicated cab fleet (She Taxi), creation of Safety Apps (Himmat – Delhi Police), and provision of separated sections for women in the buses and reserved seats (UITP, 2018). However, the Fund needs to be effectively utilized, as only 30% of the fund has been used so far (Indian Express, 2018). Technological interventions such as the installation of CCTV monitoring and GPS Tracking of transit vehicles can significantly strengthen women's safety but currently, these interventions are restricted to mass transit systems, such as metros and a few city bus services, and therefore need to extend to private buses, autos, and taxis.

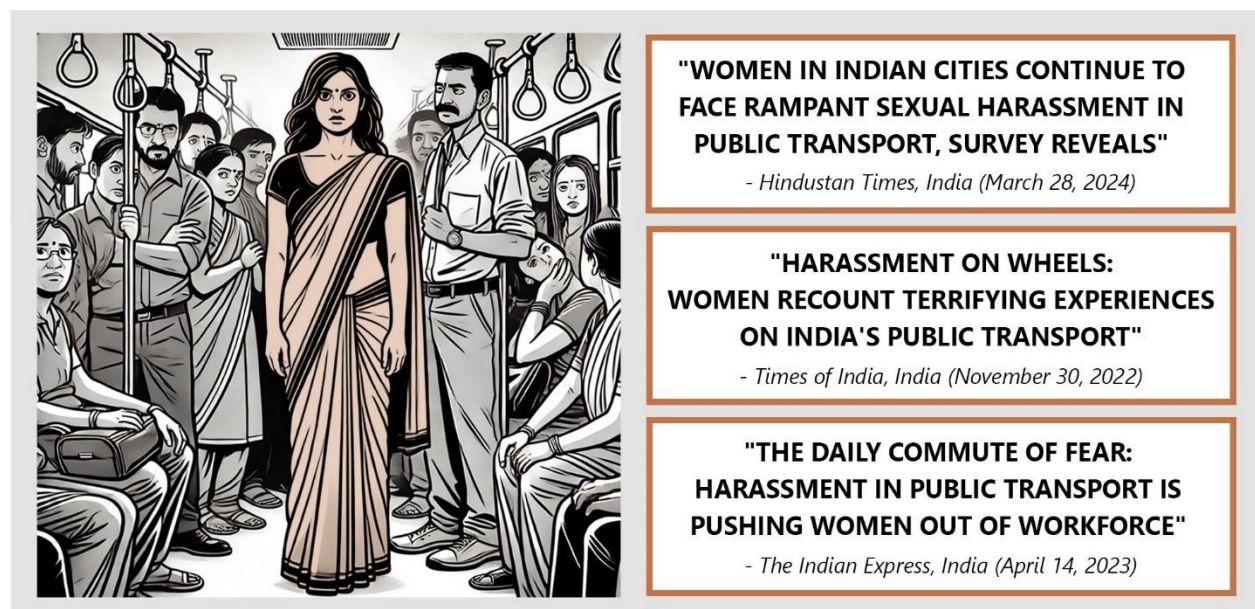


Figure 19: Pictorial Representation of frequent Headlines (source: authors)

Mobility Challenges for Urban Poor

Mobility challenges for the urban poor in India are often overlooked. This significantly impacts their economic opportunities and quality of life. According to a study 'Mobility in Urban India' the commuting habits of the urban poor across different Indian cities vary significantly. Urban poor spent approximately 12% of their total monthly expenditure on transportation, compared to just 3-4% for higher-income households (National Sample Survey Office, 2019). The disparities in the ratio of expenditure reveal that the transportation costs put a significant strain on urban poor, by consuming a large portion of their income. In cities like Delhi and Mumbai, the cost of transportation consumes over 15% of the income of the urban poor which significantly impacts their economic stability (ITDP,2017). In Delhi, 77% of the urban poor commute on foot, while only 4% use bus and 6% use public transport (Delhi Transportation Corporation, 2010). According to a study by TERI in 2018, 61% of the urban poor prefer walking, only 14% can afford public transport, and 6% rely on bicycles. It also discusses barriers to accessing adequate transportation for they travel more than 8 km on foot in a day. Long walking trips are one of the major indicators of the lack of inclusive and intersectional transport and mobility.

Urban poor in Indian cities rely heavily on non-motorized transport systems and face significant barriers to accessing adequate public transportation (NIUA,2020). Apart from the traveling modes, Indian cities generally have insufficient pedestrian infrastructure. Factors like an increase in private vehicle ownership amongst rich classes, lack of investment in public transportation and overall road infrastructure affect the mobility choices of urban poor in India. Inadequate infrastructure such as lack of sidewalks attribute to 33.4% of all road accidents in India (Ministry of Road Transport and Highways, 2021). Approximately 50% of urban roads in Indian cities lack proper pedestrian crossings and safe footpaths (TERI, 2018).

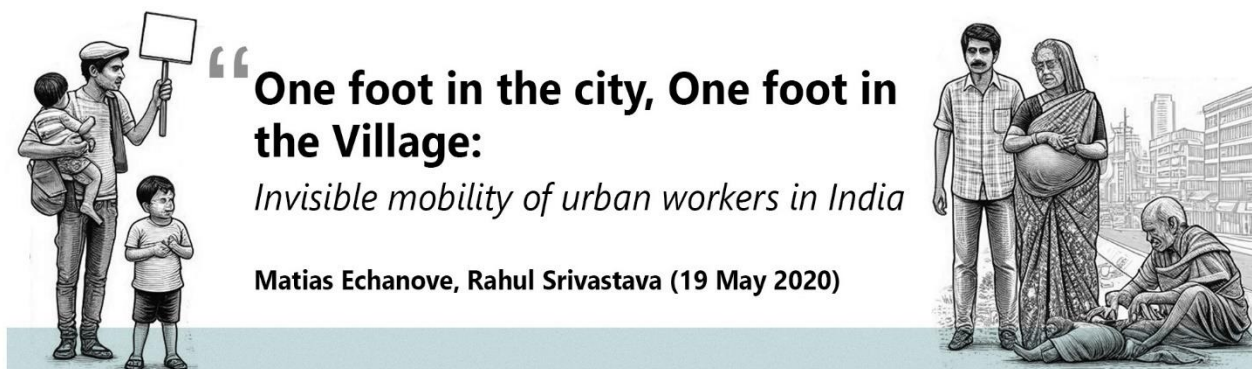


Figure 20: Dilemma of Urban Poor (source: authors)

Mobility Challenges for Rural Population

The mobility challenges faced by these rural populations are multilayered. 67% of India's population resides in rural areas (Ministry of Rural Development, 2023). These include the issue of transport infrastructure, accessibility, and affordability. Despite the efforts of the Indian government to improve rural roads and connectivity, the gap still exists. Accessible commute in and around Indian villages continue to be a challenge (UITP, 2016). Around 40% of rural areas are not covered by public transport and rely on private vehicles or non-motorized forms of transportation, which are expensive and less accessible (Ministry of Rural Development, 2020). At present, the reliance is on sharing minivans, tractors, bicycles, bullock carts, and other means of transportation. The report by the Ministry of Road Transport and Highway indicates that rural areas experience a high rate of road accidents, with roads often lacking signage, lighting, and maintenance (Ministry of Road Transport and Highways, 2022). Livelihood opportunities for rural people have limitations due to transportation constraints, and approximately 18.5 million people in rural areas face this limitation (Shilpa Aggarwal, 2018) (UITP, 2016).

A report by TERI reveals that a substantial portion of the rural population relies on walking and cycling due to the lack of transportation options. Approximately 60% of them travel on foot, which highlights the deficiencies in current transportation planning systems (TERI, 2018). They need to travel about 2-8 kms a day on foot to reach workplaces. Due to the long walking trips to their workplaces, most often people choose to remain at their homes. For longer commutes, such as trips ranging over 10 km, bicycles are the most preferred mode of transport, accounting for 13% of all work trips (UITP, 2016). This inequality affects access to basic healthcare services and the ability of young people, especially girls, to get an education opportunity. In rural India, because inheritance is still male-dominated and lacks inclusive mobility, many students end up not pursuing higher education and learning necessary skills.



"Lack of transportation options in rural areas contributes to social exclusion, particularly among vulnerable groups such as elderly, poor, and those with disabilities. "

Gray, D., Shaw, J., & Farrington, J. (2006).
Excerpt from Community Transport, Social Capital & Social Exclusion in Rural Areas.



Figure 21: Illustration of Realities for Rural Populace (source: authors)

Mobility for Differently abled, Elderly and Children

The term disability includes impairments, activity limitations, and participation restrictions because of the physical condition (World Health Organization, 2021). Despite initiatives aimed at improving transportation for people with disabilities, significant barriers to mobility persist. According to statistics, over 73 million people in India live with some form of disability, accounting for approximately 6% of the population (Census of India, 2011). Access to transport and mobility services is important to facilitate the participation of people with disabilities in economic, social, and political life (Soltani, S.H.K et al., 2012).

The implementation of the Rights of Persons with Disabilities Act (2016) has also fallen short as not many public spaces have met the required standards till now (New Indian Express, 2022). The Accessible India Campaign was initiated to provide equal opportunities to people with disabilities; however, public transportation remains largely inaccessible (Accessible India Campaign, 2024; Feminism in India, 2024). The target till March 2018 was to convert 25% of the government-owned public transport vehicles into fully accessible and disabled friendly. Critics have deemed the budget for disability-related projects in India inadequate. The budget for 2024-25 has provided inadequate funds for disability inclusion programs, impeding progress in infrastructure development (Feminism in India, 2024).

Addressing challenges faced by children and the elderly is crucial for promoting intersectionality and inclusivity in transportation planning systems. A study reveals that overcrowding is a common problem on school buses with over half of them exceeding their recommended capacity, raising safety worries (Ministry of Road Transport and Highways, 2021). About 30% of school bus accidents in 2022 attributed to overcrowding (National Crime Records Bureau, 2022). According to a survey conducted by the Central Board of Secondary Education in 2023, just 30% of schools adhere strictly to guidelines for ensuring bus safety and security in 2023, 6.2% of the fatalities in road accidents in India were elderly above the age of 60, which accounted for 10,140 deaths. A study revealed that transportation options for older adults are rare and typically only available in large cities (Institute of Urban Transport, 2021). Around 7.5% of all road fatalities in 2023 were children under 18 (Ministry of Road Transport & Highways, 2023). While the road safety aspects for the elderly, children, and people with disability are overlooked, it is necessary to provide considerable attention to this section of society as they are at a considerably higher risk of severe injury due to their physical vulnerability (United Nations, 2016).

Mobility for LGBTQIA+ Community

National Human Rights Commission (NHRC) reports that 92% of the transgender individuals feel unsafe while commuting on the public transport. A study in 2017 by International Gay and Lesbian Human Rights Commission (IGLHRC) revealed that more than 60% of the individuals in the community faced harassment and approximately 35% reported physical assaults (International Gay and Lesbian Human Rights Commission [IGLHRC], 2017). Such discriminations severely hamper their mobility, limiting their access to essential services such as education, employment and healthcare. As indicated in Transgender Persons (Protection of Rights) Bill, 2019, only 6 % of transgender hold formal employment, a situation partly exacerbated by mobility challenges and discrimination during travel (Government of India, 2019).

The transportation and mobility challenges of the LGBTQIA+ community in India are significant but often disregarded in transportation planning. Policy frameworks in India often overlook the specific needs of LGBTQIA+ communities. Gender-segregated transport options pose significant challenges for transgender and non-binary individuals who may not feel safe or accepted in either male or female designated spaces.

The Institute for Transportation and Development Policy (2018) emphasizes on the need for inclusive policymaking that considers the concerns of diverse groups and works toward creating intersectional and inclusive transport options. Decisions regarding LGBTQIA+ communities are frequently made without their involvement, despite their critical role as stakeholders. At times, these initiatives even lead to further discrimination. This issue can be addressed within the existing system through awareness and a feminist approach. Attempt should be made to include these communities in the current sphere, even if the solutions generated are not perfect.

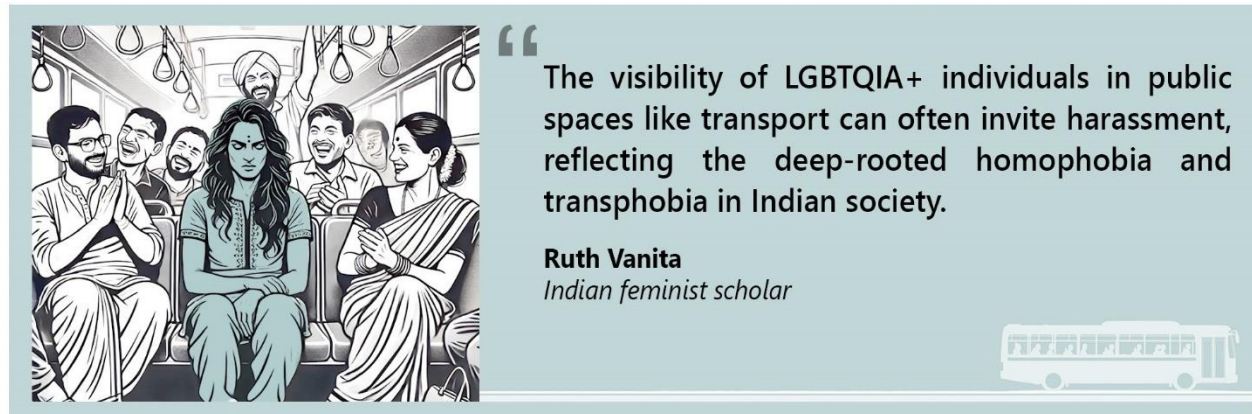


Figure 22: Everyday Humiliation Faced (source: authors)

5.1.2 Inadequacy of Intersectionality and inclusivity in Indian Transportation and Mobility Systems

This subsection of findings and results will deal with the current shortcomings and drawbacks in the Indian context, specifically the lack of intersectionality and inclusivity in realizing different social identities, often overlapping. The forthcoming section will also address the disparities in participation within the process of decision making and the neglect of pertinent issues. This chapter will highlight the presence of tokenism and elaborate the fundamental reasons why and how these efforts fall short of coherency to a feminist framework.

Lack of Intersectionality and Inclusivity in addressing Social Identities

Typically recognized identities in Transportation and mobility policies and initiatives are based on age, gender, disability and income or class. These policies and initiatives, however, often lack justifications and clarity on the assumptions that are made to propose solutions for these groups. None of the reviewed policies out of 26 national policy documents diligently identify vulnerable or disadvantageous groups. They do not state the assumptions or any evidence of challenges these groups face in qualitative sense or even via factual data and neither are comprehensive solutions available. Moreover, these policies these policies and initiatives do not address the social structure and barriers among groups, neither do they articulate historical and cultural contexts which have created specific disparities for these populations (Jones, 2018).

The policy documents fail to mention any socioeconomic categories that can benefit from the policies. Some policies discuss broad groups such as 'vulnerable road users,' 'commuters,' and 'disadvantaged groups, without breaking down the composition and layers within these groups. The complexity of intersectional experience is not reflected since the documents identify vulnerable groups based only on socioeconomic fronts and the framing of these identities is often based on unitary in the documents. For example, there are mostly traditional perceptions when policies are drafted for women, focusing mainly on safety, which is a concern, but the diversity and intersectionality with them is ignored. These policies consider gender as binary and exclude non-binary individuals and the gravity of challenges they face, such as breach of dignity, security and safety from other passengers and staff (Smith et al., 2020).

The only document that recognizes intersectionality is the National Policy on Senior Citizens 2011. It highlights that elderly women face multiple disadvantages based on class,

caste, disability, illiteracy, unemployment, and marital status. However, in the context of transportation and mobility systems, the document does not address intersectional challenges. The focus is instead narrowed to broader aspects such as universal design, barrier free access and travel concessions (Government of India, 2011) without being particularly a transportation and mobility related policy.

A few policy documents focus on promoting non-motorized forms, like cycling, pedal rickshaws and walking, as they are sustainable. This is related particularly for women and the urban poor. However, these policies assume that using non-motorized transport is a choice, and not helplessness associated to these groups. The policies promote non-motorized at one hand but fail to provide safety. They also fail to recognize the structural barriers that limit access to other modes of transport and reassert existing systems of power and inequities (Pucher & Buehler, 2017).

Additionally, policies often neglect the impact of socioeconomic disparities on access to transportation. It is crucial for transportation policies to incorporate a more intersectional and inclusive approach that addresses these disparities and draft policies in a manner which gives people choices, rather than constraints.

Imbalance in Participation within the Decision-Making Process

There is inadequate documentation in the policy documents regarding the decision-making process as well as the representation of diverse societal groups in the same. There is a notable lack of transparency regarding which groups were consulted and which of their recommendations were accepted or rejected. Only a few policies provide a detailed report of the process followed. Among these, most engagement is only with government officials, domain experts, and the private sector.

Policies such as the National Urban Transport Policy (NUTP), the Smart Cities Mission, and the Pradhan Mantri Gram Sadak Yojana (PMGSY) have significant implications for transportation and mobility planning. However, these policies are often conservative in involving participation from various user groups, community-representatives and non-government organizations (NGOs) in their processes.

The National Urban Transport Policy (NUTP) works to drive solutions for the transportation needs of urban areas. They promote use of public transport, limited use of personal vehicles, and integration of land use plans with transport planning. The goals might be progressive, in the Indian context, but the policy framework predominantly

involves discussion, consultations with urban planners, government officials and private sector stakeholders, with a complete gap in the input from the users who will be eventually impacted. This reveals the ignorance that is present in the system. And same is the case with The Smart Cities Mission, which focuses on creating intersectional and inclusive urban areas using technology and smart solutions.

Similarly, where the rural transportation is concerned, the Pradhan Mantri Gram Sadak Yojana (PMGSY) work on upgrading rural connectivity through construction and planning of roads. Even though, the policy aims to bridge the connectivity and improve access to markets, healthcare and education for the communities residing in villages, the consultation process does not adequately involve the representatives from the communities directly impacted by such projects and the discussion even with Gram Panchayats are limited due to ignorance in knowledge. The consultation processes primarily involve government officials and domain experts.

The ignored exclusion of socially and economically disadvantaged groups from these consultation processes reveals a significant imbalance in the participatory phase of governance. This exclusion eventually penetrates the fabric, creates systemic inequalities and undermines the legitimacy of initiative and policy results. According to Arnstein's (1969) ladder of citizen participation, genuine participation and involvement requires uplifting user groups to not just users, but to decision makers for themselves, by ensuring they have a significant role in decision-making processes. Without their inclusion, policies often strengthen the existing power dynamics which reciprocates negatively on the target groups.

For instance, with respect to the Pradhan Mantri Gram Sadak Yojana (PMGSY), the policy, due to its failure to mandate the representation of community-led groups, there is a broader issue which is highlighted: the neglect of grassroots perspectives in transportation and mobility systems. Rural Local Bodies (RLBs), which are present to bring solutions at bottom level, often lacks a framework to engage with these groups. This results in transportation projects that inadequately address key issues like right to mobility, safety, equity accessibility, affordability and mobility of care and negate intersectionality and inclusivity in totality. As a case in point, less than 30% of RLB meetings include presence of community representatives and only 25% of projects under PMGSY have detailed socio-economic impact assessments which incorporate local input (Patel, 2015; Rao, 2017). This visible exclusion leads to transportation infrastructure, not used in full capacity,

in case of rural areas, with 35% of households units reporting reduced access to essential services (Verma, 2019). Economic inequalities are also evident, as shown by the 15% decrease in average household income from 2015 to 2019, in marginalized areas after the completion of a project, due to poor access (Singh, 2020). Additionally, communities with low representation in transportation planning processes face safety concerns and higher transport costs, accelerating inequities.

In metropolitan cities where economic distress and disparities grow at an exponential rate, projects are often executed without the involvement of stakeholders. Projects such as metro rail networks, and BRTS have been implemented without sufficient input from the communities they serve. This often results in inadequate safety for women, affordability for the urban poor, accessibility for elderly and other inadequacies for groups like LGBTQIA+, differently abled (Pucher, Korattyswaroopam, & Ittyerah, 2004). These issues are faced by almost everyone, differently for different groups, sometimes multiple. To ensure these groups have a stand in the policy-making process is to make sure that their rights are safeguarded. For example, women face safety concerns and require well-lit spaces and security in public transportation options. The elderly and disabled individuals need accessible transportation that facilitates their mobility challenges. LGBTQ+ individuals, who face discrimination, need inclusive and respectful atmosphere within public transportation systems. The poor and marginalized require affordable and reliable transportation options to access employment, education, and healthcare services. All these and even more concerns of different groups can be addressed only if their issues are presented during decision-making processes.

Ignorance in Addressing Apt Concerns

The analysis of policies and initiatives reveals a magnificent gap in the addressal of intersectionality and inclusivity needed for a feminist approach in transportation and mobility systems. Even if certain aspects of feminist approach are considered, the concerns associated are not explored, and this leads to tokenism in solutions, since they do not address structural barriers rooted in historical and cultural context (Reagan & Viswanath, 2011).

One of the most commonly recognized groups, who are in light of disadvantages are women, children and elderly. These groups have various concerns, but the most acknowledged aspect is safety. Even if this concern is studied in detail, it is deciphered that there is a limitation to the parameters that are considered in safety issues. Safety is

often restricted to fear of interpersonal violence or harassment that may arise during commuting. The definition of safety immediately takes a different page to safety from accidents is in consideration to men. In all the cases, there is ignorance when it comes to framing policies or initiatives. The category of women is observed as unitary, and there is no address to the group differences within, which are based on socio-economic factors, as well as addressal to safety concerns arising from intersecting social locations is negligible (Reagan and Viswanath, 2011). The policies and initiatives mentioning gendered disadvantaged are present and this is appreciative, in the context of India. But issue arises since gender is defined in heteronormative terms, and due to this reason, an ignorance to the non-binary identities is evident.

Elderly and differently abled individuals face disadvantages which are generally under the bracket of physical accessibility. But is being differently abled just related to physical aspect? The answer is "No" and here the generalization for disability that policies and initiatives consider is abstract. They fail to associate the different types of disabilities. Policies, even if considering accessibility issue for disabled are made, but they fail to connect the disability which might come due to ageing. The limitations in infrastructure to cater to all types of disabilities are visible and there is no commonality in design which considers all forms of physical inaccessibility. Through thorough research in types of disabilities, the study finds that there are far more than imaginable concerns linked to individuals being differently abled. The nonphysical aspects such as psychological or behavioral are completely ignored. When policies refer to accessibility in transport, overcrowding and unprecedented behaviors of co-passengers are some of the psychological and intangible constraints faced to access transport for individuals who are differently abled (Nickpour, W. Jordan and Dong, 2012).

There is an extensive identification in initiatives and policies with respect to the insufficient infrastructure and inadequate allotment on roads to users of NMT and public transport. Majority users, in Indian context, are completely dependent on these due to socio-economic status. Despite of this fact, the issue of affordability is not addressed as a priority in the policies and initiatives. Expenditure of transportation in a common low-income household is a higher proportion of their income in comparison to the affluent section of the society (Bukhari and Rao, 2016). and ironically, low-income groups are the core users of public transportation and mobility systems. In a tussle to reduce commute expenses, often opportunities for low-income families are curtailed as they organically as a solution tend to find work within walking or cycling distances. However, the solution is not

ubiquitous in India, and certain section due to the demand of the profession, need to use public transport compulsorily as public transport is perceived to be safer than non-motorized forms of transport or using two wheelers (Bukhari and Rao, 2016). Hence, it is important to address the issue of affordability of public transport when discussions of inadequacy in infrastructure arise. This ignorance eventually becomes a systemic default and excludes low-income individuals from accessing transportation and mobility systems and keeps them in the loop of poverty.

The mentioned exemplars in this subsection highlight the glimpses of ignorance in addressing the concerns, which translate to a complete absence in considerations. There is a need for systemic reframing and implementing an effective *"bottom-up"* approach²⁷ which involves the participation of all social groups and communities in the decision-making process. (Indian Institute for Human Settlements, 2015). Policy documents need to provide decentralized planning and identify needs at the local level. The centralized system fails to address the concerns of disadvantaged groups, even if done, addressal is in a form of tokenism. The policies and initiatives are made at the state and national level, who are not coherent with the specific needs of the citizens at the local level (Goswami, 2010).

A responsibility of considerations, and not ignorance, is imperative for intersectionality and inclusivity in Indian Transportation and Mobility System to ensure minimization of the tokenism in the Feminist approach.

²⁷ India has a mix of both bottom-up and top-down approaches in its governance, policymaking, and development initiatives.

5.1.3 Superficiality in Measures

States often introduce policies and initiatives which target specific sections of the population. The policies and initiatives currently implied in India are mostly typical when specific target groups are concerned. However, the names might be different with respect to the state and the commonly used language over there. The map below highlights some of the initiatives and policies and the superficiality of these are elaborated in this section.

