Chudiyan: A study into the lives of Firozabad's glass bangle industry workers



Discover India Program 2019-2020





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CERTIFICATE

This is to certify that the work incorporated in this report titled "Chudiyan: A study into the lives of Firozabad's glass bangle industry workers" submitted by the undersigned Research Team was carried out under my mentorship. Such material as has been obtained from other sources has been duly acknowledged.

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CONTENTS

CERTIFICATE i
TABLE OF CONTENTS
ACKNOWLEDGEMENTS iv
ABSTRACTv
LIST OF MAPS,FIGURES AND TABLES vi
CHAPTER 1. PARICHAYA
Geography and History
Aims and objectives5
Research Methodology 6
CHAPTER 2. MAJDOOR- LITERATURE REVIEW
Historical Context
Social context
Exploitation11
Child labour
Medical concerns
Gender dynamics
Process
Economic context
Wages
Demonetisation and Goods & Services Tax
Gaps in Literature
CHAPTER 3. MAJBOORI
Swaasthya
Health21
Working conditions
Kaam26
Wages26
Work hours32
Leaves

Government schemes and attitude towards workers34	
Demonetization, and Goods and Services Tax (GST)36	
Duniya	1
Religion38	
Government40	
Trade unions42	
Samajikta43	,
Education43	,
Migration47	
CHAPTER 4: SAMAAJ 49)
Stri aur Purush50	0
Gender50	
Family	3
Sambandh55	5
CHAPTER 5: SAPNE5	7
Pareshaniyaan5	58
Job dissatisfaction and lack of other employment opportunities	
Falling Demand	
Exploitation 6	
<i>Upae</i> 6	
Aashayein 6	
CHAPTER 6: KHAYAAL	
REFERENCES	5
APPENDIX A. CONSENT FORM	
APPENDIX B. SURVEYS82	
B.1 Workers8	
B.2 Owner/ Manager	
B.3 Bangle Seller	
B.4 Doctor	
	86

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ABSTRACT

"Kabhi kabhaar chudi ki channkaar itni zyaada shorr karti hai, ki unko banane walo ki awaz dab jaati hai."

("Sometimes the clanking of the bangles gets so loud, that it masks the voices of those who create them.")

Firozabad, a town in Uttar Pradesh, popularly known as the *Suhag Nagri*, is the hub of the Indian glass bangle industry. The story of Firozabad finds its origin in the Mughal era - the practice of bangle-making can be traced back to Emperor Akbar's dynasty, during which Muslim shishgars (glassmakers) first began producing glass bangles. Nevertheless, the industry is relatively modern and dates back a century as per most estimates. At present, bangles have permeated several levels of our society- from folk songs to Bollywood classics, from being sacred offerings to the divine to being emblems of bridehood, they are essential cultural artefacts. Even though there is extensive literature studying the process of bangle-making, child labour, and pollution, the research remains devoid of human experiences, of human emotions, and social realities. Thus, this research primarily serves as an inquiry into the lives of the workers of the glass bangle industry and is meant to supplement the existing literature. In undertaking this project, we aimed to examine the lesser-known facets of the glass industry such as the challenges faced by workers, and the interplay between socio-political and economic factors. Although we aimed to collate workers' narratives and lived experiences, we also took into consideration the accounts of owners, factory managers/supervisors, sellers, and consumers, to ascertain the future of the industry.

To acquire a comprehensive overview of the industry, individuals occupying different positionalities in social hierarchies were interviewed. We identified key contacts in the industry but the main sampling techniques were snowball and convenience sampling. In all, we interviewed approximately 70 participants, including: workers (of both formal and informal sectors); godown owners; factory owners and managers; glass bangle sellers; and medical health professionals. As mentioned previously, these individuals belonged to varying economic, religious, historical, political, and geographical backgrounds. The primary methods undertaken involved non-participant observations, and semi-structured interviews, which would often turn into group interviews. We used discourse analysis to analyse patterns in responses, to discern

similarities and differences, and to identify the ways in which glass bangles have been framed as cultural objects. The findings of our research touch upon themes like economy, policy, gender, and politics among others. The main findings suggest that the demand for glass bangles appears to have decreased in spite of daily production, that and exploitative conditions persist, resulting in lower wages, increased work hours, and virtually no job security. Other inferences relate to gender and gendered work, education or the lack thereof, ineffective implementation of policies, and the industrialisation of a tradition, which has affected all participants to a certain extent. The lives of every resident of Firozabad invariably revolves around the glass bangle industry.

The query into the lives of the glass bangle workers has a heavy implication on several fields of knowledge and practice. It is a reflection of socio-economic realities and has the potential to improve policies, as it exposes their ineffective implementation. The research also has the potential to raise awareness - a means of educating the masses about the plight of workers employed in all spheres of industrial work. Comparing the perspectives of different groups - particularly the workers and the owners - will help understand how life experiences alter one's ideologies. By adopting such an approach, we have analysed variables like religion, demonetisation, traditions, economic aspirations, and how they play out in the industry itself. Finally, in a politically charged environment, we believe that the realisation of reality has the potential to decentralise the hegemony of ruling classes. Thus, the social and anthropological implications of our research expand upon several theoretical approaches and apply them to a local context - the glass bangle industry of Firozabad.

LIST OF MAPS, FIGURES AND TABLES

Figure 1.1: Map of Firozabad with places visited for our research	6
Figure 2.1: Glass bangle industry - the only industry that prevails in Firozabad as it rol	pes in
generation after generation of workers	12
Figure 2.2: Two workers share a laugh midst the bangle making process	15
Figure 2.3: Table of wages of different workers	16
Figure 3.1: A bangle worker eats as another sorts bangles	20
Table 3.1: Wages of different daily-wage workers	27
Figure 3.2: Primary shaping of the glass	33
Figure 4.1: A female worker in the factory removing the broken glass pieces	54
Figure 5.1: A man assembling the bangles that are the most in demand: green and red.	62

Chapter 1

Parichaya

Introduction

"Ek hi tajurba hai - majboori hai"
("There is only one experience - helplessness")

"In the city of Firozabad, people breathe glass and not air" (Khairoowala, 2010).

Khairoowala's (2010) words embody ironic realities, which shape the lives of all those residing in Firozabad, the 'Suhag Nagri' of India. The city, situated within the eponymous district of Uttar Pradesh, is home to the country's flourishing glass industry. Under the shimmer, it is the city of shards, of glass bangles, and of bustling aspirations. The glass industry has a rich legacy spanning across several decades and accounts for about 70% of all the glass tableware produced in India, and approximately 90% of all the glass bangles manufactured (Chari, 2013).

As cultural artefacts, no other ornament has captured the popular imagination like the glass bangles of Firozabad. From *bhajans* (hymns) like "*Shyam Chudi Bechne Aaya*" (Shyam/Krishna has come to sell bangles) to Bollywood classics like "*Bole Chudiyan*"; from a *suhag ka prateek* (an emblem of bridehood) to a poorly appropriated fashion statement; from serving as a tool to strategically emasculate the Rajputs to its role in the formation of the Bangle League (Basner, 2010), the importance of glass bangles has transcended space and time.

In a capitalist society like ours, as consumer sheep, we are unlikely to care about how something is created as long as it is available for consumption. However, focusing on the superficial aspects of the industry - like the bangles themselves - conceals the lives of those who toil to produce this ornament. As one respondent summed it up, "Karkhane se nikalkar ladies ke haath mein jaati hai tab tak laghbagh fifty log kaam karte hai" (A bangle passes along almost fifty hands before it is adorned by a lady). According to the Marxist theory, the invisibilisation of workers in the eyes of the consumers is due to the former's alienation from the product, the production process, and from others (Marx, 1867/1959). In order to throw some light on the invisible hands involved in the manufacturing of glass bangles, we wanted to collect and collate their narratives, particularly those of workers employed in the unorganised sector.

Furthermore, in a post-demonetisation era, officials reported the closure of approximately "65% of glass bangle factories" in the area (Yadav, as cited in Dev & Sharma, 2017). For a cash-reliant business that sustains almost every family in the city, demonetisation was a heavy blow. A few months later, the central government of India levied the Goods and Services Tax (GST), which exempts glass bangles but taxes the materials required to produce them. As a result, its implementation compounded the losses incurred by the owners of the manufacturing

units. Even though the modern glass bangle industry survived for almost a century, these two acts brought it down on its knees. Therefore, by interviewing the various stakeholder groups (workers, owners, sellers, and consumers), we wanted to ascertain the future of the industry.

Geography and History

The history of Firozabad traverses a long winding road, finding its roots in stories and myths, transforming into a city of antiquity. Firozabad has always been linked with bangles, and this connection has withstood the test of time. Even though the story of the city remains vague, incomplete, and in fragments, its formation can be traced back to the reign of the Emperor Abu'l-Fath Jalal-ud-din Muhammad Akbar. The city was known, in the annals of history, as Chander Nager, a densely forested area. The tales recounting the transformation of Chander Nager to Firozabad mention Raja Todarmal, Akbar's revenue minister. In 1566, while passing through the area, he was besieged by robbers. At Akbar's behest, Firoz Shah, the former's *Mansab Dar*, a military official, came to Raja Todarmal's aid. In lieu of capturing the robbers, Firoz Shah settled in the area, creating a small settlement. The grateful ruler named Chander Nager, Rasoolpur, Mohmmadpur, Gajmalpur, Sukhmalpur, Datauji, and surrounding areas Firozabad after Shah (Imran, 2009; Khairoowala, 2010).

It was during this period that some *shishgars* (glassmakers) began manufacturing glass at home. Although the craft was predominantly practiced by Muslim artisans, many Hindu artisans later took it up as well. While the Muslims working with glass were called *shishghars*, Hindu workers were referred to as *kancher* (from the Hindi word '*kaanch*', meaning glass). Therefore, Akbar's patronage is considered central to the establishment of Firozabad as the 'Glass City' of India. Moreover, at the same time, with the emergence and confluence of several styles of music, poetry, and art, it blossomed into an important cultural site (Khairoowala, 2010).

The modern glass bangle industry of Firozabad was established in the 20th century by Haji Rustom Ustad, also known as the 'Adam of Bangles' (Khairoowala, 2010). Over the years, especially between the two world wars, the industry in the *Suhag Nagri* flourished, creating a few bottle manufacturing plants, and the only sheet glass industry in Asia (Khairoowala, 2010). In 1989, the introduction of newer techniques allowed for the embedding of colour in the glass itself. By the end of the 20th century, Firozabad monopolised the glass sector (Imran, 2009).

The Firozabad that we recognise was established on 2nd February 1989, upon the executive orders of the government of Uttar Pradesh. Located at a distance of approximately forty-five kilometres from Agra - home to the Taj Mahal - the Firozabad district is spread over an area of 2361 km² (Khairoowala, 2010). It is also situated 250 kilometers from the capital of India, Delhi, and is surrounded by Etah on its North, North-east and North-west fronts; by Agra and the district of Etawah to the South; and by the district of Mainpuri to its East. Like the district itself, the city of Firozabad, the site of our study, lies on a level plain, with rivers Yamuna, Sirsa and Sengar, flowing through its southern parts (Nasiruddin, 2012).

In accordance with its status as the glass hub of the country, more than half of Firozabad's population is engaged in the industry. As noted in *Ain-e-Akbar*, glass handicrafts bloomed in India under the Mughal period, the descendent of the original artisans still working in the industry (Khairoowala, 2010). Naturally, as the wheel of time turns, the ancient motifs of glasswork still find their reflections in the products like glass chandeliers, lamps, and bangles produced today (Imran 2009; Khairoowala 2010).

Firozabad is a multicultural, and multi-religious centre of transaction, with a population of about 25 lakhs individuals divided into a majority Hindu population (85.69%), along with Muslim (12.60%), Christian (0.13%), and Jain (0.76%) populations (Directorate of Census Operations, 2011). The demographic information of Firozabad indicates that the average family comprises 5.77 members. The sex ratio of the city, is lower than that of the state (882 females to 1000 males), at 680 females for 1000 males, according to the recent census. Literacy in Firozabad remains an unfulfilled ideal, with only 71.92 % individuals educated, with males faring better (80.82%), than females (61.75%) (Khairoowala, 2010)...

