

Understanding Safety and Mobility Experiences of Women Working in Public Spaces in Chennai

Sujatha Srinivasan (LEAD at Krea University),
Meera Sundarrajan (Gender and Policy Lab,
Greater Chennai Corporation)



Report



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Foreword

Women's safety in public places is an issue of utmost importance as it enables them to participate in the workforce effectively, access education, skill training and enjoy leisure. The Tamil Nadu State Policy for Women, 2024 seeks to increase women's workforce participation and provide safe workplaces for women, recognizing the heterogeneity among women from diverse socioeconomic segments, and the different challenges faced by vulnerable groups among women.

The Greater Chennai Corporation is committed to creating a safe Chennai where women can participate in the workforce effectively and realize their dreams. The Gender and Policy Lab set up as part of the Greater Chennai Corporation is the first effort made by any urban local body to address the issue of women's safety and mobility in a concerted manner.

While looking at women in the workforce, this study has focused exclusively on women whose workplace overlaps with public spaces, such as conservancy workers, auto drivers, courier delivery agents and women engaged in postal delivery, bridging an important gap in the understanding of their lived experiences, drawing on a survey of over 490 women as well as focus group discussions. The Greater Chennai Corporation depends heavily on women workers to keep the city clean through its solid waste management program which employs a large number of women in its workforce. Similarly, with increasing opportunities women are moving into hitherto male-dominated and unconventional domains – such as courier delivery services, postal delivery and autorickshaw driving. These workers play a critical role in delivering essential services to large segments of the population.

The findings from this study conducted by the Greater Chennai Corporation's Gender and Policy Lab and LEAD at Krea University have been useful in understanding actionable areas for strengthening civic infrastructure and creating more inclusive spaces in the city.


Thiru J. Kumaragurubaran, I.A.S
Commissioner
Greater Chennai Corporation

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Authors: Sujatha Srinivasan (LEAD at Krea University), Meera Sundarrajan (Gender Policy Lab, Greater Chennai Corporation)

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Background

Participation of women in workforce is crucial for fostering inclusive growth, improving family and societal well-being, and achieving long-term economic sustainability. Globally, the female labour force participation rate (FLFPR) has been low despite favourable policies, and further exacerbated in low-income and developing economies. **In India, Periodic Labor Force Survey (PLFS) estimates suggest a rising participation of women in the workforce. But at 41.7 per cent, the labor force participation rate for females continues to be lower than the 78.8 per cent for males according to 2023-24 PLFS estimates.** There are a range of factors that impede female labor force participation, notable among which are constraints around safety and mobility which significantly influence women's ability to enter and remain in the workforce.

Mobility is pivotal to shaping female labour force participation. Evidence suggests that lack of reliable and safe modes of transportation can limit job opportunities for women. Inadequate mobility can lead to longer commute times, reducing the time women have available for work and other responsibilities, ultimately impacting their job choices and retention. Similarly, concerns about personal safety in public spaces can deter women from commuting to work or seeking employment in certain sectors. Fear of crime and harassment can invoke stress and anxiety, affecting women's overall well-being and work performance, further discouraging women from workforce participation.

According to UN Women, out of 736 million women worldwide, at least one in three have experienced physical and/or sexual abuse by an intimate partner, sexual violence by a non-partner or both, at some point in their lives. In India, according to the National Crime Record Bureau (NCRB), the incidences of crimes against women was 0.4283 million in 2021, a 15.3% increase from the previous year. This is exaggerated for women who are required to access public spaces as part of their livelihood. Women working as traffic police, women engaged in conservancy work, women engaged in postal and courier services, are all examples of such category of women who are necessitated by virtue of their profession to access public spaces on a daily basis.

In recent years, the job market in India has seen notable shifts, with more women taking up opportunities in non-traditional sectors such as logistics, and e-commerce, gig work in delivery and logistics, as auto vehicle drivers, among others. These jobs often blur the lines between public spaces and worksites and highlight the need for a holistic approach to create safer and more inclusive public spaces for all. Evidence from across India also suggests that women who access public spaces are constrained by limitations in gender-inclusive infrastructure and services such as sanitation and hygiene facilities which further carries implications on their perceptions around safety and security (O'Reilly, 2015) (Joshi, 2017).

Women working in public spaces are an important constituency for our study partners the Greater Chennai Corporation, whose Gender and Policy Lab is dedicated to the mission of enhancing women's access to opportunities by improving safety and gender responsiveness in public spaces and transport.

Chennai is the fourth largest metropolitan city in India and the Greater Chennai Corporation Area is the largest urban cluster in the state of Tamil Nadu. At a population of over 12.29 million (Census of India, 2011), the Chennai metropolitan region is at the forefront of the urbanization wave that is sweeping the nation and is an engine for economic growth and development opportunities within the state of Tamil Nadu. Women's participation in the paid economy is significant – FLFPR in Tamil Nadu is substantially higher than the average recorded for India, for both rural and urban areas. Periodic Labour Force Survey (PLFS) 2018-19 finds that rural FLFPR within the state is 35.1 per cent, which is 15.4 percentage points higher than the national figure (IWWAGE Factsheet1). Urban FLFPR in Tamil Nadu is 23.6 per cent, 7.5 percentage points higher than urban FLFPR recorded for all of India. On the other hand, while the NCRB data suggests that Chennai is a safe city for women, it also indicates that 10 per cent crimes against women in Tamil Nadu have taken place in Chennai.