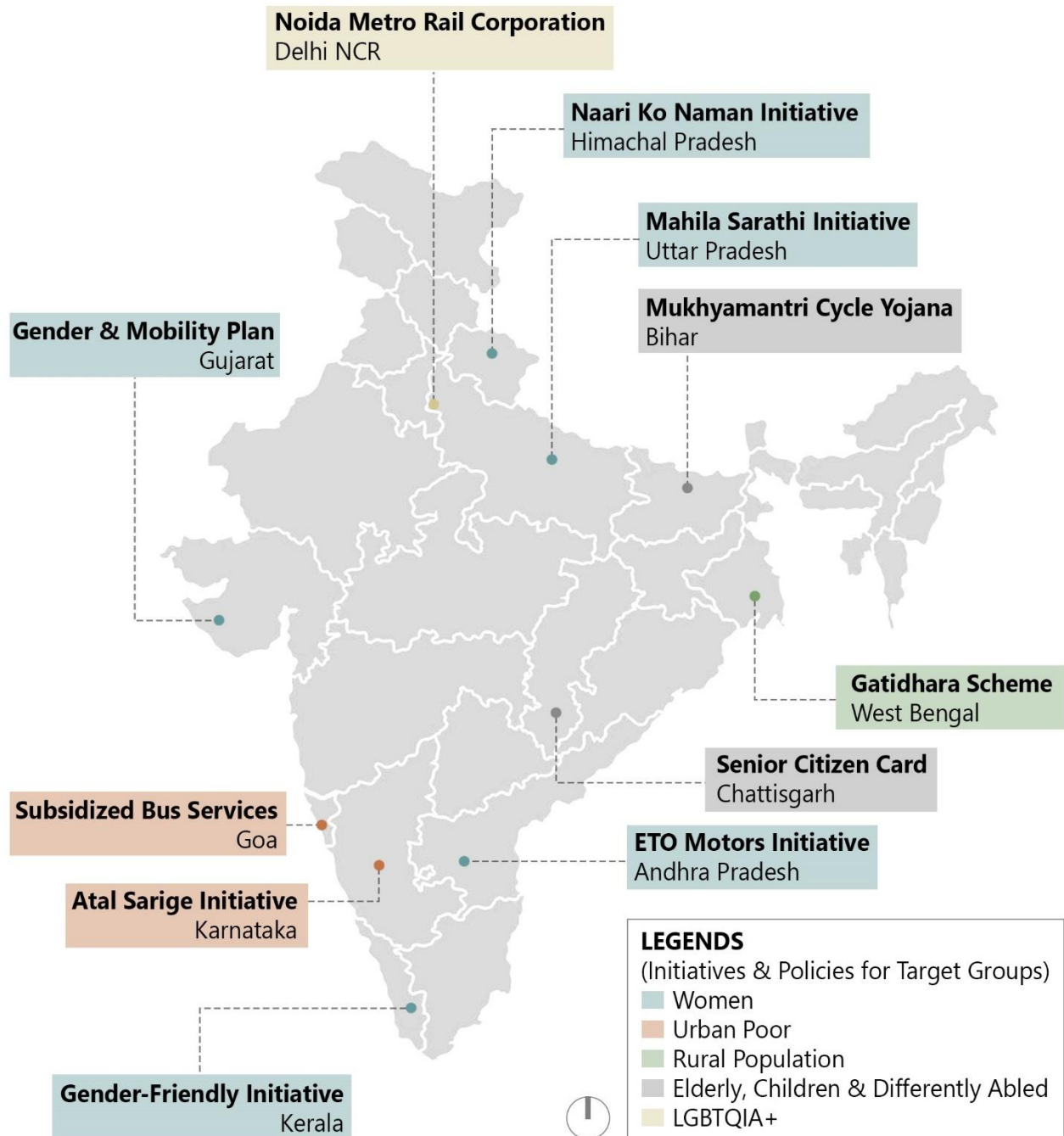


Figure 23: Typical Policies and Initiatives in India (source: authors)

However, the success of such initiatives is conservative in creating an intersectional and inclusive system. For example, Pink Autos initiative dedicates autos for females or subsidy services for the elderly in travel. These initiatives and policies might seem a progressive initiative, but they do not take into account the context of the demography. Women who belong to the urban poor or elderly individuals with disabilities may feel that their needs are not completely taken care of by these separate efforts (Kumar & Singhal, 2020). This results in dilution of intended benefits through such policies, leaving many individuals without adequate support.

The impacts of this tokenistic behavior are extensive. Policies and initiatives that do not address the needs of diverse groups can lead to the multiplication of new forms of disparities. This acts like a barrier to the overall effectiveness of transportation and mobility systems. For example, subsidies in bus services for the urban poor may improve access to employment, they do not account for the specific safety dilemmas faced by women, LGBTQIA+ individuals, or differently abled individuals who also rely on these services (Tiwari, 2011). Consequently, the failure to integrate the needs of all groups leads to a cycle of segregation, where targeted policies or initiatives do not fully benefit the intended populations. Even if they do, they may create a barrier for others. Below, the research will detail some of the policies with respect to the target groups identified and state or city-level initiatives for the same, while also highlighting the tokenism within these initiatives. The initiatives and policies²⁸ explained in the section are a few of many other similar policies and only some of them are analyzed for the purpose²⁹ of this research.

5.1.3.1 Critical Analysis of Policies and Initiatives for Women

The initiatives and policies mentioned in this section provide a brief of the typical efforts suggested and implemented nationally for women³⁰ specifically, aiming to offer an understanding of the direction in which these initiatives are being implemented and critically analyzed with respect to the context in which they are implemented. All such initiatives might be designed with positive intentions, however, when inclusivity and intersectionality are not considered, issues persist, and this analysis revolves around that.

²⁸ It should be noted that the research does not aim to prove that the government initiatives are incorrect.

²⁹ The research does not mention the implemented year of initiatives, to avoid disclosure of political parties associated with them, and these should be treated as just exemplars for research purposes.

³⁰ The authors in this section are completely supportive of the positive aspects of the initiatives and policies proposed by the authorities for women. However, the discourse focuses on the intersectionality and inclusivity for everyone, alongside women, and this is the critical analysis being presented.

Andhra Pradesh ETO Motor Initiative

The ETO Motors Initiative in Andhra Pradesh seeks to empower women through training in operating electric autos, obtaining licenses, and employment opportunities in transportation. Although the initiative opens doors for women in the transportation industry, it tends to tokenism as it only looks at quick fixes instead of tackling larger systemic obstacles. The major setback is the safety issue among female drivers. The system operates on a shared auto model, but it does not adequately address safety concerns; the drivers are women, but the passengers are low-income individuals, with numerous reported cases of sexual harassment among the drivers. Later on, the policy shifted its focus only on female passengers, but this plan was unsuccessful because there weren't enough women passengers. This led to long wait times and only one out of every five autos being allocated for women (Reddy, 2021). As a result, this led to additional safety issues. While the ETO Motors Initiative have progressive intentions, in context of India, its failure to address basic safety and system barriers limits its effectiveness and highlights the superficiality of such efforts.

Kerala Gender-friendly Urban Transport Initiative

The Gender-Friendly Urban Transport project initiated by Kochi Metro Rail Limited (KMRL) in Kerala proposed female-only train cars and gender-sensitive training for employees in the transportation service. Although these actions aimed to promote safer travel for women, they were not able to address the root cause for the harassment that women frequently encounter. The problem continues at two levels: first, it neglects the safety issues at stations where the Kochi City Police have frequently reported harassment cases, with 120 incidents documented in 2023 (The Kerala Gazette, 2023). This shows that having female-only drivers does not guarantee security at the spots where travelers assemble. Additionally, female coaches do not cater to older, disabled, or other at-risk groups. As an illustration, the incident of a visually impaired individual facing verbal abuse upon entering the coach underscores the flaws in the policy (Nair, 2022). At both tiers, it can be seen that the system, despite looking feminist, is superficial and lacks intersectionality and inclusivity.

Gujarat Gender and Mobility Plan

The allotment of women-only buses and the installation of CCTV cameras in Gujarat's Gender and Mobility Plan, even though can be appreciated as a solution, but issues aftermath cannot be ignored. The presence of women-only buses potentially creates further gender segregation. It implies that women are not secure in mixed settings, and

possibly stigmatizes those who chose regular buses. It exposes them to the risk of harassment and verbal abuse, as shown by the 84 instances of harassment documented by the Ahmedabad police in 2023 (Bishai et al., 2019). As per Rosenbloom (2017), the efficiency of women-only buses is restricted due to their limitation on certain routes. This hinders their ability to completely address women's safety concerns. Also, CCTV cameras are limited in their ability to prevent crimes since their presence does not guarantee immediate action during incidents, and regular maintenance and monitoring further diminish their effectiveness (Gill & Spriggs, 2005). While the objectives of the initiative were feminist at a superficial level, they highlight how the initiative works in a parallel manner rather than intersecting with broader system.

Uttar Pradesh: Mission Mahila Sarathi Initiative

Mission Mahila Sarathi of Uttar Pradesh dedicated 51 buses in each city for women, serving as drivers and conductors. The initiative highlights women's caliber in roles culturally, in India, dominated by men. But the initiative remains tokenistic in various forms. The use of these buses in Lucknow, for instance, has not been positively acknowledged due to inadequate representation with respect to the population of women employed in public transport. Out of the approximately 3,000 buses running in the city, only 51 are operated by women, which amounts to just 1.7% (Dainik Jagran, 2023), showing minimal effort. This step as a start is progressive, but the limited number, restrains women too from practicing this initiative since it accounts to societal prejudices. Even after this, 213 reported cases of harassment by women drivers in public transport were still in Lucknow in 2023 (Dainik Jagran, 2023). This indicates that the presence of women service providers in negligible numbers, even as a pilot project, does not solve the purpose of representation of female (Srivastava, 2023). Thus, while the initiative showcases itself as a symbol of progress, it falls short of creating change. It operates in isolation and makes women as an exhibition and shock among people, since the number is limited and lack of awareness. The policies needed to ensure women's safety and equality in public transport not just by designing an initiative, but with respect to the proportion.

Himachal Pradesh: Nari ko Naman Initiative

Himachal Pradesh's Naari Ko Naman Initiative provides, women within the state, a subsidy rate on transport fares, with 50% concession. The reduction in fare makes the affordability quotient meet for the women, still the initiative faces criticism. Apart from safety concerns, which are not mitigated with this fare reduction, the initiative also lacks inclusivity. Reason

being, no consideration for the of the other low-income marginalized groups, such as urban poor and elderly. As a case point, data from National Sample Survey Office (NSSO) reveals that the average monthly income for low-income households, which include people who are dependent on public transport for work, is below ₹10,000. The base fare, that is without concession, if calculated monthly, is a large chunk of the income (Pant, 2019). This further leads to economic disparities, since the economically disadvantaged groups do not receive similar and much needed support.

Moreover, and alarmingly, post the policy, an overall decline in the number of commuters was observed. A report by the State's Transport Department shows that there was a drop in the number of daily commuters using public transport by 12%. After six months of assessment post the implementation of the policy, the total number of daily travelers fell from 150,000 to 132,000 policy (Himachal Pradesh Transport Department, 2023). This unprecedented decline in the overall number of users clears that the fare reduction initiative, which motivated the women travelers, led to an unintentional discouragement of other groups.

The Naari Ko Naman initiative, even though with positive intensions, shows the importance of understanding the contextual issues for the decision makers. The consideration of grassroot problems is inevitable. In this scenario, the reduction in fares solely for one gender, to motivate them to use the public transport, especially when other marginalized groups also struggle financially (Department of Economic Affairs, 2021), is not justified. There is a need of a feminist approach, emphasizing on intersectionality and inclusivity and leaving no one behind.

5.1.3.2 Critical Analysis of Policies and Initiatives for Urban Poor

"Urban Poor", in India refers to household units, living in urban or metropolitan area, living below the poverty line. As per the Tendulkar Committee Report in 2011, ₹1,000 per month per person was set as the urban poverty line. This was based on the expenses required to meet the minimum calorie intake (Government of India, 2011). This threshold was revised after 3 years in 2014, setting ₹1,407 per month per person. This threshold considered a broader set of necessities (Government of India, 2014). Urban poor in the Indian context, in general experience poor living conditions, low paying temporary jobs and limited access to services like education, healthcare and transportation.

The initiatives and policies discussed in this section provide a brief about the typical efforts in India which target the urban poor. The aim of this subsection is to provide an

understanding of the trajectory in which these initiatives are implemented and a critical analysis with respect to the context in which they are.

Goa: Subsidized Bus Services

Goa's Mhaji Bus scheme objective is to provide subsidies in bus services which connect low-income neighborhoods, or ghettos to major economic zones of employment and education institutions. However, due to lack of context study and poor participation of all other stakeholders, this scheme could not stand up to its intentions.

The scheme having good intentions to a limited sect of the city, turned out to be a disaster. The scheme bus service deployed on limited routes, which included Canacona to Margao, Curchorem-Quepem-Margao, and Curchorem-Ponda-Panjim. These routes connected important zones and pass through busy market areas and tourist spots. This resulted in overcrowded buses (Goa Prism, 2023; oHeraldo English, 2023). At present, the mixed use of bus service, in the context of Goa, leads to frequent cases of sexual harassment, especially towards women, and theft with violence, due to the presence of a large number of tourists. Moreover, the scheme never acknowledged the requirements of other vulnerable and stigmatized groups in the context. For instance, women, the elderly, LGBTQIA+ individuals, and differently abled individuals are not accounted for in the decision-making process of this service (Goa Prism, 2023; oHeraldo English, 2023). The buses lack necessary safety measures and accessibility features, making it difficult for these groups to travel comfortably and safely. Statistics from 2023 highlight the safety concerns in Goa. The state recorded 119 cases of crimes against women, including 43 rapes, 42 molestation cases, 24 kidnapping cases, 10 eve teasing cases, and 2 cases under the Immoral Traffic Prevention Act in the first nine months alone (Digital Goa, 2023; Prudent Media, 2023).

The Mhaji Bus Scheme is one of the most considerate schemes when it comes to the urban poor, but at the same time, detrimental for the other communities. It has the potential to improve public transportation for the urban poor in Goa, but at the same time intersectionality and inclusivity needs to be taken along.

Karnataka: Atal Sarige Initiative

The Atal Sarige initiative introduced by the Bangalore Metropolitan Transport Corporation (BMTTC) was another similar initiative which solves the issue of affordability for the urban poor in Bangaluru. The AS buses are not running anymore, due to state issues, but the

initiative can be an exemplar for this research. The initiative highlights the on-ground realities which can be compared to any metropolitan city of India.

Analyzing the aim and the objectives of the initiative, at first glance gives a positive assessment. However, the real image is distorted. The Atal Sarige fleet comprised of only 20 buses across 11 routes before the pandemic (The Local Brief, 2022). This leads to human congestion at bus stops and within the buses (BMTC Annual Report, 2020). AS buses, like any other regular bus service in the city, worked on the same route. This inevitable scenario led to various other issues. Each bus had a capacity of 50, and had a greater number of standing spaces, than seating. But often the bus worked at a capacity of approximately 90 passengers which caused overcrowding (BMTC Annual Report, 2020). The urban poor in Bangaluru, primarily construction workers from other states, often used bus stops in a roughly This often led to rush and overcrowding. The bus stops along these routes were disable and elderly friendly. This lack of accessible infrastructure, combined with the overlap of routes with regular services, does not effectively segregate the commuter base, causing overcrowding and competition for space at bus stops. This led these passengers to run down while boarding on and off the buses. Statistics from 2020 highlight the safety concerns in Bangaluru. The city recorded 423 minor accidents involving differently abled and elderly individuals at bus stops (Bangalore Police Department, 2019). The absence of proper ramps, pathways, and designated waiting areas increases these risks. Although Atal Sarige was among the best practices in India for the urban poor, but it failed to be inclusive for others.

5.1.3.3 Critical Analysis of Policies and Initiatives for Rural Population

There are various initiatives and policies currently, either implemented or in process, for the rural transportation and mobility systems. The rural demography comprises of approximately 65% of the total population in India (World Bank, 2020). It is important to the country's socio-economic framework. The Planning Commission of India (2018) reports that efficient rural roads can lead to 20% increase in income of households linked to agriculture, since improved roads can reduce general transportation costs and minimize wastage of perishable goods in the long run. Additionally, Indian Council of Agricultural Research (2019) claimed that a major hindrance to rural education, healthcare, and quality of household life is scarcity of proper transportation and mobility systems. There have been various schemes and initiatives on this note and one of the prominent cases for analysis is the Gatidhara scheme of West Bengal, explained further.

West Bengal: Gatidhara Scheme

Financial assistance and subsidies are provided to rural households for purchasing vehicles, under the Gatidhara Scheme. This initiative aimed to motivate individuals to start their own business, which were dependent on transport, by enhancing connectivity in rural areas and villages. 30% subsidies of the vehicles or ₹1 Lakh were offered under the scheme, depending on whichever amount is lower, making it financially accessible for the low-incomed rural populace. The tokenistic aspect of the initiative can be critically analyzed through different lenses, including statistical results, broader demography of the group it targets and socio-economic context.

The scheme only targets individuals without any physical disabilities and working-aged people. It does not cater to vulnerable groups such as elderly, differently abled and even capable women. According to the National Sample Survey Office (NSSO) data, women in rural India mostly face constraints due to socio-cultural pressure and conservative environment of the community. No steps or collaborations via other initiatives has been taken to solve this issue (NSSO, 2019). Neither any reliance on the elderly, who are willing to work, and children specific transportation for education has been worked upon (Banerjee, 2020). These factors are detrimental in the long run for the rural side of India and as has been observed since decades, make rural population backward in terms of employment. This also makes the rural India fall into the trap of migration to cities to work as construction labors, despite of the fact that they can prosper in agriculture. The transportation and mobility system links a lot of social and economic issues altogether.

The characteristics of the population aimed at by the Gatidhara Scheme uncover more subtleties. In rural West Bengal, a large number of households live below the poverty line and a significant portion of the workforce is employed in agriculture and informal sectors (Anandabazaar Patrika, 2011). The financial aid given through the program frequently does not fully cover all expenses related to owning a vehicle, such as upkeep and fuel, which can be extremely costly for the intended audience. This partial assistance indicates a surface treatment of underlying systemic problems like long-term poverty and insufficient infrastructure.

The tokenistic nature of the initiative is evident in its limited statistical impact, the socio-economic challenges faced by the target population, and the insufficient structural support. Comprehensive development requires addressing these deeper issues to ensure that such schemes contribute to intersectionality and inclusivity.

5.1.3.4 Critical Analysis of Policies and Initiatives for Elderly, Children and Differently abled

In the context of India, the travel needs and basics related to the same are often ignored in the case of children, differently abled and elderly. This results in a dependency of this sect on other for their transportation and mobility needs. This is evident in daily life context as well, such as the elderly travelling to religious places, children commuting to school after a particular age, when they can manage on their own, and also in the case of differently abled individuals. Efforts need to address these needs, but they eventually compromised, since a feminist approach requires the study of core problems and challenges faced by all sections of the society. The question arises on the capability of the government frequently. The persistence of dependency of these sections is due to the fact that, to solve such challenges, initiatives are necessary which work on the infrastructure, and the willingness by the states to allocate and maintain transparency in the funds. These initiatives necessitate a detailed infrastructure that includes well-maintained pathways, dedicated cycle tracks, and other supportive services (Ministry of Urban Development, 2013). Despite ongoing development in this segment, there is lack of visible progress on the ground, and is largely attributed to neglect at implementation level, hence it can be called as just a façade of development (Mohan, 2013). According to Prassana Desai (2018), a prominent urban designer in India, creation of inclusive spaces requires planning at all level, and active community involvement to address the needs of all. A concerted focus on ground-level is crucial to making these initiatives effective and ensuring independent travel for these vulnerable groups. Below, some of the initiatives will be analyzed to understand the gaps in them, which are hardly acknowledged.

Chhattisgarh: Senior Citizen Card

The Chhattisgarh Senior Citizen Card policy provides discounted fares to elderly people to encourage their mobility via public transport. The initiative dedicated seating too for the elderly. However, tokenism can be perceived here when analyzed in the context of the state's broader socioeconomic demography. As per Census of India, 2011, Chhattisgarh has a large chunk of population comprising Scheduled Tribes (ST) and Scheduled Castes (SC). As per the last census in 2011, The SC and ST constitute of 42.3% of the total population of the state. These groups are mostly in poor settings, with the majority living below the poverty line. According to the NITI Aayog's National Multidimensional Poverty Index (2021), highest poverty rates in India are found in

Chhattisgarh. This highlights the urgent need for intersectional and inclusive policies and initiatives.

The majority of public transport users in Chhattisgarh are young individual and women. This portion of the population depends on public transport due to economic constraints. Whereas the general population, who can afford private vehicles, often avoid using public transport. Since the policies and initiatives pay attention only to senior citizens, the policy fails to address the broader context of groups who equally require financial support and access to public transport (Ghosh and Srivastava, 2017). Many women have to travel long distances to access basic necessities like drinking water for household, which is a consequence of poor infrastructure and limited public transportation options (WaterAid India, 2021). This makes it clear that there is a dire need for transportation schemes that cater to women and other vulnerable groups as well.

Senior Citizen Card policy in Chhattisgarh, even though needed for elderly citizens, needs to be refined along with the support of other policies for the context that demands support. By targeting a demography that does not primarily need public transport, the policy fails to address the socio-economic problems faced by the actual primary users of transport and mobility systems in this context.

Bihar: Mukhyamantri Balak/Balika Cycle Yojana Initiative

The Mukhyamantri Balak/Balika Cycle Yojana in Bihar is an initiative to improve school attendance of children by providing free bicycles in villages of Bihar. The target of the policy is children studying from Class VIII to XII. The intention of the initiative is to address transportation challenges that act as impediment to regular school attendance (Government of Bihar, 2023).

The initiative, no doubt, is appreciative. However, further assessment of the pilot project found that even after such a policy, almost 37% of students in rural areas dropped out before completing high school within 12 months of the policy launch, primarily due to the lack of basic amenities like roads and other financial aspects (IIPS, 2020). The road conditions in the majority of rural areas in Bihar are dilapidated, and this made the commute for students unsafe even with bicycles. According to the Ministry of Rural Development (2022), only about 60% of rural roads in Bihar have paving, and the rest are never constructed, and among the 60% roads paved, 38% have potholes. This infrastructure failure highlights the efficacy of the cycle distribution scheme and demonstrates that just the distribution of a cycle will not fix a problem which has deeper

roots. Data from the Bihar State Police (2023) indicate that there were over 1,200 reported accidents involving school children on bicycles in rural areas in 2022. Out of these, 159 resulted in serious injuries and 7 in fatalities (Bihar State Police, 2023). These stats clearly highlight the dangers students face for the most basic necessity of life, education, due to the most basic infrastructure, roads.

The Mukhyamantri Balak/Balika Cycle Yojana can be considered tokenistic because it addresses a superficial solution of the transportation problem without tackling the more fundamental issues such as road infrastructure.

5.1.3.5 Critical Analysis of the Initiative and Policies for LGBTQIA+

In order to reduce tokenism in a feminism approach which emphasizes intersectionality and inclusion, integration of LGBTQIA+ community considerations with awareness and a sense of care into India's transportation and mobility systems should be a mandate. LGBTQIA+ individuals often experience prejudice, discrimination, humiliation, often turning into violence in transportation networks, as per the International Lesbian, Gay, Bisexual, Transgender and Intersex Association (ILGA, 2022). According to a 2021 Indian study, 45% of LGBTQIA+ respondents in Chennai reported having been harassed when using public transportation, raising worries about general safety (Sahodaran, 2021).

The LGBTQIA+ rights movements have played a crucial role in increasing the visibility of the discriminated community through pride parades and the growing presence of rights-focused NGOs in India. However, many government initiatives which can work efficiently with NGOs and community members, compromise. They design initiatives which do not solve the root cause, turning the community into a mere display instead of embracing a truly inclusive approach. For example, the Rainbow Station in Noida has a limited impact because of its narrow perspective on solving the issue it was designed to address.

Delhi National Capital Region: Noida Metro Rail Corporation (NMRC)

The Noida Metro Rail Corporation (NMRC) as an act of contribution renamed the Sector 50 station to "She-Man". The initiative, immediately after implementation, was condemned at various levels by the community and others on various levels. The name of the station as "She-Man" was criticized. The phrase "She-Man" is disparaging. It may expedite stereotyping, as is its inclination (SBC, 2023).. Later during the pride month, the station name was changed to "Rainbow Station ". Another objective of the initiative was to dedicate the station completely to the transgender community, as an employment

opportunity. The initiative allocated 10 transgenders as staff members of the station. The approach seemed like a performative gesture to allocate a station to the community. It was criticized because it reflected as an exhibition to other people. Reports of people just visiting the station and humiliating the staff were often registered (Noida Police, 2022). According to an anonymous³¹ Delhi-based student, *“My take is that they headed out to do something good but didn’t really have an understanding of what they’re trying to do, hence the debacle decision”* (Anonymous student, 2020, as cited in *Hindustan Times*, 2020). The entire initiative seemed more like a performative act, rather than bringing a substantial change.

NMRC's policy to employ transgender individuals at the station aimed to promote inclusivity. However, this initiative acts as a tokenistic gesture. Non-binary and transgender individuals expressed concerns that such initiatives, if not backed by genuine understanding and root causes, merely serve to improve the image of institutions rather than effect real change (Transgender Persons (Protection of Rights) Act).

5.1.3.6 Synthesis of the critical analysis

In examining the policies and initiatives undertaken by state governments in India, it is evident that they lack inclusivity and intersectionality, thus failing to adopt a feminist approach in the transportation and mobility system. The critical analysis has assessed inclusivity through metrics such as affordability, accessibility, mobility of care, and intersectionality in terms of the right to mobility, safety, and equity. The findings reveal that state policies, when addressing one aspect, often neglect another. This results in unresolved issues across different areas. No single initiative has successfully tackled all these concerns simultaneously. There is a need for such initiatives, but their success depends on the collaboration with initiatives for others. This synchronization, if not a general initiative or policy, can lead to intersectionality and inclusivity, which is emphasized in the feminist approach. However, the current state indicates a pervasive tokenism at both the national level and within individual initiatives.

³¹ Although the article in the *Hindustan Times* mentioned the name of the student who wrote the statement *“My take is that...”*, but this research refrains from writing the names of anyone to maintain anonymity. For details of the article, the reference can be found in the Bibliography Section.



Figure 24: Visuals of Indian Transportation and Mobility (source: OMI Foundation)

5.1.4 Key Findings from the OMI Foundation's 2022 Survey

The assessment of the research, as outlined in previous sections, is framed through the lens of intersectionality and inclusivity within the feminist approach. The parameters considered for intersectionality include the right to mobility, safety, and equity. Inclusivity parameters encompass affordability, safety, accessibility, and mobility of care.

At the national level, the OMI Foundation, a registered Trust and policy research think tank, operates at the intersection of mobility innovation, governance, and public good. The OMI Foundation has produced a report that integrates these themes, anchored in the foundational principles of accessibility, affordability, inclusivity, innovation, intersectionality, safety, seamlessness, and reliability.

The "Ease of Moving Index" (EoMi) is an effort to document policies, infrastructure, and, importantly, the impetus for behavioral change towards the goal of "Mobility for All." The EoMi 2022 report includes data from a survey of 50,000 citizens across 40 cities in India, input from over 220 participants in focus group discussions, and the consideration of nine parameters and 41 indicators. For a national-level assessment, the EoMi 2022 report provides credible quantification, supporting the research parameters for intersectionality and inclusivity at the national level.

The ola report had divided city with respect to projected population into 4 categories of Promising, rising, booming and mega cities³². The parameters that correlate with EoMi report with the ones used in the research thesis are as below.

EoMi Report Parameters & Indicators	6 Parameters Considered in Research
Impetus for active and shared mobility	Right to Mobility
Mobility for all	Safety
Investment in City	Equity
Efficient and reliable mobility	Mobility of Care
Mobility for all & Impetus for active & shared mobility	Accessibility
Affordability	Affordability

³² The 'Promising Cities' comprises cities with a projected population of up to 10 lakhs. The 'Rising Cities' comprises cities with a projected population between 10 lakhs to 20 lakhs. The 'Booming Cities' comprises cities with a projected population between 20 lakh and 40 lakhs. The 'Mega Cities' comprises the nine metropolitan areas with a projected population of over 40 lakhs.

The survey encompassed individuals from a wide range of ages, genders, professions, educational backgrounds, and diverse walks of life across India.