The demographic limitations to the research amalgamate both geography and social structures. The housing plan in Firozabad is highly influenced by one's economic stature. This results in the creation of worker housing that is not only segregated from the entire city, but is also difficult to access. This is coupled by two other aspects, namely religious and political ones. Following the pattern of residence, religious minorities are sidelined into smaller settlements. Jatavpuri, the main housing area of Muslim workers, was difficult to access due to multiple layers of othering experienced by the individuals inhabiting the area. This was exacerbated by

communal tension, wherein the current anti-CAA and anti- NRC riots played a role. This had a two-pronged effect- firstly, it posed a risk to the individuals involved in the research. The cases of anti-CAA, and NRC violence in Firozabad are not uncommon, often involving gun fire (Live Hindustan Team, 2019b). Secondly, this resulted in suspicion, especially where the group was mistaken to be a survey group, and not a research group. Furthermore, as mentioned, the workers and the owners live in different areas, which not only made travelling between the two areas a concern, but would create class based differences.

Aims and objectives

The primary aim of this research project is to explore the various factors that influence the lives of the workers in the glass bangle industry of Firozabad.

The aims and objectives are as follows:

Aim 1: To assess the challenges of the workers in the industry.

Objectives: The research will focus on how health and well-being of the workers may be influenced by working conditions and access to medical facilities. Economic conditions and how they may be affected by wage-related policies, other governmental policies, demonetisation and implementation of GST, will also be explored. Moreover, the research will attempt to understand how the socio-political environment of Firozabad is shaped by trade unions, religious and/or political conflicts, as well as relations with government authorities. Finally, the research will investigate how social and economic mobility is determined by accessibility to resources and government provisions.

Aim 2: To explore the social dynamics between groups involved in the industry.

Objectives: In order to fulfill this, the research will focus on gender dynamics between the workers through the work environment, gendering of work, and employment patterns. Power dynamics and relations between workers, owners and managers will also be studied.

Aim 3: To analyse the stakeholders' perspectives regarding the future of the industry.

Objectives: To this effect, we will attempt to gauge current threats to the industry that may influence the future of bangle-making in Firozabad. Moreover, we will explore solutions that are being proposed to deal with current concerns of the industry. Finally, the aspirations of the multiple stakeholder groups will also be studied

Aim 4: To document the personal narratives of the industry stakeholders.

Objectives: This research will conduct a thematic analysis of the accounts collected. In addition to this, perceptions of the various stakeholder groups involved, such as workers, owners, sellers, consumers, and health providers, will also be analysed.

The aforementioned aims and objectives lead to the following research statement:

To explore the various factors influencing the lives of the workers employed in the glass bangle industry of Firozabad, which include: the challenges faced by bangle workers, the social dynamics between stakeholder groups, and stakeholder perspectives on the future of the industry. This will be supplemented by an analysis of personal narratives.

Figure 1.1 *Map of Firozabad with places visited for our research*



(Google Maps, n.d.)

Research Methodology

A descriptive and exploratory study of the glass bangle industry of Firozabad was undertaken. Since there is a dearth of information about the workers' perspectives and lived experiences, we aimed to fill in this gap in the literature. The research methods that we used include non-participant observations and semi-structured interviews. Additionally, when appropriate, we used group discussions, such as when respondents felt more comfortable answering in groups. This helped us look beyond the mere aesthetics of the bangles, and gauge the realities of working in the industry.

The non-participation observational method was used to gather and analyse the working conditions of workers in the formal and informal sectors of the industry. The semi-structured interviews aided in obtaining information pertaining to specific, predetermined themes such as the health of the workers or their relations with owners. This, in turn, allowed the respondents to provide insights that might have been overlooked previously. These interviews were conducted for workers, factory owners and managers, sellers, and doctors. While conducting these interviews, we referred to questionnaires, which were designed primarily to collect qualitative data. By conducting group discussions, we were able to interact with a larger number of respondents in a short span of time, as well as understand the dynamics of group interactions.

Considering the fact that our study drew upon the main gap in literature, the largest sample consisted of workers in the formal and informal sectors. We interviewed approximately 35 workers. The workers had specialised tasks pertaining to the bangle-making process; tasks were varied within the factory as well as between the formal and informal sectors. Furthermore, the working conditions and gender composition in the two sectors varied. The factories mainly employed male workers while female workers are mostly engaged in the informal sector. Hence, this allowed us to get diverse responses.

Our second sample consisted of factory owners and managers. We interviewed 14 owners and managers. The factory owners and managers directly influenced the working conditions, wages and facilities (such as healthcare) provided to the workers. It was therefore important to gather the owners' and managers' perspectives in order to compare and contrast as their responses will either complement the workers' or contradict them..

The sellers were our third sample, and we interviewed 12 of them. In order to understand the current demand for bangles and determine the probable future of the industry, we felt it was important to interact with the sellers. The demand for bangles is also linked to the workers - if the demand falls, many workers risk losing their jobs. The sellers gave us useful details about the same by talking about their own trade or their observations regarding the market. The fourth sample was made up of healthcare professionals, and we interviewed a doctor and a nurse. The doctors were able to describe the common illnesses ailing the workers. This was important for our research as previous studies (Bano, 2017; Burra, 1986b; Chandra, 2009) have stated that the

factory workers suffer numerous injuries while working, leading to the development of chronic health issues such as weak eyesight, respiratory ailments, backaches, amongst others. Additionally, we were also able to interview certain individuals that do not necessarily fall into other stakeholder categories mentioned above. These include lawyers, consumers, a temple priest and his wife, and a group of people that consisted of street shop owners and passersby.

The sampling methods that were used were snowball and convenience sampling, which are both types of non-probability sampling. The former involved interviewing a small group first, which directed us to more groups of people to interview. On the other hand, convenience sampling involved interviewing the closest accessible individuals in a particular sample. We had contacted two owners prior to going on-field, who agreed to giving us access to their factories. We were also in touch with a manager, who looks after a godown and a workshop for decorating bangles. Further, we were able to contact a researcher, who was willing to introduce us to more respondents. Once we were on field, we recruited other respondents on our key contacts' recommendations. Our chosen sampling techniques were most suitable to our research because of the time constraint and unfamiliar location.

We carefully created consent forms that precisely stated the purpose of the interview, our aims, as well as how we intended to use the information our respondents provide us with. We ensured that the consent forms reassured the respondents of their rights. The forms were administered to each respondent prior to the commencement of the interviews.

For data analysis, we used ethnographic analysis and thematic analysis. These methods were appropriate for our research because our data was mainly qualitative and our focus was on people (mainly workers) and their narrative, stories and perspectives. However, some data was excluded due to ethical reasons. Based on our literature review, we were aware that child labour was present in the industry, however, due to ethical reasons, we chose to not interview children.

The intention of this study was to ensure that the aims and objectives of the project were carried out. The methodology was hence planned keeping in mind this intention and to answer the research question appropriately.

Chapter 2

Majdoor

Literature Review

"Hum kue ke maindhak hai, kabhi bahar niklenge, toh hi toh duniya dekhenge?"
("We are frogs trapped in a well, we will see the real world only after we escape from it?")

The literature concerning the glass bangle industry is both extensive and niche. Many research projects have focused on the industry, however, as mentioned, the research has rarely looked into the lives of the workers themselves. The narrative constructed, majorly, is debilitating, and often paints incomplete images, overlooking the lived narratives of the workers. While there is information on the exploitation faced by the workers, in the form of child labour, economic exploitation and others; there has rarely been undertaken an intersectional discourse analysis of the industry. In this chapter, we present the review, and suggest the gaps in literature.

Historical Context

The historical links that trace the development of glass ornamentation, specifically glass bangles in India are vague and varied. Glass bangles in India have several origin points, from Islamic immigrants to trade fragments in Harappa, and others. However, it was under the Mughal empire that the technology and process of glass making developed into a plethora of products such as perfume bottles, plates, hookah bowls, and others (especially under Jahangir and Shah Jahan's patronage) (Govind, 1970; Kanungo, 2001; Sharma, 1981). The legacy of Firozabad is described in the Ain-e-Akbar which illuminates the city as a hub of colorful bangles, and the home of the Shishgars (glassmakers), artisans whose art and technology was handed over from father to son, prospered and even today constitute a very important sector of the industry (Sharma, 1981). The first organised glass factory in India was set up in Firozabad about a hundred years ago, a fact that seems to corroborate the worker's claims. For the production of bangles in particular, the entire process is undertaken in several vertically interrelated units. While the melting and reheating are undertaken in factories, activities like decorating, straightening, and joining of bangles are performed in household units (cottage industry). Owing to its history, the glass cluster in Firozabad is the largest one in India, comprising the only glass bangle-making cluster, thereby creating a monopoly.

Although there are 412 registered glass units in Firozabad, not all of them are operational. The average number of workers employed in one unit ranges from 40-250, most employed on a daily contract basis (Soni, 2007). While the modern history of Firozabad remains somewhat intact, the ancient and medieval history of the regions seems to be lost to the fires of history, with only a few, scattered documents surviving till date.

Social context

Exploitation

The exploitative conditions of the glass bangle industry of Firozabad are no secret; for decades, filmmakers, documentary-makers, journalists, and scholars have been flocking to this city to document the lives of the workers. Some of these studies have proven to be fruitful in terms of contrasting the plight of the workers with their portrayal on official documents.

Burra (1986b) reports that in spite of the official work shifts lasting for 8 hours and tax documents noting the production of 200 toras (312 bangles rolled in strings), the workers were forced to work in 12-hour shifts to produce 400-500 toras. This practice still continues, although it is unclear whether the workers are compensated for the extra hours or not. This discrepancy in projected and actual production results in profits, which allow the factories to remain shut for part of the year. Moreover, in case of noncompliance, the workers are intimidated by the local gunda-raj (mafia) employed by the factory owners (Burra, 1986b). This tactic has been adopted because the glass industry, including the bangle industry, operates under precarious and unsafe conditions. Most of the production processes occuring in the factories make use of pot and tank furnaces - the pakai bhatti - the temperature within which rises up to 1400°C. The months of summer prove to be the most challenging ones; it is not uncommon for workers to faint, or even die. Burra (1986b) also highlights other health complaints voiced by ailing workers, the prevalence of tuberculosis (TB) being one of them. Many workers have reported that even though the unfair practices are making the labour condition worse, insecure, and highly unstable, they continue to work as cheap labour can be easily replaced (Burra, 1986b). Furthermore, there are no alternative employment opportunities in Firozabad, as a result of which bangle-makers have to rely on this industry for their livelihoods (Burra, 1986b).

The 2011 report of All India Glass Manufacturers' Federation elucidates upon its formation in 1944, under whose syndicate, Firozabad also falls. The reports outline the several duties and responsibilities of the federation such as promoting research into worker benefits, and into glass technology. However, these responsibilities have yet to be fulfilled, resulting in mass suffering of the workers under the yoke of the glass bangle industry in Firozabad (All India Glass Manufacturers' Federation, 2011).

Figure 2.1

Glass Bangle industry - the only industry that prevails in Firozabad as it ropes in generation after generation of workers



Child labour

There are several policy initiatives in place to safeguard children from being employed in the factories. For instance, the Child Labour (Prohibition and Regulation) Act, 1986, aims to protect the rights of children; first as minors, and second as citizens of the sovereign Republic of India. Although the act stipulates the prohibition of employing children - under the age of fourteen - in hazardous working conditions, it has failed to implement the same in cottage industries. The domestic sphere arguably lies beyond the realm of the judiciary. In other words, while child labourers are frowned upon and legally disbarred from working in the organised sectors, there are no laws prohibiting their activities in the unorganised sectors (Roy, 1998). The glass bangle industry situated in Firozabad is not exempt from this - several children are employed in small units that can typically accommodate only eight to ten people at once (Arshi, 2008; Khairoowala, 2010)

In order to evade the child labour policies, a major trend observed in the glass bangle industry of Firozabad is the phenomenon of 'informalization of child labour.' This refers to the shift of child labour from factories and large establishments to home-based units and small cottage units, that is, from formal settings to informal settings beyond the regulation of child labour policies (Khairoowala, 2010). Additionally, there have also been discussions pertaining to classifying work in the industry as "hazardous" and "non-hazardous" in order to ensure that

children could still continue working but in the latter conditions (Burra, 1986b). Moreover, the labour department hasn't banned child labour as children are valuable and move quicker, they have suggested for night hostels for children working night shifts, even though this is banned by the 1948 Factories Act. Though the labour department claims that only 13% of 65,000 workers in UP are children, sources other than the labour department claim that children below the age of 14 employed in the factories is around 40,000-50,000 (Weiner, 1991).

