

## ***Who is the female factory worker in urban India?***

### *In Brief*

- As work opportunities in agriculture shrink, the future lies in improving women's access to jobs in manufacturing and services. It is important to understand the demand and supply factors that determine women's participation in these sectors, which has been stagnating.
- Based on manufacturing areas in Delhi NCR (National Capital Region), this research seeks to examine the profile and background of women workers in contemporary industrial and urban landscapes – the kind of opportunities available; barriers to participation; and aspirations and expectations from industrial employment.
- The average female labor force participation rate (LFPR) in Delhi is 16.1%, and the average male LFPR is 80.1%. New Delhi has the highest female LFPR and Northeast Delhi has the lowest. The largest concentration of female factory workers is in textile, apparel, and leather industries. Field visits suggest that women prefer to work in factories where there are more women. Besides, there is a perception that women cannot operate certain factory machinery and can only do 'light work' (*'halka kaam'*).
- Manufacturing seems to have little role in female LFPR and it is plausible that women prefer to work in services. Female factory workers are concentrated in lower-end tasks like packing and packaging, and consequently, paid less than male workers. There are also stigmas associated with women working in factories.
- Responsibility for household work is mainly borne by women, and hence, they are more impacted by poor access of households to basic civic amenities. Time poverty constrains their ability to take up work outside the home.
- Opportunities on the shop-floor need to be systematically expanded for women beyond 'light work' in order to achieve parity of work and pay. Work-from-home options for women, already prevalent in industrial landscapes, need regulation to ensure adherence to minimum wages. Safe and adequate

public transport facilities need to be in place to enable women to commute for work. Further, every home should be provided drinking water, and steps should be taken to eliminate the use of *chulhas* for cooking.

## Research Methodology

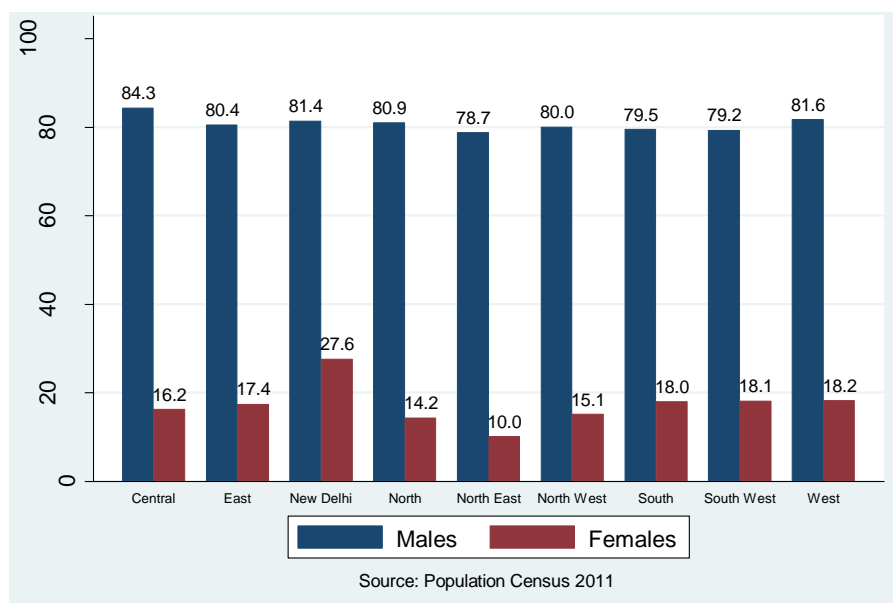
This project is using existing survey data (collected by the researchers in previous work on garment factory workers in Delhi NCR) to build a profile of a typical female worker. The data is supplemented by more detailed information on current or aspiring workers obtained through focus group discussions and interviews with women workers, and interviews with factory owners/managers, labour contractors, etc. Further, possible interventions to enhance women's economic empowerment in manufacturing would be tested systematically.

## Key Findings

### ***Work participation among males is over four times that of females in Delhi***

The average female LFPR in Delhi is 16.1%, and average male LFPR is 80.1% (the corresponding national figures are 42.3% and 88.4%). Female LFPR is highest in New Delhi and lowest in Northeast Delhi. Moreover, the variation across regions in female LFPR is more than that in male LFPR.