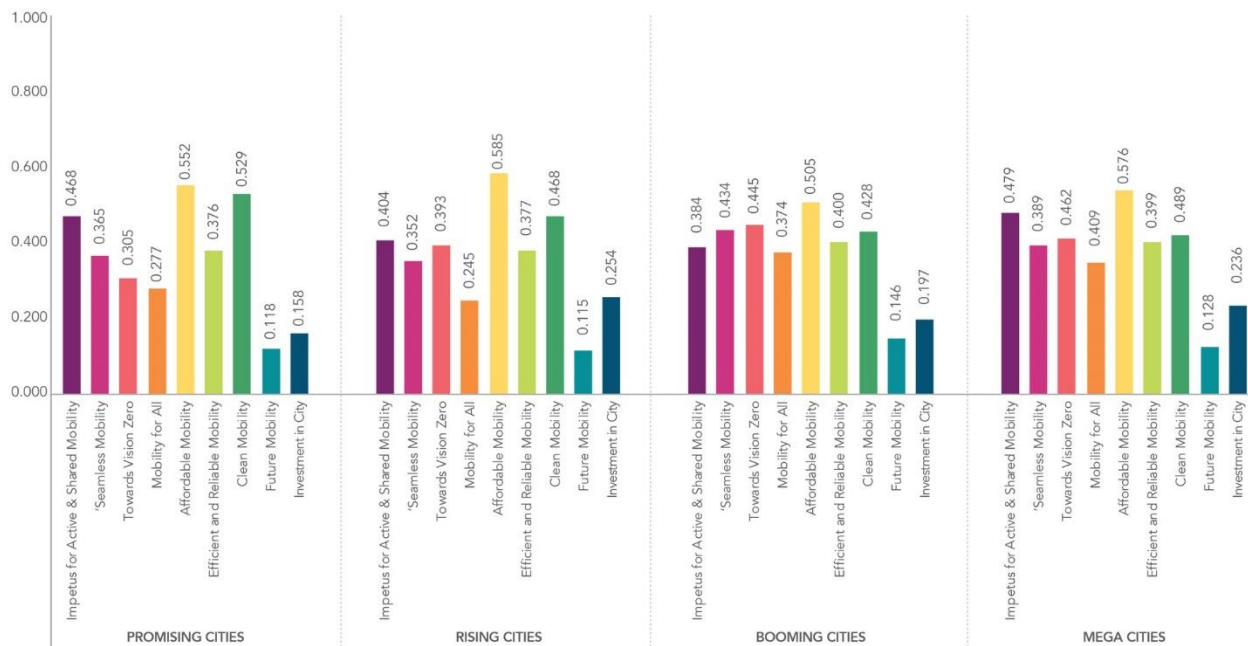


Figure 25: Cluster Assessment (source: OMI Foundation Report 2022)

The survey results reveal that the scores assigned to various categories, on a scale of 1, scarcely approach 0.5. This suggests that the current policies and initiatives in India are insufficient in meeting the needs of citizens across the country.

The 2022 EoMi report highlighted considerable shortcomings concerning mobility and accessibility in India. Survey results highlighted the primary issues faced by the respondents in India, that is lack of safety during travel, and insufficient infrastructural investments to improve accessibility for disabled and senior citizens.

The parameter of Mobility of Care is coherent with Efficient and Reliable Mobility in EoMi report. The result indicates a uniform inadequacy in the urban transportation system all over India. The findings highlight that factor such as road width, footpaths, ease of walking, and ease of crossing do not adequately facilitate movement for diverse user groups, thereby complicating intra-city travel.

The graph further illustrates that the affordability parameter is the only one that is above 0.5 in all types of cities. This indicates that while affordability in the transportation system is relatively manageable, this manageability is apparent only when compared to other parameters of intersectionality and inclusivity, rather than in absolute terms. In terms of

equity, the indicator considered is the city's investment³³. In terms of equity, the indicator considered is the city's investment. The results indicate that cities in all four categories lack sufficient investment. Despite India's rapid urbanization, the survey highlights significant deficiencies in equitable urban investment across all city categories. This shortfall can be attributed to systemic issues and governance challenges, including fragmented governance, inefficient planning, and a lack of integrated development strategies.

Overall, in terms of intersectionality and inclusivity, there is a significant gap that needs to be addressed at all levels. Different individuals are impacted differently by various parameters, making it imperative to apply a feminist approach without tokenism across all measures and parameters equally.

³³ The city investment has been considered in relation to the equity parameter in terms with the tax that a citizen pays and the opportunity and benefits one should receive from the tax. In brief, it is equated as the right of the citizens to contribute to the nation and in return an equity to receive resources and opportunities.

5.2 Assessment of Tokenism in Policies and Initiatives Targeted at Women in Delhi

In the previous section, which dealt with the national level in India, the research focused on tokenism in the feminist approach, emphasizing parallel solutions rather than intersecting ones. This section will further elaborate on how tokenism prevails even when a single parallel effort is made for any target group. The section will address this tokenism in the feminist approach by taking the case of Delhi, India's capital, with women as the selected target group.

It is important to understand that the research considered the feminist approach as intersectional and inclusive, not specific to women. However, in the case of Delhi, the target group selected is women to gain a deeper insight into how efforts are being made for women, but tokenism still prevails.

Delhi does not exist in isolation; many policies, initiatives, and developments are implemented with the Delhi NCR (National Capital Region) in mind, which includes prominent cities from different states like Noida and Ghaziabad in Uttar Pradesh, Gurugram and Faridabad in Haryana, and other smaller districts. However, this chapter and case will deal specifically with Delhi, not the NCR.

The case of Delhi is imperative for this research since it is the capital of India, and has a substantial female population compared to other states. The city has a higher number of women who are actively engaged in the workforce, education, and various other sectors along with being home makers. Women in Delhi are more likely to work, study, and engage in activities outside their homes, considering the context of India, necessitating targeted policies and initiatives to support their mobility, safety, and overall well-being.

5.2.1 Overview

Delhi, the capital city of India, spans an area of approximately 1,484 square kilometers. As of 2023, the population of Delhi is estimated to be around 20.57 million people (World Population Review, 2023). The city is characterized by its high population density, with about 13,871 persons per square kilometer (Knoema, 2023). Delhi has a notable gender disparity, with a sex ratio of 868 females per 1,000 males as per the 2011 Census (Knoema, 2023). This ratio implies that out of the total population, the number of females is approximately 8.54 million.

Delhi's transport system is highly developed and extensive, making it one of the most advanced cities in India. The primary modes of transportation include DTC (Delhi Transport Corporation) buses, auto-rickshaws, cycle-rickshaws, and the metro rail. Additionally, ride-sharing services like Uber and Ola are prevalent, providing further convenience to travelers. The city's road network is well-developed, with national highways like NH-8 ensuring connectivity to other regions. The Delhi Metro, which started in 2002, now connects the entire city and serves millions of commuters daily. Often considered to have one of the most extensive networks, it plays a crucial role in the city's transportation infrastructure. Delhi's transport network, including roads, buses, autorickshaws, e-rickshaws, and the metro, caters to all aspects of society, ranging from low-income to high-income individuals. There are numerous policies and initiatives aimed at improving transportation facilities, including some specifically for women, ensuring their safety and convenience in commuting.

In recent years, significant efforts³⁴ have been made to enhance the inclusivity and intersectionality of Delhi's public transportation, particularly for women. The introduction of the free bus ride scheme for women in 2019 represents a landmark initiative aimed at promoting gender equity in public transport usage. Data indicate a substantial uptick in the percentage of women utilizing public buses, rising from 25% in 2020-21 to 28% in 2021-22, and reaching nearly 33% in 2022-23 (Indian Express, 2023). According to a report by the Centre for Science and Environment (CSE), women constitute approximately 30% of the daily ridership of the Delhi Metro (CSE, 2023). The metro's introduction of women-only coaches and enhanced security measures have contributed significantly to making it a preferred choice for women. Walking remains an essential mode of transport for women, particularly for last-mile connectivity.

Despite these progressive steps, issues and challenges persist, highlighting that these initiatives and policies are not working as effectively as intended or may be merely tokenistic in nature. Women still face harassment and feel unsafe during their commutes, there are gaps in the infrastructure and representation in the decision-making process that need to be addressed to ensure intersectional and inclusive urban mobility.

³⁴ The policies and initiatives addressed in the Survey and Virtual Interviews are: 1- Pink Slip Service, free bus ride scheme, 2- Pink Autos for women, 3- Navigation Apps like Chartr and DTC, 4- Ladies Special Buses, 5- Ladies Special Buses, 6- Ladies Metro Coaches and 7- Women Safety App-Himmat Plus.

5.2.2 User Perception Analysis

In this section, a detailed analysis of the survey results, insights from focus group interviews, and personal observations is presented. Various indicators of intersectionality and inclusivity are examined to assess the perceptions and experiences of women in Delhi regarding their daily commutes. The study involved a sample of 100 women and three Zoom interviews, along with in-field observations conducted by the authors in Delhi, India. The survey respondents represent a diverse cross-section of women, encompassing a range of ages, professional backgrounds, economic statuses, and educational levels. The six parameters of **INTERSECTIONALITY** and **INCLUSIVITY** are measured through the following indicators in the research:

PARAMETER 01: Right to Mobility Indicators

Indicator 01:

Preferences regarding public and private transportation systems among women.

Indicator 02:

Types of vehicles used by women.

Indicator 03:

Awareness of transportation policies and initiatives designed for women.

Indicator 04:

Facilities and provisions utilized or accessed by women in Delhi.

Indicator 05:

Perceptions of the effectiveness of existing policies and initiatives in supporting women.

PARAMETER 02: Safety Indicators

Indicator 01:

Proportion of women traveling alone versus with companions.

Indicator 02:

Proportion of women who have experienced harassment while traveling.

Indicator 03:

Factors perceived by women as contributing to the lack of safety while using public transportation.

Indicator 04:

Segments of the transportation mobility chain identified as unsafe for women in Delhi.

Indicator 05:

Types of harassment encountered by women within the transportation systems in Delhi.

PARAMETER 03: Equity Indicators

Indicator 01:

Proportion of women whose use of transportation is influenced by the time of day.

Indicator 02:

Proportion of women who have foregone opportunities due to commute-related concerns.

Indicator 03:

Percentage of women who have encountered female service providers in the transport sector during their commute.

Indicator 04:

Proportion of women who perceive that government investment in transportation and mobility infrastructure in Delhi is sufficient.

Indicator 05:

Women's perceptions of the effectiveness of the Delhi government in addressing transportation issues.

PARAMETER 04: Mobility of Care Indicators

Indicator 01:

Modes of last-mile connectivity utilized by women.

Indicator 02:

Women's perceptions regarding areas for improvement in infrastructural elements.

Indicator 03:

Women's assessment of how accessible Delhi's transportation system is for differently abled individuals, the elderly, and children.

PARAMETER 05: Affordability Indicators

Indicator 01:

The range of daily travel costs experienced by women.

Indicator 02:

Women's assessment of how affordable Delhi's transportation system.

PARAMETER 06: Accessibility Indicators

Indicator 01:

Women's experiences with bus halting and waiting times.

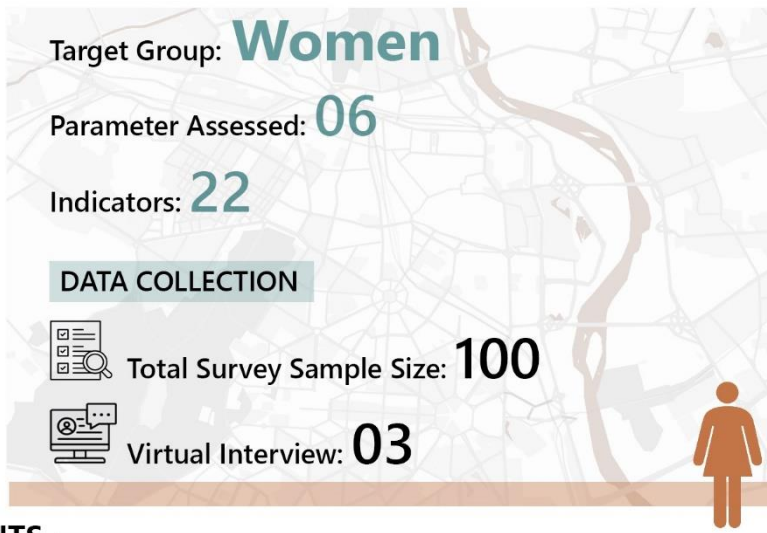
Indicator 02:

Women's rating on a scale of 1 to 10 for the accessibility of public transport for differently abled individuals.

5.2.3 Participant's Profile

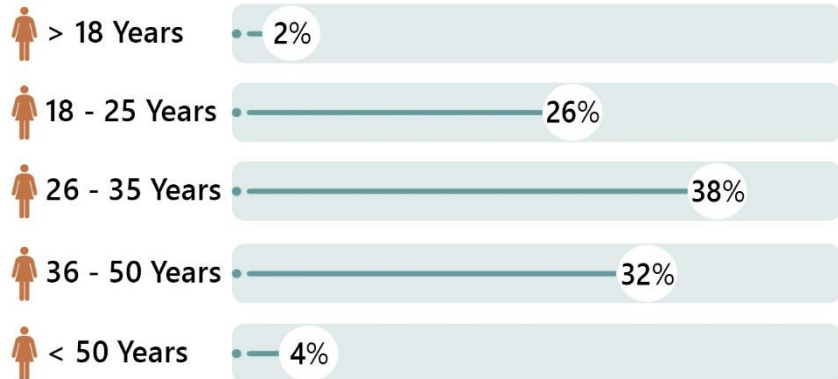
Below are the details of the survey participants and the three interviewers.

LOCATION OF DELHI

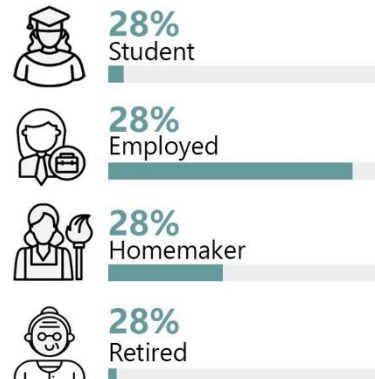


PROFILE OF SURVEY RESPONDENTS

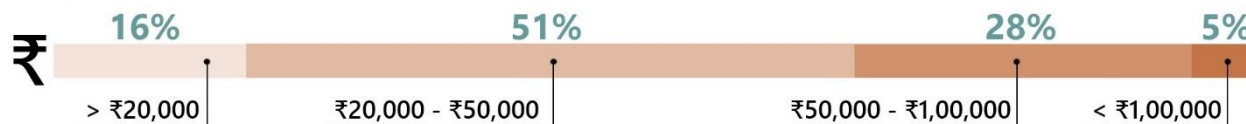
Age Group



Occupation



Income



TYPICAL TRAVEL PATTERN OF INTERVIEW RESPONDENTS

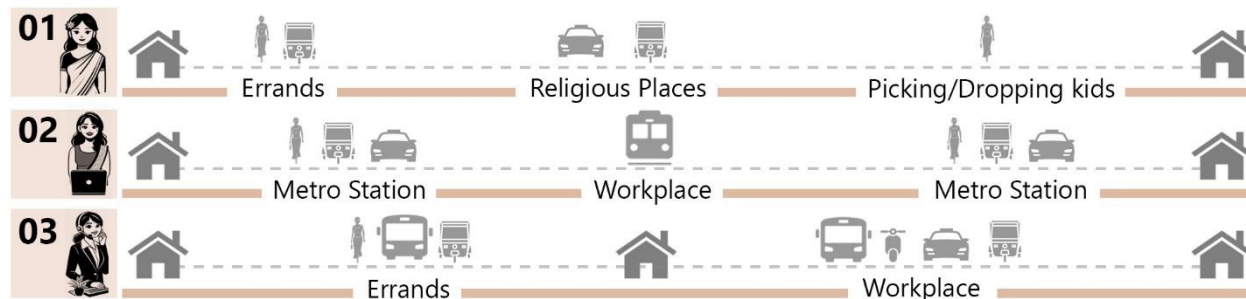


Figure 26: Participant's Profile (source: authors)

5.2.4 Assessment of Tokenism: Quantitative and Qualitative

In coherence to the Section 5.2.2, this section will individually detail the quantitative and qualitative analysis of the Six Parameters and their 22 Indicators to assess the Tokenism in Feminist Approach in the Transportation and Mobility Systems of Delhi with Women as the target group, as elaborated in the participant’s profile in the Section 5.2.3.

PARAMETER 01: Right to Mobility Indicators

Indicator 01:

Preferences regarding public and private transportation systems among women.



Figure 27: Preference of Transport Mode (source: authors)

Indicator 02:

Types of vehicles used by women.



Figure 28: Mode of Transport Used (source: authors)

Indicator 03:

Awareness of transportation policies and initiatives designed for women.



Figure 29: Awareness about Initiatives and Policies

Indicator 04 & Indicator 05:

Facilities and provisions utilized or accessed by women in Delhi.

Perceptions of the effectiveness of existing policies and initiatives in supporting women.

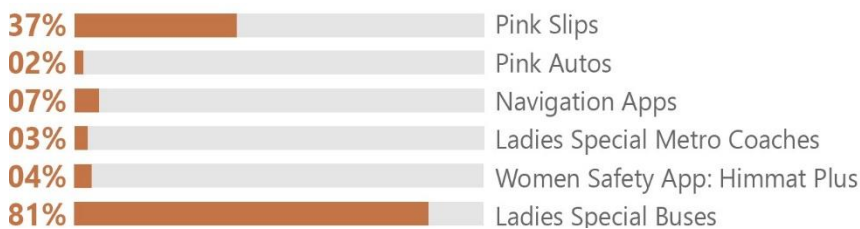


Figure 31: Percent of Policies and Initiatives Accessed (source: authors)

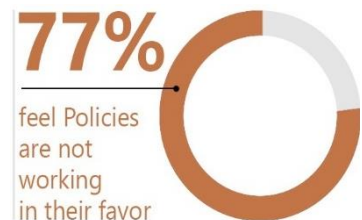


Figure 30: Perception (source: authors)

"The right to mobility, travel, or whatever it is, haha, in the context of India, how can it even be understood? Sure, there are rights, and there are policies too, but the conditions of the system are such that one doesn't even feel like exercising that right when it comes to mobility." -Informant 02

This sentence was expressed by one of the informants quite casually, but it highlights the real picture of the situation in Delhi. Women in Delhi know about their rights but in practice right to mobility often take a back seat.

It is quite evident with survey result in *Figure 27* that 92 percent of the women prefer to use private transportation option if given that they had no barrier to money, time and society. Despite a general preference for private vehicles in ideal conditions, practical usage indicates a significant reliance on public transport, particularly the metro, bus and auto rickshaws, for daily commuting as highlighted in *Figure 28*. The proportion of walking and the use of auto rickshaws and e-rickshaws underscores the importance of these modes specifically limited for the last-mile connectivity.

The *Figure 29* indicates a high level of awareness among women regarding the transportation policies and initiatives specifically designed for them. 93 percentage women in the survey are aware about the policies and initiatives for them. This suggests that efforts to disseminate information about these policies have been largely effective. However, the 10% of women who are not aware highlights the need for continued and possibly more targeted information campaigns to ensure that all women are informed about their mobility rights and the resources available to them. Often, awareness of certain policies becomes associated with one's occupation. For example, there are homemakers who are unaware of the free bus passes named Pink Slip policy launched by the Delhi government, as addressed by informant 01 in the interview.

"I'm not familiar with the pink slips-free scheme. It's not something I've seen in the news or heard about in my daily life." -Informant 01

The *Figure 30* reveals that the perception of right to mobility among the women is limited to Ladies' Special Metro Coaches and Pink Slips for buses. But other facilities such as pink autos, special buses, and safety apps are underutilized.

Only 23 percent of women believe that the policies are working in their favor, as evident in *Figure 31*. The results suggest that even if women avail themselves of certain policies,

it is generally for a part of a journey and not end-to-end, particularly when it comes to last-mile connectivity.

"Policies exist for the metro and buses, but I spend a lot of time and energy traveling from home to the metro and from the metro to home. Sometimes I manage to get an auto, but otherwise, I have to walk. I think there should be some end-to-end solutions."
-Informant 02

This clearly shows why 77 percent of women said that policies don't work in their favor. In a city like Delhi, last-mile connectivity plays an important role, and the accomplishment of the right to mobility can be in the fulfillment of all modes, not limited to a few modes.

PARAMETER 02: Safety Indicators

Indicator 01:

Proportion of women traveling alone versus with companions.



Figure 32: Proportion of women travelling alone (source: authors)

Indicator 02:

Proportion of women who have experienced harassment while traveling.

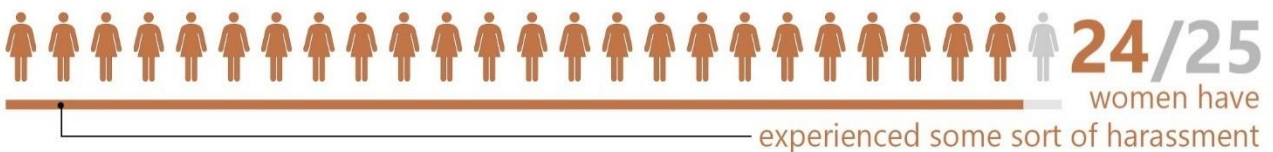


Figure 33: Harassment Index (source: authors)

Indicator 03:

Factors perceived by women as contributing to the lack of safety while using public transportation.

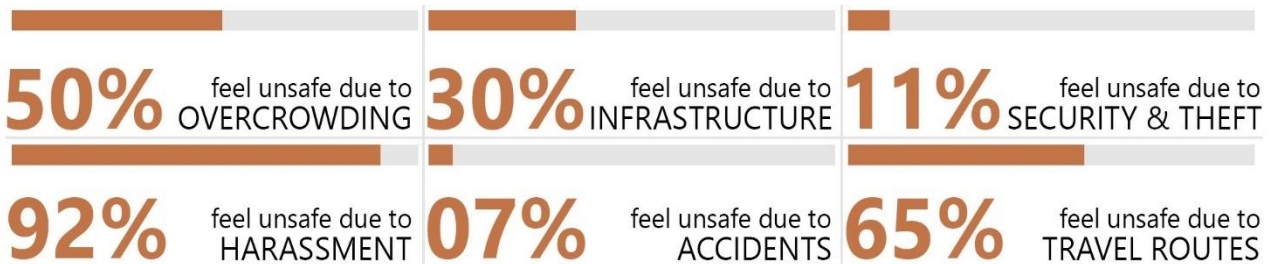


Figure 34: Safety factors Perception (source: authors)

Indicator 04:

Segments of the transportation mobility chain identified as unsafe for women in Delhi.



Figure 35: Safety perception in Mobility Chain (source: authors)

Indicator 05:

Types of harassment encountered by women within the transportation systems in Delhi.



Figure 36: Percent of Women experiencing Harassment (source: authors)

“If I had a choice, I would travel alone to my destinations, but it's not feasible all the time due to safety concerns. I prefer having my friends or a family member with me. Even if I'm alone in the metro, I want someone with me in autos, E-rickshaws, or even while walking.” -Informant 02

Survey data provides a deeper understanding of women's experiences with public transportation. *Figure 32* reveals that approximately 66 percent of women surveyed travel alone for various reasons, while around 34 percent choose to travel with family, friends, or companions when using public transportation. Regardless of whether they travel alone or with others, women face harassment, as illustrated in *Figure 33*, which shows that nearly 96 percent or 24 out of every 25 women in Delhi have encountered harassment during their commutes. This statistic underscores the widespread safety issues faced by female commuters in the city.

“I live near Samaypur Badli Metro Station, and my commute home typically takes about 20 minutes by auto. The whole experience can be quite nerve-wracking, especially when I work late. The station itself is unsettling because it's the last stop on the Yellow Line, and the area around it tends to be deserted and poorly lit once the crowds disperse. Waiting for an auto can be stressful, as the surroundings often feel unsafe. One particularly troubling incident that stands out happened when I took an auto home. The

driver took a different route without any clear explanation, and when I confronted him about it, he became aggressively defensive. This kind of behavior is unfortunately not uncommon. Many women in this area share similar concerns. To manage my anxiety, I've started calling a friend or family member while I'm in the auto. It's a precaution I take and it's a sad reality that such measures are necessary just to feel a bit safer during what should be a routine commute." -Informant 03

Figure 34 provides further insight by highlighting that harassment and long or unsafe travel routes are major factors contributing to the overall perception of insecurity during commutes, with 92 percent and 65 percent respectively. Women frequently report feeling unsafe across multiple segments of the transport mobility chain. This includes not only the time spent waiting for transportation but also the experiences of traveling inside vehicles and the journeys to and from stops. Ironically, while accidents are also considered a major safety issue, they were a concern for only 7 percent of women. Figure 35 corroborates these findings by illustrating that every stage of the transportation process is perceived as unsafe by women in Delhi. The nature of this insecurity—spanning from the waiting period at transport hubs to the actual journey and the transition between stops—points to a systemic issue affecting female commuters.

During the fieldwork, the author, Nishu Satish Jindal, encountered experiences similar to those reported by many women in the survey. While traveling from Govindpuri metro station to Rajiv Chowk metro station, there were frequent instances of men staring from the adjacent general compartment and from the station platforms at the women's compartment. This observation aligns with the broader trend of visual harassment, including leering, staring, and ogling, as reported by 96 percent of survey respondents. Additionally, approximately 60 percent have experienced physical harassment, including groping and touching. (See figure 36)

The analysis illustrates the multifaceted nature of the safety concerns faced by women. The deserted and poorly lit areas, aggressive behavior from transport operators, and the need for constant vigilance highlight the layers of insecurity that female commuters navigate daily. The experiences and observations during the fieldwork and the survey highlight a pervasive issue of safety for female commuters in Delhi's public transportation system. Safety, both in terms of perception as well as the realities faced by the women in the Delhi Transportation system, is taken granted. The alignment of these findings with broader survey results indicates that harassment and insecurity are systemic problems.

PARAMETER 03: Equity Indicators

Indicator 01:

Proportion of women whose use of transportation is influenced by the time of day.



Figure 37: Women affected by time of travel (source: authors)

Indicator 02:

Proportion of women who have foregone opportunities due to commute concerns.



Figure 38: Career Impact due to Transportation Issues (source: authors)

Indicator 03:

Percentage of women who have encountered female service providers in the transport sector during their commute.



Figure 39: Visibility of Female Staff (source: authors)

Indicator 04:

Proportion of women who perceive that government investment in transportation and mobility infrastructure in Delhi is sufficient.



Figure 40: Perspective on Government's Efforts (source: author)

Indicator 05:

Perceptions on effectiveness of Delhi Government in addressing transportation issues.

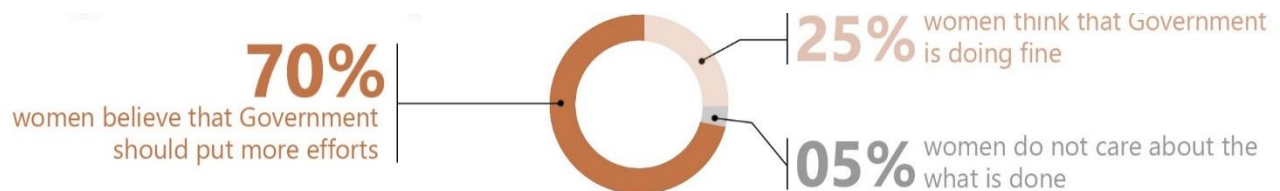


Figure 41: Perception on Government's Effort (source: source)

"I am a homemaker, but I sometimes want to take up a part-time job, like teaching, since I have some free time. However, due to my location, I don't have convenient commute options to reach the schools, which are at least 2-3 kilometers from my house."