The Labour Department justifies child labour on the grounds of poverty, children being disinterested in conventional education, bangle making being a hereditary occupation, acclimatisation to the heat, and the work given to children being of non-hazardous nature (Burra, 1986b). "There is a vested interest in preventing the children of the poor from getting education because then you have a vast mass of illiterate, subservient and unskilled work-force which will see the employers as being benevolent rather than exploitative" (Burra, 1986b). These justifications by the authorities and the vested interests of the involved parties are the major contributors hindering the eradication of child labour from the industry.

The socio-economic factors that influence the child labour in this industry are the fact that children are motivated to work because of monetary inducement; even school going children are attracted to it initially on a part-time basis and are later absorbed permanently; social and economic disparity leads to their families becoming highly indebted. This is supported by the poverty school of thought suggests economic weakness to be the center of child labour. It advocates that it is the poverty of certain households that compels children to find and engage in labour. The earnings of child labourers are integral to the family sustenance, and often are a significant portion of the family income. Consequently, due to employment, and economic instability, child labourers do not attend schools. Furthermore, these under-age 'employees' become the focus of industrial exploitation due to easy economic accessibility, easy manipulation, and cheap labor (Roy, 1998). This can be particularly seen in Firozabad, where child labour is a common sight (Arshi, 2008).

Medical concerns

Bano (2017), investigated the consequences of working in the factories, especially with regard to the workers' health. The responses collected by administering questionnaires revealed that working conditions directly influenced the workers' physical well-being. In order to melt the

key ingredients in the pots, the core temperature of the furnace is maintained between 1400-1600°C. This, in turn, increases the ambient temperature inside the factories to 45-50°C. The workers, who have to work eight to twelve hours every day, perform most of their job in close proximity to the furnaces, leading to several health hazards (Chandra, 2009). Furthermore, the indoor air pollution and the lack of sanitation were the leading causes of distress. Moreover, inadequate ventilation, congestion, and overcrowding resulted in ailments like conjunctivitis, allergies, bronchitis, pneumonia, asthma, rhinitis, and tuberculosis (Bano, 2017). The polluted air not only affects the workers but also poses a threat to the residents of Firozabad, afflicting even those, who are not directly involved in factories, with respiratory ailments. The study was also able to establish a relationship between the income levels of city dwellers, and the impact on their health. As per the findings, individuals hailing from lower socio-economic strata were the most affected ones, and were largely ignored by the administration. Apart from the devastating consequences of being continuously exposed to heat and pollution, the factories themselves are dangerous. It is not uncommon for workers to sustain injuries while walking over the factory floors, which are littered with shards of glass and naked electric wires (Burra, 1986b). The environment inside the factory can be deafening at times, leading to complete or partial loss of hearing in the workers' ears (Burra, 1986b). Similarly, these conditions cause premature ageing the workers tend to look much older than their actual ages (Burra, 1986b).

Gender dynamics

Bangles are monikers of gendered conversations. As cultural artefacts, they are typically considered symbols of femininity; women who do not wear bangles are marked as sporting a *bekar* (worthless) look - an insult to one's marital duties (Basner, 2010). The popularity of bangles made them the focus of several literary works (like *The Grace of Four Moons*, for example), including poems and stories defining normative roles. Besides, bangles, and similar ornaments, have long been gendered - cores of conversations, and narratives of emasculation, femininity, and masculinity. At the beginning, bangles were gender-neutral objects, worn by both men and women, and even signifying war, and divinity, when implicated in masculine roles, (along with serving the physical role of protection of the wrist), and necessity when implicated in those of a female's (Basner, 2010).

As stated above, the wrist ornament was originally worn by both men and women. However, since the time of the Mahaābhārata, a *śankh valaya* (chank bangle) has come to be regarded as a sign of femininity (Basner, 2010). However, a *valaya* is not only a sign of femininity but also of a married woman - the wife's bangles are broken to signify her widowhood (Sankalia, 1947). Nonetheless, this association has surpassed aeons - in medieval times, a Rajput was presented with bangles for his cowardly conduct in war; more recently, the practice was witnessed during the Civil Disobedience movement where the ornaments become a symbol of femininity through the reinforcement of male roles (Basner, 2010).

Over the course of time, bangles have emerged as important cultural sites of discourse. They have come to symbolise the duties of women, especially marital responsibilities. In terms of the latter, the colours of bangles are particularly vital - red symbolises recent marriages, and green represents fertility (Basner, 2010; Sankalia, 1947). The meanings attached to bangles include their clinking sound (represents sexual intercourse) and the act of breaking them, which symbolises the failure of marital duties. Thus, bangles become the point of intersection between beauty and duty; a unique battleground on which conjugal issues can be negotiated metaphorically (Basner, 2010).

Figure 2.2

Two workers share a laugh midst the bangle making process



Process

All glass bangles produced in India are arguably manufactured in Firozabad. The process of bangle-making differs according to the type of furnace used. Typically, this industry uses two

kinds of furnaces: tank and pot (TERI, 2015). The process varies slightly in terms of jobs that workers have to carry out for bangle making (TERI, 2015). An important aspect of decoration is applying liquid gold to the bangles. Upto one lakh ounces of bright liquid gold are used each year for this purpose (Amin et al., 1953). Although applying a very thin coating increases the worker's efficiency, it makes it difficult to ascertain the purity. Nonetheless, it is cheaper than burnishing (Amin et al., 1953).

Economic context

While bangles can be traced back to Islamic traditions, today, the ₹300 crore industry is majorly dominated by Baniyas and other Hindu trading castes. These owners of about 5000 factories in total are able to earn a sum of ₹6 lakh per annum (Maheshwari, 2019).

Wages
Figure 2.3

Table of Wages of Different Workers

Unit Types	Estimat- ed No. o Units	Type of Labour	No.of workers (ave.)	Negotia- tion	Wage pat- tern	Age of Worker
Stock	200	Skilled, Semi- skilled and Unskilled	5-6	verbal Piece rate	Daily, fort- nightly and Monthly	Adult male
Godam	10000- 12000	Skilled, Semi- skilled and Unskilled	6-10	verbal Piece rate	Daily, fort- nightly and Monthly	Children, adolescent male, adult male
Judai & Sadai	2000	Skilled, Semi- skilled and Unskilled	4-6	verbal Piece rate	Daily, fort- nightly and Monthly	Women, ado- lescent girls, children, adult male
Design Cutting	1500	Skilled, Semi- skilled and Unskilled	5-7	verbal Piece rate	Daily, fort- nightly and Monthly	Women, ado- lescent girls, children
Gold Policing	150-200	Skilled, Semi- skilled and Unskilled	6-8	verbal Piece rate	Daily, fort- nightly and Monthly	Adult male, children
Pakai& Sekai	150-200	Skilled, Semi- skilled and Unskilled	9-10	verbal Piece rate	Daily, fort- nightly and Monthly	Adult male
Zari	2000	Skilled, Semi- skilled and Unskilled	10-12	verbal Piece rate	Daily, fort- nightly and Monthly	Adult male and children
Artificial Polish	1500	Skilled, Semi- skilled and Unskilled	8-10	verbal Piece rate	Daily, fort- nightly and Monthly	Children, adult male
Packet Making	1500- 2500	Skilled, Semi- skilled and Unskilled	10-20	verbal Piece rate	Daily, fort- nightly and Monthly	children, women, ado- lescent, male
Scrape/ Glass Junk segre- gation	1500- 2000	Unskilled	5-10	verbal	Daily, fort- nightly and monthly	Women, ado- lescent girls, children

(Nasiruddin, 2012)

These categories depict that the majority of the workers have an informal contract and earn daily wages. They are paid below minimum wages while the contractors earn commission. Although males and females do the same work, males are given a higher wage. The highly skilled labourers earn wages higher than minimum wage. The semi-skilled and unskilled earn lower than minimum wage and are not paid for working overtime. The workers work for 8 to 12 hours even when the labour laws recommend eight hours of workday (Nasiruddin, 2012). Workers are also paid ₹ 80-90 per day. Factory owners prefer to hire children because children are paid ₹ 60 per day (Shafi, 2015). According to the information provided by the Lok Sabha, the minimum wage per day is ₹206.50 for unskilled workers in the glass bangle industry (Ministry of Labour and Employment, 2014). However, several factory owners fail to abide by this.

Demonetisation and Goods & Services Tax

Demonetisation crippled the glass bangle industry of Firozabad, and the worst affected were the owners and the workers. As of 2017, "65% of Firozabad's glass industry was still shut" due to demonetisation (Dev & Sharma, 2017). This could be attributed to the fact that the industry is mainly reliant on cash transactions. All stakeholders were hence left without cash for transactions or bulk orders. This was further complicated by the lack of documented purchase and the process of money exchange at banks (Maheshwari, 2019). Demonetisation also impacted the wages of labourers. The balance between the demand and supply for labourers was disturbed. There were many labourers who became unemployed and were willing to work for any wage. Hence factory owners took advantage of this and provided jobs with wages lower than the minimum wage. Many factories lowered the wage to an average of ₹30 to ₹50 per day compared to ₹400 per day. Earlier, the workers would get wages that were 20-30% above the minimum wage (Dev & Sharma, 2017).

The introduction of GST created more problems for the industry by creating tax rule divides between the retailers and the wholesalers. The law permitted the non-registration of GST for retailers whose yearly turnover was less than ₹20 lakhs. This created undue pressure on the wholesaler, who by the law, were registered. This was further complicated by the lack of willingness on the retailer's part to document the sales (Maheshwari, 2019).

Gaps in Literature

After conducting an exhaustive literature review, we identified the gaps in the field, which our research attempts to fill. Firstly, previous research did not adopt a worker-centric approach to understand the functioning of the industry. Although the workers form the crux of the business, none of the researchers had directly interviewed the workers to gain their perspectives. Burra (1986a, 1986b) is a notable exception - she interviewed factory workers to study the exploitative conditions of their factory, especially with regard to child labour. Secondly, and this gap draws from the first one, existing studies overlook the personal histories of the workers - there is no documentation of their living conditions, their aspirations, or their intersectional identities, and how these determine their positionalities. As researchers, we consider accounts of how the workers' lives revolve around bangle-making of utmost importance, especially with respect to the primary aim of our study.

Thirdly, as a chunk of research in this field has been published between the 1950s and early 2000s, studies have not been able to explore the impact of different changes in the industry such as the switch from coal to natural gas, demonetisation, and the implementation of the Goods and Services Tax (GST). Although leading dailies like *The Hindu* and *The Economic Times* briefly touched upon the devastating effects of demonetisation in the industry, the data lacked depth. Therefore, our research will also attempt to collect narratives specific to these three changes, and assess their impacts, if any. Fourthly, while scholars emphasise the presence of children on factory floors, they do not address the ineffectiveness of policy implementation. In spite of outlining and describing the problems that workers face, these researchers have not engaged with the policies themselves. Lastly, there is an erasure of caste in previous studies, thereby undermining caste-based dynamics in the functioning of the industry, if any. Similarly, there is no documentation of the association between caste and bangles.

Chapter 3

Majboori

Helplessness

Aim: To assess the challenges of the workers in the glass bangle industry of Firozabad

"Mor jaise apne pair dekh kar rota hai, waise hi baari baari hume apne haath dekh kar rona padta hai"

("The way a peacock looks at its legs and cries, the same way we cry, looking at our hands")

We are sitting in a dimly-lit room at Gurunanak Glass Works. The sunlight is filtering through the glittering glass products adorning the windowsill, filling the room with warm hues of bright red, yellow, and green. We are interviewing Samir (name changed to maintain confidentiality), 40, the junior manager of the factory, who has been working for over 28 years in the industry. For Samir, growing up in Firozabad has a different connotation than one would imagine, as it implies being born and brought up breathing glass, walking on it, working for it, and working under it.

Samir smiles as he reminisces his journey- a smile that warms the somewhat cold marble room that was the owners' quarters. He was 12, he said, his father had passed away recently and the family's condition was deteriorating. He still remembers the fateful day - it had been two days since anyone had consumed a single morsel in his house. Samir's mother asked her son to find some work. He was hurt, he admitted, stuttering as the words fell from his mouth. As each word formed, he took his time to encapsulate those memories of pain, of sadness, of despair.