Considering that the state is highly urbanized, cities need to be safe and inclusive for women to sustain the existing opportunities they offer and enable women to explore and move into newer domains of employment, education and self-actualization within the urban context. It is thus imperative to understand the safety perceptions of women and provide support mechanisms to address any challenges that might be identified.



Objectives of the Study

In this context, LEAD at Krea University, in partnership with the Gender Policy Lab at the Greater Chennai Corporation, undertook a mixed methods study of women workers in public spaces to understand their access and safety requirements and perceptions.

The main objectives of the study were the following –

- Understand the daily challenges women face in accessing public spaces for work
- Understand the safety issues that women might face while working in public spaces
- Examine barriers such as mobility constraints, exposure to heat etc., that might pose challenges for women while working in public spaces
- Identify potential solutions to address these barriers through infrastructure improvements and policy interventions

Our research focused on women residing in urban and peri-urban areas of the Chennai metropolitan city who access public spaces for their work in Chennai, including women engaged as conservancy workers, postal and courier delivery workers and gig workers in delivery and logistics.

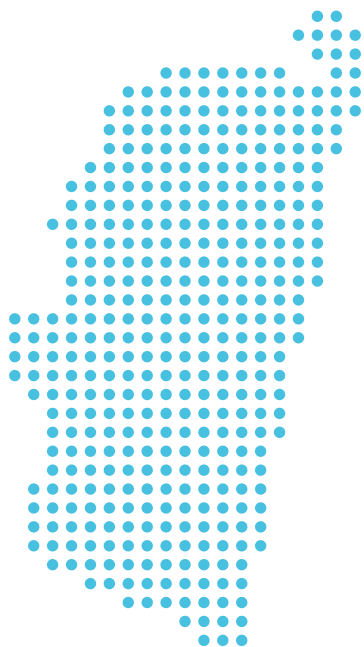
Methodology

To achieve our objectives, we adopted a cross-sectional study design involving a mixed methods approach to data collection which included a quantitative survey and qualitative Focus Group Discussions (FGDs). FGDs were conducted with women workers to interpret the quantitative findings better and to gain a more nuanced understanding of women workers' experiences in public spaces.



Quantitative Data Collection

Sampling Strategy



Zone	Name of the Zone	Conservancy	Delivery	Postal
I	Thiruvotriyur	15	5	2
II	Manali	25	-	-
III	Madhavaram	15	2	1
IV	Tondirpet	1	-	2
V	Royapuram	1	4	4
VI	Thiru-vi-ka-Nagar	57	-	-
VII	Ambattur	3	4	26
VIII	Anna Nagar	2	11	11
IX	Teynampet	43	1	1
X	Kodabakkam	45	2	1
XI	Valasaravakkam	34	1	-
XII	Alandur	62	-	1
XIII	Adyar	4	-	1
XIV	Perungudi	16	-	-
XV	Sozhanganallur	88	-	-
Total	491	411	30	50

The study was conducted across the Greater Chennai Corporation with a total of 491 survey respondents selected based on stratified random sampling, with the stratification based on employment of female respondents as conservancy workers, postal workers, and delivery workers (respectively with Chennai Corporation Solid Waste Management department, Tamil Nadu postal department and gig platforms such as Zomato & Swiggy). The inclusion criteria for selection of women for the study (both quantitative and qualitative data collection) was that the women should be in the age group of 18-59 years and employed in the above public and private agencies whose employment requires exposure to public spaces in the city of Chennai.

Distribution of Quantitative Survey

Conservancy Workers
83.7%



Postal Delivery
10.2%



Platform Delivery
6.1%



The Quantitative questionnaire had the following modules: Individual and household characteristics; Quality of work environment and Mobility; Safety in work environment, and Income and Agency.

The qualitative data collection was conducted through focus group discussions with women engaged in conservancy work that constituted the majority of our survey sample. The semi-structured FGD guide focused on understanding how working in public spaces affected the safety and mobility of these women, their quality of work environment as well as aspects such as aspirations, health and empowerment. The questionnaire also delved deeper into understanding their priority needs with regards to accessing public spaces. For the study, 39 respondents randomly selected from among women engaged in conservancy work for participation in four FGDs.

The survey and FGDs were conducted in June and July 2024 by a team of surveyors who were given orientation and training to conduct the interviews. The interviews were conducted in the local language of Tamil in Chennai City.

Study Limitations

The sample for this study are similar in that their work requires accessing public spaces. They are also similar in other key socioeconomic and wage characteristics (e.g. women workers within each category fall under the same pay scale). However, our sampling approach was limited due to time and budgetary constraints as well as lack of access to the total population under each worker category from which we could derive a study sample based on probabilistic sampling methods. We followed the convenience sampling approach for selecting participants with the sample size determined by sample and time saturation.

Key Findings

We present the findings from the quantitative survey across various themes related to the study objectives in tabular or graphical form and provide interpretations of the findings. To build a narrative around the findings, we have used the insights obtained from the FGDs.