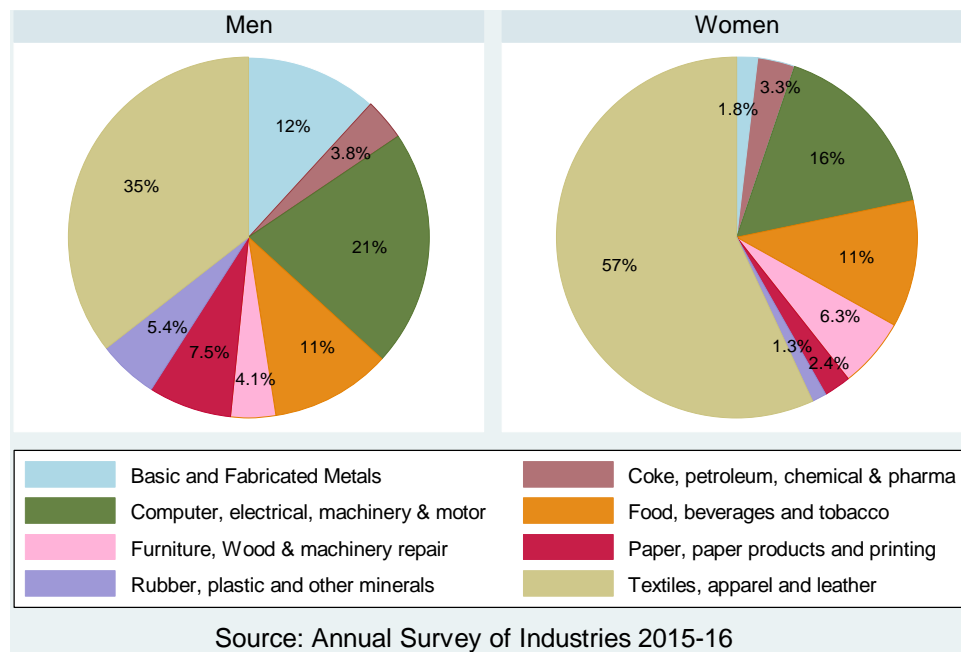
**Figure 1. Labour force participation rate among women and men aged 15-59 in Delhi**



**The largest concentration of female factory workers in Delhi is in textile, apparel, and leather industries**

Industries in Delhi that employ the largest proportion of women are textiles, apparel, and leather (57%); followed by computer, electrical, machinery, and motor (16%); and food, beverages, and tobacco (11%).

**Figure 2. Distribution of male and female workers in manufacturing activities in Delhi**

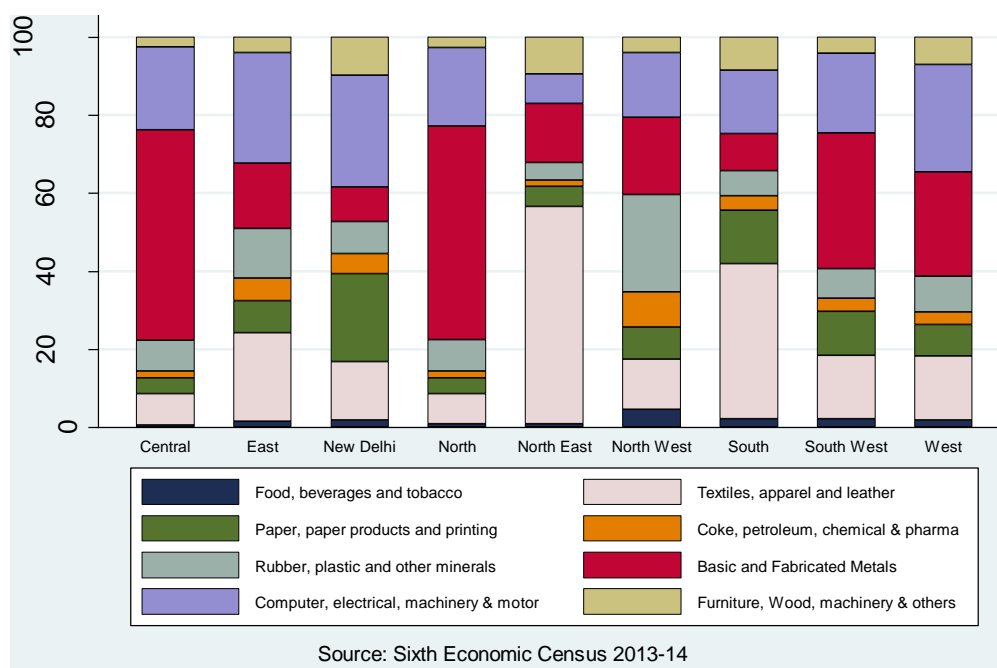


The female workforce is more concentrated in some industries while the male workforce is relatively uniformly distributed across industries. This may be on account of pro-male bias in hiring, skill requirements, and women’s preference for certain kinds of work over others due to associated stigmas. Field visits revealed that women consider it inappropriate to work in factories with several men around and that they prefer to work in factories where there are more women (“*Achha thodi na lagta hai jab pachhas aadmi ke beech ek aurat kaam karti hai factory mein*”). Among men, there is a perception that women cannot operate certain factory machinery (“*factory ki machine auratein nahi chala sakti*”) and can only do ‘light work’ (“*Auratein halka kaam karti hain*”).