He reached the factory, unaware of what lay ahead. Did he know, back then, that he would be here today? He struck a deal with another underage worker to split the day in two each earning half the daily wage. But the other worker did not show up, and as fate would have it, he was employed permanently in the factory. His first wage, ₹16, changed his life. He smiled through it all - through the story, and through the past 28 years, hoping for a different tomorrow.

Figure 3.1

A bangle worker eats as another sorts bangles



Swaasthya

Objective 1: Health and well-being which could be influenced by working conditions and accessibility to medical facilities

Health

What about health? Samir questions- he has no illnesses. However, the health he refers to is not the absence of illness; for him, health is well-being, an abstract ideal that is impossible to achieve. One of the biggest threats to their health, then, are the long working hours. If they are lucky, they get a lunch break, otherwise, they quite often work on empty stomachs. They can only afford to consume food if their wage allows for it. Due to this, they remain malnourished, which adversely impacts their health.

A significant number of workers that we interviewed mentioned the impact that their work in the glass bangle factory had on their health. The nature of their work is such that they are at risk for various health conditions. "Pet ke khatir bardasht karte hai aur baithe rehte hai," (for the sake of survival they are compelled to endure such draconian conditions inside the factories and continue labouring despite the odds), says Rafiq (name changed to maintain confidentiality), Samir's brother, in his interview. The challenges of the workers do not end here. Their working conditions are worsened by the lack of ventilation and sufficient light. Moreover, health risks are heightened as most of their work involves fire, glass and harmful chemicals.

Based on interviews, it was evident that one of the chief health concerns of the workers was deteriorating eyesight - the heat in factories has been reported as a major contributor of this. We observed that many workers repeatedly worked in close range to furnaces (the temperature of which rises up to 1400°C) and with other heated objects. Moreover, having to perform the same in with lack of sufficient light in the workplace can be another reason for the same.

Another health concern that quite a few workers reported was body pain, specifically, knee pain. The workers suspected that this was a product of long hours of sitting and working, with no breaks. In one particular workshop that we visited, we observed workers sitting in cramped spaces, where they would have to carry out their jobs for up to ten hours at a stretch. In addition to chronic body pain, workers also reported that the chemicals that they worked with such as solvents and gold dust, caused various health issues. One particular worker that worked

primarily with gold dusting of bangles for decoration purposes, reported that the chemicals often cause allergies, as well as side effects such as breathlessness, skin infections and swellings.

The workers' palms are bruised because of direct contact with these chemicals. Injuries and wounds are quite common too. Since many workers do not wear gloves while working, they are susceptible to injuries on their hand caused by heat and glass. They either get burns or cuts. Working with molten glass has at times caused face injuries according to workers. Many workers also report that tuberculosis is common among factory workers. This is caused due to overexposure to the harmful working conditions of their workspaces. In severe cases, there have also been cases where workers have died in factories, all facts corroborated by previous literature (Chandra, 2009; Bano, 2017; Burra, 1986b; Government of Uttar Pradesh, n.d.).

We also interviewed doctors and nurses of a local hospital, to be able to gauge common complaints of patients that were workers in the glass bangle industry. According to them, 75% of their patients were local workers. They usually came with respiratory problems and complaints such as breathlessness, asthma and tuberculosis, caused by repeated exposure to emissions of harmful chemicals. Other problems of workers included - fatigue, low haemoglobin and burns. The interviewees also mentioned that the workers only pay a visit to the hospital when their situation becomes extremely bad, owing to their preference to rather ignore their condition and continue working than pay extra money and receive treatment. This, however, seemed a natural response, considering the heavy economic toll of treatments.

The hazardous working conditions raise a question - do factory owners or managers take measures to ensure the safety of workers? When asked about safety, Samir scoffs, claiming it to be an ideal one considers and ignores each day; in short, there are no safety measures. The factory has first aid, he says - bandages, and some ointments - for minor injuries. Nonetheless, major accidents are personal affairs- the owner might, out of the graciousness of their hearts, help by arranging an ambulance, but the expense is borne by the workers. However, under most circumstances there are no provisions for ambulances or doctors in the factory premises, or any other provisions to safeguard the workers' well-being.

Samir says, accidents are common- and so is the compensation that follows it- 4-5 lakhsthe price of one life- four to five lakhs. Some time ago, Samir recollects, a *Bada hadsa*, (a big accident) took place- a mason while working on the furnace, met his doom when an iron rod fell on him- but such things were common, all too common- at least that is what Samir's facial expressions- his calm, collected, and unflinching facial expressions- suggested.

Other interviews revealed similar reports of factories providing no medical support for workers, save for first aid. It is therefore left up to the workers to get treatment for their conditions, some of which are chronic. Many workers cannot afford medical assistance, and therefore do not receive any treatment for their ailments. One worker mentioned that if workers did experience any chronic health conditions, they would simply have to leave, if they could not continue working, and find another job in the glass bangle industry. However, there were some respondents who stated otherwise. In certain factories, basic first aid is provided. Additionally, certain owners sometimes pay for the worker's medical bills. It depends on the factory owner, some intervene when there are accidents and some do nothing at all.

More often than not, workers like Samir and Rafiq end up paying out of their own pockets for health services, since no such provisions are made by either the factory owners or the government authorities. Workers spend anywhere between ₹1500-₹20000 per month on health expenditure, depending on the number of family members and history of chronic illnesses.

Try as he might, even Samir, the invincible father of three fails against nature. If affected by ill health he avails government hospitals- with private hospitals being too costly for his class. He, however, is not satisfied with them; often understocked, government hospitals provide a haven, but only sometimes. Medicines, for examples, are not provided for free, much to the constitution's dismay; a huge predicament for a husband with a constantly sick wife. He spends about ₹2000 a month on her medicines. Samir's wife, Mariam's (name changed to maintain confidentiality), arms ache, causing her to frequent the hospital. However, the doctors prescribe medicines from non-governmental sources, which cost more than what the family can afford. So she comes back home, with hands full of pain, but empty of medicines. "Ghar grihasthi chalaye, ki apna ilaaj karaye?" (Do we focus on our livelihood or take care of our health?) This is the overwhelming predicament that most families like Samir face, wherein they have to choose between their health and mere basic needs for their families' survival. Unfortunately, in this trying battle, their families' survival takes precedence over their health concerns. Thereby,

forcing them to continue working despite the deteriorating health conditions in the absence of affordable healthcare facilities for the workers and their families.

When other respondents were asked about government provision of health services, most of them similarly claimed that the government does not provide any medical help. The government hospitals allegedly do not have proper facilities. They are short of staff, provide inferior services, and do not give timely medical support. As a result, workers feel that going to a hospital wastes the time they could have spent in working and earning money. They do not take fees but at the same time, prescribe medicines that the workers cannot afford to buy. Only half of the medicines are given to the workers and they are expected to buy the rest. Hence, many workers resort to taking some common medicines.

Rafiq and Samir, at their house now, and seriously, talk of the only constant in labour. On the other hand, when doctors and nurses of the local hospital were asked about government support for health, they listed various schemes that are implemented and are being followed in the hospital. These included-institutional delivery, revised national TB control program, blindness protection, controlling mortality rate among women and infants. For the workers in particular, the National Health Protection Scheme/ Ayushman Bharat Yojana/Pradhan Mantri Jan Arogya Yojana (PMJAY) was released. Under this, the government releases a list of workers who have ration cards, these workers further receive an Ayushman Card from the *Jankalyaan Vibhaag* (public welfare department). According to the doctors, under this scheme, workers holding the Ayushman card are treated better as compared to workers without this card. There is also a separate section in the hospital to treat the workers with the Ayushman card. Moreover, these card holders are also given a five lakh allowance on their treatment in a private hospital. Therefore, it becomes interesting to see how despite the fact that these schemes are implemented, and hospitals claim that they are helpful, workers believe otherwise.

"Haal labour ka yaha bahut bura hai" (the condition of the labourers here is very bad), they say as they ponder over their own lives. Referring back to the day we first visited Gurunanak Glass Works, Samir recounts the procedure of changing the pots in the *bhatti* (furnace). He had been a witness to this risky procedure time and again. This job entailed the actions of a few workers, who had to lift the steaming hot pot from inside the furnace and carry it

outside the factory to allow it to cool down. In the absence of any safety provisions, such a procedure can be deemed fatal. Moreover, this procedure proves to be next to impossible during the summer, due to the blistering hot heat emitting from the red pot. Under such circumstances the workers have no other option but to put on a brave front and pray that no injuries or fatalities are incurred. Samir also states that if such a similar job was offered to anyone for the pay of a thousand rupees, even then they would refuse to do so, considering the risk associated. However, due to the helpless circumstances, workers are forced to perform such tasks for the mere sum of hundred rupees.

Upon being asked what message would they send to the wider audience about the condition in Firozabad, Rafiq replied by saying "hum haath jod kar vinti karte hai ki Firozabad mein kaam karne na aye" (we would request them to not come to Firozabad for work). According to them any other form of labour, like working in other factories or even selling vegetables, would be a better option than toiling under the harsh conditions of the bangle industry of Firozabad. "Charo taraf aag hi aag hai yaha pe, jahannum ke beech mein reh rahe hai, jahannum mein baith kar kaam karte hai" (there is fire everywhere, we are living and working in the midst of hell), is how Rafiq encapsulated the workers' conditions.

Working conditions

The working conditions vary across factories, godowns and workshops. Since, the work is mechanical and mundane, a lot of animosity is present among the workers. The type of work done at the factory does not allow the workers to grow. A respondent who left the working in the factory mentioned how working there had a toll on his personality.

There are no washrooms in the factory. Most workers do not get breaks to eat or drink water. Even if they are given a break, it is a meagre amount of time such as ten minutes. "Kaanch par lot jaate hai" (we end up sleeping on the glass), one worker said, as they described their breaks. These breaks, however, are taken only when the worker's share of work is completed, else rests remain a distant ideal.

"Mahol accha nahi hai" (the environment is not good), one of the female workers stated, commenting upon the work environment infected with harassment, and male gazes. One respondent, however, assured protection from the same, by the owners of the factories. Women,

however, live in conditions of constant danger- engendered not only by men, but societal norms too. It is common, workers suggested, for example, for the *ghunghat* (veil) that women are forced into wearing, to get stuck in the machinery resulting in their death.

Godowns and workshops, on the contrary, are safer than factories because there is no looming threat of unbearable heat, over crowded working locations, molten glass, and high-speed machinery. Working in godowns does not impact workers' health as much as working in a factory would affect it. However, there is a trade off for this safety. While workers are given breaks, and better working conditions, they are also paid less than their factory counterparts. Workers are thus forced to juggle between safety, and income. It seems, thus, there is an obvious cycle of impoverishment, that keeps workers trapped in the factory, in a way that future labour is always ensured. Workers either live long, and poor in the godowns, resulting in their next generation joining the work; or die early in a highly dangerous factory, forcing their children to join the glass bangle work.

Kaam

Objective: Economic conditions that may be affected by wage-related policies, governmental policies, demonetisation and implementation of GST

Wages

As for his salary- Samir belongs to the group one might call the cream, the upper crust of his group. He is a daily wage earner, making about ₹650 a day, about ₹15,000 a month. But his earnings do not compare to either his superiors who bank in lakhs a month or his inferiors, other workers, who might make as low as ₹150 a day. But, this ₹15,000 is not enough, Samir affirms-khech padti hai (he has to stretch it), income kam hai, pareshaniyon ka saamna karna padta hai (the income is low, we have to face a lot of problems), for his salary is not regular- it is daily wage- yaha ke kaam ka koi bharosa nahi hai, karoge toh mil jayega, nahi karoge toh kuch nahi milega (you cannot depend upon your work here, if you work then you gain, if not then you shall gain nothing). There is no job security, and one is employed daily, one is fired daily. More often than not their survival and even daily meals are entirely dependent on each day's salary. Losing a day's wage means sleeping hungry for many workers like Samir. There is no scope for demanding higher wages, owing to the abundance of labour, and shortage in the availability of

work in Firozabad. If the worker even does try to demand for higher wages, he is not called in for work the next day and his job is given to another worker. A group of respondents stated that the maximum amount of money a person can earn in a month is ₹20,000. They also mentioned that when children are paid to work, their salary is typically ₹100 for a day's work.

Rafiq also mentioned that so corrupt is the bureaucracy in the factories, that a worker demanding ₹49 would be given employment over a worker demanding ₹50. However, the official documents would state the salary as the latter amount and the extra rupee would go to the owner's pocket.