Sample Characteristics

The median age of the surveyed women across in our sample is 39 years. The postal delivery and platform delivery women worker sample includes a significantly higher proportion of women (48 and 77 per cent respectively) in the age group of 31-40 years than that of conservancy worker sample (41 per cent), majority of whom were in the age group of 41-50 (48 per cent). The proportion of married women is higher across all worker categories (63 per cent). In terms of education, only 19 per cent of the surveyed women had completed higher secondary education or above, with a higher proportion of women in the postal delivery and platform delivery categories (98 and 50 per cent respectively). Over 65 per cent of women engaged in conservancy work had completed less than higher secondary education, of which 36 per cent had never attended school. Majority of women workers reported living in rental/lease housing (64 per cent), with the proportion of ownership higher among postal delivery workers (52 per cent).

Median duration of women working in their current employment is 4 years. Majority of the women (94 per cent) worked between 8-10 hours, with women conservancy workers employed in day/evening/night shifts while the women employed in the remaining worker categories working only day shifts. That said, even among conservancy workers, the shift time is fixed and determined based on worker preference. Median distance to place of work is 6 km, with 34 per cent women reporting a commute time of 15-29 minutes and 27 per cent reporting 30-59 minutes. Almost 96 per cent of the women reported requiring some form of transport to conduct their work duties. Majority of the women (88 per cent) earn between Rs 10,000 and 20,000 from their current jobs.



Table 1: Basic Characteristics

	Overall N=491	Conservancy n=411	Delivery n=30	Postal n=50
Age (Mean age= 39)	N(%)	n(%)	n(%)	n(%)
20-30	58(11.81%)	34(8.27%)	5(16.67%)	19(38%)
31-40	215(43.79%)	168(40.88%)	23(76.67%)	24(48%)
41-50	204(41.55%)	197(47.93%)	2(6.67%)	5(10%)
51-60	14(2.85%)	12(2.92%)	0	2(4%)
Education Level				
Never-attended School	150(30.55%)	149(36.25%)	1(3.33%)	0
Primary till 8th	219(44.60%)	212(23.33%)	7(23.33%)	0
Secondary	30(6.11%)	22(5.35%)	7(23.33%)	1(2%)
Higher Secondary	36(7.33%)	16(3.89%)	10(33.33%)	10(20%)
Undergraduate	34(6.92%)	5(1.22%)	3(10.00%)	26(52%)
Post-Graduate	13(2.65%)	4(0.97%)	1(3.33%)	8(16%)
Diploma	9(1.81%)	3(0.73%)	1(3.33%)	5(10%)
Type of Housing				
Own House	167(34.01%)	138(33.58%)	3(10%)	26(52%)
Rental/Lease House	315(64.15%)	272(66.18%)	27(90%)	17(34%)
Government housing	2 (0.41%)	1(0.24%)	0	1(2%)
Women's Hostel/PG	6(1.22%)	0	0	6(12%)
Religion				
Hindu	416 (84.73%)	352(85.64%)	20(66.66%)	44(88%)
Muslim	8 (1.63%)	7(17.07%)	1(3.33%)	0
Christian	56 (11.41%)	52(12.65)	3(10%)	1(2%)
No-religion reported	11 (12.24%)	0	6(20%)	5(10%)

Table 1: Basic Characteristics

	Overall N=491	Conservancy n=411	Delivery n=30	Postal n=50
Monthly Income				
INR- 10,000 – 19,999	431(87.78%)	404(98.30%)	21(70.00%)	6(12.00%)
INR 20,000 – 39,999	37(7.54%)	6(1.46%)	9(30.00%)	22(44%)
INR 40,000 – 49,999	20(4.47%)	-	-	20(40%)
Refused-to answer	3(0.61%)	1(0.24%)	-	2(4.00%)
Working hours				
Less than 8 hours	17(3.46%)	5(1.22%)	6(20.00%)	6(12.00%)
8-10 hours	461(93.89%)	406(98.78%)	12(40.00%)	43(86.00%)
Greater than 10 hours	13(2.65%)	-	12(40.00%)	1(2.00%)
Work shift				
Fixed Day Shift	356(72.51%)	285(69.34%)	21(70.00%)	50(100.00%)
Fixed-Night Shift	127(25.87%)	126(30.66%)	1(3.33%)	-
Changes- but, mostly day	1(0.20%)	-	1(3.33%)	-
Changes between day and night	7(1.43%)	-	7(23.33%)	-
Use of transport for work				
Yes	475(96.74%)	396(96.35%)	30(100%)	49(98.00%)
No	16(3.26%)	15(3.65%)	-	1(2.00%)

Mobility Perceptions, Constraints and Needs



In general, women reported satisfaction with the mobility options available to commute to work and a preference for public transport owing to its affordability. Their work shift timings did not impact their ability to reach their work place. But women working the night shift indicate a higher preference for using public transport which carries implications on their perceived safety during commute at night. Lower frequency of public transport during night shift hours is also a reported constraint, requiring policy attention.