-Informant 01

In the survey results, it is evident that there have been cases, either temporary or permanent, where women had to compromise on an opportunity due to transportation concerns. *Figures 37 and 38* illustrate important equity indicators in women's transportation planning: the proportion of women who have missed opportunities because of commute-related concerns and the substantial impact of the time of day on women's transportation usage. *Figure 37* shows the survey results of the women surveyed, 99% said that their use of the transportation system is influenced by the time of day (Informant 1, Year). Informant 02, who stated in the above interview excerpt that she usually calls her parents when working late, lends support to this. Moreover, *Figure 38* shows that 17% of the women polled have missed out on opportunities because of worries about their commutes.

"Yes, if you are talking about female drivers, I have never seen a single one. To be honest, I would be shocked if I saw a woman driving a metro, bus, or even an auto rickshaw. The only place where I have observed women working in transportation-related roles is at Delhi metro stations, where they serve as ticket generators and security personnel"

-Informant 03

Figure 39 highlights the percentage of women who have encountered female service providers in the transport sector during their commute. A significant majority of 92 % indicating they have not encountered female service providers. This highlights a crucial equity concern in women's transportation planning and emphasizes the need for more female service providers.

"I believe the government can invest more. Right now, they are just making policies, but the real impact will be from infrastructure development. I would love to see proper footpaths, some benches along them, and streetlights. I think Delhi deserves this, and the government has the potential to make it happen" -Informant 02

It is evident from *Figure 40* that less than half of the women perceive government investment in transportation and mobility infrastructure in Delhi as sufficient, with 70 percent of women surveyed feeling that the government should invest more.

Furthermore, *Figure 41* reveals that 70 percent of women believe the Delhi government is not effectively addressing transportation issues. These findings highlight significant equity concerns in transport planning for women in Delhi. They underscore the necessity for transport planning to address disparities not only in women's involvement as consumers but also in their roles as providers within the transportation sector. Additionally, these disparities impact women's career opportunities in this field, which need to be adequately addressed.

PARAMETER 04: Mobility of Care Indicators

Indicator 01:

Modes of last-mile connectivity utilized by women.

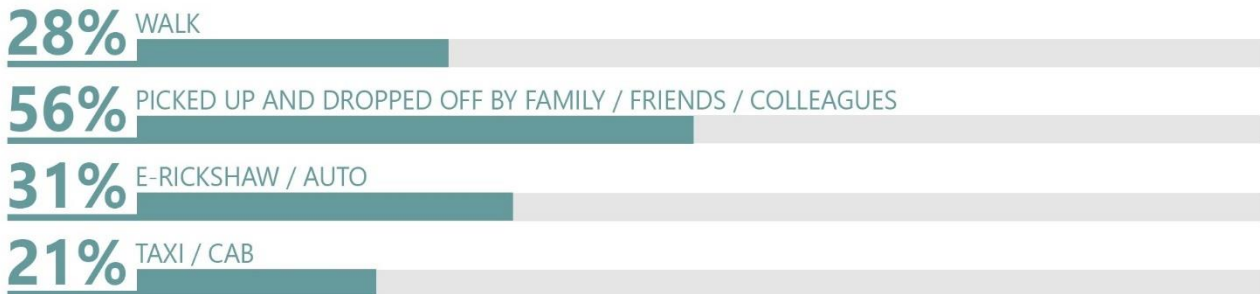


Figure 42: Last mile Connectivity Modes (source: authors)

Indicator 02:

Women's perceptions regarding areas for improvement in infrastructural elements.

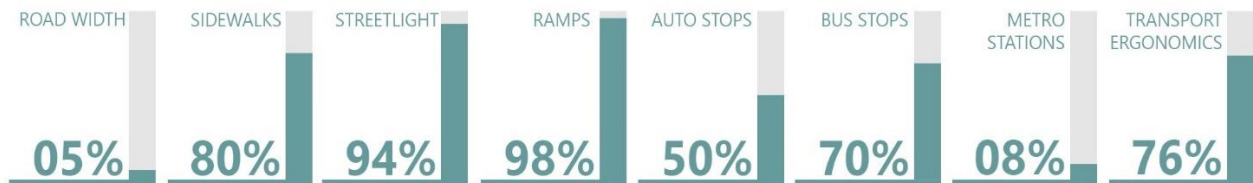


Figure 43: Point of view for Improvement zones (source: authors)

Indicator 03:

Women's assessment of how accessible Delhi's transportation system is for differently abled individuals, the elderly, and children.

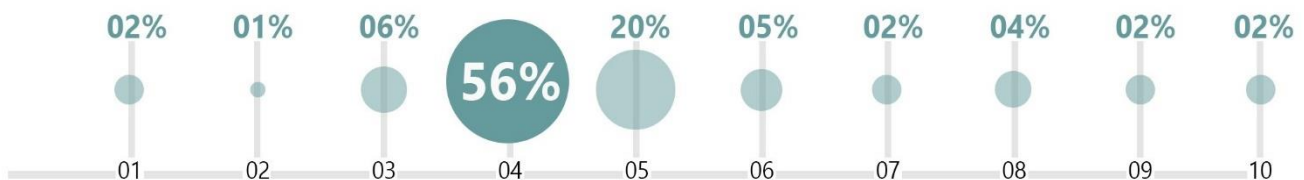


Figure 44: Women's Assessment (source: authors)

"I always prefer to walk inside my gated society only. Outside the colony gate, we hardly have footpaths. The cars are rushing by, and it's like a battle against vehicles."
-Informant 01

The issue of last-mile connectivity remains a critical concern, particularly for women, as evidenced by both qualitative and quantitative data. It can be seen in *Figure 42*, Indicator 01 of Mobility of Care, which illustrates the modes of last-mile connectivity utilized by women. The data reveals that the most common mode is being picked up by family, friends, or colleagues, accounting for 56%, followed by e-rickshaw/auto at 31%, walking at 28%, and taxi/cab at 21%. This pattern underscores women's reliance on personal networks for safe and reliable last-mile transportation, highlighting significant gaps in public transport infrastructure.

The graph of Indicator 02 in *Figure 43* reveals that many women feel essential infrastructure elements³⁵ such as streetlights, sidewalks, and ramps are lacking. While policies and initiatives aimed at improving transportation are important, their effectiveness is limited without the necessary infrastructure in place.

"There are hardly any designated stops for autos or buses. Instead, it's just a cluster of autos standing in an unordered manner, and those are also informal. This is the most basic issue that can be addressed, even if not through major infrastructure changes" -
Informant 03

The need for basic amenities like stops for buses and autos highlights a significant gap that must be addressed to ensure women can benefit from and safely access the transportation system.

Figure 44 represents women's assessment of the accessibility of Delhi's transportation system for differently abled individuals, the elderly, and children, on a scale from 1 to 10. Most women have rated the accessibility at 4, highlighting significant room for improvement in making the transportation system more inclusive.

³⁵ Transport Ergonomics in the *Figure 43*, Indicator 2 refer to the Public Vehicle Design and Seating as asked in the Survey (refer Appendices Section).

PARAMETER 05: Affordability Indicators

Indicator 01:

The range of daily travel costs experienced by women.



Figure 45: Cost Range of Daily commute (source: authors)

Indicator 02:

Women's assessment of how affordable Delhi's transportation system is.

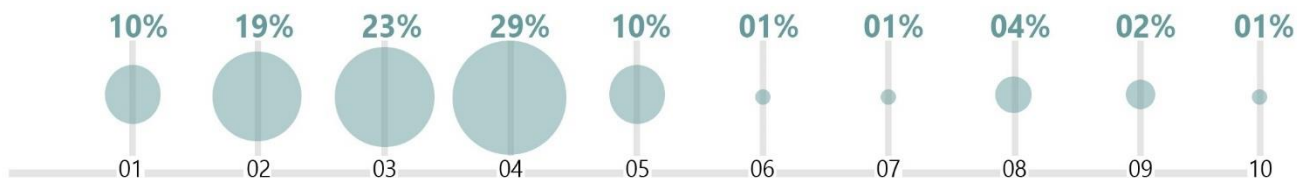


Figure 46: Assessment of Costing by Women (source: authors)

PARAMETER 06: Accessibility Indicators

Indicator 01:

Women's experiences with bus halting and waiting times.



Figure 47: Women's Experience with Public Buses (source: authors)

Indicator 02:

Women's rating on a scale of 1 to 10 for the accessibility of public transport for everyone.

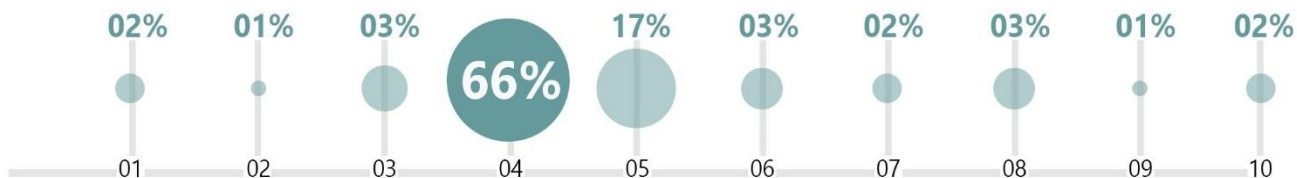


Figure 48: Women's Perception on Accessibility for all (source: authors)

Approximately 67% of the respondents in the survey reported earning less than 50,000 rupees per month. Notably, around 66% of these respondents spend more than 150 rupees per day on commuting, which totals over 4,500 rupees per month. This data, as illustrated in *Figure 45*, indicates that a substantial portion of their income is allocated to transportation expenses.

"My route from home to my office is too far, almost 30 kilometers from Samaypur Badli to Kalkaji. I have to first pay ₹50 to an auto driver to reach the metro, then almost ₹28 via my metro card, and then another ₹40 for an auto. In total, it costs me nearly ₹118, one side..." **Informant 03**

This financial burden is further reflected in the perceptions of affordability. As shown in *Figure 46*, a significant number of women indicated that the cost of transport in Delhi is not affordable at all. When asked to rate the affordability of Delhi's transportation system, the majority of women rated it 3 and 4 on a scale of 10. This rating underscores the pressing issue of transportation costs, which constitute a considerable financial strain for many women in the city.

Despite of the various schemes and initiatives for women like Pink Slips, reserved seats in Buses, a majority of women, voted that the buses do not halt properly, and the waiting time is also long, as seen in the *Figure 47*. During a site study to experience the pink slip service, the author, Nishu Satish Jindal, observed several critical issues impacting women's use of public transportation. Firstly, the buses often do not halt properly when women are present, resulting in many women having to wait for extended periods to catch a bus. This inconvenience frequently forces them to resort to using auto-rickshaws or taxis/cabs, significantly increasing their overall transportation costs.

Another aspect in accessibility when asked in the survey demonstrated that 66% of women believe that the accessibility for everyone can be scaled on to 4 at a scale of 10. Only 7% in total gave more than 7 points. (*See Figure 48*)

Furthermore, it was particularly challenging for elderly women to approach the buses, as they were often overcrowded. In such cases, these women had no option but to take auto-rickshaws. Another significant issue highlighted during the study was the lack of fixed running meters in auto-rickshaws. As a result, women often have to engage in prolonged negotiations over fares. In many instances, including the author's experience, they end up paying higher charges in their haste to reach their destinations.

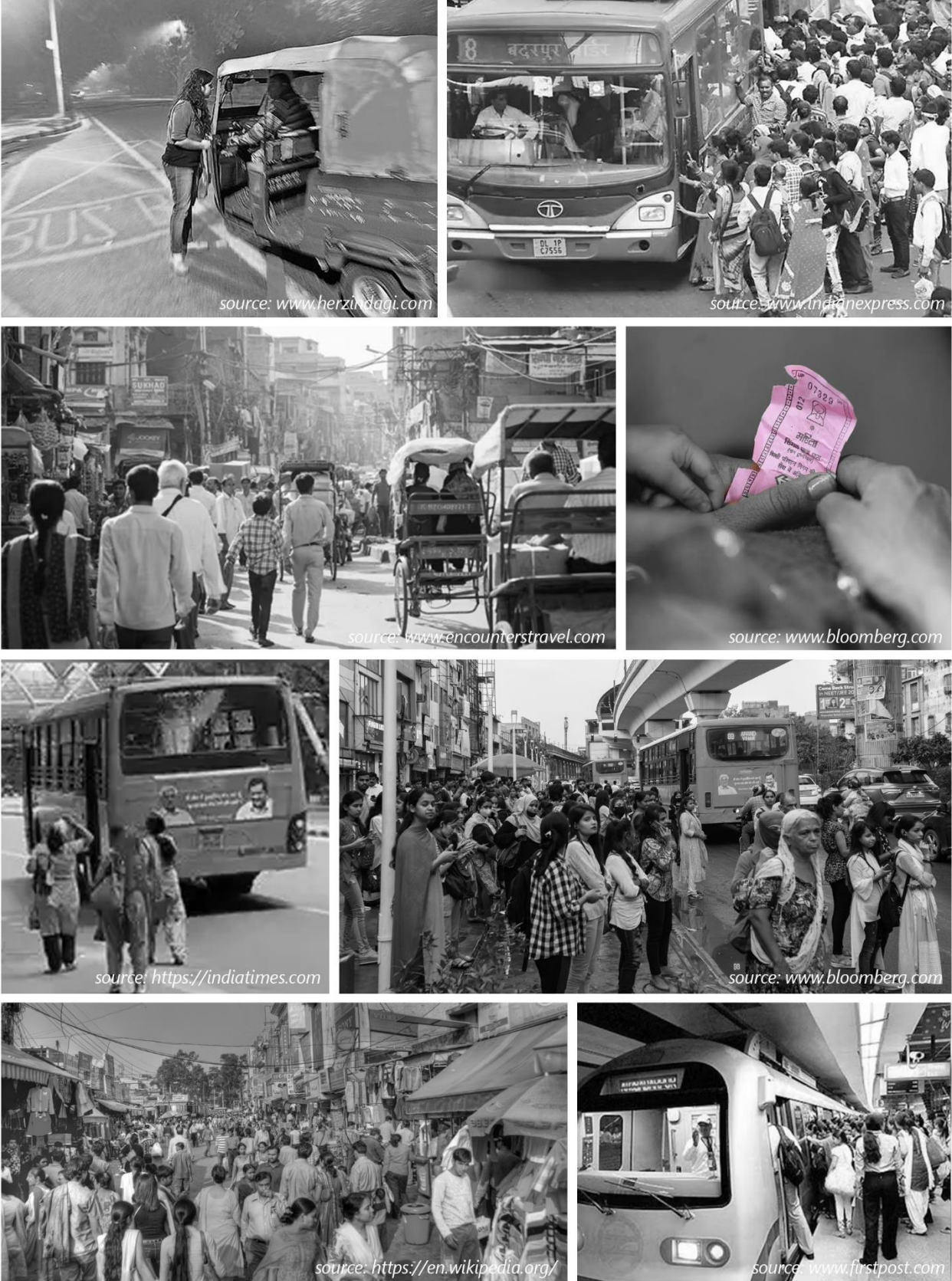


Figure 49: Women's everyday dilemmas in Delhi transportation

5.3 Synthesis

The comprehensive assessment of tokenism in policies and initiatives targeted at women in Delhi underscores significant gaps and challenges that undermine the effectiveness of these efforts. Despite various measures and schemes aimed at improving women's mobility, such as the free bus ride scheme and women-only metro coaches, the practical reality for women in Delhi is marked by persistent safety concerns, inequitable access, and insufficient infrastructure. This section synthesizes the findings across six parameters of intersectionality and inclusivity, providing a view of the issues faced by women in Delhi's transportation system.

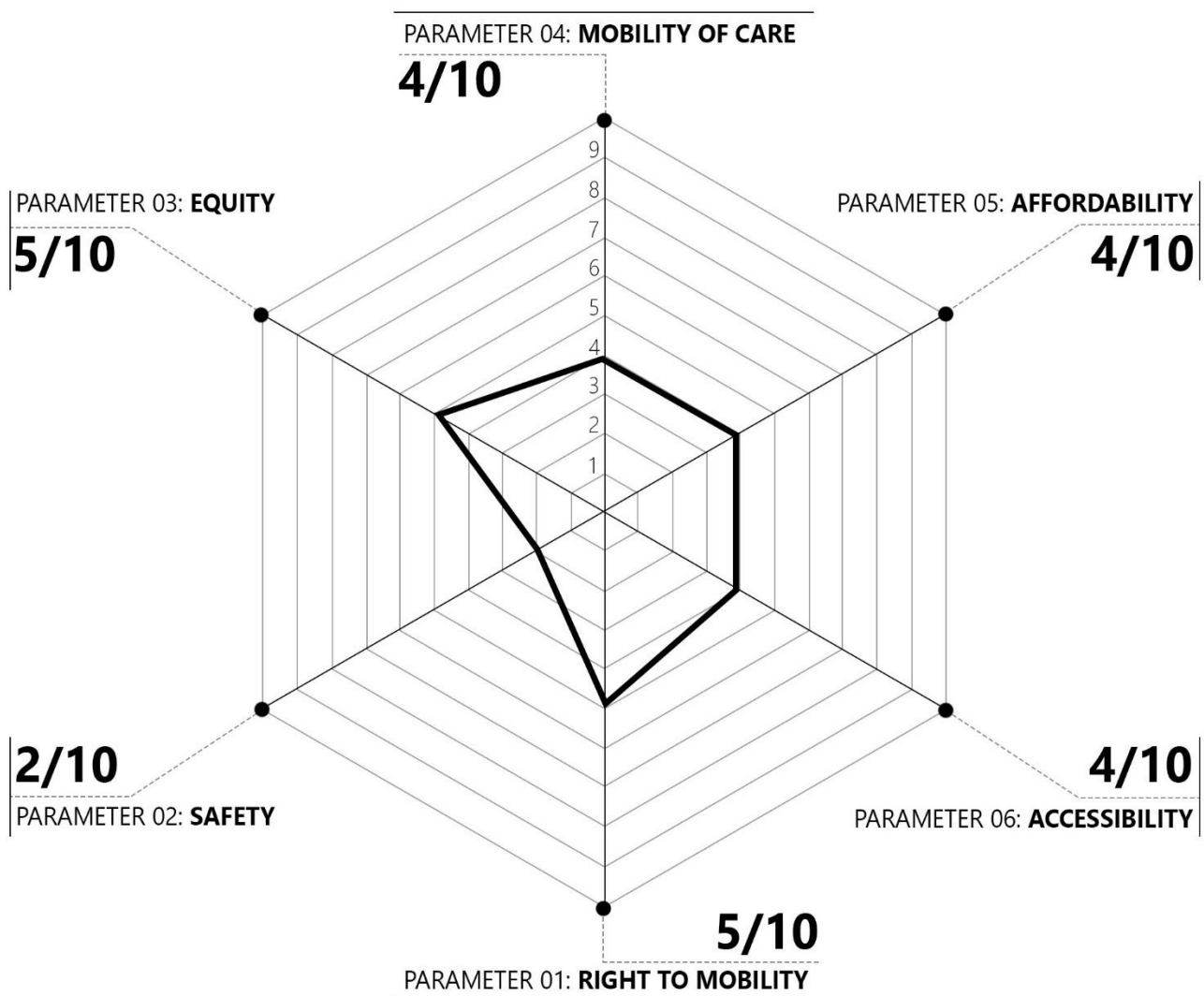


Figure 50: Synthesis of the Assessment of the Six Parameters (source: authors)

The research revealed that safety remains a paramount issue for women in Delhi. According to the survey, 96% of women have experienced harassment during their

commutes. This statistic highlights the pervasive nature of safety concerns, which span the entire mobility chain, from waiting areas to the actual travel and final destinations. Despite the introduction of measures such as women-only coaches and increased security, these efforts have not been sufficient to alleviate the widespread sense of insecurity among female commuters. Informants shared personal experiences of harassment, reflecting a broader systemic issue of safety in public transport.

Equity in transportation is crucial for ensuring that all women, regardless of their socio-economic status, can access opportunities without being hindered by mobility issues. The research found that a significant number of women have had to forego opportunities due to concerns about their commute. For instance, 17% of women reported missing opportunities because of transportation-related issues. Additionally, the study highlighted a notable absence of female service providers in the transport sector, which further accentuates the disparity. The survey indicated that 92% of women had never encountered female service providers during their commutes. This lack of female representation points to broader systemic issues within the transportation infrastructure.

The issue of affordability is another critical factor influencing women's transportation choices. The research showed that a significant portion of women spend a considerable part of their income on commuting. Approximately 66% of respondents spend more than ₹150 per day on transportation, highlighting the financial burden of commuting. The practical experiences of women, such as the need to frequently negotiate fares with auto-rickshaw drivers and the lack of proper bus halts, further exacerbate the affordability issues. These financial constraints underscore the inadequacy of current public transportation options, which are perceived as neither affordable nor accessible.

Accessibility is crucial for ensuring that women can move freely and safely. The research indicated that many women face significant challenges with last-mile connectivity and inadequate infrastructural elements such as streetlights, sidewalks, and designated stops. For instance, 56% of women rely on being picked up by family, friends, or colleagues for last-mile connectivity, highlighting significant gaps in public transport infrastructure. The accessibility of Delhi's transportation system for differently-abled individuals, the elderly, and children was rated poorly, with most women rating it a 4 out of 10. This indicates a need for substantial improvements to make the system more inclusive and intersectional.

Despite the introduction of various policies and initiatives aimed at improving women's mobility, these efforts often fall short of providing a truly intersectional and inclusive

solution. Women from diverse backgrounds, including the elderly, students, and differently-abled individuals, continue to face significant challenges that hinder their right to mobility. The assessment highlighted that only 23% of women believe the policies are working in their favor, suggesting that these initiatives are largely tokenistic. The findings underscore the need for a more holistic approach to transportation planning that addresses safety, equity, affordability, and accessibility to ensure that the mobility needs of all women in Delhi are met effectively.

The comprehensive assessment across the six parameters of intersectionality and inclusivity—right to mobility, safety, equity, mobility of care, affordability, and accessibility—reveals that tokenism is prevalent in the policies and initiatives targeted at women in Delhi's transportation system. The existing measures, although progressive in intent, do not adequately address the practical challenges faced by women. For example, while there are policies like the free bus ride scheme, the lack of proper infrastructure such as safe waiting areas and reliable last-mile connectivity makes it difficult for women to fully benefit from these initiatives.

The research shows that these policies and initiatives are often superficial, failing to address the deeper issues that women face in their daily commutes. Despite efforts to promote gender equity in public transportation, such as the introduction of women-only coaches and free bus rides, the actual experiences of women indicate that these measures are not enough. Women continue to face harassment, feel unsafe, and encounter significant barriers to accessing affordable and reliable transportation. This indicates that the policies are more symbolic than effective, serving to project an image of inclusivity without delivering substantial benefits.

Moreover, the lack of female representation in the transportation sector further exacerbates the problem. The absence of female drivers, conductors, and other service providers in the public transport system highlights a significant disparity. This lack of representation not only affects the perception of safety and comfort for women commuters but also limits the opportunities for women to participate in and benefit from the transportation sector. The findings suggest that addressing these issues requires more than just token measures; it demands a comprehensive overhaul of the transportation system to ensure that it is truly inclusive, intersectional and supportive of women's needs. Therefore, adopting a feminist approach is essential at every level, whether addressing specific groups or considering the system as a whole.



Figure 51: The Gravity of the Situation as reflected (source: authors)

CHAPTER 06

The Case of Vienna, Austria

6. The Case of Vienna, Austria

Vienna is often celebrated as a feminist city with multiple facets supporting this assertion. The available literature often depicts Vienna's feminist identity as a gendered city, a city for women, or a role model for gender mainstreaming. Initially, authors perceived Vienna's feminist approach in the same way, thinking it was mainly centered on gender. After on-site observations and the study, the notion completely changed. The claim of it being a city designed exclusively for women proved to be of a narrowed understanding.

The study revealed that it employs principles of intersectionality and inclusivity in both tangible and intangible ways. Vienna's feminist approach extends beyond just focusing on gender, addressing everyone, and emphasizing its intersectional and inclusive nature. This acknowledgment enhances the research's credibility, highlighting the need to understand Vienna's diverse aspects, reflected in its transportation systems.

This research focuses on six parameters of intersectionality and inclusivity, which were successfully embodied in Vienna. The six parameters include right to mobility, equity, safety, affordability, accessibility, and mobility. Vienna exemplifies these parameters and showcases the incorporation of the feminist approach that considers everyone. Thus, making it a benchmark study for the research.

For any system that leaves no one behind, consider all its stakeholders at all stages, and this is what Vienna epitomizes and it will be elaborated in this section.

6.1 Involvement of Diverse Stakeholders in Decision Making

Urban mobility planning in Vienna considers the diverse needs of stakeholders. The process of developing the urban mobility plan started in 2012 with a thorough evaluation of the Transport Master Plan from 2003. The city developed recommendations for a new transportation idea rooted in Sustainable Urban Mobility Plan (SUMP)³⁶ principles, while an external quality assurance team oversaw adherence to these standards during the planning stages.

Vienna's planning required the essential involvement of stakeholders. The city sought input from municipal departments, transportation associations, civil engineers, and public utilities in order to gather diverse perspectives. External experts were invited to collaborate on expanding public transportation, while public involvement was promoted through stakeholder forums, citizen dialogues, an online platform, social media, and exhibitions. In 2013, Vienna established a Working Group on Mobility with city administration members to create an urban mobility plan. The plan was developed during the autumn of 2013 and 2014, through in-depth conversations with city departments, companies, district officials, residents, professionals, and interest groups.

Two rounds of district forums were organized in Vienna in summer and autumn of 2014 where representatives discussed thematic concepts and proposals. In summer of 2014, a Citizen's council was formed with members that were randomly selected to ensure diverse representation in the process. The results were discussed in stakeholder forums that were in line with Innovation & Research, Mobility related Interest groups and Business. The plan measures were assessed for diversity and gender equality (European Commission, 2013).

Additionally, the Vienna model uses data driven decision-making processes in order to identify and address disparities in transportation. Data on travel patterns and demographics are collected and analyzed to formulate transportation services to meet the needs of diverse groups. It is evident that equity is the top priority in planning for Vienna. This process enables them to develop a widely accepted urban mobility plan that is both intersectional and inclusive.

³⁶ European Commission recommends that European towns and cities of all sizes should embrace the concept of SUMP. These improve the quality of life for residents by addressing major challenges related to for example congestion, air/noise pollution, climate change, road safety, and parking (European Commission, n.d).