Table 3.1 indicates the wages reported by the daily wage workers who were interviewed.

Table 3.1

Wages of different daily wage workers

Place	Name of place	Type of Work	Wage/day (₹)
Factory	Gurunanak Glass Factory	Helps with cart filled with bangles	300
Factory	Gurunanak Glass Factory	Not mentioned	270
Factory	Gurunanak Glass Factory	Not mentioned	270
Factory	Gurunanak Glass Factory	Carries bangles in factory	270

Factory	Gurunanak Glass Factory	Fill sands in furnace	307.69
Factory	Sheetal Khan Road Factory	Helps with furnace work	450
Informal	Nagla Bari Chauraha	Sadai	250
Factory	Sheetal Khan Road Factory	Not mentioned	211.54
Factory	Unknown	Factory work	350
Informal	Hajipura	Zari work	200
Factory	Sheetal Khan Road Factory	Bangle making and cutting	65
Factory	Sheetal Khan Road Factory	Menial work such as taking out dirt from the pile; segregating bangles according to colours from the waste pile	270
Factory	Sheetal Khan Road Factory	Menial work such as taking out dirt from the pile; segregating bangles according to colours from the waste pile	270
Go-down	Bohran Gali	Decoration work	275

Informal	Nagla Bari	Liquid Gold	85
	Chauraha		
Factory	Gurunanak	Works with boiler	450
	Glass		
	Factory		
Informal	Nagla Bari	Gold polishing	225
	Chauraha		
Informal	Nagla Bari	Informal sector	375
	Chauraha		
Informal	Hajipura	Chhatai	90
Factory	Jatavpuri	Chhatai	134.62
	Chauraha		
Factory	Jatavpuri	Chhatai	450
	Chauraha		
Factory	Jatavpuri	Joining and welding	275
	Chauraha		
	_	Median Wage	270

Note. The figures that are not in bold are the values of wage that were mentioned by the workers whereas the figures in bold are calculated using the number of days of work per month -26 (as Sundays are usually a holiday). For certain wages that were mentioned in a range, the average was taken into consideration during calculation (for example, if the wage was mentioned as ₹200-₹300, ₹250 was taken as the wage).

Table 3.1 consists of the respondents who earn daily wages. According to the data in Table 3.1, the median wage is ₹270 per day, which is slightly higher than the current minimum wage of ₹178 per day (Khan, 2019).

"Ab tum batao, dhaaiso rupayein mein aadmi kya karega?" (What can one do with mere ₹250?), is the concern that one worker raised upon being asked whether their income was sufficient for them.

In terms of whether workers could sustain their families on their incomes, three claimed that their salary is sufficient. Other workers were unhappy as their salaries were not enough to cater to their families' needs. The sole resource that they regret being unable to afford is quality education for their children. The lack of monetary resources renders them unable to move out of the city as well. "Wahaan dikkat bohot hai aur salary kam hai" (the working conditions of the factory are troublesome and the salary is less). Moreover, the general consensus is that the pay is not comparable to the difficulty of the work undertaken, a sentiment that particularly echoes amongst factory workers.

These responses are in tandem with regard to the minimum and fair wages. The recommended minimum wage is ₹375 per day, but is currently ₹178 (Khan, 2019). The median income of the respondents has been capped at ₹270. Furthermore, fair wage has been estimated to be ₹700, which means that workers will be unable to support their families with their daily wages (Khan, 2019). A worker had mentioned that he believed that they should be paid anywhere between ₹700 to ₹800 in order to afford basic necessities.

"Mazdoori jitni hai, utna rate nahi milta humein" (the wages are not proportionate with the labour), was another worker's response with regards to their wage and its relation with the labour demanded from them. However, at the same time, workers are willing to accept any amount of wage. The same respondent who believes ₹700 should be given, also talked about how at the moment they accept the wage given to them because they are helpless, "Majboor". This narrative of helplessness is constant across the workers and their demands, which compel them to continue toiling for a wage inadequate for their needs. Their other option is to be involved in crimes such as stealing but it is better to earn ₹300 from working in the factory than to commit crimes, they believe.

The specific amount of wages for certain tasks were not mentioned. For example, payment for sweeping floors and cleaning the factory premises, which majorly involve female workers, is issued week-wise. The payment also follows a hierarchy with the people involved in

important stages of the process being paid more than the others. For certain types of work, workers earn based on the number of pieces they produce for tasks such as liquid gold work; zari; and bangle-making or cutting, a fact supported by Khairoowala (2010), and Burra (1986b).

Some respondents discussed the advance wages they receive as well as how they save their earnings. Certain respondents mentioned that they are given an advance if they request for it. This included those who worked as the junior manager, with boiler-related work, joining and welding work, and *chhatai* work; however, this advanced wage is cut from their total income. Few respondents explained how they are cautious about their expenditure and savings – for instance, one respondent earns ₹8000, saves half of it and spends the other half each month.

The limited factory resources and low wages indicate another concern- the trial of the owners to increase profits by limiting their cost of production. A respondent stated that even though the price of bangles has increased over the years, the workers' salaries have not. Owing to the replaceability of cheap labour, workers refrain from demanding fairer wages. Replacing existing workers with those willing to work for lower wages is another tactic that factory owners have been employing to boost revenue.

It is possible that the government is aiding the factory owners in lowering the cost of production by keeping the minimum wage low, as concluded by several workers' critique of the government. A worker alluded to factory owners bribing the government in order to maintain the status quo. However, the other side of the argument suggests that raising the minimum wage will generate unemployment. If the owners want to ensure that the cost of production is low, they will counter the higher pay by reducing the number of workers employed. In the case of the workers of Firozabad, many people need jobs and the low wage rate allows a larger number of workers to earn at least some amount of money.

The owners who were interviewed had another perspective to share. They insisted that the workers are given fair pay according to their skills and level of expertise. For example, a manager stated how in his godown the worker who packs the bangles gets paid the most. In similar fashion, every factory, godown, or house-based units have their own methods of deciding workers' wages. However, there is no fixed salary or wages, and it largely depends on the worker's performance. All the respondents stated that no worker earned less than ₹300 on a

working day. A considerable portion of workers were daily wage earners, and their average wage is ₹9000-₹10000 per month. Moreover, the respondents also specified that the workers' wages do not get cut for any reason.

Work hours

Samir works nine hours a day, which is quite common amongst workers, doing overtime work. While the narratives of law define eight hours (a narrative pasted on each owner's face, of course, it is impossible, they suggest, that any worker works for more than eight hours), work often exceeds this limit. On some days work extends to nine hours, on others to twelve hours. However, there is no compensation for extra work. The work has increased, but the salary has not, several workers claim. On an average, the workers in the factories work for seven to eight hours a day, for six days in a week. However, it is not uncommon for them to work for ten to twelve hours at a stretch. This increase in work hours, often undocumented, has been implemented to boost the output. Nevertheless, their pay remains the same. Factory workers also do not receive extra payment for overtime work. The situation is slightly worse in the unorganised sector with respect to the work hours – oftentimes, labourers work for twelve hours at a stretch; the irregular flow of work means that sometimes they remain unemployed for weeks.

On the other hand, not all the factory owners' answers matched those of the workers. Three respondents stated that the work is done for 8 hours per day; out of which two of the respondents were discussing work hours in a godown. The other respondent was discussing working hours in the factory. Another respondent stated that work is done for 10 hours per day in the factory that he manages. These responses contradict some of the workers' responses. The legal number of working hours per day is nine (WageIndicator Foundation, n.d.). There is a possibility that the owners and managers did not mention the real number of working hours as that would hint at the illegal, and non-compensated nature of the work hours of the factories. The lack of responses to this question could also imply that the owners and managers do not want to reveal exploitation being carried out.

Leaves

As for the leaves, there is no process but that of *pareshani* (problem). A leave is not ideal, most workers suggested, there are no paid leaves, so a day not attended is a day lost- a day of

hunger, a day with no income. Honestly, one would wish then of no leaves- for one might as well call that term, 'leave', a curse.

The maximum that the workers get in terms of leaves are Sundays and certain festivals, and the workers reported that even on some of these occasions they are compelled to work without any compensatory payment. This was also observed during one of our visits to a godown on a Sunday, with workers engaged in activities such as sorting, packaging and decoration of bangles. Some workers do get sanctioned medical leaves for up to five days, however, this benefit does not extend to most workers. Due to the lack of adequate medical leaves or compensation for the same, workers are forced to break their backs and work despite their medical concerns because of the fear of losing the day's wage. The reason why such compensations for leaves do not exist in the factories is due to the daily wage nature of the work and lack of job security or provisions in place to safeguard the workers' employment rights. Another concern with regard to workers' leaves is that in certain manufacturing units the wages are paid solely on the basis of the output produced by the workers. Therefore, absence from work results in no pay on account of the inability of producing an output.

In contrast to the workers' response, the owners claimed that they do provide the workers with adequate leaves, even on occasions when the workers are ill, refuting the workers' claims. The owners unanimously expressed that the workers can take leaves as they please, however, this was not substantiated by the information provided by the workers pertaining to the leaves.

Figure 3.2

Primary shaping of the glass



Government schemes and attitude towards workers

On being asked about the presence of schemes such as the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, or the Ayushman scheme for health by the National Health Authority, Samir let out an ironic laugh and stated that such schemes only exist to fill the pockets of the corrupt officials. The workers are unable to avail any benefits promised by such schemes and other government policies. Similarly, no policies were mentioned by the workers in any of the interviews. One worker did mention, however, that the workers could avail public healthcare services that were subsidised. However, another worker contradicted this response by stating that most of them could not afford medical consultations at government hospitals, as they cost ₹500, which was too expensive for them. This could either mean that the government does not have any policies in place or that the policies are not being implemented, due to which workers are unaware of them. One reason for this could be the daily nature of the work. Since most of the workers working the factories are daily wage workers, they are not counted as employees of the industry, one lawyer suggested. Being that the workers are not counted as employees, several laws do not apply to them. Furthermore, no laws are made since no proper data is ascertained with regards to them.

In addition to this, the government also set up a 'labour colony', government housing for the workers, sometime in the past-Samir recalled- but he cannot remember when. However, due to the corrupt bureaucracy, the labour colonies that were built by the government, do not house the poor, and are instead filled by the rich. Upon being questioned whether there is a machinery in place to look after such grievances, Rafiq exclaimed that a labour committee is in place, however, they are driven by the only motive to make money and not providing any solutions. "Jeb garam karke chale jate hai" (the members on the committee are only concerned with earning bribes instead of heeding to their complaints).

Simply put, Samir has no belief in the government. He finds them greedy, individuals who promise and provide aid only at the eve of voting, and forget the same faster than a gold fish's three-second predicament, after the elections. It is during elections that tokenism manifests- *Bade hadse* are met with *Bade* compensations (greater compensations are awarded for major accidents). Along with the owners, the political parties, too indulge in distributing cash,

for example, when a worker met with an accident, then there was no one as magnanimous as the political parties- but Samir knew full well that it was a mere attempt at buying votes.

His voice drowns in his own dejection, as Samir speaks of *siyasat ke log* (people in politics), who are in circles of corruption with the owners. There is no trickle-down, no happiness for the workers. Rafiq is a rare man like Samir, an anomaly, one outspoken about the rule of the bureaucracy. While people sit and cower under the government, Rafiq has given up the pretence. He firmly abhors the government- for its insincerity, its corruption, its communal nature, and its ignorance. He critiques the vote hungry political parties, and the trade unions. He talks of the police, exposing its lies- the police that writes FIRs and throws them into *raddi* (waste paper), the police that chases away the victims of oppression- police *jo phatkare lagakar bhaga deti hai* (they beat us up and chase us away). They believe that their grievances would be duly heard had there been a true representative to put forth the workers' demands. However, no such machinery is in existence at the present time. Even those who claim to represent the workers fail to provide any concrete solutions for the misery endured by the labourers.

When questioned about governmental support provided, all workers responded that there was absolutely no support provided by the government. Most workers exclaimed that the government only helps them during election season, and even then, provides them with false assurances in order to secure votes. One worker categorically stated that the government was only "interested in rearing cows", and did not concern itself with the welfare of the people. Thereby, highlighting a serious lack of initiative by the government to work for the upliftment of the workers and providing any substantial solutions for their grievances.