Mobility patterns in cities have ripple effects on women's choices and experiences relating to work. Evidence suggests that lack of proper transportation and roads may hinder women's participation in education and employment, further limiting their socioeconomic empowerment. In the absence of fair, safe, and affordable modes of transportation, women often feel constrained to work from home or take informal job opportunities that are proximate to their residence to sustain their living. **In this section, we report how women working in public spaces access their workplace and constraints and needs therein. In our sample, while postal and platform delivery work is only conducted during the day, conservancy work involved shift work, and women engaged in this work worked in day, evening or night shifts based on their individual preference.**

Respondents who worked night shifts reported that shift work did not impact their ability to commute to work. But a majority of them also reported a preference for public transport such as buses, local trains and less expensive modes of private transport such as share auto for their commute, with women working night shift exhibiting a higher preference (79 per cent) for these specific mode of commute than those working in day shift (51 per cent). This result is consistent with other evidence from India that commuting safety is an important concern for women, with those in low-skilled employment relying more on public transport for their commute to work (Mahambare & Dhanaraj, 2022) and women students and non-students reporting a preference for public transport as it enabled reduction in travel time and accessibility from home to place of education or work (Ratho & Jain, 2021).

Our focus group discussions underscored the preference of public transport among women irrespective of their shift timings as it is perceived as a safer mode of commute relative to other modes. It is also perceived as a more economical mode of commute, particularly since the launch of the free bus travel program - the Vidiyal Payanam scheme - in year 2021 for women in Tamil Nadu. Our FGD participants reported that the scheme has limited barriers for them to travel. But those that work night shifts could not effectively avail of this scheme benefits as ordinary buses where this scheme is valid ran at a reduced frequency during night or early morning hours when they commuted to and from work.

Considering that a significant proportion of the surveyed women (51% of conservancy workers, 30% of platform workers and 42% of postal workers) require at least 30 minutes or more to reach their workplace, addressing these mobility constraints can reduce their commute time and increase the time these women have for work and domestic responsibilities.

Table 2: Shift Work and Mobility Patterns

	Overall	Conservancy	Delivery	Postal
	N=491	n=411	n=30	n=50
Time to reach the workplace				
Less than 15mins	86(17.52%)	74(18%)	4(13.33%)	8(16%)
15mins-20mins	167(34.01%)	129(31.39%)	17(56.67%)	21(42%)
30mins-50mins	133(27.09%)	116(28.22%)	8(26.67%)	9(18%)
1 hour or more	102(21.0%)	92(22.38%)	1(3.33%)	12(24%)
Type of Shift				
Fixed Day	356(72.51%)	285(69.34%)	21(70%)	50(100%)
Fixed Night	127(25.87%)	126(30.66%)	1(3.33%)	-
Changes- but mostly day	1(0.20%)	-	1(3.33%)	-
Changes - day and night	7(1.43%)	-	7(23.33%)	-
Impact of shift work on commute – Day shift	n=364	n=285	n=29	n=50
Not at all	197(54.12%)	161(56.49%)	9(31.03%)	27(54%)
A small amount	87(23.9%)	73(25.61%)	8(27.59%)	6(12%)
Moderate Amount/ Moderately	48(13.19%)	35(12.28%)	6(20.69%)	7(14%)
A great deal/ very	23(6.32%)	13(4.56%)	5(17.24%)	5(10%)
An extreme amount/ Extremely	9(2.47%)	3(1.05%)	1(3.45%)	5(10%)

Table 2: Shift Work and Mobility Patterns

Impact of shift work on commute – Night shift	n=135	n=126	n=9	
Not at all	48(35.56%)	47(37.3%)	1(11.11%)	-
A small amount	35(25.93%)	30(23.81%)	5(55.56%)	-
Moderate Amount/ Moderately	28(20.74%)	26(20.63%)	2(22.22%)	-
A great deal/ very	18(13.33%)	17(13.49%)	1(11.11%)	-
An extreme amount/ Extremely	6(4.44%)	6(4.76%)	0(0%)	-
Commute to work in day time				
Walk alone	60(16.48%)	58(20.35%)	0	2(4%)
Walk with co-workers and family	2(0.55%)	2(0.70%)	0	33(66%)
Drive your own bicycle/two-wheeler	104(28.57%)	42(14.74%)	29(100%)	2(4%)
Family members drop off	11(3.02%)	9(3.16%)	0	13(26%)
Public transport such as auto	187(51.37%)	174(61.05%)	0	0
Commute to work at night time				
Walk alone	15(11.11%)	15(11.9%)	0(0%)	-
Walk with co-workers and family	1(0.74%)	1(0.79%)	0(0%)	-
Drive your bicycle/two-wheeler	12(8.89%)	3(2.38%)	9(100%)	-
Family members drop off	1(0.74%)	1(0.79%)	0(0%)	-
Mode of transport to conduct work				
By walk	260(54.74%)	258(65.15%)	-	2(4.08%)
Own bicycle/two-wheeler	85(17.89%)	14(3.54%)	30(100%)	41(83.67%)
Company provided transport	51(10.74%)	51(12.88%)	-	-
Public Transport	79(16.63%)	73(18.43%)	-	6(12.24%)

Safety Perceptions and Needs



In general, Chennai is perceived to be a safe city by women respondents in this study. Respondents also reported a high level of satisfaction with the safety and redressal mechanisms offered at work and for the general public. Aspects such as availability of street-lighting, patrolling by supervisors and city police especially at night and access to help during distress appear to improve their perceptions of safety.

Evidence suggests that women working in public spaces face a range of safety challenges that can significantly impact their well-being and ability to perform their jobs effectively. These threats to their personal security in the form of physical or sexual harassment or assault in urban public spaces, make them feel unsafe in their work environment. Safety of women and girls in the public and private spheres is therefore a key concern of the [2030 Agenda for Sustainable Development](#) and is part of the indicators selected to measure progress towards the UN Sustainable Development Goal (SDG) 5. In this section we report the safety perceptions, experiences and needs among our women respondents in the context of their work in public spaces.