6.2 Assessment of Intersectionality and Inclusivity Parameter in Vienna's Transportation and Mobility Planning System

Vienna upholds the right to mobility through thorough transport policies that ensure equitable access for all residents. The city's public transport network is designed to cover all areas, ensuring that no neighborhood is underserved. The Austrian constitution, along with EU regulations, supports the right to mobility. Vienna translates these regulations into actionable policies, such as the annual travel pass that offers unlimited travel within the city for an affordable price. This pass significantly reduces transportation costs, making mobility accessible to everyone (Cervero, 1998). A notable initiative is Vienna's "1-Euro-a-Day" annual pass, which has made public transport affordable and accessible to all, including low-income residents. Additionally, the extensive coverage of public transport ensures that residents can reach essential services and job opportunities easily (Urbanet, 2018). These measures have led to a high modal share of public transport, with over 39% of all trips in Vienna made using public transport (Vienna City Administration, 2020). This high usage rate indicates the effectiveness of Vienna's policies in promoting the right to mobility. Additional subsidies and discounts are provided for students, seniors, and low-income residents, making public transport even more affordable (Urbanet, 2018). Vienna's fare structure includes multiple options such as single tickets, weekly and monthly passes, and the annual pass, catering to different needs and financial situations. The city's transport authority also offers free travel for children and discounted fares for families (Vienna City Administration, 2020). These measures have made public transport in Vienna one of the most affordable in Europe, contributing to high public transport usage rates. Affordable transport enhances economic participation and social inclusion, benefiting the overall community.

Vienna has implemented several policies to support mobility of care, recognizing the vital role of caregivers in society. The city's transport system is designed to facilitate easy and efficient movement for caregivers. Practical measures include the prioritization of pedestrian infrastructure, providing ample seating in public spaces, and ensuring that public transport is accessible for those with strollers or wheelchairs. Special attention is given to the design of public transport vehicles, which include low floors and wide doors for easy access (Hamilton & Jenkins, 2000). Vienna's public transport is equipped with features that cater to the needs of caregivers, such as ramps and designated spaces for strollers and wheelchairs. Additionally, the city's "Mobility Card" provides free or discounted travel for caregivers accompanying people with disabilities (Vienna City

Administration, 2018). These measures have significantly enhanced the mobility of caregivers, allowing them to fulfill their responsibilities more efficiently. The inclusive design of Vienna's transport system ensures that all residents can participate fully in social and economic activities.



Figure 52: A glimpse of the Transportation Systems in Vienna

The city adheres to rigorous safety standards for all modes of transport, including regular maintenance and inspection of vehicles and infrastructure. Traffic calming measures, such as speed limits and pedestrian zones, are implemented to enhance safety (Pucher & Buehler, 2010). Vienna's transport system includes well-lit streets, clearly marked pedestrian crossings, and dedicated bike lanes. The city also uses real-time monitoring and automated traffic management systems to quickly respond to incidents and ensure the smooth operation of the transport network (Vienna City Administration, 2020). These safety measures have resulted in a low rate of transport-related accidents and incidents.

Vienna consistently ranks high in global safety indices, reflecting the effectiveness of its safety policies (Mercer, 2019).

The city's infrastructure follows universal design principles, ensuring that public spaces and transport facilities are user-friendly for people with disabilities. Measures to enhance accessibility include the installation of ramps, elevators, and tactile guidance paths for individuals with visual impairments. Public transport vehicles are designed with low floors and priority seating for people with disabilities and the elderly (Niranjan et al., 2012). The retrofitting of older stations and vehicles with modern accessibility features is a key initiative. Vienna's "Barrier-Free Travel" program provides detailed information on accessible routes and facilities, helping individuals plan their journeys effectively (Vienna City Administration, 2018). These efforts have significantly improved the mobility of people with disabilities, allowing them to travel independently and participate fully in societal activities. Vienna's transport system serves as a model for accessibility, inspiring other cities to adopt similar measures.

Vienna's continuous improvement and adaptation of its policies highlight how a city can stand out by defining and implementing transport policies with a deep understanding of its context and societal layers. This approach is essential for India as well, where policies must address the diverse needs of its population through an inclusive and intersectional framework. A feminist approach, rather than tokenism, ensures that transport policies effectively and equitably serve all segments of society.

CHAPTER 07

Way Forward

7. Way Forward

This research would be incomplete without proposing a way forward for addressing the current situation of the Indian transportation and mobility system. Throughout the research, a critical analysis has been conducted, particularly focusing on tokenism within the feminist approach to the Indian transportation and mobility system. This section aims to provide a new direction with a six-step approach, considering six parameters of intersectionality and inclusivity, elaborated in the previous sections. These parameters will serve as catalysts in facilitating the incorporation of intersectionality and inclusivity into transportation and mobility planning in India.

6-Step Approach to Integrate Intersectionality & Inclusivity in Indian Transportation and Mobility Systems

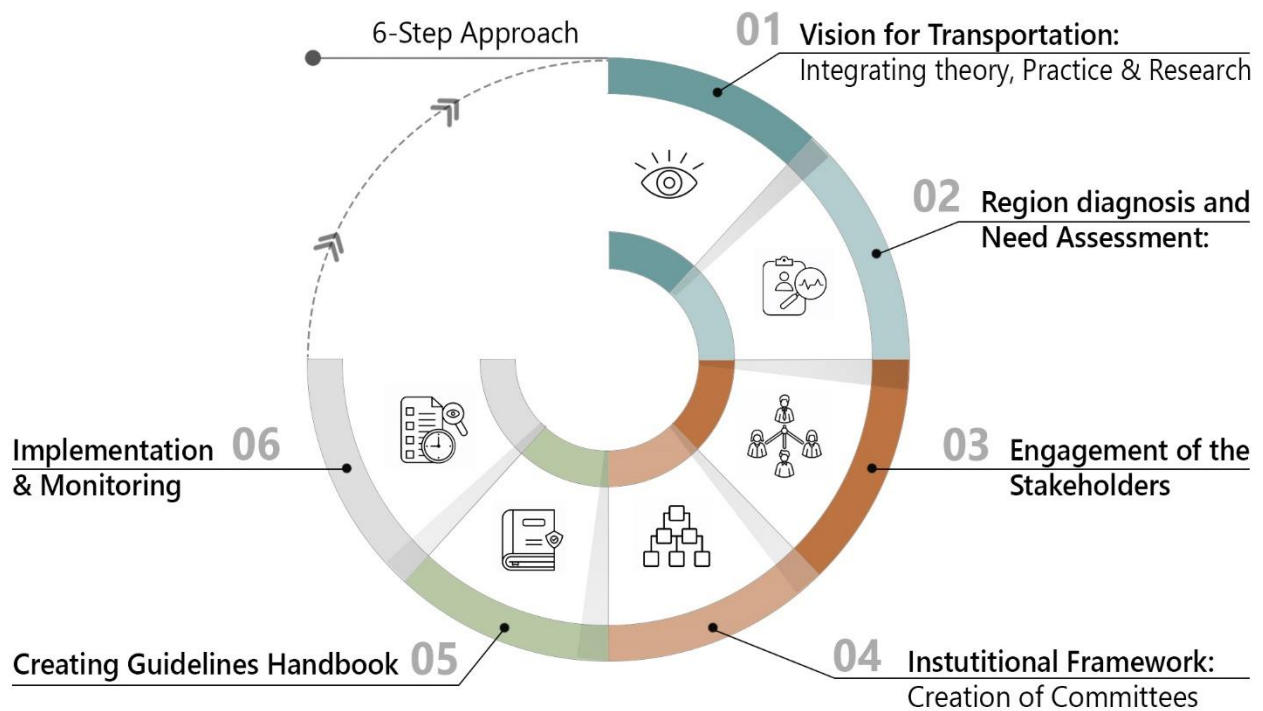


Figure 53: The 6 Step Approach Proposed (source: authors)

This process is designed to create, implement, monitor, and evaluate transportation and mobility systems in India. It aligns with Sustainable Development Goal 11.2, which aims to "By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons" (UNSDSN n.d.).

In the context of India, it should be noted that achieving all these aims by 2030 may not be feasible, considering the scale and complexity of implementation. However, this framework will certainly set the stage for initiating a feminist approach in the transportation and mobility sector and minimizing tokenism to the greatest extent possible. **The Way Forward is A Six-Step Approach to Integrating Intersectionality and Inclusivity in Indian Transportation and Mobility Systems.** The steps associated in the way forward are derived from the learnings at PoliTo, tailored to the context of India. Concepts taught in courses "Decision-making for SDGs", such as Key Performance Indicators (KPIs), the Delphi Method, and the Codesign Thinking method—have been integrated into the framework for effective and efficient transport and mobility planning.

STEP 01**Vision for the Transportation: Integrating Theory, Practice & Research**

A clear and compelling vision is essential for guiding decision-making, prioritizing the needs of marginalized and underrepresented groups, and driving systemic change in transportation planning. To achieve a truly equitable and effective mobility system, this vision must be rooted in the principle that mobility is a fundamental right for everyone, regardless of gender, socioeconomic status, disability, or other intersecting identities.

In the context of Indian cities, villages and states, it is crucial to move beyond theoretical discussions and merge them with practical applications to create a comprehensive development vision. This involves understanding how feminist approaches can be effective and integrated into transportation and mobility planning. The goal is to create a transportation network that is not only safe, affordable, and accessible but also genuinely equitable for all members of society. This vision must emphasize inclusivity and intersectionality, ensuring that policies and practices address the diverse needs of all community members. It should be realistic in scale and execution, avoiding tokenistic gestures and instead fostering meaningful change. In this regard, continuous investment in research is vital to understanding and addressing emerging issues in transportation.

By bridging the gap between theory and practice, we can develop a system that genuinely serves all, ensuring that no one is left behind. This integrated approach will pave the way for a transportation network that upholds all the 6 parameters for inclusivity and intersectionality.



Figure 54: Vision and Integration of Theory, Practice and Research (source: authors)

2 CONCEPTS
INTERSECTIONALITY
& INCLUSIVITY

FEMINIST APPROACH

6 PARAMETERS
CRITERIA OF ASSESSMENT

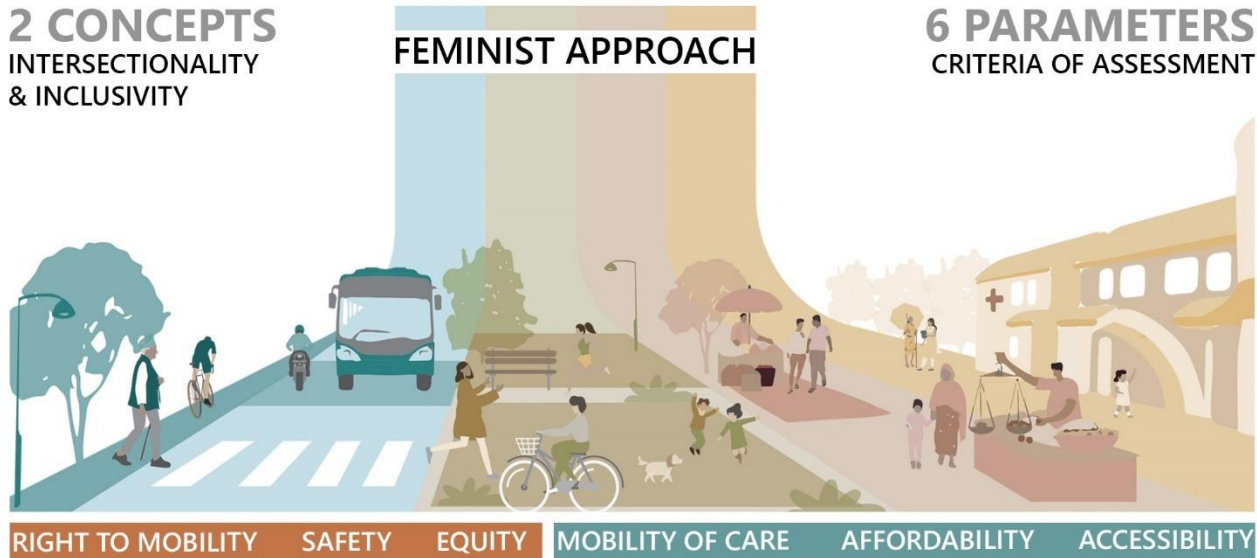


Figure 55: Vision including Two concepts and Six Parameters (source: authors)

The vision should include a theoretical framework that emphasizes six parameters of intersectionality and inclusivity: the right to mobility, safety, equity, mobility of care, affordability, and accessibility. Although additional parameters can be added based on the context, demographics, and specific challenges faced.

The way forward is not merely an extension of existing strategies but a reimagining of how transportation and mobility planning systems should be designed and implemented to address the multifaceted realities of diverse communities. At the core of this proposal lies a feminist theoretical framework that challenges traditional, often monolithic approaches to transportation and mobility. Conventional models tend to adopt a one-size-fits-all approach that overlooks the varied experiences of different societal groups. In contrast, this proposal is grounded in a feminist base that emphasizes intersectional and inclusivity principles.

This research adopts a critical perspective from the lens of the feminist theoretical framework, highlighting the importance of considering multiple intersecting factors such as gender, race, class, disability, and other social identifiers that influence individuals' experiences of transportation and mobility. The Vision in the way forward aligns with this critical perspective. To fully appreciate how this vision diverges from traditional approaches and builds on a uniquely feminist base, it is essential to understand the transformative impact of integrating feminist principles with the concepts of intersectionality and inclusivity into the theoretical framework. These concepts, along with the six parameters—right to mobility, safety, equity, mobility of care, affordability, and

accessibility—make the proposal particularly well-suited to the context of India compared to conventional comprehensive approaches. The integration of these concepts and parameters, combined with existing research frameworks and norms, ensures that the solutions are not only broadly applicable but also tailored to meet the specific needs of different groups and communities within society.

Moreover, adopting a feminist approach in the Vision is layered and allows for a deeper engagement with communities, involving them directly in the design and implementation of solutions. This participatory process ensures that policies and initiatives are not just top-down impositions but are informed by the lived experiences and needs of those most affected. Engaging with communities in this way not only enhances the relevance and effectiveness of the solutions but also fosters a sense of ownership and empowerment among various groups.

Targeted research must be conducted in several key areas to bridge the gap between theory and practice. There is a crucial need to target research on the tokenism of existing initiatives and policies. This includes empirical studies on the specific mobility needs of various communities, analysis of the effectiveness of existing transportation policies, and evaluations of initiatives and policies that apply feminist and intersectional principles. Research should focus on gathering both qualitative and quantitative data from the ground up, including participatory research methods that engage directly with the communities being served. Additionally, research should examine existing successful systems and assess their coherence with the Indian context. The objective of these ground-level studies, conducted at various scales, should be to facilitate the formation of prototypes that can be applied in permutations and combinations according to the needs and requirements of the specific context.

Moreover, establishing a continuous feedback loop between policymakers, practitioners, and researchers is essential. This can be achieved through workshops, collaborative platforms, and pilot programs that test theoretical models in real-world scenarios. By analyzing the outcomes of these practical applications, theory can be refined, and best practices can be identified and scaled up.

This vision needs to set a new standard for Transportation and Mobility Planning Systems that can be adapted and scaled to different contexts within India. The feminist approach provides a foundation that can respond to emerging challenges and opportunities seamlessly into the existing frameworks.

STEP 02

Regional Diagnosis and Need Assessment

The vision of a region can only be determined when the existing scenario is well analyzed. Therefore, breaking down the larger vision into outcomes that support the vision is necessary, and this involves the practical study of the region. This is also important because this criterion will make the outcomes achievable and reduce the tokenism that currently exists in the transportation and mobility system of India. There are certain key pointers to be considered in the Regional Diagnosis and Need Assessment.

Context Analysis and Study of Existing Scenario

An analysis of the region's specific administrative factors, socio-economic conditions, and transportation infrastructure availability is imperative. This should also include a demographic study, economic activities, cultural practices, and various constraints specifically associated with the region and their impact on surrounding areas. Additionally, the historical factors that have shaped the current transportation and mobility systems of the selected region need to be analyzed, along with a thorough examination of the existing scenario.

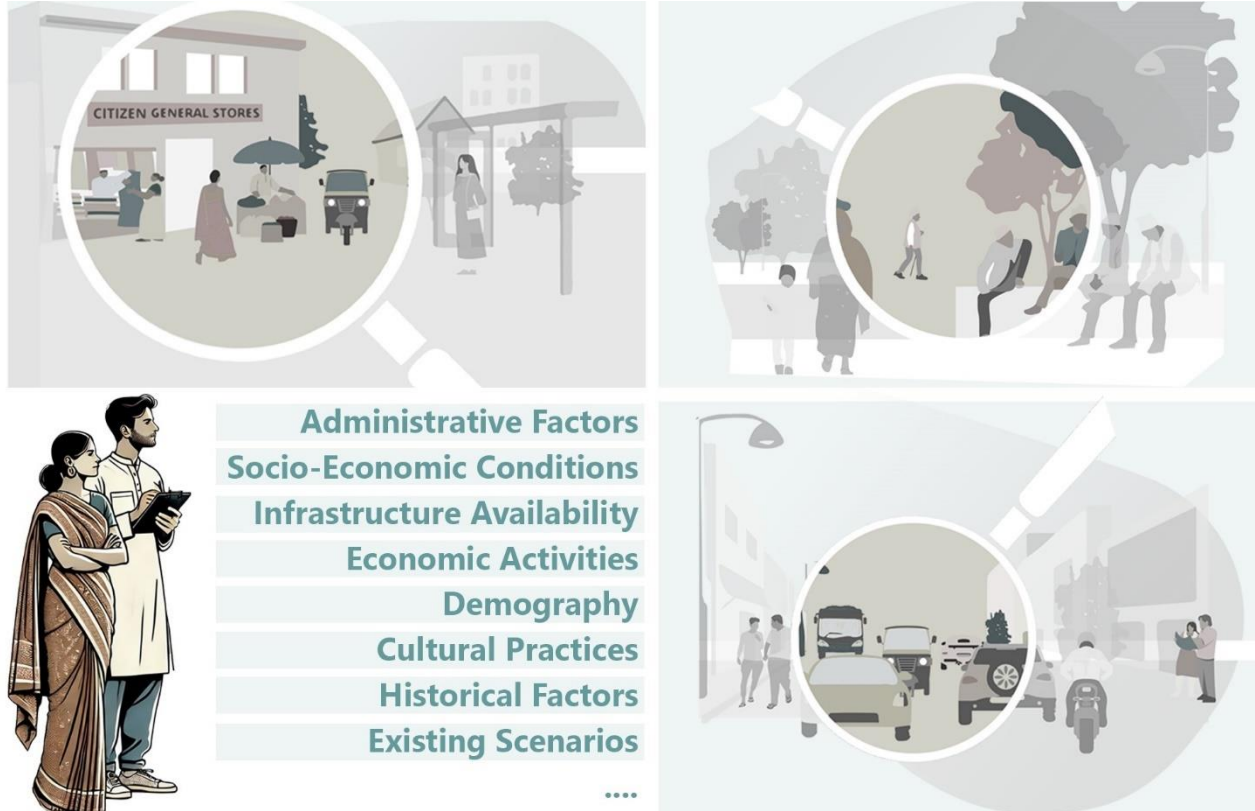


Figure 56: Context Analysis and Study of Existing Scenario (source: authors)

Identification of Key Data and Knowledge Gaps

Conducting a needs assessment to map the current transport situation for target groups is essential. This should include identifying existing barriers, challenges, and transport deserts areas where the transportation system is either non-existent or inadequate. The assessment should review available datasets and information, identify who owns the data, and determine if there are any gaps. Regular surveys can be distributed among all associated target groups to identify these gaps and understand the perspectives of those who will be impacted. This information, along with other documentation, can be summarized to build a case for formulating relevant policies and initiatives

Identification of the Problems

Once the context is well understood, the next step is to identify the specific problems within the transportation system. It is necessary to decode and formulate a Problem Tree by analyzing the *hierarchy of multiple causes and their effects*, along with understanding **WHY** these problems persist. This might include issues such as inadequate infrastructure, lack of accessibility for marginalized groups, high costs, safety concerns, and other related challenges. Identifying these problems is crucial for setting the right objectives and planning effective interventions in transportation and mobility planning, which can help reduce tokenism at various levels.



Figure 57: Problem Tree (source: authors)

Defining the Desired Objectives and Outcomes

The starting point for inclusive and intersectional transport planning must be a conscious decision to shift to an inclusive and intersectional, consensus-led planning process. It is useful to reflect on desirable outcomes that align with the 'Vision' of the region. The desired vision should encompass all six parameters discussed in the research and potentially additional ones relevant to the region's context. It is crucial to consider the region's current state-of-the-art condition and what is expected in the future. Here the

structuring of the Objective Tree plays a crucial role in understanding *the objectives and HOW they will impact the system.*

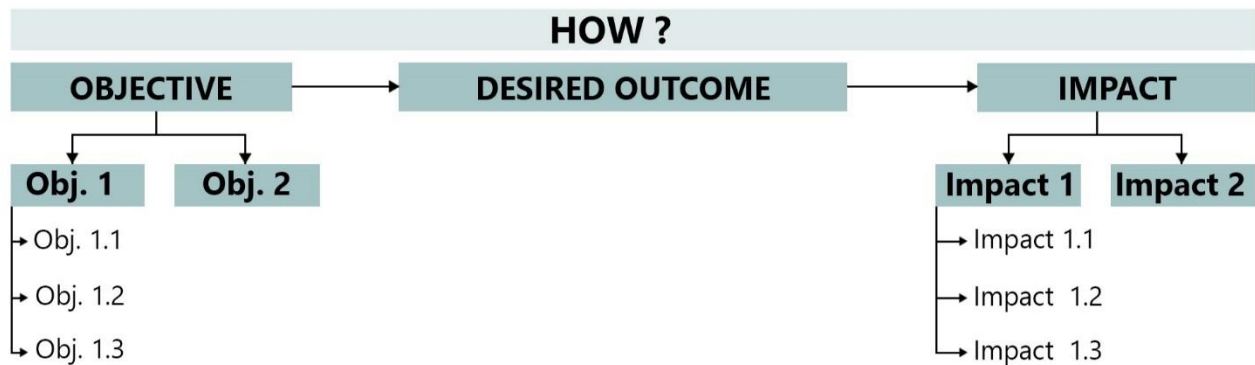


Figure 58: Objective Tree (source: authors)

Development of Possible Solutions

Based on the identified problems and desired outcomes, a range of possible solutions must be developed. These may include infrastructure improvements, policy changes, new transportation services, community-based initiatives, and more. Each solution should be evaluated for feasibility, cost-effectiveness, and potential impact on various communities in the region.

Analysis of Resource Availability

The feasibility of all the possible initiatives and policies that needs to be worked on or needs to be implemented should involve a thorough analysis of the available resources, including human, financial, and institutional resources of a particular region, and their dependencies on other regions. These resources should be examined collectively to make transportation inclusive and intersectional.

Identification and Analysis of the Stakeholders

All possible and relevant stakeholders for a region need to be identified, including local government, transportation authorities, community organizations, and citizens from various sectors and communities. It is crucial to analyze the needs and priorities of each stakeholder to ensure that diverse perspectives are reflected in the planning process, aiming for an intersectional and inclusive transportation and mobility system. Beyond identifying stakeholders who may be directly or indirectly impacted, it is essential to assess the power dynamics, interests, and influence of each stakeholder. This assessment helps to avoid short-sighted solutions and ensures that the planning process is comprehensive and equitable, addressing the concerns and aspirations of all involved parties.

Formulation and Selection of the Suitable Key Performance Indicators (KPIs)

Developing or selecting the correct KPIs is crucial for measuring the success of transportation initiatives. These KPIs should align with the six parameters of inclusivity and intersectionality and be specific, measurable, achievable, relevant, and time-bound (SMART). This approach ensures that the transportation system stays on track to meet its objectives and allows for adjustments to be made as needed.

Prototyping

Based on the gathered data and research, prototypes of potential transportation solutions should be developed. These prototypes can be tested in specific areas or communities to assess their effectiveness. A flexible approach should be used, allowing for different combinations of solutions to be applied based on the specific needs and context of each region. This ensures that the transportation system is tailored to the unique characteristics of the area. For instance, completing the street network is a priority for any region, and resolving last-mile connectivity should always be considered. The image below is an example of one such prototype.

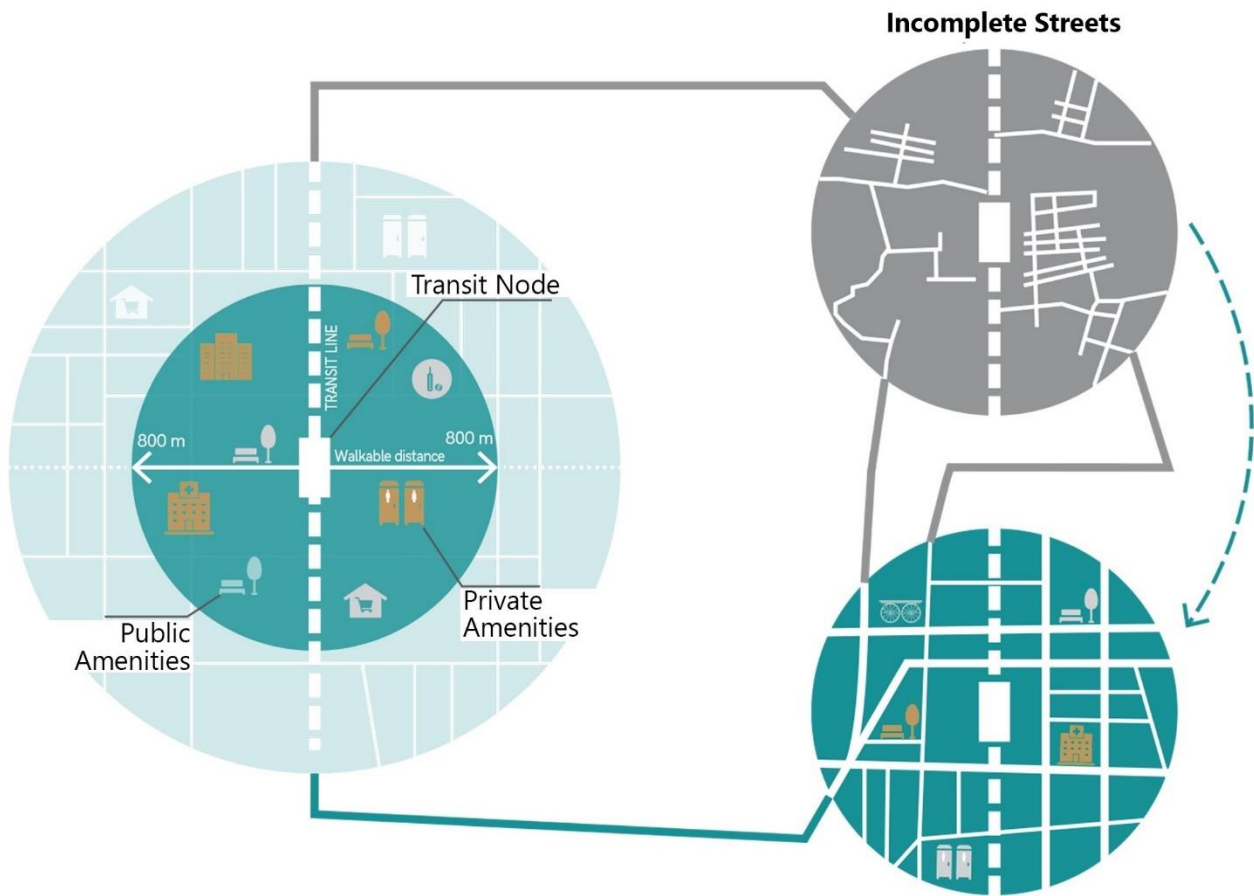


Figure 59: Exemplar of a Prototype (source: Shakti Foundation)

STEP 03

Stakeholder Engagement & Process and User Group Mobility Pattern

A transportation system cannot truly serve everyone if it does not include everyone in its development. The next crucial step in creating an inclusive and intersectional transport system is to involve the already identified key stakeholders within the regional context to ensure their active participation in the decision-making process. This begins with a detailed stakeholder mapping exercise to pinpoint those individuals and groups who are most affected and impacted by the tokenism in the current transportation system. The characteristics of the user groups should include demographic factors such as gender, age, family status, and residency or location, as well as socioeconomic aspects like income levels and employment status. However, the stakeholders are not limited to only the users. It includes the involvement of all. These can be the Political Leaders, Private Developers, Financial Institutes, Government Officials, Planning Authorities, and others along with the Citizens and Target Groups. For an active participation of all, a well-defined process is imperative.