Some workers were also quite vocal about how the government acted as an antithetical force in Firozabad, instead of providing the labour class with the much-needed support that would promote social and economic mobility. One worker stated that the government was using up all public funds for personal reasons. When workers do go on strikes to demand their rights, these attempts are always unsuccessful as no government officials support them. The worker also stated that the police, like the government, creates more trouble than providing support. They often arrest more innocent labourers than goons that cause disruptions. Additionally, they file FIRs against the workers without proper cause, and constantly threaten workers, especially when

they go on peaceful strikes. This worker also claimed that the government and the police often created rifts in the community to secure votes. He argued that the implementation of NRC/CAA was another example of this.

There are also internal politics in play within the factories. Rafiq narrated how despite there being no discrimination amongst factory workers, the *thekedars* (contractors) often instigate the workers to fight against each other based on religious factors, targeting people of certain communities. This also leads to the votes being distributed between the members of these communities. Additionally, there is no scope for putting forth demands such as reducing the work hours from nine to eight hours, or increasing their wages. In case the workers strike for their demands, they are accused of disrupting the work and labelled as criminals and arrested by the police. Thus, the workers are forced to work despite the injustice they face, due to the fear of the police, which does not hold the factory owners accountable and instead sides with them.

The politics in Firozabad, thus take two forms- politics of disappointment, and politics of fear- something that was clear from the way people perceived our group- either as unpromising researchers, or CAA officials. Often the researcher group was met with a cold shoulder, for the lives of the workers, has been not only exploited intellectually, but also aspirationally- often the groups were promised monetary or social mobility- however, none such ever came. This transformed into disappointment politics, which mirrored their disappointment with the politicians. On the other hand, politics of fear mainly manifested in the way the majority Muslim worker population concieved of the CAA and NRC. Considering us to be officials, several would wither maintain their distance, or question our motive. This fear distilled when one women worker asked- *Modi kya humko maar dega?* (Will Modi kill us?). The play between the two kinds of politics depict bourgeois exploitation which takes the form of both physical and intellectual robbery- a constant cycle that maintains the proletariat impoverishment.

Demonetisation, and Goods and Services Tax (GST)

Demonetisation had disproportionate outcomes for the people associated with the bangle factories. Some of the workers reported that their work was not impacted after the implementation of demonetisation, others stated that it had a huge impact on their lives. The workers whose lives were not grossly impacted by demonetisation were mainly the ones working

in the informal sector or in shops and godowns. The labourers in factories that were negatively impacted, mostly due to exploitation by factory owners. The factory owners paid the labourers using the older currency which was being devalued, leading to a loss for the workers but a profit for the factory owners.

Some of the workers who were affected stated that since they did not have bank accounts, it was difficult to exchange the old notes for the new ones. Since the majority of them received only cash payments, demonetisation affected them adversely due to devaluation of the notes, and the difficulty that time posed on them. One female worker reported that she had given her old notes to someone else, since she had no bank account, to be exchanged with the new ones but that person fled with the money. There were several similar instances of dishonesty and fraud. The implementation of demonetisation also led to the workers taking loans from the banks being charged with exorbitant interests, resulting in inability to pay back the loans. Other workers reported that demonetisation also led to the factories being shut down due to which they did not have work for a certain period. Some other workers expressed the distressed experience after the implementation of demonetisation by stating, "bhookhe mar rahe the" (we were dying hungry), they had to stand in queues for long hours to get the new notes. This often meant that they would have to be absent from work and not get paid.

Even after demonetisation the workers were not paid wages by the owners. They did not have enough money to fend for themselves. One worker recounted the impact of demonetisation by expressing, "chillar mil rahi thi, chillar se kaam chalaya" (we were only paid pennies, we had to make do with the pennies). They also stated, "maalik ko khud nahi mil rahe the, maalik ke ghar par paise nahi the" (the owner himself did not have money at home), resulting in the workers not being paid on time. The workers exclaimed that the effects of demonetisation still persisted. Earlier there was an abundance of work, but since demonetisation the owners do not have enough money to employ workers.

Demonetisation had varying impacts on the owners and managers. Some claimed that they were not affected by demonetisation. Certain owners' businesses had been severely affected and the effects lasted for around two to three months." *Note ka transaction nahi hua toh business nahi hoga*" (If cash transactions do not happen, then there will be no business), said a seller.

During this period, demand for glass bangles fell, thereby affecting the overall production process. Additionally, the rates of diesel inflated, incurring huge losses in terms of transportation of the raw materials or the finished products to and from the factories. Unlike the profound effect that demonetisation had on the workers, the case of GST is quite different. Essentially, workers never had enough money for them to be affected by a tax scheme overtly. The effect on the other hand was systemic, internal. As shall be described later, GST led to huge losses in certain sections of the industry, resulting in wage cuts, unemployment or firing; increasing the losses already incurred due to the implementation of demonetisation.

The scheme, as mentioned, affected the factories themselves, again, disproportionately. The impact of the implementation of the Goods and Services Tax (GST) on the industry differed on the basis of whether a unit was involved in the production of bangles or in the decoration of bangles. Factories, which fall in the former category, incurred heavy losses because glass bangles are tax-free but the raw materials required to produce them are not. Unlike the manufacturing plants, godown owners reported no effect on the work being carried out in their workshops. As a result, owners of factories want the government to either impose a tax on glass bangles or to make the chemicals required tax-free as well. This created an uneven flow of services and materials in the industry, where the same transaction, which had been more or less an equal exchange, now cost the factory owners more, but spared the sellers and decorators in the process. Some owners expressed that this had influenced the whole economic structure of the industry-from the price of the bangles, to the wages of the workers, and their yearly profit from the sales.

Duniya

Objective: Socio-political environment created by trade unions, religious and/or political conflicts, relations with government authorities

Religion

For Samir, religion is a contentious topic. Although he does not wear any religious markers on his body, his wife does. All of Firozabad is shrouded in a thick layer of agitation - if the whispers on the streets are not sufficient, the pointed, questioning stares definitely are - and Rafiq, Samir, and Mariam (Samir's wife), have plenty to discuss.

While one cannot make any definite claims about the religious associations presently fostered by bangles, one cannot deny the inextricable link that the craft has had with the followers of Islam, considering it is the group responsible for the establishment of the glass bangle industry in India. This is not to glorify its connection or overstate it, but, this information is important to trace the generational and cultural transition that the artefacts have undergone. According to Dhairya Maheshwari, a reporter for the National Herald India, majority of the bangle producing industries in Firozabad are owned by *Baniyas* (a Hindu trading caste) (2019). Amongst the respondents who were willing to reveal their religion, about 65% were Hindus, majorly *Baniyas* while the remaining 35% (most of which were managers), were either Muslims (20%), or wished to remain anonymous (15%).

Over the years, there has been a transition from a predominantly Islamic association with the bangles to a Hindu association. This has particularly developed around the growth of traditions, especially the concept of *suhag* (wifehood) in Hinduism, and its emphasis on bangles as important markers of bridehood. While bangles still remain an aspect of traditions in Muslim households, particularly during Eid, and pigeon rearing, mass dissemination and meaning have constructed a Hindu image and Hindu stamp over bangles. The question of religion among the workers is more complex, and simplistic at the same. According to Arshi, a PhD. candidate at the Aligarh Muslim University, the handicraft industry in Uttar Pradesh employs a large number of Muslim workers, with around 10% of all workers households identifying as Muslims (2009). This is crucial as the Firozabad population consists of only 12.60% Muslim citizens (Directorate of Census Operations, 2011). Of the workers interviewed, about 30.5% of workers identified as Hindus, 55.55% identified as Muslims, and 13.88% were anonymous. There was no attestation to any other religious identities. Although our sample should not be considered representative of the demographics, it still provides a glimpse into the construction of the worker composition of the individuals interviewed.

As mentioned earlier, the conception of religion remains complex. While the workers work together regardless of their religious affiliations and are not stalled in promotions on the basis of it; there is visible geographic othering. Mentioned earlier in the report, geographic othering occurs on multiple levels. First, and foremost, there is economic othering, where

different areas of habitation emerge on the basis of economic accessibility. Firozabad depicted the same with workers and owners inhabiting different areas. The architecture too, was a testament to the same - Samir's house is a dilapidated brick structure, which, at first glance, looks like nothing more than a ruin. However, the owners' houses are much more durable and lavish.

The second layer of geographic othering results from religious othering witnessed commonly in India- i.e, the creation of religion-based settlements. There was obvious othering in the way the worker and the Muslim identities were constructed in the general discourse, often marking the workers and their settlement as unsafe areas. The worker settlement, Jatavpuri, the centre of our research, was predominantly Islamic, depicting the culmination of the two forms of geographic otherings. Centres of economic exchange too were divided among religious lines. The centre of glass sale in Firozabad, for example, was divided into two- Bohran Gali (Hindu majority), and Imambara (Muslim Majority sellers) The current political protests against the Citizenship Amendment Act also highlighted the volatile position religion occupies in Indian politics - Bohran Gali and Imambara serve as examples of the same. While Bohran Gali sported pro-CAA and NRC posters, Imambara sported anti-CAA and NRC posters, in the same font, and design. When further inquired, one of the respondents claimed that the posters were not set up by the sellers, but were pasted by individuals paid by the Opposition, as a means of achieving political benefits from the exchange. The area had in the past remained as a hotspot for religious riots, with one of the respondents, mentioning the riots that have ravaged the Bohran Gali-Imambara area. Therefore, while religion remains a matter of contention, it emerges as an object to either violence or peace, it in itself does not become a purveyor of it, but rather an aspect through which ideas can be channelled through.

Government

It is interesting to note how the association of civil groups with the state apparatus differ depending upon the location of their community in the social hierarchy. As members of the ruling classes, or as the bourgeoisie, the factory owners wield a considerable amount of power over the workers, or the proletariats in this analogy. Moreover, the cultural and social capital available at the disposal of the factory owners ranks them higher in the hierarchy than the

workers. Thus, the state aims to subjugate the workers while the owners become an extension of the state itself. While the workers are discontent (and terrified) of the government and the atrocious deeds promulgated and encouraged by the current leaders, the factory owners (whose power marks them as 'safe') have other qualms with the governance, which stem from a position of privilege.

The owners we interviewed outrightly voiced dissatisfaction with the dearth of support from the state government. According to the co-owners of Gurunanak Glass Factory, where Samir is presently employed, the state is partial to the factories manufacturing products such as glass bottles, chandeliers, bulbs, and other glassware. Thus, monetary help is readily made available to owners of those factories; the glass bangle industry, for some peculiar reason, has been largely ignored by the government. Moreover, the owners are unhappy with the government repeatedly failing to equip factories with superior technology. As per them, German-made furnaces can heat molten glass up to 1800°C, thereby producing purer glass; at present, all units use locally-sourced *bhattis*, which heat the glass up to only 1400°C, which allegedly results in the production of 'impure' glass.

Additionally, the owners are concerned about workers going to a strike, and try everything within their power to prevent strikes. As reported by one of Samir's employers, halt in a day's production results in a loss of nearly ₹1 crore. Even though the strikes are often a result of exploitation within particular factories, the owners continue to attribute them to the government's inability to implement comprehensive policies.

The responses gathered from Samir and other workers had pointed us in a single direction - the owners are complicit in exploiting their employees. Unsurprisingly, whenever conversations with the factory owners revolved around workers' welfare and well-being, almost all of them brushed those questions off with forceful assurances of their satisfaction. While the labourers equated their lives with inferno, the owners subtly played the blame-game, attributing their problems to the government's inaction. Unlike the workers' opinions about schemes and policies, the owners believed that although these policies have been formulated and indeed exist, they have not been implemented. When probed further, they feigned ignorance.

Based on the exhaustive review of the literature pertaining to the glass bangle industry, we discovered a disparity between the official count of factories in Firozabad and the one reported by previous studies. When we actually travelled to the site, we realised that not all manufacturing units in the city are registered - some are unregistered, thus 'invisible' - due to which the present count is almost twice that of the official count. As government officials may not be aware of the existence of all factories, the schemes proposed by the state government might not apply to half of these units. Consequently, their implementation becomes difficult, and hundreds of factory workers remain unaware of these provisions. Similarly, the cottage industry is viewed as multiple independent businesses, an unfortunate consequence of which is the unavailability of these policies and schemes.