A significant proportion of the surveyed women reported that they did not worry about their physical safety (40 per cent) or safety as a woman (59 per cent). This perception of Chennai as a safe city was also echoed in the qualitative discussions where women, including those that work night shifts, reported feeling generally safe while conducting their work in public areas. These perceptions were bolstered by the fact that safety mechanisms such as patrolling and surveillance both by their supervisors at work as well as by the city’s police system were strong. These results are consistent with NCRB 2023 statistics that Chennai is the safest city for women in the whole of India.

Perceptions Around Workplace Safety



Safety dimensions	Shift type	Safety rating				
		Very good	Good	Neither poor nor good	Poor	Very poor
Overall safety	Day (N = 364)	79 (21%)	267 (73%)	2 (7%)	11 (3%)	-
	Night (N=135)	13 (10%)	105 (78%)	11 (6%)	4 (3%)	2 (1%)
Street-lighting	Day (N = 364)	66 (18%)	264 (72%)	30 (8%)	4 (1%)	-
	Night (N=135)	11 (12%)	93 (69%)	16 (12%)	8 (6%)	2 (1%)
Patrolling/ surveillance	Day (N = 364)	82 (22%)	260 (71%)	13 (4%)	8 (2%)	1 (3%)
	Night (N=135)	31 (23%)	96 (71%)	8 (6%)	-	-
Access to help during distress	Day (N = 364)	142 (39%)	160 (44%)	40 (11%)	20 (5%)	2 (6%)
	Night (N=135)	17 (13%)	91 (67%)	18(13%)	8 (6%)	1 (7%)
Roads and sidewalks	Day (N = 364)	48 (14%)	202 (56%)	28 (8%)	65 (18%)	21 (6%)
	Night (N=135)	4 (3%)	76 (56%)	27 (20%)	19 (14%)	9 (7%)

Only 5 per cent of the women had experienced physical or sexual harassment while at work during the last 2-3 years, with the abuse perpetrated by the general public. Among these women who reported abuse (5 per cent of the total sample), almost 46 per cent did nothing to address this incidence of abuse. That said, a high proportion of women reported satisfaction with the grievance mechanisms to address distress situations offered by their employer (91 per cent) and by the government (63 per cent).



Working Conditions



Among all the factors impacting their work in public spaces, women respondents in this study reported strong dissatisfaction with the quality of their work environment. Lack of access to safe and hygienic sanitation facilities in public areas where they work as well as hygienic spaces is a considerable challenge, requiring urgent policy attention.

Beyond understanding the barriers of safety and mobility, our study also sought to examine the quality of work environment for women who work in public spaces. To this end, we included four indicators related to sanitation and menstrual hygiene facilities and spaces to eat. These are: 1) quality and availability of sanitation facilities during work hours, 2) ability to wash and change in privacy at workplace during the last menstrual period, 3) availability of menstrual products at the workplace and 4) ability to access clean spaces to eat their lunch or dinner. Literature suggests that inadequate access to water and sanitation services affect women and girls disproportionately and gaps in sanitation service provision expose women to physical, emotional and health vulnerabilities (Burt & et.al, 2016) (WSP, 2010). Women and girls who resort to open defecation due to inadequate sanitation facilities within their households undergo considerable psychosocial stress trying to ensure their privacy and safety in this process (Patkar, 2016) (Khanna & et.al, 2015). These risks also extend to public spaces, where female users of public toilets report insecurities in the form of “unsafe locations and other infrastructural factors including poor quality, poor design, no locks on doors, lack of cleanliness and maintenance, insufficient lighting” that render public toilet unusable for women (O'Reilly, 2015).

These challenges were evidenced in this study as well – 54.54 per cent of the surveyed women reported using public restroom for their sanitation needs, with 78 per cent of respondents reporting dissatisfaction with both the availability and quality of sanitation facilities in public spaces. 15.27 per cent of respondents reported using open spaces for their sanitation needs. Our qualitative discussion underscored these results, with women expressing severe challenges in accessing sanitation facilities of acceptable quality and particularly, women working night shifts reporting that public restrooms were inaccessible as they are not operated during night hours. FGD participants also noted that they were discouraged from using sanitation facilities in other private or public buildings such as metro stations. Among 491 surveyed women, 374 reported inability to wash and change in private during their menstrual period and 21 of them took leave during the last menstrual period. About 99 per cent of the women reported non-availability of menstrual products at the workplace.

Table 3: Access to Sanitation and Hygiene Facilities at Work

Place of restroom breaks while at work	N(%) N= 491
Public restrooms	268 (54.54%)
Company arranged spot	5 (1.02%)
Office	58 (11.81%)
Go home	47 (9.57%)
Don't use restroom till I return home	26 (5.3%)
Petrol bunk	7 (1.43%)
Open place	75 (15.27%)
Hospital / Hotel etc	5 (1.02%)

Almost 97 per cent (n = 411) reported that they have their lunch or dinner in open public areas. Almost 66 per cent of the 491 women surveyed reported dissatisfaction with the quality of these spaces available to eat. Our qualitative discussions suggested that the women consider it as par for the course with working in open public spaces.