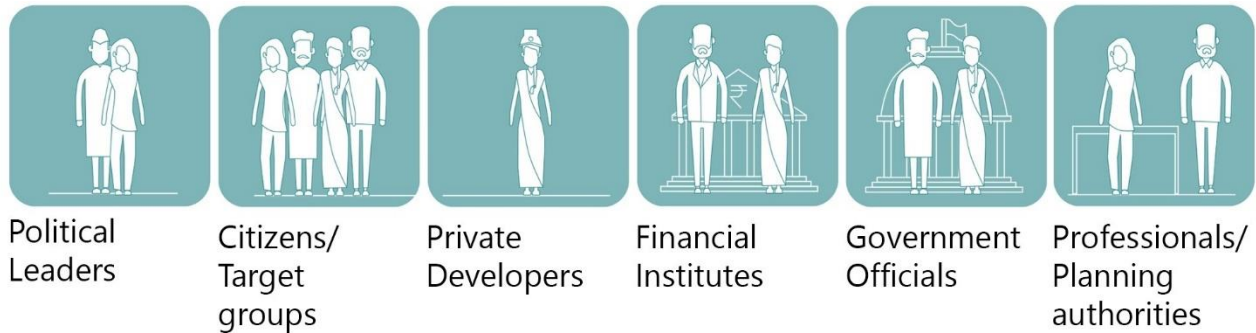
Stakeholder Engagement Process

A definite framework of the process is crucial for the organized participation of all stakeholders. There can be various methods and processes that can be adapted in the region-specific Indian context; however, this research focuses on the application of the Delphi Method³⁷ as a stabilizer for the effective adoption of a feminist approach, emphasizing intersectionality and inclusivity in Indian Transportation and Mobility Systems.

The Delphi Method is well-suited for the Indian context as it incorporates the combined perspectives and input of all involved parties. Once stakeholders, apart from the users, are defined for a specific region, which may vary depending on the scale, it is important to establish representatives for the user groups. These representatives should reflect target groups such as women, LGBTQIA+, the elderly, differently abled individuals, and the urban poor, among others, depending on the context.

³⁷ In this research, the Delphi Method has been considered just as one of the approaches, based on learnings from the course "Decision Making for Sustainable Development Goals" by Lombardi Patrizia and Sara Torabi Moghadam. The Delphi Method, developed in the 1950s by Olaf Helmer, Norman Dalkey, and Nicholas Rescher at the RAND Corporation, has a long-standing history of application across various fields.

The process of Stakeholder Engagement is elaborated in the diagram below.



STAKEHOLDER ENGAGEMENT PROCESS

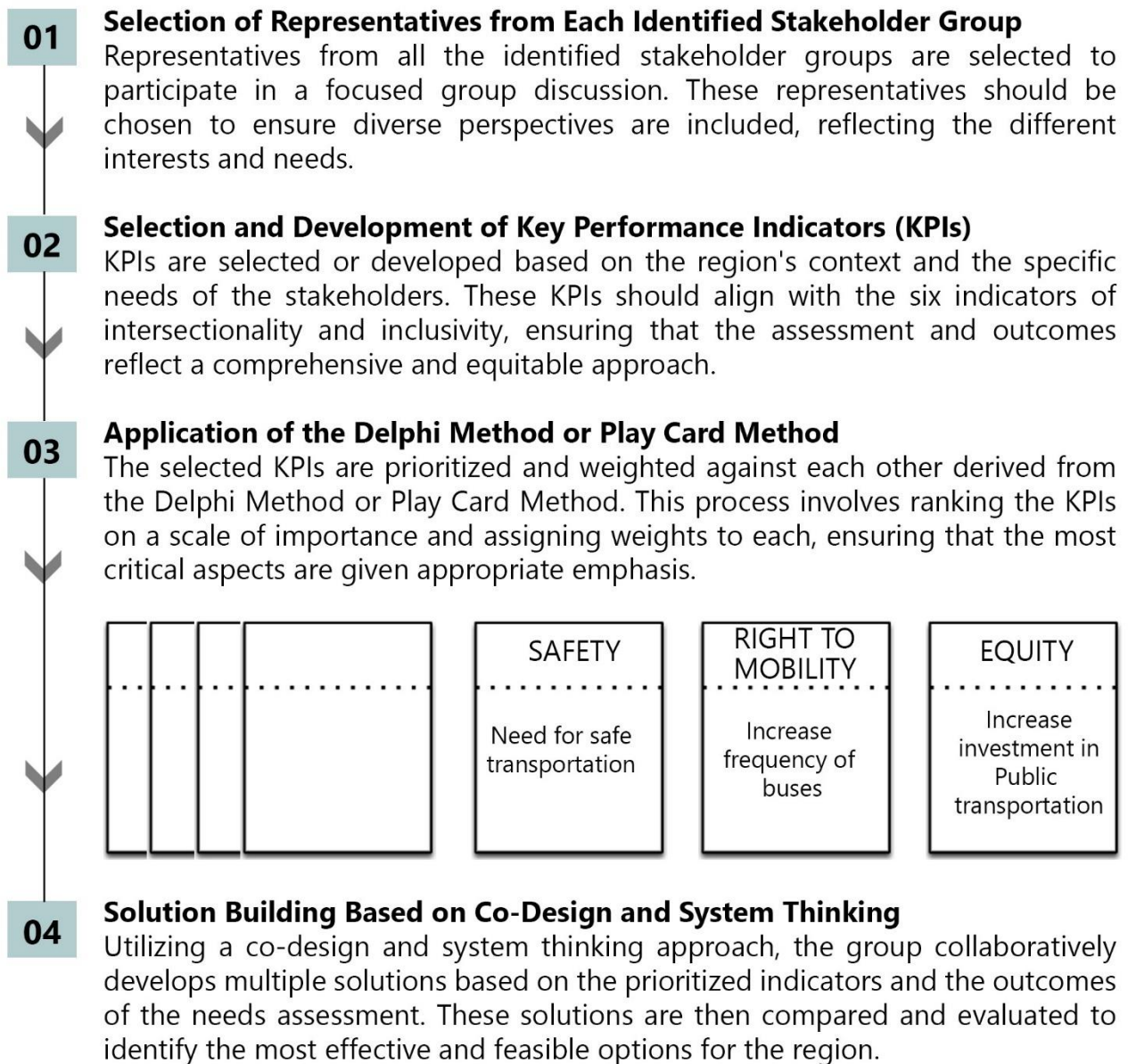


Figure 60: Stakeholder Engagement Process (source: authors)

User Group Mobility Pattern

With the stakeholder mapping completed, the next step is to develop a system that incorporates the needs and perspectives of these target groups. The approach is to map all users' inputs to the transportation and mobility planning using simple priorities: why they are being included, who they are (stakeholder profile), how to contact and engage them, and when to involve them in the planning system.

Once the users are identified, it is essential to gather and analyze data that reflects their specific needs and travel behaviors. This analysis should consider how various factors influence mobility, including differences in travel patterns, transport mode preferences, and the challenges faced by different users when using transportation systems. Understanding these differences will inform more intersectional and inclusive decisions.

To gather comprehensive data, household surveys and focus group discussions should be conducted with all users and service providers. These activities should aim to understand mobility patterns, including trip origins and destinations, trip purposes, trip chaining, modes of transport, trip lengths, trip costs, and travel times. Additionally, the perceptions of all users regarding right to mobility, mobility of care, safety, affordability, accessibility, and equity should be assessed, along with their aspirations for the transportation system. Particular attention should be paid to users' awareness and understanding of how tokenism exists in the transportation system and how it affects them.

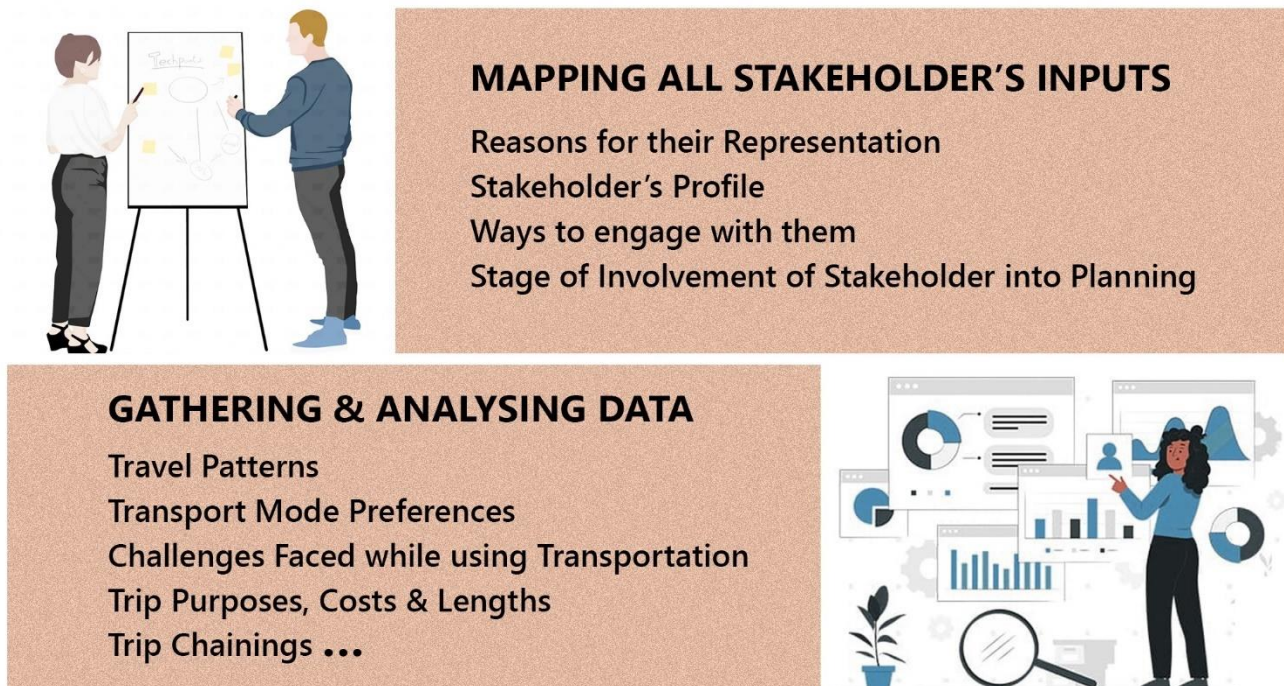


Figure 61: User Group Study (source: authors)

STEP 04

Institutional Framework: Creation of Committees

An institutional framework is essential to guide the preparation, implementation, monitoring, and evaluation of the intersectional and inclusive mobility plan. Establishing the right authorities and bodies will ensure coordinated and inclusive and intersectional urban transport planning and execution.

- Creating a functional Unified Metropolitan/ Regional Transport Committee in various regions to coordinate the planning and implementation of urban and rural transport projects in the country. It should include all stakeholders' groups and target groups, urban planning and transportation experts.
- Creating a multi-stakeholder committee (MSC) in regions, comprising of the urban and rural local body, urban/rural development authority, traffic police, police, public transport authorities, relevant state departments. The committee should include representatives from all the target groups along with urban planning and transportation experts.
- Creating an All Inclusive and Intersectional Advisory Committee within the Unified metropolitan/ Regional transport authority or the multi-stakeholder committee to review each stage of the comprehensive mobility plan process, transportation projects, policies and programs, monitor implementation, evaluate impact and implement a capacity building program. This committee will ensure the assessment of tokenism at various levels and their proper addressal.

Existing Institutional Framework

National Development Authorities

State Development Authorities

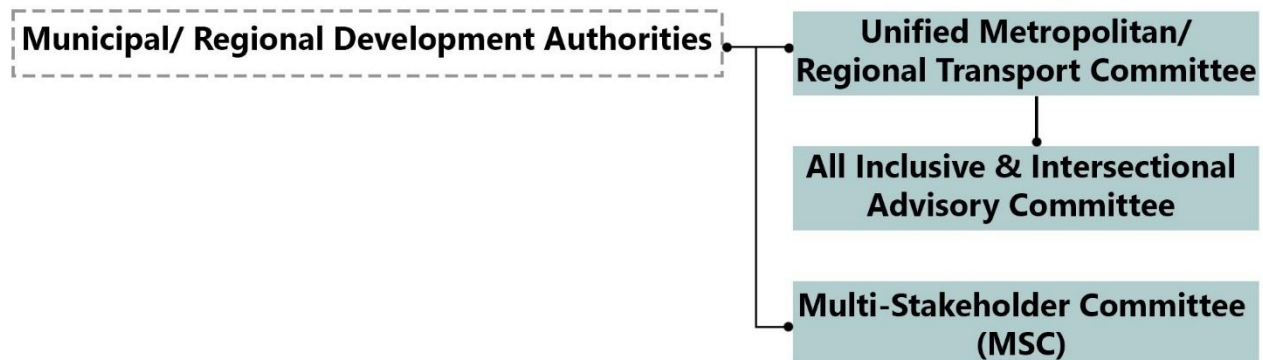


Figure 62: Proposal of Creating Committees (source: authors)

STEP 05

Creating an Inclusive and Intersectional Guidelines Handbook

Establish a Collaborative Handbook for Urban Interventions: Convene a comprehensive working group consisting of representatives from all levels of government, urban planners & designers, technical experts, and relevant stakeholders. Together, this group will co-create a detailed handbook that outlines user-specific standards and minimum benchmarks for urban interventions. This handbook will serve as a guiding document, ensuring that every aspect of the project—from vehicle design to road width—is meticulously planned to meet the diverse needs of all users.

Incorporate Inclusive and Intersectional Design Standards: The handbook in coherence with existing state toolkits will include specific guidelines for critical infrastructure elements such as ramps, stairs, elevators, and street lighting. These guidelines will ensure that the urban environment supports the parameter of right to mobility, safety, accessibility, affordability, and the mobility of care. The design standards will address not just the physical infrastructure but also how these elements interact with various user groups, ensuring that every individual's is well catered for and represented.

Adopt Universal Design Standards: The handbook will integrate Universal Design standards which advocate for effective and efficient use of transportation and mobility systems. Universal design goes beyond accessibility, aiming to create spaces that are inherently inclusive, accommodating the widest range of users.



Figure 63: Handbook Proposal (source: authors)

Following are examples of what typical guidelines can be mentioned in the Handbook-1.

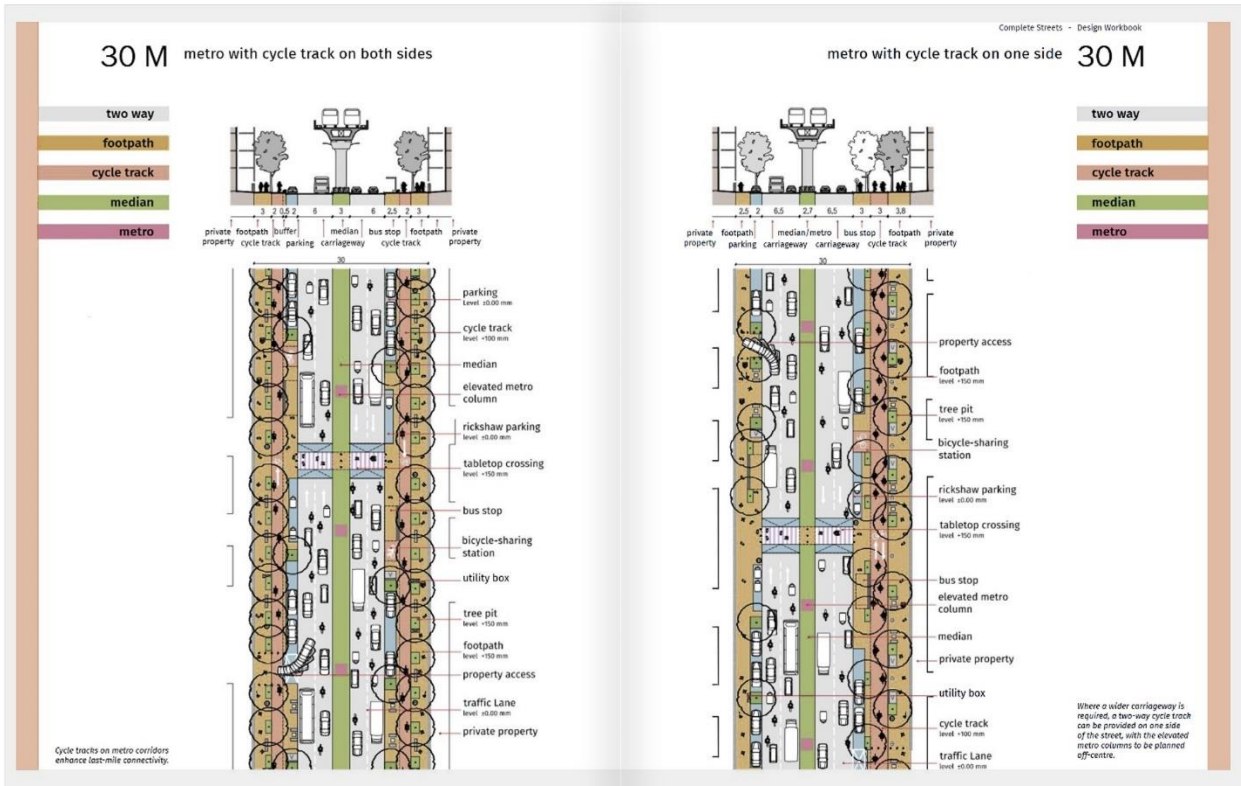


Figure 64: Example of Excerpts from a Possible Handbook-1 (source: ITDP India)

Following are examples of what typical guidelines can be mentioned in the Handbook-2.

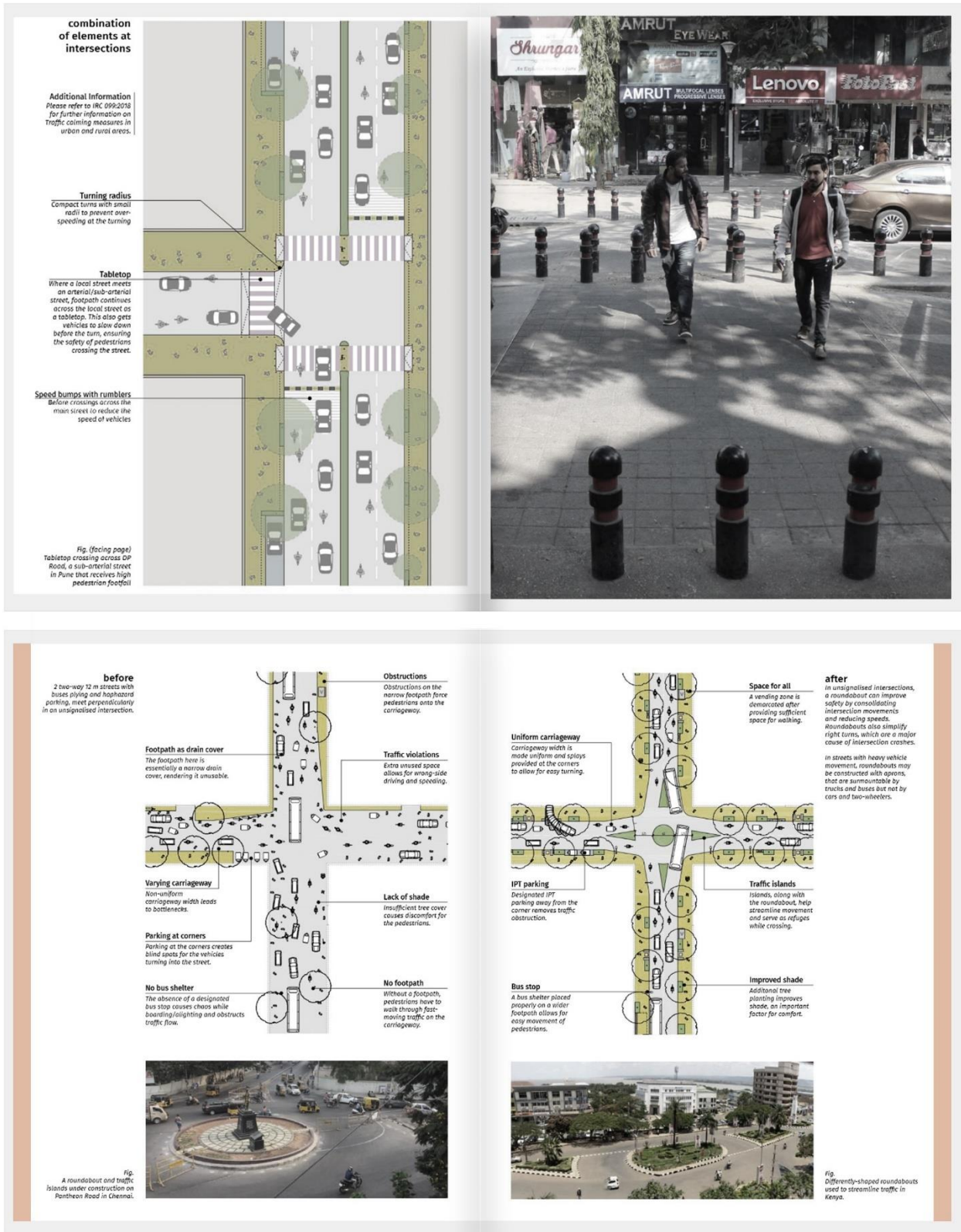


Figure 65: Example of Excerpts from a Possible Handbook-2 (source: ITDP India)

STEP 06**Implementation and Monitoring**

To ensure a tokenism-free implementation in the transportation and mobility planning system, it is essential to establish regular and effective monitoring mechanisms. Technical support should be provided by various organizations, public or private, for-profit or non-profit, to plan and implement pilot or test phases and to document the experiences of all stakeholders in the various regions using the transportation system in India.

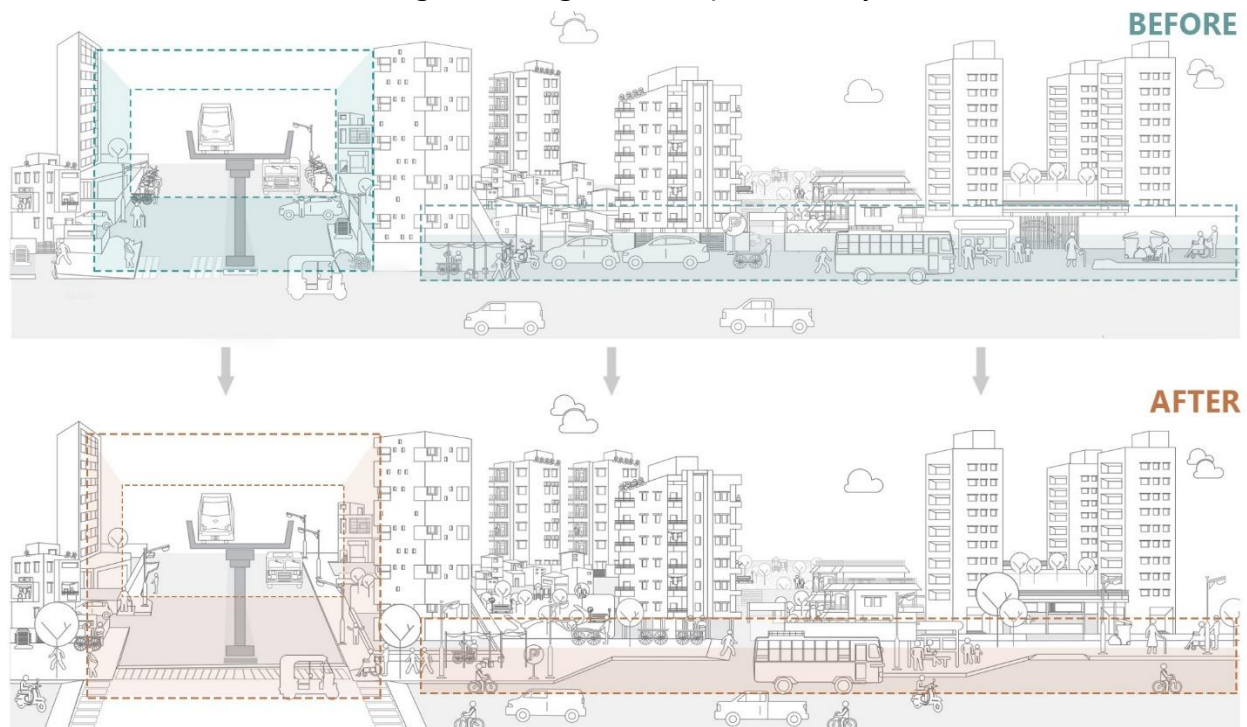


Figure 66: Implementation and Monitoring zones (source: Shakti, modified: authors)

It is crucial to ensure that the city's resources dedicated to transportation are aligned with the initial vision. This involves identifying and developing comprehensive monitoring and evaluation components. Various dimensions should be discussed and documented to ensure that the expectations of different communities are incorporated. The policies or the initiatives should be actively managed within the new inclusive and intersectional framework, considering complexities such as institutional and stakeholder dynamics.

Communication must be managed effectively, and periodic evaluations should be conducted to monitor implementation progress and assess impact. The challenges and successes of implementation should be shared, and efforts should be made to build capacity within the Unified Metropolitan/Regional Transport Authority or the multi-stakeholder committee.