**There is no clear correlation between female LFPR and manufacturing industries in Delhi**

Areas that have more industries, especially the ones where women are more likely to be employed, are expected to have higher female LFPR. However, no clear correlation is seen between female LFPR and manufacturing industries in Delhi. For instance, even though Northeast Delhi is abundant in textile, apparel, and leather manufacturing, and has a large number of industries, the area has the lowest female LFPR. It is plausible that the manufacturing sector has little role in female LFPR in Delhi and that women prefer to work in the service sector. Fieldwork suggests that women are concentrated in low-end tasks like packing and packaging, and consequently, paid less than men who are likely to be engaged in the more skilled work such as stitching. Factory work is also not considered appropriate (“*sahi kaam*”) for women due to long hours and on account of being male-dominated.

**Figure 3. Distribution of industrial activities by districts in Delhi**

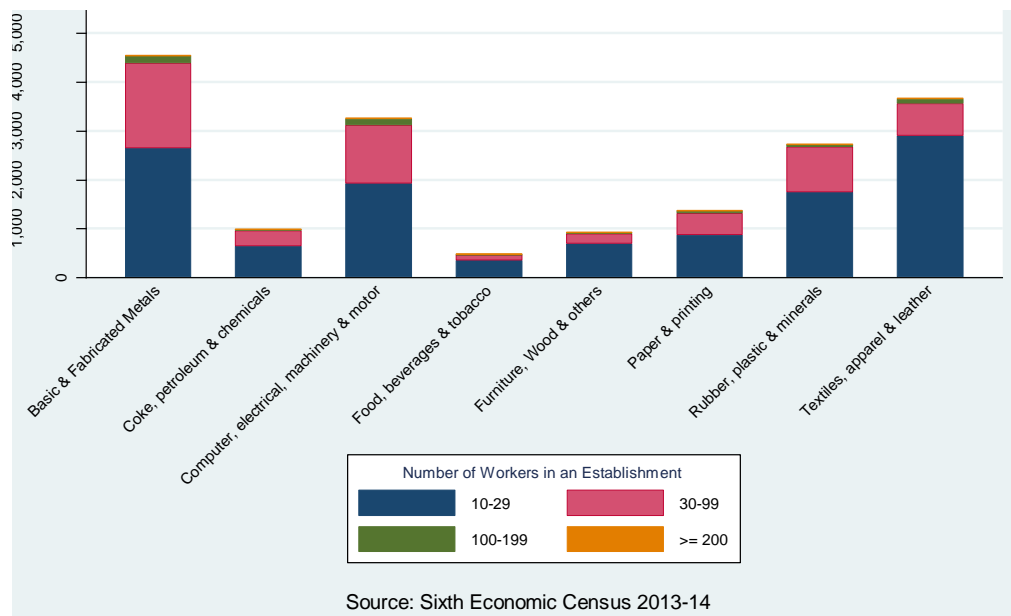


**Industries that employ more female workers comprise a large number of small-scale enterprises**

Industries that employ larger proportions of female workers are also among the top-three in terms of the number of enterprises – textile, apparel, and leather; and computer, electrical, machinery, and motor have 3,675 and 3,268 units, respectively.

Further, these industry groups predominantly comprise small-scale enterprises – 78.9% of textile, apparel, and leather enterprises, and 58.7% of computer, electrical, machinery, and motor enterprises hire 10-29 workers each.