	Full Sample N=491	Conservancy (n=411)	Delivery (n=30)	Postal (n=50)
Availability of menstrual products at workplace				
Yes	5(1.02%)	5(1.22%)	-	-
No	486(98.98%)	406(98.78%)	30(100.00%)	50(100.00%)
Ability to change in private during menstruation				
Yes	96(19.55%)	80(19.46%)	1(3.33%)	15(30.00%)
No	374(76.17%)	318(77.37%)	21(70.00%)	35(70.00%)
Took leave	21(4.28%)	13(3.16%)	8(26.67%)	-



Effect on Health and Empowerment



A considerable proportion of women respondents noted that their work is public spaces where they were exposed to natural elements as well as pollution did have adverse effects on their health. But women accepted these aspects as typical of their work environment. Notwithstanding these aspects of the work environment and challenges in balancing work and domestic responsibilities, women reported a preference for this work owing to their improved socioeconomic empowerment enabled by this employment.

The study also examined perceptions around health and well-being of our respondents as result of their working environment which entailed exposure natural elements such as heat from sun and rains as well as vehicular pollution. Majority of the women surveyed reported that this working environment did have negative impact on their overall health (56 per cent), fatigue (82 per cent) and sleep (62 per cent). Despite these challenges, our qualitative discussions suggested that these women considered that aspects as typical of a working environment such as theirs and were reconciled to it.

Interestingly, despite these negative aspects of their working environment, over 55 per cent of the women surveyed (specifically, 60 per cent of women engaged in conservancy work) reported a preference for their current job over a more traditional, desk-based job. Based on our qualitative discussions, women engaged in conservancy work who are particularly older among our overall sample viewed their age and low education to be barriers to seeking traditional office jobs. That said, they preferred their current job owing to enabling aspects such as job security, income stability and employment benefits such as provident fund. The women also took considerable pride in their role and contributions to keeping their city clean.

A majority of respondents reported received some form of employment benefits - of the 491 women surveyed, almost 88 per cent reported access to provident fund and gratuity, 28 per cent and 55 per cent had access to health insurance and health benefits such as subsidized access to doctors/medicines respectively, and 21 per cent had access to accident insurance. Over 70 per cent reported satisfaction with these benefits; 63 per cent reported satisfaction with the income from their work and nearly 83 per cent report satisfaction with the working hours.

Figure 1: Preference for Desk-based Job

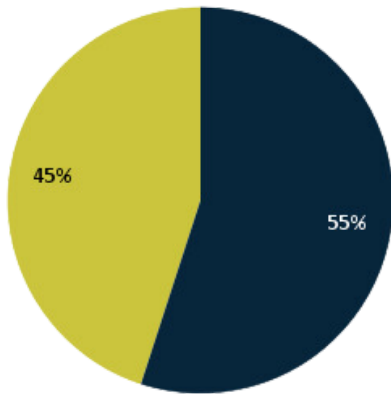
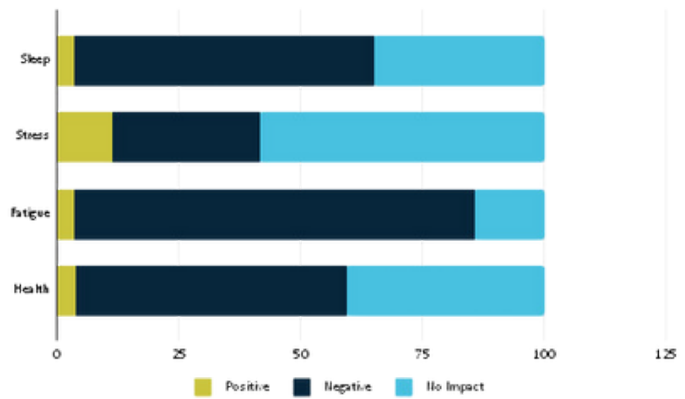


Figure 2: Impact on Health



Almost 97 per cent of the surveyed women reported that their family members were aware of the nature of their jobs, with 74 per cent reporting that they did not face any resistance from their family to taking up this job. Among the 126 women who reported family resistance to their jobs, 62 per cent cited family worries around their physical safety and safety as a woman as the reason for resistance. Almost 53 per cent of the surveyed women indicated that they receive no support from other household members in performing household chores.

Almost 100 per cent of the surveyed women own bank accounts as well as receive their salary into their own account. Over 88 per cent contribute almost half or more of their total household income, with 94 per cent reporting that they contribute to financial decisions in their household. Over 53 per cent of the women report that they can make their individual financial decisions which their family agrees to, and 28 per cent report that financial decisions for the household are made mutually with their spouse. Over 63 per cent report having money of their own which they alone can decide how to use. It is quite encouraging to see these positive results on empowerment within their household.