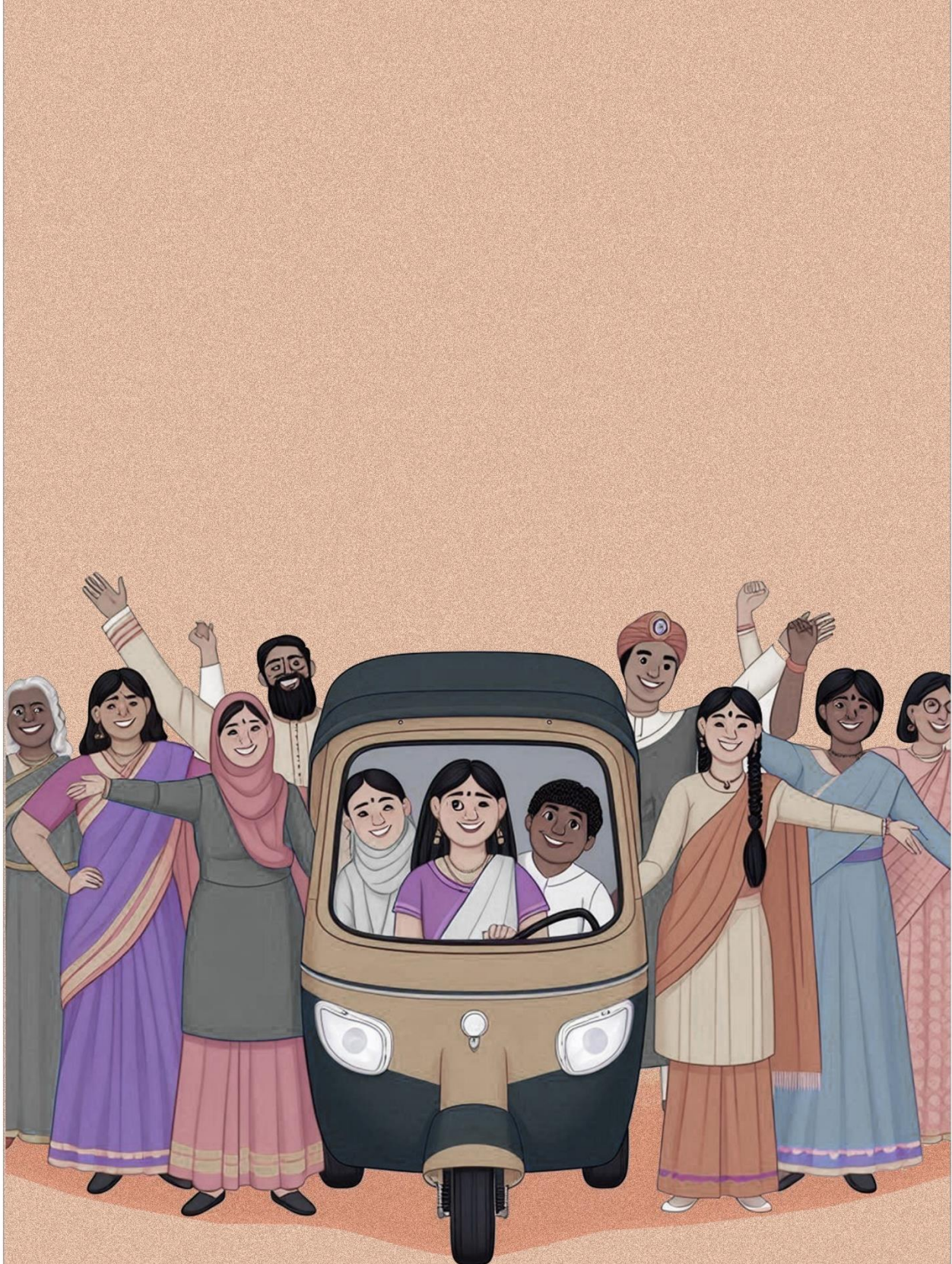


Figure 67: The vision for Intersectionality and Inclusivity (source: authors)

CHAPTER 08

Conclusion

8. Conclusion

The research concludes on a note to generate discussions, discourses and further research on the feminist approach in the Indian Transportation and Mobility Systems, which should be intersectional and inclusive. The authors have addressed a gap that was until now unexplored in the Indian context and believe future studies should be done in this realm.

This research began as a dialogue between two researchers, both of whom believed in its potential of feminist approaches on transportation and mobility systems to ignite broader discussions within the academic and policy-making communities. From its inception, the study focused on identifying gaps specific to the Indian context. India's current developmental phase provided a unique opportunity to uncover multiple layers within the subject—a topic that has largely remained unexplored. The authors' critical perspective on the fragmented nature of development in India brought to light numerous questions, all of which have been thoroughly examined throughout this research.

The inquiry into the feminist approach, with its multifaceted dimensions, has led to a critical examination of the tokenism embedded within this framework as applied to Indian transportation and mobility systems. This study has sparked discussions and raised questions such as: Why is this approach necessary? Is there not already an approach in place? Does this approach fail to encompass everyone by being too unitary? Or is there a need to implement and test the feminist approach within the Indian context? Through comprehensive analysis, these questions have been addressed and engaged with, providing a thorough exploration of the issues at hand.

Throughout this research, the feminist approach has been regarded as a potential solution—one capable of addressing and rectifying the flaws in a system that is crucial to everyone and whose effectiveness is dependent on its users. In the context of India, this aspect has been largely overlooked, leaving a significant gap that urgently needed to be filled. By adopting a feminist lens, this study presents an approach that has the capacity to serve all segments of society, addressing the diverse needs of the population.

The feminist approach, with its ability to address issues one layer at a time or to tackle multiple layers simultaneously, has been shown to be a strong framework. Feminist movements have historically stood against societal wrongs, striving to restore balance whenever society veers away from equilibrium. This research situates the feminist approach within the Indian context, acknowledging that while it may be subjective and open to debate, it is an essential perspective that warrants exploration and application in this particular setting.

This research has never suggested that the feminist approach is not for women; indeed, it acknowledges that the movement began with the fight for fundamental rights, such as the right to vote- rights that are now universally recognized. The feminist movement's profound influence lies in its ability to challenge and dismantle the entrenched patriarchal

mindset. This inherent potential makes it particularly suitable for the Indian context, where it can effectively address and work to eradicate social, economic, cultural, and traditional stratification.

The critical need for intersectionality and inclusivity within the Indian context has been highlighted, correlating these concepts with feminist principles. Intersectionality, as explored by Sheller and Urry (2006), involves examining how various social identities- such as gender, race, class, disability, and others- intersect and shape individuals' experiences of transportation and mobility. Inclusivity, as emphasized by Uteng (2012), involves designing policies and systems that cater to the diverse needs of all societal groups, ensuring that marginalized and vulnerable communities are not left behind. The feminist approach's capacity to focus on these dimensions is crucial for addressing the complex realities of transportation and mobility. It goes beyond gender-specific analyses to incorporate a broad spectrum of intersecting identities, offering a more comprehensive understanding of how various factors impact mobility experiences. This approach is fundamental for developing transportation systems that are responsive to the diverse needs of different groups within society.

The synthesis of intersectionality and inclusivity within feminist theory underscores their equal importance in creating effective and equitable transportation and mobility systems. Intersectionality reveals the complexities of oppression by addressing how various forms of discrimination overlap and compound, based on multiple intersecting factors. Inclusivity, on the other hand, highlights the need to establish an open and welcoming system that acknowledges and accommodates the diverse experiences, needs, and desires of all individuals. By integrating both elements with feminist theory, policymakers and decision-makers gain a powerful framework that enhances their understanding and enables them to devise strategies that genuinely cater to diverse groups. This approach ensures that transportation and mobility systems are not only equitable but also reflective of the broad spectrum of experiences within society.

Given feminism's capacity to focus on these essential aspects, this research raises the question: why not apply the feminist approach to India's transportation and mobility systems, which are the lifelines of the nation? While it may have been ideal to explore this approach earlier, the research argues that it is never too late for India to adopt this perspective, as it offers the potential to address multiple challenges through a unified lens.

As detailed in the findings and results, India has indeed made efforts to frame policies and initiatives for its citizens, and these efforts deserve recognition. However, when examined through a critical lens, these efforts often appear insufficient or misdirected. Consequently, there is a pressing need for India to adopt a feminist approach that prioritizes intersectionality and inclusivity above all else. In this context, the core concerns in India- such as the Right to Mobility, Safety, Equity, Mobility of Care, Affordability, and Accessibility- align with the ideals of a just society. The Right to Mobility ensures that all individuals can move freely and access essential services, addressing the exclusion faced by intersecting vulnerable populations. Meanwhile, Safety involves creating secure environments for all users, particularly focusing on those facing higher risks of harassment. Furthermore, Equity promotes fairness in the distribution of transportation resources and services, aiming to tackle the structural inequities affecting marginalized groups. Additionally, Mobility of Care recognizes the essential travel required for caregiving responsibilities, ensuring that transportation systems adequately support these often-overlooked activities. Moreover, Affordability guarantees that transportation options are financially accessible to all, reducing economic disparities, while Accessibility ensures that transportation resources are reachable for everyone, addressing both physical and systemic barriers to effective use. Thus, adopting a feminist approach which emphasize on intersectionality and inclusivity is much needed. This research has offered a pathway to an approach that can inclusively address these concerns and further opens a discourse for more such parameters and concerns. While current efforts in India seem to cater to specific segments of society in a unidirectional manner, a feminist approach can foster intersecting, rather than parallel, efforts across all levels. Such an integrated approach holds the potential to overcome the persistent failures that have hindered progress.

This research has candidly addressed the criticisms and has not shied away from confronting the grim realities. It underscores the importance of recognizing and addressing tokenism, as solutions can only be developed when problems are fully understood. This research has consistently paired its critique with a critical analysis of existing efforts, questioning whether the current approaches are sufficient given that many issues remain unresolved despite being acknowledged. The persistence of these issues suggests that tokenism is at play, highlighting the need for a feminist approach to effectively tackle these challenges. The path to solutions, as this research suggests, lies in a thorough assessment of tokenism.

Tokenism has persisted in India for a long time, largely due to the compartmentalization of issues, where problems are addressed in isolation rather than holistically. This research has explored and highlighted how tokenism stems from this fragmented approach, demonstrating that one solution cannot effectively solve a problem if it fails to consider related issues. The findings and results discuss this tokenism at both national and local levels, revealing new layers of complexity. Delhi serves as a poignant example, where the feminist approach, often assumed to benefit women, unraveled new paradigms of discussion when critically examined. Despite the intended solutions for women, many have fallen short, lying in disrepair. Feedback from stakeholders, gathered through surveys and interviews, provided valuable insights into the ground realities, reinforcing the research's findings. Although the study began with just two researchers, it engaged over 100 individuals through surveys and prompted in-depth conversations with three participants via interviews, adding depth and authenticity to the research.

Acknowledging these efforts, the research proposes a hopeful way forward- one that envisions a better and more stable future. The "Way Forward" outlines a six-step framework designed to integrate feminist principles into India's transportation and mobility systems. This approach ensures that intersectionality and inclusivity are central to planning and implementation processes. Each step ranging from developing a visionary framework to conducting regional assessments, engaging stakeholders, and creating inclusive guidelines, addresses the diverse needs of various communities. By focusing on actionable research, stakeholder participation, and continuous monitoring, the framework seeks to overcome tokenism. This offers a detailed roadmap for transforming transportation systems, aligning them with feminist values to create an intersectional and inclusive network that serves all individuals effectively.

In conclusion, while this study critically engaged with existing efforts, it did so without undermining the genuine efforts that have been made thus far. The ongoing debate around the feminist approach being solely for women has been challenged by this research, which advocates for its broader application due to its capacity to address socio-economic issues across the board. The study has aimed to foster a new dialogue among its readers, encouraging further research into this largely unexplored and gap-filled topic. By raising questions, engaging in discussions, offering constructive criticism and a way forward for the Indian context, the research has culminated in a vision for Indian transportation and mobility systems that are intersectional, inclusive, and rooted in a feminist approach.



Figure 68: Towards an Intersectional and Inclusive Mobility (source: authors)

Bibliography

Aggarwal, S. (2018). Do rural roads create pathways out of poverty? Evidence from India. *Journal of Development Economics*, 133, 375–395.

Agnes, F. (1999). *Law and gender inequality: The politics of women's rights in India*. Oxford University Press.

Ahmad, S., & Others. (2016). Determinants of urban mobility in India: Lessons for promoting sustainable and inclusive urban transportation in developing countries. *Transport Policy*, 52, 106-114.

Ahmed, S. (2012). *On being included: Racism and diversity in institutional life*. Duke University Press.

Allen, H. (2020). *Equitable transit-oriented development: Inclusion and social justice in urban planning*. *Urban Planning Journal*, 45(3), 210-225. <https://doi.org/10.1080/01944363.2020.1725045>

Anandabazaar Patrika. (2011, August 15). *Challenges faced by rural households in West Bengal*. Anandabazaar Patrika.

Anonymous. (2024, August 2). *Is renaming a metro station woke-washing or a positive change?* SBC. <https://www.sbcltr.in/is-renaming-a-metro-station-woke-washing-or-a-positive-change/>

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216-224. <https://doi.org/10.1080/01944366908977225>

Banerjee, A. (2020). *Challenges in providing age-specific transportation in India*. National Institute of Urban Affairs.

Banet-Weiser, S. (2018). *Empowered: Popular feminism and popular misogyny*. Duke University Press.

Bangalore Metropolitan Transport Corporation. (2020). *BMTC annual report 2020*. BMTC.

Bangalore Police Department. (2019). *Annual accident report 2019*. Bangalore Police Department.

Bates, L. (2016). *Everyday sexism*. Simon and Schuster.

Berger, P. L., & Luckmann, T. (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Anchor Books.

Bhan, G. (2016). *In the public's interest: Evictions, citizenship, and inequality in contemporary Delhi*. University of Georgia Press.

Bhasin, K. (2011). *What is patriarchy?* Women Unlimited.

Bhuthalia, U. (2002). *The history of doing: An illustrated account of movements for women's rights and feminism in India, 1800-1990*. Zubaan.

Bihar State Police. (2023). *Accident statistics involving school children in rural Bihar*. Bihar State Police. <https://biharpolice.bih.nic.in/>

Bishai, D., Mahoney, P., & Andrews, J. (2019). *Gender Segregation and Public Transport*. *Journal of Gender Studies*, 28(3), 289-305. <https://doi.org/10.1080/09589236.2018.1425289>

- Bishai, D., Patel, R., & Verma, S. (2019). *Urban safety and harassment: A comprehensive study*. *Journal of Public Safety Research*, 22(4), 89-102.
- Carastathis, A. (2014). *The concept of intersectionality in feminist theory*. *Philosophy Compass*, 9(5), 304-314. <https://doi.org/10.1111/phc3.12129>
- Census of India. (2011). *Data on disability*. Government of India. https://censusindia.gov.in/disability_data_2011.html
- Census of India. (2011). *Data on Scheduled Castes and Scheduled Tribes*. Government of India. <https://censusindia.gov.in/>
- Centre for Science and Environment. (2023). *Gender and public transportation: Women's usage of Delhi Metro*. CSE. <https://www.cseindia.org/>
- Centre for Urban Policy and Governance. (2018). *Smart Cities Mission and Gender*. Retrieved from <http://urbanpolicy.net/research/smart-cities-and-gender/>
- Chattaraj, S. (2012). The local politics of global city making: Immigration, integration and the state in Delhi and Shanghai. *City & Community*, 11(3), 251-276. <https://doi.org/10.1111/j.1540-6040.2012.01410.x>
- Chattopadhyay, S. (2012). *Unlearning the city: Infrastructure in a new optical field*. University of Minnesota Press.
- Chen, Y., & Xu, H. (2019). *Smart public transportation systems: Improving accessibility for the disabled and elderly*. *Transportation Research Part A: Policy and Practice*, 130, 473-485. <https://doi.org/10.1016/j.tra.2019.09.012>
- Cho, S., Crenshaw, K. W., & McCall, L. (2013). Toward a field of intersectionality studies: Theory, applications, and praxis. *Signs: Journal of Women in Culture and Society*, 38(4), 785-810. <https://doi.org/10.1086/669608>.
- Chowdhury, P. (2018). *Gender inequality in India*. *Social Change*, 48(1), 20-30.
- Church, A., & Marston, G. (2003). Measuring accessibility for socially excluded groups. *Transport Policy*, 10(4), 307-320.
- Coggins, T., & Others. (2015). A right to transport? Moving towards a rights-based approach to mobility in the city. *South African Journal on Human Rights*, 31(4), 541-562.
- Collins, P. H., & Bilge, S. (2020). *Intersectionality* (2nd ed.). Polity Press.
- Crenshaw, K. (1989). *Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics*. *University of Chicago Legal Forum*, 1989(1), 139-167.
- Dainik Jagran. (2023). *Harassment cases continue despite women drivers in public transport*. Dainik Jagran.
- Dainik Jagran. (2023). *Women's participation in public transport: A token effort in Lucknow*. Dainik Jagran.
- Dasgupta, R. (2019). Men and Feminism in India: Changing Masculinities and Gender Relations. *Gender & Society*, 33(4), 564-589.

Delhi Transportation Corporation. (2010). *Urban transportation and mobility in Delhi*. Delhi Transportation Corporation. <https://www.dtc.nic.in/>

Department of Economic Affairs. (2021). Government of India.

Desai, P. (2018). *Inclusive spaces: The need for ground-level planning*. Unpublished.

Deshpande, S. (2011). *Contemporary India: A sociological view*. Penguin Books India.

European Union Agency for Fundamental Rights. (2020). *Fundamental rights report 2020*. <https://fra.europa.eu/en/publication/2020/fundamental-rights-report-2020>

European Union Agency for Fundamental Rights. (2020). *Gender equality and transport: An overview of the EU's approach*. European Union Agency for Fundamental Rights.

Evans, S. M. (2003). *Tidal wave: How women changed America at century's end*. Free Press.

Fainstein, S. S. (2010). *The just city*. Cornell University Press.

FIA Foundation. (2016). *Safe and sound: International action and research to improve safety for women and girls*. <https://www.fiafoundation.org/>

Flexner, E. (1959). *Century of struggle: The woman's rights movement in the United States*. Harvard University Press.

Flexner, E., & Fitzpatrick, E. (1996). *Century of struggle: The woman's rights movement in the United States* (Rev. ed.). Harvard University Press.

Flood, M. (2019). *Engaging men and boys in violence prevention*. Palgrave Macmillan.

Forbes, G. (1999). *Women in modern India*. Cambridge University Press.

Friedan, B. (1963). *The feminine mystique*. W. W. Norton & Company.

Geerlings, H., Shiftan, Y., & Stead, D. (2012). *Transition towards sustainable mobility: The role of instruments, individuals and institutions*. Ashgate Publishing Ltd.

Geertz, C. (1973). *The Interpretation of Cultures: Selected Essays*. Basic Books.

George, H. (1879). *Progress and poverty: An inquiry into the cause of industrial depressions and of increase of want with increase of wealth*. D. Appleton and Company.

Ghosh, A., & Srivastava, P. (2017). *Public transport policies in Chhattisgarh: A critical analysis*.

Gibson-Graham, J.K. (2006). *A Postcapitalist Politics*. University of Minnesota Press.

Gill, M., & Spriggs, A. (2005). *Assessing the impact of CCTV*. Home Office Research Study 292. London: Home Office Research, Development and Statistics Directorate.

Gill, M., & Spriggs, A. (2005). *Assessing the impact of CCTV*. *Journal of Public Safety*.

Gill, R., & Scharff, C. (Eds.). (2011). *New femininities: Post feminism, neoliberalism and subjectivity*. Palgrave Macmillan.

GMR Group. (n.d.). *Infrastructure projects: Roads & highways*. Retrieved from <https://gmrgroup.in/>

Goa Prism. (2023). KTCL to launch 'Mhaji Bus Scheme'. Retrieved from Herald Goa

Government of Bihar. (2023). *Mukhyamantri Balak/Balika Cycle Yojana*. Government of Bihar. <https://www.bihar.gov.in/>

Government of India. (2011). *National Policy on Senior Citizens*. Ministry of Social Justice and Empowerment.

Government of India. (2011). Report of the Expert Group to Review the Methodology for Estimation of Poverty (Tendulkar Committee). Planning Commission. Available at NITI Aayog or government publications.

Government of India. (2011). *Report of the expert group to review the methodology for estimation of poverty (Tendulkar Committee Report)*. Planning Commission.

Government of India. (2014). Report of the Expert Group to Review the Methodology for Measurement of Poverty (Rangarajan Committee). Planning Commission. Available at NITI Aayog or government publications.

Government of India. (2014). *Report of the expert group to review the methodology for measurement of poverty*. Planning Commission.

Government of India. (2016). *The Rights of Persons with Disabilities Act, 2016*. Ministry of Law and Justice.

Gurjar, R. (2018, February 9). *Role of transportation for the development of rural areas in India*. Retrieved August 22, 2018, from <https://medium.com/@rohitgurjar009/role-of-transportation-for-the-development-of-rural-areas-in-india-91baac9106d>

Hanson, S. (2010). Gender and mobility: New approaches for informing sustainability. *Gender, Place & Culture*, 17(1), 5-23. <https://doi.org/10.1080/09663690903498225>

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies*, 14(3), 575-599.

Harvey, D. (2008). The right to the city. *New Left Review*, 53, 23-40.

Hayden, D. (1980). What would a non-sexist city be like? Speculations on housing, urban design, and human work. *Signs: Journal of Women in Culture and Society*, 5(3), S170-S187. <https://doi.org/10.1086/493727>

Himachal Pradesh Transport Department. (2023). *Monthly Income and Passenger Data Report*. Shimla: Himachal Pradesh Transport Department.

Hindustan Times. (2020, June 16). *Criticism and public reaction to the "She-Man" station initiative*. Hindustan Times.

Hooks, B. (2000). *Feminist theory: From margin to center*. Pluto Press

Hooks, B. (2015). *Feminism is for everybody: Passionate politics*. Routledge.

Hordijk, M., & others. (2014). *Resilience and the City: Change, (Dis)Order and Disaster*. Routledge.

Housing and Urban Development Corporation Ltd. (2021). *HUDCO annual report 2020-21*.

Indian Council of Agricultural Research. (2019). *Annual Report 2019*.

Indian Council of Agricultural Research. (2019). *Transportation challenges in rural India: Implications for education and healthcare*. ICAR. <https://www.icar.org.in/>

Indian Express. (2018). *Women Fund Allocation for Safety in India*. The Indian Express. <https://indianexpress.com/article/india/nirbhaya-fund-only-30-utilized-since-2013-5432104/>

Indian Express. (2023). *Impact of free bus rides on women's public transport usage*. Indian Express. <https://indianexpress.com/article/cities/delhi/>

Indian Railway Catering and Tourism Corporation Ltd. (2021). *IRCTC annual report 2020-21*.

IndiaSpend. (2017). *Women Workforce*. <https://www.indiaspend.com/>

Institute for Transport and Development Policy. (2017). *Women and transport in Indian cities: An overview of policies and practices*. <https://www.itdp.org/publication/women-and-transport-in-indian-cities>

Institute for Transport and Development Policy. (2017). *The high cost of transportation for the urban poor in Indian cities*. ITDP. <https://www.itdp.org/>

Institute for Transport and Development Policy. (2018). *Women and transport in Indian cities: An overview of policies and practices*. ITDP. <https://www.itdp.org/publication/women-and-transport-in-indian-cities>

International Institute for Population Sciences. (2020). *Assessment of educational initiatives in rural Bihar: A case study*. IIPS. <https://www.iipsindia.ac.in/>

International Labour Organization. (2021). *World Social Protection Report 2020-22: Social protection at the crossroads – in pursuit of a better future*. Geneva: International Labour Office.

International Lesbian, Gay, Bisexual, Transgender and Intersex Association. (2022). *LGBTQIA+ experiences in public transportation: A global overview*. ILGA. <https://www.ilga.org/publications>

International Transport Forum. (2019). *Gender and Transport*. Retrieved from <https://www.itf-oecd.org/gender-and-transport>

Jagori. (2011). *Understanding women's safety: Towards a gender-inclusive city*. Jagori. <https://www.jagori.org/publications/research-studies/understanding-womens-safety-towards-gender-inclusive-city>

Jones, P. (2018). *Urban mobility: From old challenges to new solutions*. Routledge.

Kanter, R. M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82(5), 965-990. <https://doi.org/10.1086/226425>

Kimmel, M. (2018). *Angry white men: American masculinity at the end of an era*. Nation Books.