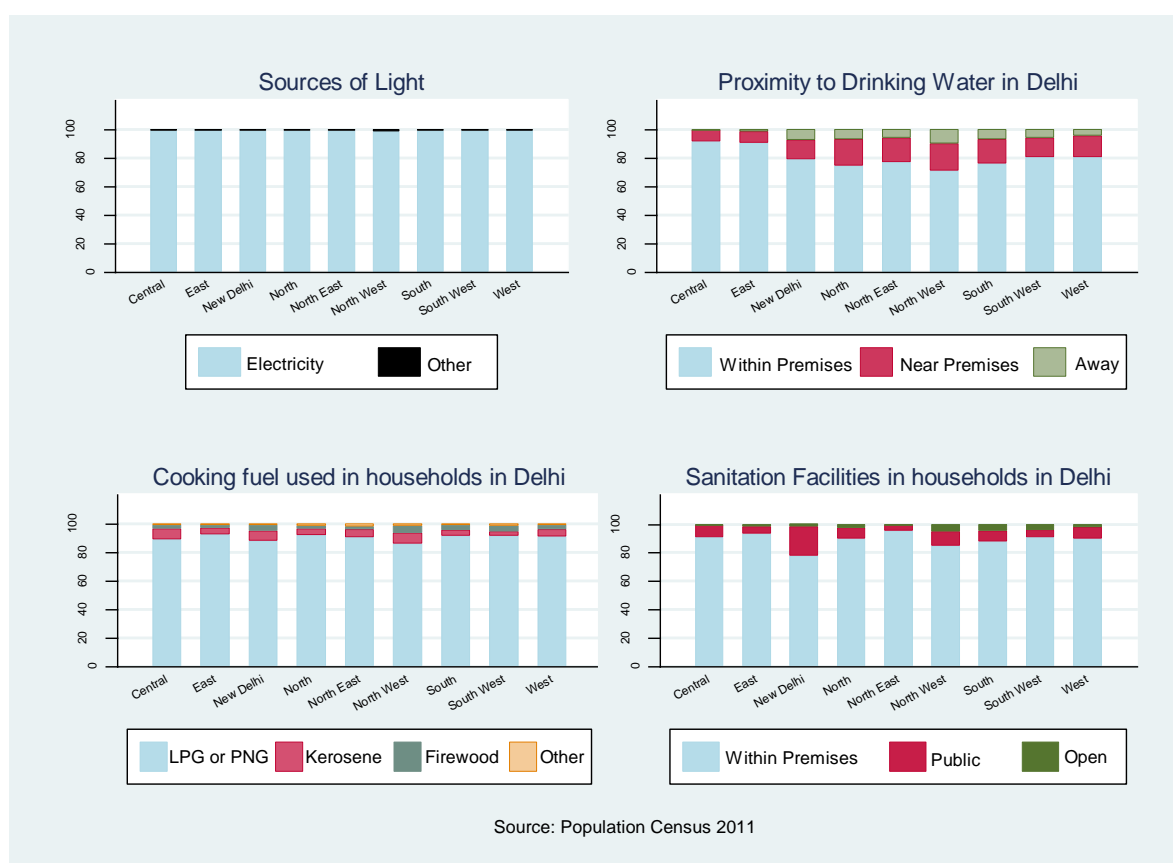
**Figure 4. Distribution of scale of enterprise by industry**



***As women bear primary responsibility of domestic work, poor access to civic amenities adds to their time poverty and constrains labour force participation***

A significant proportion of households – mostly in North, Northwest, and Northeast Delhi with some in South and Southwest Delhi – do not have access to drinking water within their premises and hence, people have to go out to get water for their families. While LPG (liquefied petroleum gas) or PNG (pipelined natural gas) are the major fuels used for cooking, over 10% of the households use kerosene stoves (*chulhas*) and firewood. During field visits, women report that they have no time for work outside home as they have to carry out several domestic chores for all household members (*“Kaam karne ka time hi kahaan hai. Ghar mein chaar log hain par mere toh chaar haath nahi hai. Sabka kaam bhi toh karna hota hai”*). They also express a preference for work-from-home options given their household responsibilities and safety concerns in going out (*“Ghar pe koi kaam ho toh kar lenge, bahar jaana mushkil hai”*).

**Figure 5. Access to civic amenities by households in Delhi**



## Policy Implications

- Opportunities on the shop-floor need to be systematically expanded for women beyond 'light work' so as to ensure parity of work and pay.
- Work-from-home options for women, already prevalent in industrial landscapes (for tasks that can be done at home and do not require heavy machines), need regulation to ensure adherence to minimum wages. Information regarding such opportunities could potentially be channelized through a common, accessible portal so that maximum women can avail the option of working remotely.
- Safe and adequate public transport facilities need to be provided for women for commuting between home and factory.
- Provision of drinking water in every home is essential, regardless of a settlement's legal status. This would be in sync with Delhi Jal Board's 2016 announcement of "[Jal Adhikaar Connection](#)", which recognizes "the need to grant water connections to prospective consumers irrespective of their

residential status". LPG/PNG pipeline for cooking should be installed for free, and gas service should be provided at subsidized rate with appropriate implementation. These steps are imperative to eradicate *chulhas* from homes.