Figure 3: Challenges in Managing Work and Household Responsibilities

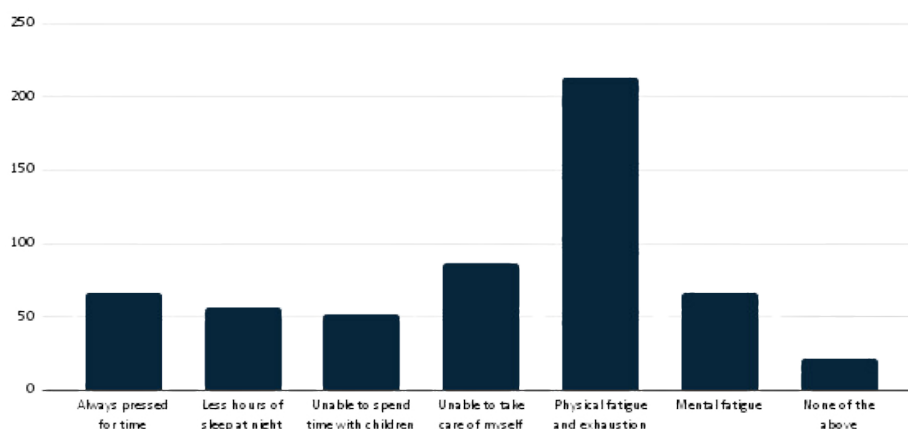
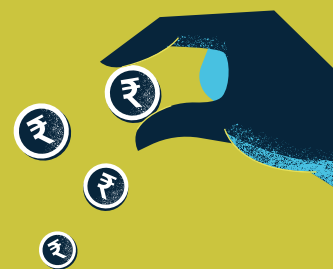


Table 4: Income and Decision-making



	Total N= (491)	Conservancy n=(411)	Delivery n=(30)	Postal n=(50)
Salary mode				
Cash	2(0.41%)	-	1(3.33%)	1(2.00%)
Transfer to own bank account	488(99.39%)	410(99.76%)	29(96.67%)	49(98.00%)
Transfer to husband/ other family member	1(0.20%)	1(0.24%)	-	-
Contribution to hh income				
less than 20%	4(0.81%)	2(0.49%)	2(6.67%)	
20% - 39%	56(11.41%)	47(11.44%)	3(10.00%)	6(12.00%)
40% -59%	167(34.01%)	127(30.90%)	8(26.67%)	32(64.00%)
60-80%	75(15.27%)	63(15.33%)	4(13.33%)	8(16.00%)
81-100%	189(38.49%)	172(41.85%)	13(43.33%)	4(8.00%)
Contribute to hh financial decisions				
No	28(5.70%)	24(5.84%)	2(6.67%)	2(4.00%)
Yes	463(94.30%)	387(94.16%)	28(93.33%)	48(96.00%)

Table 4: Income and Decision-making



Perception around financial situation				
Able to make my own financial decisions	261(53.16%)	236(57.42%)	14(46.67%)	11(22.00%)
Decisions based on spouse	25(5.09%)	22(5.35%)	2(6.67%)	1(2.00%)
Mutually with spouse	138(28.11%)	96(23.36%)	8(26.67%)	34(68.00%)
Mutually with parents	10(2.04%)	6(1.46%)	2(6.67%)	2(4.00%)
Agree to parents decisions	6(1.22%)	4(0.97%)	1(3.33%)	2(4.00%)
Decision of relatives	8(1.63%)	7(1.70%)	-	-
No one decides	42(8.55%)	39(9.49 %)	3(10.00%)	-
Don't know	1(0.22%)	1(0.24%)	-	-
Autonomy over own money				
Yes	311(63.34%)	252(61.31%)	18(60.00%)	41(82.00%)
No	180(36.66%)	159(38.69 %)	12(40.00%)	9(18.00%)

Steering Safety

In India, a growing number of women are entering fields that have been traditionally male-dominated, like *auto-rickshaws* and *gig workers*. These trends break the traditional gender barriers that have long defined these occupations. The entry of women into the auto-rickshaw sector epitomizes a transformative shift, embodying the spirit of entrepreneurship, resilience, and a quest for financial independence. This learning note delves into the experiences of women auto drivers, focusing on the safety and security risks they face on a daily basis. By examining the intersection of gender and the realities of public transportation, we aim to shed light on the challenges they navigate in an environment often rife with gender-based obstacles.

Empowering the Road Ahead



The insights gained from this study will be instrumental in informing policy changes, building capacity-building programs, and ultimately empowering the next generation of women workers pursuing careers in non-traditional fields. Our study focused on 220 women auto-rickshaw drivers in Chennai, India.

- The average age of drivers is 38 (range: 22-59 years old).
- The majority of drivers (84%) have a middle school education or lower (i.e., never attended school, primary, or middle school).
- Marital Status: 50% married and 50% unmarried/ widowed/ separated/ deserted women auto-rickshaw drivers.
- The average monthly income for women auto-rickshaw driver households is around ₹33,000 with a significant spread. Auto driving is considered a sustainable livelihood for women in the long term by 94% of respondents.
- 82% reported using their own vehicles with the average cost of ₹ 2,95,000.
- A significant portion (93%) carry outstanding loans or debts, suggesting financial considerations as a motivating factor for entering this industry.
- On average, women auto-rickshaw drivers hold approximately three loans, with a mean loan amount of ₹141,954.