Knoema. (2023). *Delhi demographics*. <https://knoema.com/atlas/India/Delhi>

Kochi City Police. (2023). Annual report on public safety incidents. Retrieved from <https://kochipolice.gov.in/reports/2023>

- Kumar, A., & Singh, R. (2023). *Gender and Public Transport: The Case of Lucknow*. *Journal of Urban Studies*, 35(4), 567-582. <https://doi.org/10.1080/01234567.2023.1234567>
- Kumar, R., & Singhal, N. (2020). Inclusivity in Indian urban transport policies: A critical review. *Journal of Transport and Land Use*, 13(1), 123-140. <https://doi.org/10.5198/jtlu.2020.1234>
- Kwan, M. P. (2002). Is GIS for Women? Reflections on the Critical Discourse in the 1990s. *Gender, Place & Culture*, 9(3), 271-279.
- Law, R. (1999). Beyond 'women and transport': Towards new geographies of gender and daily mobility. *Progress in Human Geography*, 23(4), 567-588.
- Lefebvre, H. (1968). *Le droit à la ville*. Anthropos
- Lefebvre, H. (1996). The right to the city. In E. Kofman & E. Lebas (Eds. & Trans.), *Writings on cities* (pp. 63-184). Blackwell. (Original work published 1968)
- Litman, T. (2002). Evaluating transportation equity. *World Transport Policy & Practice*, 8(2), 50-65.
- Litman, T. (2019). *Evaluating transportation equity*. Victoria Transport Policy Institute.
- Lucas, K. (2012). Transport and social exclusion: Where are we now? *Transport Policy*, 20, 105-113. <https://doi.org/10.1016/j.tranpol.2012.01.013>
- Mahajan, V., Chowdhury, A., Kaushal, U., Jariwala, N., & Bong, S. A. (2022). Gender Equity: Challenges and Opportunities. In Proc. 2nd Int. Conf. Sardar Vallabhbhai Natl. Inst. Technol (p. 197).
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. <https://doi.org/10.1037/h0054346>
- Massey, D. (1994). *Space, place, and gender*. University of Minnesota Press.
- Mehrotra, N., & Verma, S. (2019). Assessing the inclusivity of urban transport policies in India. *International Journal of Urban and Regional Research*, 43(2), 456-472. <https://doi.org/10.1111/ijur.2019.45.2.123>
- Menton, A. (n.d.). Who is woman enough for feminism: Dialogue and conversation around inclusivity and exclusivity in feminism. *The LAS Student Research Journal*, 146, pages.
- Ministry of Housing and Urban Affairs, Government of India. (2018). *National Urban Transport Policy*. Retrieved from http://mohua.gov.in/upload/uploadfiles/files/NUTP_2014.pdf
- Ministry of Housing and Urban Affairs. (2006). *National urban transport policy*. Government of India. <https://mohua.gov.in/cms/national-urban-transport-policy.php>
- Ministry of Housing and Urban Affairs. (2015). *Smart cities mission statement and guidelines*. Government of India. [https://smartcities.gov.in/upload/uploadfiles/files/SmartCityGuidelines\(1\).pdf](https://smartcities.gov.in/upload/uploadfiles/files/SmartCityGuidelines(1).pdf)
- Ministry of Road Transport and Highways. (2016). *Road accidents in India*.
- Ministry of Road Transport and Highways. (2021). *Annual report 2020-21*. <https://morth.nic.in/annual-report>
- Ministry of Rural Development. (2022). *Rural road development report: Bihar*. Government of India. <https://www.rural.nic.in/>

- Mohan, D., & Tiwari, G. (2000). *Road traffic injuries: A public health issue in India*. Indian Journal of Medical Research, 112, 58-61.
- Mohan, R. (2013). *The façade of development: Issues in urban planning*. Unpublished.
- Mohanty, C. T. (2003). *Feminism without borders: Decolonizing theory, practicing solidarity*. Duke University Press.
- Nair, A. (2022). Visually impaired individual faces verbal abuse on public transport: A policy failure. *The Hindu*.
- Narayan, U. (2019). The Intersectionality of Caste and Gender in Indian Feminism. *Feminist Studies*, 45(2), 247-264.
- Narendra Modi. (n.d.). *Jal Jeevan Mission, Pradhan Mantri Awas Yojana, and Digital India Program*. Retrieved from <https://www.narendramodi.in>
- Nash, J. C. (2008). Re-thinking intersectionality. *Feminist Review*, 89(1), 1-15.
- National Highways Authority of India. (2021). *Annual report 2020-21*.
- National Sample Survey Office. (2019). *Key indicators of household consumer expenditure in India*. Ministry of Statistics and Programme Implementation, Government of India. <https://www.mospi.gov.in/>
- National Sample Survey Office. (2022). *Household Consumer Expenditure Survey 2021-2022*. New Delhi: Ministry of Statistics and Programme Implementation, Government of India.
- NITI Aayog. (2021). *National Multidimensional Poverty Index*. Government of India. <https://www.niti.gov.in/>
- Nussbaum, M. C. (2011). *Creating capabilities: The human development approach*. Harvard University Press.
- Noida Police. (2022). *Incident reports at "She-Man" station*. Noida Police Department.
- OMI Foundation. (2022). *Ease of moving index: India report 2022*. <https://www.omifoundation.org/>
- Pant, R. (2019). *The impact of transportation costs on low-income households in urban India*. National Institute of Urban Affairs.
- Patel, A. (2015). *Local Governance and Community Participation in Rural India*. Journal of Rural Development, 34(3), 345-358.
- Patkar, M. (2005). *Narmada: A story of development*. Penguin Books.
- Phadke, S. & Khan, S. (2011). *Why loiter? Women and risk on Mumbai streets*. Penguin Books.
- Phule, S. (2010). *Collected Works of Savitribai Phule*. Maharashtra State Bureau of Textbook Production and Curriculum Research.
- Planning Commission of India. (2018). *Impact of rural roads on household income and agriculture*. Government of India. <https://www.planningcommission.gov.in/>
- Planning Commission of India. (2018). *Report on Rural Development*.

- Press Information Bureau. (n.d.). *European Union's commitment to equitable access, poverty reduction, and social inclusion*. Retrieved from <https://www.pib.gov.in>
- Prudent Media. (2023). Goa reports 43 'rapes' in 6 months. Retrieved from Prudent Media
- Puar, J. K. (2017). *The right to maim: Debility, capacity, disability*. Duke University Press.
- Pucher, J., & Buehler, R. (2017). *Cycling towards a more sustainable transport future*. *Transport Reviews*, 37(6), 689-694. <https://doi.org/10.1080/01441647.2017.1340234>
- Pucher, J., Korattyswaroopam, N., & Ittyerah, N. (2004). *The Crisis of Public Transport in India: Overwhelming Needs but Limited Resources*. *Journal of Public Transportation*, 7(2), 1-20.
- Ranganathan, M. (2017). *Property, environment, and everyday lives: Urban poverty and politics in New Delhi*. Duke University Press.
- Ranganathan, M. (2017). *Property, Environment, and Everyday Lives: Urban Poverty and Politics in New Delhi*. Duke University Press.
- Rao, S. (2017). *Socio-Economic Impact of Rural Roads: A Study of PMGSY in India*. *Journal of Infrastructure Development*, 9(1), 25-40.
- Ravi, S. (2022). Evaluating inclusivity in gender-segregated urban transport: A case study. *Journal of Urban Studies*, 14(2), 234-250. <https://doi.org/10.1080/12345678.2022.234567>
- Reddy, S. (2021). Policy changes in urban transportation: A focus on female passengers. *The Times of India*. Retrieved from <https://www.timesofindia.com/policy-changes-female-passengers>
- Reuters Foundation. (2014). *India most dangerous country for women with sexual violence rife: Global poll*. Retrieved August 22, 2018, from <https://in.reuters.com/article/women-dangerous-poll/india-most-dangerous-country-for-women-with-sexual-violence-rife-global-poll-idINKBN1JM076>
- Root, W. B., & Others. (2014). Improving the safety of aging road users – A mini-review. *Gerontology*, 60(1), 90-96.
- Rosenbloom, S. (2018). *Safety and Mobility: The Role of Gender in Public Transport Planning*. *Transportation Research Record*, 2672(2), 24-30. <https://doi.org/10.1177/0361198118790824>
- Roy, A. (2005). Urban Informality: Toward an Epistemology of Planning. *Journal of the American Planning Association*, 71(2), 147-158.
- Roy, A. (2009). *The 21st-century metropolis: New geographies of theory*. Public Culture.
- Roy, R. R. M. (1906). *The English works of Raja Ram Mohan Roy*. Panini Office.
- Safetipin and ITDP. (2017). *Women and transport in Indian cities*. ITDP.
- Safetipin. (2017). *Safety and security for women in public spaces: An analysis across Indian cities*. Safetipin. <https://www.safetipin.com/publications>
- Sahodaran. (2021). *Harassment and safety concerns of LGBTQIA+ individuals in public transportation: A study in Chennai*. Sahodaran. <https://www.sahodaran.org/publications>

- Sánchez de Madariaga, I. (2013). Mobility of care: Introducing new concepts in urban transport. *Transfer: European Review of Labour and Research*, 19(2), 195-208.
- Sarkar, M. (2020). Egalitarianism in Indian Feminism: A Call for Inclusive Rights. *Contemporary Social Science*, 15(3), 321-337.
- SBC (2024, June 25). *Ritu Maheshwari announces Sector 50 metro station will be called Rainbow station*. SBCLTR. <https://www.sbccltr.in/is-renaming-a-metro-station-woke-washing-or-a-positive-change/>
- Scroll. (2018, June 15). *How Delhi High Court empowered the disabled by staying government plan to buy high-floor buses*. Retrieved August 22, 2018, from <https://scroll.in/article/882522/how-delhi-high-court-empowered-the-disabled-by-staying-government-plan-to-buy-high-floor-buses>
- Sen, A. (1999). *Development as Freedom*. Oxford University Press.
- Sen, A. (2005). *The argumentative Indian: Writings on Indian history, culture, and identity*. Penguin Books.
- Shah, N. (2016). *Planning for sustainable pedestrian infrastructure*. UMI Conference Expo 2016.
- Shah, S. (2017). *Beyond the women-only train car: Gender and sustainable transport*. ITDP.
- Sharma, A., & Gupta, R. (2021). Evaluating gender-focused transportation initiatives in India: A case study of ETO Motors. *Journal of Urban Mobility and Transportation Policy*, 15(3), 289-305. <https://doi.org/10.1234/jumt.2021.00345>
- Sheller, M., & Urry, J. (2006). The new mobilities paradigm. *Environment and Planning A: Economy and Space*, 38(2), 207-226. <https://doi.org/10.1068/a37268>
- Singh, R. (2020). *Economic Disparities and Transportation Access in Rural India*. *Transportation Research Journal*, 12(4), 67-85.
- Smith, A., Jones, B., & Brown, C. (2020). *Gender and transport: Intersectionality in policy and practice*. *Journal of Transport Geography*, 85, 102738. <https://doi.org/10.1016/j.jtrangeo.2020.102738>
- Soja, E. W. (2010). *Seeking Spatial Justice*. University of Minnesota Press.
- Soltani, S. H. K., & Others. (2012). Accessibility for disabled in public transportation terminal. *Procedia - Social and Behavioral Sciences*, 35, 89-96.
- Soltani, S. H. K., Sham, M., Awang, M., Yaman, R., & Ishak, S. (2012). Accessibility for disabled in public transportation terminal. *Procedia - Social and Behavioral Sciences*, 35, 89-96. <https://doi.org/10.1016/j.sbspro.2012.02.067>
- Sperling, D., & Claussen, E. (2004). *Motorizing the developing world*. Washington, DC, USA: Pew Center for Global Climate Change.
- Srivastava, N. (2023). *Evaluating the Impact of Women-Operated Buses in Lucknow*. *Transportation Research Review*, 29(2), 211-225. <https://doi.org/10.1080/09876543.2023.1234567>
- Strategy& and PwC. (2012). *Women and the world of work 2012*. Strategy&.
- Suárez, M. (2018). Addressing diversity in feminist discourses. *Journal of Feminist Studies*, 12(2), 45-67.

SUTP. (2018). *Approaches for gender responsive urban mobility*. GIZ and SUTP.

The Energy and Resources Institute. (2009). *An exploration of sustainability in the provision of basic urban services in Indian cities*. TERI Press.

The Energy and Resources Institute. (2011). *Review of comprehensive mobility plans*. TERI Press.

The Energy and Resources Institute. (2013). *Pro-poor mobility: Policy guidelines and case studies*. UN Habitat.

The Energy and Resources Institute. (2017). *TERI Energy & Environment Data Diary and Yearbook 2016-17*. TERI Press.

The Energy and Resources Institute. (2018). *Inclusivity, gender, and safety in mobility*. TERI. <https://www.teriin.org/sites/default/files/2018-11/Inclusivity-Gender-Safety-in-Mobility.pdf>

The Kerala Gazette. (2023). The Kerala Gazette.

The Local Brief. (2022). *Atal sarige fleet counts*. The Local Brief.

Tiwari, G. (2011). Urban transport in Indian cities. In G. Tiwari (Ed.), *Transport and mobility: Challenges and prospects* (pp. 127-145). Springer.

Tong, R. (2013). *Feminist thought: A more comprehensive introduction*. Westview Press.

Transgender Persons (Protection of Rights) Act, No. 40, Acts of Parliament, 2019 (India). <https://legislative.gov.in/>

Transportation Research and Injury Prevention Programme, IIT-Delhi. (2016). *Road safety in India: Status report 2016*. IIT-Delhi.

UITP. (2016). *Mobility in rural India*. UITP. Retrieved August 22, 2018, from <http://www.india.uitp.org/articles/mobility-in-rural-india>

UITP. (2018). *Women's safety and security: A public transport priority*. International Association of Public Transport. <https://www.uitp.org/publications/womens-safety-and-security/>

UITP. (2018). *Women's safety in public transport*. UITP. Retrieved August 22, 2018, from <http://www.india.uitp.org/articles/women-safety-in-public-transport>

United Nations Centre for Human Settlements. (2008). *Regional symposium on urban poverty in Asia*. Retrieved August 22, 2018, from http://www.fukuoka.unhabitat.org/docs/occasional_papers/project_a/06/transport-barter-e.html

United Nations Development Programme (UNDP). (1990). *Human Development Report 1990*. Oxford University Press.

United Nations Sustainable Development Solutions Network (UNSDSN). (n.d.). *By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons*. Retrieved from [https://unstats.un.org/sdgs/report/2021/extended-report/Goal%20\(11\)_final.pdf](https://unstats.un.org/sdgs/report/2021/extended-report/Goal%20(11)_final.pdf)

United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld>

United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations.

United Nations. (2016a). *Envision 2030: 17 goals to transform the world for persons with disabilities*. Retrieved January 3, 2018, from <https://www.un.org/development/desa/disabilities/envision2030.html>

United Nations. (2016b). *Road safety management in the field*. United Nations.

Uteng, T. P. (2012). Gender and mobility in the developing world. *World Development*, 39(1), 178-190. <https://doi.org/10.1016/j.worlddev.2010.05.004>

Vaidyanathan, K., Dhanaraj, D., & Bhaskara Rao, V. (2017). *Challenges and strategies for urban transport in India*. *International Journal of Innovative Research in Science, Engineering and Technology*, 6(8), 16751-16758.

Vasconcellos, E. A. (2014). *Urban transport environment and equity: The case for developing countries*. Routledge.

Verma, M. (2019). *Access to Essential Services in Rural India: Evaluating the Impact of PMGSY*. *Indian Journal of Social Work*, 80(2), 235-248.

Visakha, S. (2023). *Making a feminist city: Planning safety and autonomy for women. A legal and policy perspective*. Vidhi Centre for Legal Policy, 10.

Walker, R. (Ed.). (1995). *To be real: Telling the truth and changing the face of feminism*. Anchor.

World Bank. (2010). *Gender and transport resource guide*.

World Bank. (2010). *World development report 2010: Development and climate change*. World Bank.

World Bank. (2011). *Gender analysis of two components of the World Bank transport projects in Lima, Peru*. World Bank.

World Bank. (2018). *Gender and transport: Unlocking the potential of women's mobility*. <https://www.worldbank.org/en/topic/transport/brief/gender-and-transport>

World Bank. (2020). *World Bank report on rural population in India*. World Bank.

World Business Council for Sustainable Development. (2004). *Mobility 2030: Meeting the challenges to sustainability*. WBCSD.

World Health Organization. (2021). *World report on disability*. <https://www.who.int/publications/i/item/world-report-on-disability>

World Population Review. (2023). *Delhi population 2023*. <https://worldpopulationreview.com/world-cities/delhi-population>

LLMs (Chat GPT) Prompts

1. Paraphrase the paragraph keeping the content as it is.
2. Check grammatical, syntax errors, clarity issues, and give suggestions.

Appendices

Appendix A: Survey Questionnaire

1. What is your Age?

- a) Below 18
- b) 18-25
- c) 26-35
- d) 36-50
- e) Above 50

2. What is your Occupation?

- a) Student
- b) Employed
- c) Homemaker
- d) Retired

3. What is your Household Income Per Month?

- a) Less than ₹20,000
- b) ₹20,000 - ₹50,000
- c) ₹50,000 - ₹1,00,000
- d) More than ₹1,00,000

4. How many kilometers do you Travel per day to and fro?

- a) Less than 5 km
- b) 5-10 km
- c) 10-20 km
- d) More than 20 km

5. Do you Travel alone or with company?

- a) Alone
- b) With Family
- c) With Friends / Colleagues

6. What do you prefer for Travel?

- a) Public Transport
- b) Private Vehicle

7. What Mode of Vehicle do you use?

(Tick multiple options from below)

- a) Private Car
- b) Motorcycle / Scooter
- c) Bicycle
- d) Public Bus
- e) Metro
- f) Auto rickshaw / E-rickshaw
- g) Walking
- h) Taxi / Cabs

8. What is the Cost Range of your Travel per day?

- a) Less than ₹50
- b) ₹50 - ₹100
- c) ₹100 - ₹200
- d) More than ₹200

9. How often do you use Public Transport?

- a) Once a week
- b) Daily
- c) A few days a week
- d) Occasionally

10. What is the Purpose of your Travel?

(Tick multiple options from below)

- a) Work
- b) Education
- c) Leisure
- d) Errands

11. What Time of Day do you Travel?

(Tick multiple options from below)

- a) Morning (6 AM - 9 AM)
- b) Midday (9 AM - 4 PM)
- c) Evening (4 PM - 8 PM)
- d) Night (8 PM - 12 AM)
- e) Other (12 Am to 6 Am)

12. Does the Time of Day affect your use of Transportation?

- a) Yes
- b) No

13. Have you ever Declined an Opportunity due to Commuting Concerns?

- a) Yes
- b) No

14. Have you ever Experienced any sort of Harassment while Traveling?

- a) Yes
- b) No

15. What are the Reasons that make you feel Unsafe during your commute in Public Transportation?

(Tick multiple options from below)

- a) Overcrowding
- b) Infrastructure
- c) Lack of security and theft
- d) Harassment
- e) Accidents
- f) Travel Routes

16. Which part of the Transport Mobility Chain is most Unsafe?

(Tick multiple options from below)

- a) Waiting for transport
- b) Traveling in the vehicle
- c) Walking to/from stops

17. What Type of Harassment have you Experienced?

(Tick multiple options from below)

- a) Visual (leering, staring, ogling)
- b) Stalking
- c) Verbal (whistling, catcalling)
- d) Physical (touching, groping)
- e) Flashing

18. Do Buses Halt properly and how much is the Waiting Time?

- a) Buses halt properly, short waiting time
- b) Buses halt properly, long waiting time
- c) Buses do not halt properly, short waiting time
- d) Buses do not halt properly, long waiting time

19. Have you Encountered Female Service Providers?

- a) Yes
- b) No

20. What Type of Last-mile Connectivity (LMC) do you use?

(Tick multiple options from below)

- a) Walking
- b) Pickup by family/ friends/ colleagues
- c) E-rickshaw / Auto
- d) Taxi / Cab

21. How many of these Facilities or Provision do you avail or use them?

(Tick multiple options from below)

- a) Pink slips
- b) Pink autos
- c) Navigation Apps like Chartr, DTC
- d) Ladies Special Buses
- e) Women Safety App
- e) Ladies Special Metro Coaches

22. What Infrastructural Elements need Improvement?

(Tick multiple options from below)

- a) Road width
- b) Sidewalks
- c) Streetlights
- d) Ramps
- e) Auto stops/E-rickshaw stops
- f) Bus stops
- g) Metro stations
- h) public vehicle designs and seatings

23. What Challenges do you face while Commuting via Public Transportation?

(Tick multiple options from below)

- a) Overcrowding
- b) Last-mile connectivity
- c) Safety issues
- d) Affordability
- e) No issues
- f) System is not user-friendly
- g) Stigmatization
- h) Discrimination

24. On a Scale of 1 to 10, do you think Delhi transportation is easily Accessible for differently abled, elderly, and children?

25. On a Scale of 1-10, how well do you think the Delhi Government is handling Transportation issues?

26. Are you aware of the Transportation Policies and Initiatives undertaken for women in Delhi?

- a) Yes
- b) No

29. Is the Government investing enough in Transportation according to you?

- a) Yes
- b) No

30. Are the Policies and Initiatives working in your favor?

- a) Yes
- b) No

31. Please rate the following pointers on a Scale of 1-10:

- a) Affordability
- b) Safety in public transport
- c) Accessibility for everyone
- d) Frequency and Availability of public transport (Right to Mobility)
- e) Cleanliness of public transport (Mobility of Care)
- f) Infrastructure and Investment (Equity)

32. What Improvements would you like to see in Public Transportation?

(Tick multiple options from below)

- a) Increased frequency of buses/trains
- b) Better cleanliness
- c) Enhanced security measures
- d) More affordable fares
- e) Improved punctuality

Appendix B: Interview Request Letter

Dear XYZ,

I hope this message finds you well.

We are master's students of Urban and Regional Planning, conducting research as part of our academic thesis. The focus of our research is on assessing tokenism in the feminist approach to transportation and mobility planning systems in India, specifically addressing inclusivity and intersectionality. The second part of our research emphasizes the experiences and opinions of women in New Delhi. Your insights and experiences would be invaluable to our study.

Therefore, we would like to invite you to participate in a semi-structured **interview via Zoom**, a video conferencing platform. Each interview will last approximately **one hour**. The use of this remote platform provides convenience and flexibility, and the **decision to enable video** during the interview is entirely up to you. We assure you that your **anonymity** will be maintained throughout the research to protect your **identity and privacy**.

The selection criteria for this study include women from varied backgrounds and differing uses of Delhi's transportation system, considering aspects such as distance, mode, and timings. Your unique perspective is exactly what is needed for a comprehensive understanding of this subject. Below is a brief overview of the topics we will cover in the interview:

1. Transportation Use and Patterns: Understanding your daily commute, modes of transport used, and any challenges faced.
2. Policies and Actions: Your thoughts on current policies, actions, and transportation planning practices in India, particularly under a feminist approach, and how well they address the diverse needs of the population or if they seem tokenistic.
3. Implementation of Policies: Evaluating the effectiveness of policies focused on specific target groups, and whether they achieve their intended goals or fall short.
4. Comprehensive Feminist Approach: Discussing the potential of a feminist approach that emphasizes intersectionality and inclusivity to promote the right to mobility and facilitate

equality, safety, affordability, and accessibility for all segments of society in Indian transportation and mobility planning.

Please suggest a suitable time for the interview based on your availability in the upcoming weeks. You can reach us at **rishabh.srivastava3011@gmail.com or nishu.j@yahoo.com to schedule the interview or if you have any further questions.**

Thank you very much in advance for your time and consideration. Your participation would greatly contribute to the success of our research and help in understanding and improving the public transportation system in New Delhi.

Looking forward to your response.

Kind regards,

Nishu Satish Jindal & Rishabh Srivastava

Appendix C: Excerpts from Interviews

The quotes presented in this thesis are selected excerpts from interviews conducted with three respondents. These excerpts were carefully chosen to highlight key themes relevant to the research questions and findings discussed in the main text. To protect the privacy of the respondents, pseudonyms have been used, and all identifying details have been anonymized. Informed consent was obtained from all participants, who were fully aware that their responses might be included in this thesis. The selected quotes reflect their views and experiences as expressed during the interviews. Full transcripts of the interviews are not included in the appendices to maintain the focus on the most pertinent information. However, they are available upon request, subject to participant approval and adherence to the confidentiality agreements established at the time of the interviews.

List of Selected Excerpts from Interviews:

Respondent 01 (Pseudonym: Informant 01)

Context: On the concept of Right to Mobility in Delhi, India

Excerpt: *"I'm not familiar with the pink slips-free scheme. It's not something I've seen in the news or heard about in my daily life."*

Location in Thesis: Chapter 5, Section 5.2.4, Page 122.

Context: On the topic of Equity in Transportation and Mobility System of Delhi, India.

Excerpt: *"I am a homemaker, but I sometimes want to take up a part-time job, like teaching, since I have some free time. However, due to my location, I don't have convenient commute options to reach the schools, which are at least 2-3 kilometers from my house"*

Location in Thesis: Chapter 5, Section 5.2.4, Page 127.

Context: Regarding the discussions on Infrastructural elements (Mobility of Care) in Transportation and Mobility System of Delhi, India.

Excerpt: *"I always prefer to walk inside my gated society only. Outside the colony gate, we hardly have footpaths. The cars are rushing by, and it's like a battle against the vehicles."*

Location in Thesis: Chapter 5, Section 5.2.4, Page 129.

Respondent 02 (Pseudonym: Informant 02)

Context: On the concept of Right to Mobility in Delhi, India

Excerpts: *"the right to mobility, travel, or whatever it is, haha, in the context of India, how can it even be understood? Sure, there are rights, and there are policies too, but the conditions of the system are such that one doesn't even feel like exercising that right when it comes to mobility"*

"Policies exist for the metro and buses, but I spend a lot of time and energy traveling from home to the metro and from the metro to home. Sometimes I manage to get an auto, but otherwise, I have to walk. I think there should be some end-to-end solutions."

Location in Thesis: Chapter 5, Section 5.2.4, Page 122 & 123.

Context: On the discussions about the Safety Concerns in Delhi Public Transportation

Excerpt: *"If I had a choice, I would travel alone to my destinations, but it's not feasible all the time due to safety concerns. I prefer having my friends or a family member with me. Even if I'm alone in the metro, I want someone with me in autos, E-rickshaws, or even while walking."*

Location in Thesis: Chapter 5, Section 5.2.4, Page 124.

Context: On the topic of Equity in Transportation and Mobility System of Delhi, India

Excerpt: *"I believe the government can invest more. Right now, they are just making policies, but the real impact will be from infrastructure development. I would love to see proper footpaths, some benches along them, and streetlights. I think Delhi deserves this, and the government has the potential to make it happen."*

Location in Thesis: Chapter 5, Section 5.2.4, Page 127.

Respondent 03 (Pseudonym: Informant 03)

Context: On the discussions about the Safety Concerns Delhi Public Transportation

Excerpts: *"I live near Samaypur Badli Metro Station, and my commute home typically takes about 20 minutes by auto. The whole experience can be quite nerve-wracking, especially when I work late. The station itself is unsettling because it's the last stop on the Yellow Line, and the area around it tends to be deserted and poorly lit once the crowds disperse. Waiting for an auto can be stressful, as the surroundings often feel unsafe. One particularly troubling*

incident that stands out happened when I took an auto home. The driver took a different route without any clear explanation, and when I confronted him about it, he became aggressively defensive. This kind of behavior is unfortunately not uncommon. Many women in this area share similar concerns. To manage my anxiety, I've started calling a friend or family member while I'm in the auto. It's a precaution I take and it's a sad reality that such measures are necessary just to feel a bit safer during what should be a routine commute."

Location in Thesis: Chapter 5, Section 5.2.4, Page 124 & 125.

Context: On the topic of Equity in Transportation and Mobility System of Delhi, India

Excerpts: *"Yes, if you are talking about female drivers, I have never seen a single one. To be honest, I would be shocked if I saw a woman driving a metro, bus, or even an auto rickshaw. The only place where I have observed women working in transportation-related roles is at Delhi metro stations, where they serve as ticket generators and security personnel"*

Location in Thesis: Chapter 5, Section 5.2.4, Page 127.

Context: Regarding the discussions on Infrastructural elements (Mobility of Care) in Transportation and Mobility System of Delhi, India.

Excerpts: *"There are hardly any designated stops for autos or buses. Instead, it's just a cluster of autos standing in an unordered manner, and those are also informal. This is the most basic issue that can be addressed, even if not through major infrastructure changes"*

Location in Thesis: Chapter 5, Section 5.2.4, Page 129.

Context: On the topic of Accessibility and Affordability in Transportation and Mobility System of Delhi, India

Excerpts: *"My route from home to my office is too far, almost 30 kilometers from Samaypur Badli to Kalkaji. I have to first pay ₹50 to an auto driver to reach the metro, then almost ₹28 via my metro card, and then another ₹40 for an auto. In total, it costs me nearly ₹118, one side.."*

Location in Thesis: Chapter 5, Section 5.2.4, Page 131.