Trade unions

Samir is in no way a man interested in politics, or rather has been driven away from it, by fake promises, by fake messiahs, and by solidarities that never materialise. The moment we ask him about trade unions, he sighs - the disappointment is visible on his face. He says that there are none, a common response echoed by almost all workers whom we interviewed. As a junior manager, it is safe to assume that Samir speaks on the behalf of multiple workers. He mentions the Centre of Indian Trade Unions (CITU), a national level trade union politically affiliated to the Communist Party of India. Its Firozabad chapter lingered only for a while before disappearing into thin air, with not only aspirations but also pockets full of money. Much to Samir and other workers' dismay, there has been no communication of any kind from the trade union since it locally disbanded.

The "CITU party", as it is colloquially referred to, is not the first to leave its members high and dry. As per Samir, this is a common practice - unions spit out false assurances but do not look after the well-being of the workers they claim to represent. Moreover, most trade unions are only functional during the election season for the sake of appearances. A local political actor and the president of *Kanch Udyog Krantikari Sangathan*, Rajjo Devi, quickly disbanded the union and fled after securing votes (Tripathi & Shah, 2009).

The unanimous opinion equated leaders of these unions with robbers – petty thieves greasing their palms with money. Furthermore, owners, managers and supervisors of factories

tend to disregard the mediatorship of trade unions. Most of the workers reported that concerns falling under the jurisdiction of trade unions are dealt with without consulting them, and by setting up specific committees that engage in *mashwaras* (discussions). However, quite like the unions, these committees fail to resolve grievances. Even though the general air of distrust has compelled many of our respondents to distance themselves from 'upcoming' trade unions, some are hopeful - they consider these unions as facilitators of employment opportunities.

Unlike factory workers like Samir and others, those engaged in the cottage industry desire representation. One respondent, an elderly worker who applies liquid gold on engraved bangles, was unhappy with the absence of trade unions in the informal sector. According to him, the workers employed outside of the factories are not represented due to the lack of recognition of their work. The perceived importance (and difficulty) of the process carried out in factories tips the balance in the favour of factory workers. As a result, informal workshops do not stipulate trade unions as a requirement, and their employees do not have leaders to voice their concerns to.

However, last year (in 2019), plenty of local newspapers documented protests organised by trade unions to oppose the government's anti-labour policies. The officials of the *Kanch Udyog Krantikari Sangathan* were allegedly part of these demonstrations. Rajjo Devi and Soneesh Chak, another labour leader, claimed to be at the forefront representing workers' interests, and shedding light on the exploitative conditions of the glass industry of Firozabad (Jagran, 2019). A chief complaint amongst others was that the workers were not being paid minimum wage as directed by the government (Live Hindustan Team, 2019). However, our research has revealed that these protests have not created any change on the grassroots-level.

Chapter 3.4: Samajikta

Objective: Social and economic mobility determined by accessibility to resources and government provisions.

Education

Samir's link with education is not merely his own. In a way, he shares his experience with others- his narrative is common among workers. He is not illiterate, not at least by policy standards- he is educated till the 8th grade. His education, however, met a cruel halt in the

unbearable heat of the glass bangle industry, by circumstances of impoverishment that confronted him at the tender age of 12. "Ghar ke halaat khasta ho gae the" (the circumstances at home had deteriorated) he says, as he justifies his current predicament, "majboori" (helplessness), has been a constant companion since. He left his house, abandoned his education to support his family, and produced at least one square meal a day, after the death of his father. His brother, Rafiq, however, had no such luck- circumstances did not allow for education, but for majdoori (labour work). Mariam, on the other hand, had completed her degree in Bachelor of Arts, but, as Samir admits was never able to pursue her career, locked behind the walls of conservative thinking- a regret the family still fosters.

Just like Samir, most of those who can be considered educated left their academic aspirations either due to 'family problems' or the lack of funds. Even in this case, a disproportionately larger number of men were educated than women, and this is a finding that can be corroborated by the recent census data. In Firozabad, about 80% of all men are literate men, and approximately 60% of all women are literate (Directorate of Census Operations, 2011). However, the issue of female literacy is interesting in itself. Out of the women who had the opportunity to study, many were able to pursue college degrees, like Mariam. Thus, even though more men are educated than women, the quality and tenure of education attained by women is considerably better than that of the men working in the glass bangle industry of Firozabad.

The narrative of education, however, has changed over the years. The enactment of the Right to Education Act, provided students hailing from the working class with increased possibilities of continuing their education. Yet, it is necessary to recognise that increased participation does not result in guaranteed opportunities. While several children remained shackled because of the lack of economic resources, the ones who are able to break through the barrier remain constrained by the teachers' attitudes towards education. However, many of them are also engaged at home – juggling a premature work-life balance. Students, as young as ten years old, often spend days engaged in both decoration work and studying. Nonetheless, these underage workers eventually drop out of educational institutions owing to insufficient funds. Moreover, there appears to be no association between the opportunities available and the sex of the students. Education, if available, is provided to the children; and on occasions when only one

child or two can be educated, there seems to be no gender-based preference. Nonetheless, this is upturned by the quality of education itself. Several workers, and even owners contested the bad quality of education that Firozabad fosters.

While politicians like the deputy chief minister Dinesh Sharma have openly praised the excellency of the system, news reports and workers' narratives paint a different picture (Agra Bureau, 2020). One of the workers employed in the factory elucidated his and his family's plight. The worker talked of how he was not able to access education due to low economic stature, a fate shared by his children as well. Expanding upon government schools, he defined the status of the schools as unsatisfactory, and the teachers as unskilled, and uninterested. The teachers, he remarked, were interested in stitching and domestic chores, which they would complete at the school, instead of educating the students. Teachers who try teaching are often discouraged to do so by their peers themselves. He went on to remark that the staff puts up a farce of industriousness during school inspections, thus steeping deep into corruption. The scenario, so mentioned, is not isolated, but is rampant in government schools. A recent Times of India report exposed the same. It elucidated upon NISHTHA (National Initiative for School Heads and Teachers Holistic Advancement), a program established by the government to ensure the quality of education in government schools. However, instead of attending the program, a group of teachers in Firozabad were observed, post-lunch, hosting a dance party at the school. The teachers had, according to a video that surfaced, locked themselves in, were dancing, and were throwing currency notes on each other, emulating a dance performance (Chauhan, 2020).

There is another dimension to the aspiration that adheres to the general Indian narrative – civil services as salvation. Several workers interviewed dreamt of their children turning into or government officials. This perhaps stems from the job protection and pension that civil services might guarantee, especially when the aspirations stem from a background of economic insecurity. However, this dream itself proves unstable when exposed to the realities of civil services. During an interview with a seller, his history revealed the economic insecurity that can manifest civil services itself. The seller in question was an ex-civil servant, who was selling bangles out of a small shop, trying to make ends meet, his pension not enough for his family.

The interview exposed not only the economic instability of the glass bangle trade, but also of civil services in India- casting a doubt at the dream that several workers foster for their children.

Furthermore, the owners and managers in Firozabad have also remarked existing education facilities as unsatisfactory, and limited. One owner, for example, considered Agra's education far superior, and talked of several families who migrated to Agra, just in lieu of education; his own children studying and seeking a future in Hyderabad. While the stories of workers in Firozabad are that of inaccessibility, those of owners are of plenitude. The owners and managers of the bangle factories in Firozabad come from the capitalist and mediator classes wherein their primary job is to look after the proper functioning and organization of the work being conducted. Despite the increasing efforts for promoting education in Firozabad, not all owners and managers are educated. There is a huge discrepancy in the qualifications attained, since some of them have completed their graduation and BSc., while some have never received any form of institutionalised education or schooling. This indicates the inconsistency and lack of accessibility of the education system in Firozabad.

Despite this, both groups find themselves trapped in the web of glass manufacturing. Some of the owners interviewed, as mentioned, had a college degree, specialising in sciences, business administration, and social services. When asked, as to why they failed to pursue their degrees, one owner adopted the metaphor of a spiders' web. He said that education in Firozabad goes through a peculiar transformation, for Firozabad itself fails to foster any other specialisation except glass bangle manufacturing. Since the town has remained in a stasis of development over the past few years, Firozabad has failed to accommodate newer positions of economic opportunities. Thus, regardless of education, almost everyone has been constricted to the same work – the city somehow manages to suck its purveyors back into its sphere.

We cannot deny, however, the relative privilege that owners enjoy over the workers in Firozabad. Regardless of all the policies, education has remained a sphere of economics. The idea of social mobility in Firozabad is integrally tied with education, as one of the worker-turned-manager remarked, "Sabse ahem cheez padhai hoti hai, padhai sabko aage badhati hai...Ab yaha padhai nahi hai, toh ab yaha kya karenge, majdoor karenge" (Education is the most important thing, it is the only thing that takes you ahead in life... there is no education

here, what else can you do, only labour work). Social mobility, thus gets stifled, for its economic lack. In a society which has not seen wage rise in over two decades, social mobility is a distant dream, becoming more and more difficult to achieve in the face of yearly inflation. In other words, while the prices of essential goods increase, the expenditure of most of the workers remains the same, creating a gap between the living patterns. So is the case with education, where academia has adopted an almost industrial mode, providing education to the elites, in lieu of maintaining power amongst them. This leads to the reproduction of power and social hierarchies – the same group rules, the same group slaves. Therefore, when the next generation of workers are educated, they still remain under the control of the top hegemons, that have been consolidating their power each new era (Adorno & Horkheimer, 1947/2002).

As for the family, for Samir, Rafiq, and Mariam, they too, feel that education is inextricably linked to their work, and future- "Mazdoori acchi ho toh aage baccho ko bhavishya mil jaega" (if the labour was good, then we could have ensured a better future for our children), but there is no income for education, then what of the future? "Bas rab ki marzi hai" (all is fated by god). Even when the families are able to afford education for their children, they are forced to drop out in a few years and fall back into the trap of working in the glass bangle industry to earn for their survival.

Migration

"Firozabad se bahar nikalne ka" (moving out of Firozabad), Rafiq smiles, "Firozabad se bahar nikalne ka, toh koi chance hi nahi hai" (it is impossible to get out of Firozabad)-migration is impossible- Firozabad is a self-intertwining web- a web, in which once stuck, there is no escape. What one lives for is family- and to leave Firozabad is to leave behind years of traditions, connection to the land.

But therein lies more complexity, as Samir elaborates. Firozabad is a city in stasis- a city that has not experienced economic growth for years- the salary has remained the same, and so have the prices. To migrate would be certain death, like a seed which fails to strike roots in a soil not meant for it. In short, areas outside Firozabad are costlier. Hence, even if the worker can avail for better opportunities elsewhere, the extra income earnt would be nulled by the higher expenditure of living in other cities, unfortunately resulting in the same net income remaining for

the survival of the entire family. While Firozabad froze in time, the country grew- so while Firozabad remained economically stable in its bubble- it grew relatively poorer and poorer- "Kahi guzara nahi hota hai bahar- sab choot phir k, kam se kam apne toh mil jate hai (Firozabad main)- Nahi nikal pate hai, yahi aana padta hai ghoom phir ke" (You cannot live outside Firozabad, we have to come back, at least here you have family. We cannot get out, you have to return to Firozabad, regardless of circumstances).

The majority of the workers, like Samir and Rafiq, were born and have lived in Firozabad all their lives. Most of them started working in the factories either to supplement a family member's income or due to the lack of an earning member. However, some workers also reported that they had migrated from elsewhere to work in Firozabad. For instance, a female factory worker being brought to the bangle factory by her in-laws and working on site since then. A handful of workers, hailing from cities like Allahabad, Delhi, and Agra, migrated to Firozabad in search of employment. Conversely, some of the interviewees' children have relocated to cites such as Delhi and Surat in search of work.

Some workers reported wanting to leave the glass bangle factories in search of better opportunities elsewhere. According to them, around 30% of the labour force has left the city, and has migrated to Delhi, Noida, Gurgaon and Haridwar. The primary motivation for migration is upward social mobility. However, despite the lack of existing opportunities in Firozabad, not all workers are able to migrate because it is an expensive affair, a narrative not only mirrored by Samir's family. The cost of living in other cities is very high compared to the cost of living in Uttar Pradesh. Therefore, it is possible that earning more money in a different city might not compensate for the expenses incurred.

The prospect of social mobility is alluring, causing workers to migrate only to be sucked back into the vicious cycle of poverty and exploitation. Additionally, the migration rate is disproportionate as no more workers are willing to immigrate to Firozabad due to the low wages. The average daily wage in Firozabad is one-tenth of the sum being paid elsewhere, as Rafiq suggests. Furthermore, working in factories has been deemed unsafe, dangerous, and unbearable – specifically in the months of April and May, when the temperature rises dramatically, when the sun itself descends upon the factory.