Occupational health concerns

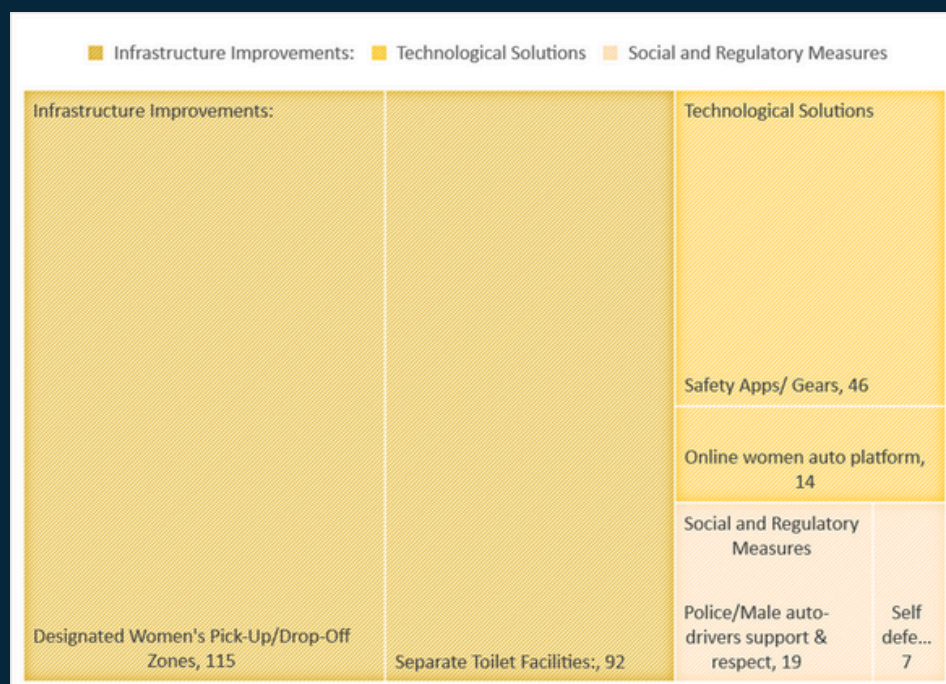
- Auto drivers reported significant increases in negative health (62%), fatigue (85%), and stress (51%) after starting the job
- 45% of drivers reported health conditions or physical challenges exacerbated by their profession.

Steering Safety

Access to safe and clean restrooms is particularly important for women auto-drivers from the perspectives of personal hygiene, public health and physical safety. Lack of proper facilities can pose significant challenges and affect their ability to work comfortably, thereby also impeding female participation in the mobility sector.

Only 18% report using public restrooms and 5% report using paid restrooms. This suggests a lack of available, accessible and hygienic facilities. As a result, 45% of drivers rely on restrooms available at petrol bunks whereas 28% wait to return home for toilet breaks, creating work disruptions and health concerns. A dependence on unconventional facilities also raises security concerns, as these locations might not always be up to hygienic standards or have proper security measures.

In particular, managing menstrual hygiene presents a significant challenge for women auto-rickshaw drivers. Nearly half or 49% reported returning home for washing and changing, disrupting their workflow and potentially impacting their income-generating opportunities.



When asked, women auto-rickshaw drivers place a strong emphasis on workplace safety measures. Infrastructure improvements emerge as the top priority. Designated pick-up and drop-off zones specifically for women drivers was requested by 52% of drivers, followed closely by the need for separate and accessible toilet facilities by 42%. Women drivers also indicate a willingness to embrace technology-based safety solutions. Safety apps and tools are recommended by 21% of drivers.

Implications for Policy and Practice

Chennai is one of the important economic hubs in the country attracting many women for jobs and education from other districts and states. As the capital city of one of the most urbanized states in India, Tamil Nadu, Chennai offers many employment opportunities for women in both the formal and informal sectors. In light of these facts, aspects such as safety, mobility, infrastructure and service provision for the general population and particularly for women who live and work in the city assume considerable significance.

To improve women's access to economic opportunities, the state has taken a number of women-centric initiatives that advance gender inclusivity across aspects such as safety, mobility and infrastructure access. **Findings from our study underscore that women who work in public spaces in Chennai perceive it to be a safe city in general barring certain hotspots within their zones where they report a higher perceived risk to their safety and therefore a need for improved patrolling and surveillance. From a mobility standpoint, women do not report major barriers in access to public transport but do indicate a need for improved frequency.**

Study findings around the inadequacies in public sanitation and hygiene infrastructure carry strong implications for policy and practice. **Women working in public spaces underscored the need for quality public sanitation facilities, with the lack of such facilities being exacerbated for women workers in night shifts.** Related infrastructure such as poor access to drinking water and lack of spaces to eat lunch with a level of privacy. **To ensure gender-responsiveness in public spaces, the city must focus on improving the availability and quality of water, sanitation and hygiene facilities and as well making public spaces such as parks accessible and available to eat lunch for women working in public spaces.**

Addressing these challenges through improved infrastructure, robust safety measures, and supportive policies can significantly enhance women's ability to engage fully in the workforce. By creating safer and more accessible environments, societies can foster greater economic participation and empowerment for women. Prioritizing the needs in their working environment of women working in public spaces is essential for fostering an equitable, productive, and inclusive society. It creates environments that empower women to work, travel, and engage freely, thereby impacting not only individual lives but also community dynamics and economic health, paving the way for a more just future.

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GENDER & POLICY LAB
GREATER CHENNAI CORPORATION



LEAD at Krea University

7th Floor, B Block, IIT- Madras Research Park
Kanagam Road, Taramani, Chennai - 600113
Tamil Nadu, India

www.ifmrlead.org