Chapter 4

Samaaj

Social Dynamics

Aim: To explore social dynamics that exist between groups involved in the glass bangle industry

"Adhikari ayega toh factory wale ke ghar mota gadda milega aur mote note bhi milenge, aur hamare ghar tooti charpai milegi. Adhikari hamari sunega ya factory wale ki?"

("If a government official comes, he will be offered fat hospitality, and fat stacks of notes; and we will offer them a broken bed. Will the official listen to us, or the factory owner?")

As the factory roars, the dynamics of the glass bangle industry unfold in front of our eyes. The hierarchies that existed were clearly distinguishable upon first sight, without information from Samir. Of course, he too was a part of this structure; the women hunched over piles of broken glass, the owners, perched in their comfortable chairs in air-conditioned offices, and the dogs yelping each time a hot shard of glass flew past them, were all parts of it. As the conversation flowed, it resonated Foucault's theorisation of power. Had he been there, he would have commented on the ubiquitous nature of power, its ability to percolate into each and every aspect of human life. Watching the workers toil through the day, he would have talked of bodies and discussed biopower (Gutting, 2005) - bodies are merely instruments of power, it flows through them and enslaves them.

The philosopher also believed that knowledge was a manifestation of power: the latter produced knowledge, and that knowledge then defined power. This particular aspect of his theorisation was reminiscent of another voice - Marx. This German philosopher introduced an important concept, one we know as false consciousness. As defined by Marx, false consciousness is an apparatus of ideological, social, and institutional control; quite literally, a false state of mind created by capitalism to relegate the proletariat within a paradigm of oppression as a means of normalising oppression. However, Samir knew no Foucault or Marx-oppression was his life, and he had to bear it.

Stri aur Purush

Objective 1: Gender dynamics that are assessed via the environment, the gendering of work, and employment patterns.

Gender

The lives in Firozabad are gendered in multiple ways: in the gender ratio of the workers and owners, in the gendering of work, and in the way the future and present of the industry are constructed. The gender ratio in Firozabad is lower than that of Uttar Pradesh - Firozabad's demographics favour males, with around 882 females for every 1000 males (Directorate of Census Operations, 2011). However, these demographics translate variedly when analysed sociologically, influenced by one's economic standing, and traditional understanding of gender.

There is no denying that the glass bangle industry of Firozabad is heavily dominated by males, but female presence in the factory reveals itself in myriad ways.

A comprehensive understanding of gender dynamics can be obtained through two spheres - the sphere of the owners/sellers, and the sphere of the workers. All the owners or sellers interviewed were male. In fact, the owners and the sellers observed were predominantly male. The normative Indian understanding of gendered spheres, where the public sphere, the realm of social exchange and economics, is generally designated to the male members of the family, while women are either designated to the bounds of the house or are 'allowed' careers that stand opposed to traditional masculine roles. When questioned about the participation of women from their family, and at work, some owners found the idea of women from their socio-economic class in managerial positions rather absurd. Unsurprisingly, this response emerged as a characteristic of middle-class ownership.

While still skewed, female participation is more commonly observed in lower socio-economic circles, spurred by the lack of resources. Of the workers interviewed, about 40% were women. There was a clear domestic-non-domestic distinction in the construction of hierarchies within the system. Although there were no women working in godowns, they were still integral members of the chain. One of the final stages in the process - decorating bangles - is typically viewed as a "woman's job". The men carry stacks of 'unfinished' bangles home, which the women then decorate, earning paltry sums in the process. In bangle factories, however, the picture was slightly different - several women had taken up employment in these units to supplement the low collective income of their families.

The duties allotted to workers were very visibly gendered - while males were involved in more 'masculine' tasks such as carrying rods of hot bangles, filling carts with stacks of bangles, or wheeling hot pots in and out of the furnace, women's chores resembled their domestic lives - sweeping the waste out, or shifting and categorising the waste produced. This unequal distribution of work, in terms of its perceived value and remuneration, could be because the factories primarily employ men. However, the cottage industry (the unorganised sector) prefers employing more female workers, and they generally perform *sadai* (straightening bangles) or *katai* (engraving designs on bangles).

While the plight of glass-workers is bad, the intersection of the multiple identities inhabited by women makes their situation worse - not only do they earn only a fraction of what men do, but they are also tied down by their domestic obligations. In heterosexual relationships, the inequal distribution of power reflects in the distribution of labour in the home. Even in families with two wage earners, the housework rests entirely upon the woman's shoulders. Arlie Hochschild, a sociologist, dubbed this the "second shift" (Hochschild & Machung, 1989/2012). In addition to working during the day, female workers have a second-shift job to go back home to. As is the case, this unpaid emotional labour continues to be unrecognised.

Moreover, gendering is visible in another aspect - wearing bangles. When making bangles is concerned, women are employed to perform limited tasks. In the factories, women are either cleaning the premises or segregate broken glass pieces according to their colours. As far as the godowns are concerned, women's mobility is severely restricted: entry is prohibited. However, when we think of glass bangles, we immediately conjure up images of bangles adorning the wrists of women. The visual rarely changes because women are considered the sole consumers since the bangles, as cultural artefacts, are perceived as 'feminine'. Many factory managers described the significance of glass bangles in the lives of young girls, and married women alike. The glass bangles are commonly referred to as "suhaag ka prateek" (markers of bridehood). Although many respondents still consider bangles as important extensions of women's identities, some believe that the sale of bangles has declined significantly since women have begun to cross the threshold of their houses to enter the workforce. While casting disappointed glances at our wrists, they explained that women have abandoned the practice of wearing bangles daily, and only choose to wear them for festivals and auspicious occasions.

In spite of the disparity between the pay earned by men and women, the male workers are attached to the notion of equality amongst the sexes. Nonetheless, the reality is quite different: where one man can earn up to ₹12,000 a month, a woman can only earn ₹2,000-₹3,000. Moreover, it is not uncommon for male workers to ridicule female factory workers; a respondent of ours brushed aside the labour of women as "menial work". Furthermore, men are given more opportunities to take control or lead as compared to women. Within the factories that we visited, the owners were men, the managers were men, the *thekedars* (supervisors/contractors) were men,

and with the exception of nine-ten women, the other workers were men. It is interesting to note how power is embedded within the hierarchies in the factories.

In spite of their differences, the owners and the workers dream of a similar future, one that is free of women. For the owners, and for the male workers to an extent, this stems from heteropatriarchal - and conventional - ideas of understanding and performing gender. For the women, on the other hand, it is rooted in their desires to escape from the clutches of the industry.

Family

Today, Samir lives the life of a typical family man: he is the breadwinner. Not much has changed since he first started working except his house is now inhabited by five additional members. He has been sustaining his family for as long as he remembers. His wife, after pursuing a Bachelor's degree, sporadically gives tuition to children living nearby. Mariam, his wife, hails from Jalesar, a neighbouring village, and never learnt the bangle-making - a curse considering their living conditions. He has one son, presently fourteen years-old; two daughters, one twelve years-old, and the other eight. Mariam, his wife, and Samir have made it a point to enroll all three children in a local school because Samir does not want his legacy to live on. Education, according to him, is an asset.

In large families (composed of five or more members) like Samir's, the burden of working often rests upon the male members' shoulders; in many cases they were the sole breadwinners of the family. An overwhelming majority of workers had family members, such as fathers, uncles, or brothers, who had previously worked with bangles, and were employed in factories for tasks like "batti lagana" (using the furnace), and "bharai ka kaam" (Filling work). Therefore, some of the tasks are learnt by observing experienced family members. Even though this is a convenient way of learning the ropes, it is dangerous nonetheless as the supervisors refrain from formally training workers. The lack of both technical and safety training is alarming as workers in the factory are exposed to hazardous conditions on the daily. By eliminating possible avenues of expenditure, including training, the owners successfully scale back on the cost of production.

As mentioned in the previous section, female workers are heavily involved in the cottage industry (small-scaled, and often home-based). No training is provided to them either. The most

common processes that they are involved in include *judai* (joining bangles), and *chhattai* (sorting bangles). Most of the family members, especially females, who worked at home began working before the age of eighteen. Although there were no children in sight on the factory premises, it is worth noting that it is fairly common for children to work in home-based units. Even though our local contacts advised us against discussing the issue of children employed in factories, some of the workers reported that their children were involved in the trade due to the inability to continue education. The Child Labour (Prohibition and Regulation) Act, 1986 dictates that minors under the age of fourteen must not be employed. Nonetheless, some of our respondents, who were in their 20s, stated that they had been performing the same task since the past eight to ten years, thereby implying that even after the enactment of the act, children continue to work.

Some of the female workers in the factories were sole earners due to the death of the male head (the most common response), or because of their husbands' inability to work in factories. Owing to their widowhood, these workers felt compelled to continue working in spite of their health concerns or harsh working conditions. In other cases, their income supplemented that of other working members in their families. This was especially observed in families with more children, therefore needing a significantly higher number of resources. Families of other workers had members employed in both factories and the unorganised sector; the latter, composed of informal workshops, requires workers to perform secondary tasks on bangles sent from factories.

Figure 4.1

A female worker in the factory removing the broken glass pieces



Sambandh

Objective 2: Power dynamics between workers, owners and managers

Most of the workers stress on the importance of maintaining a good relation with the owner so that their wages are not affected negatively, an ideal that was emulated by Samir as well. As we sat in Gurunanak Glass Works, one could feel the overpowering presence and the lingering gaze of the owner. As the boss, he wielded the power to control lives, to render workers unemployed. Therefore, maintaining a cordial relationship with the owner ensured a smaller chance of being sacked or replaced.

According to the owners and managers, most of the workers in the factories and godowns reside in Firozabad. Some workers come from Fatehpur Anandipur, which is a small village eight kilometres away from Firozabad, in search of work. The Mahatma Gandhi National Rural Employment Guarantee Act, 2005's (MGNREGA) sole purpose is to provide guaranteed employment to rural dwellers. Nonetheless, as per the supervisors, none of the workers in their factories are beneficiaries of the act, possibly due to the daily contracted work that defines the industry.

The organisational hierarchy of almost all factories is similar: a team of five or six individuals supervises the workers. More often than not, one of them is the owner, two are managers/supervisors, and there are three assistant supervisors, like Samir, who distribute work. The duties are assigned on the basis of the workers' skill sets. As mentioned in an earlier section, workers are not formally trained or groomed for their job; if a worker is exemplary or promising, the owner might train them to hone their skills. Nonetheless, learning typically occurs by observing experienced workers or by working under a family member's supervision. Over time, workers specialise in different types of tasks like *chhatai* (sorting), or *chatak bajana* (separating broken bangles). Their title given to the worker depends upon their specialisation - for instance, the worker who does *chhatai* is called *chhataiya*.

Even if a worker's relationship with the manager is slightly strained, most workers enjoy cordial relationships with each other. As stated by many respondents, there is neither caste-based discrimination nor discimination on the basis of religion. According to the owners as well, a sense of 'harmony' prevails among workers; "mill pyaar se kaam karte hai" (they work together

with love). In the case of fights or arguments, the supervisor is typically in charge of resolving disputes. Moreover, factory owners and managers often claimed, in a matter-of-fact fashion, that the workers were satisfied with their work. Similarly, they insisted that working in bangle factories had no detrimental impact on the workers' health. However, this particular response contradicted the workers' responses as well as the literature reviewed (Burrs 1986b) by us, which stated that workers' eyesights deteriorate and they develop chronic respiratory illnesses among other ailments.

Chapter 5

Sapne

Aspirations

Aim: To analyse stakeholders' perspectives on the future of the industry

"Majdoor aur majboor ek baat hai"
("Being a worker and and being helpless is the same thing")

Pareshaniyaan

Objective 1: To gauge current concerns in the industry that may influence the future of bangle-making in Firozabad.

Samir, like any other man, is filled with aspirations, aspirations his children will inherit from him. As a child, he said, he had several dreams, dreams choked by circumstances- but his children, he believes, will escape this cycle of exploitation- will achieve their dreams- that is his goal now. other workers, like Samir, expressed that they only work due to helplessness and lack of opportunities, "majboori ke wajah se kaam karna padta hai" (We work because we are helpless). They also mentioned that everybody works for money and there is no satisfaction with the work they do. Some of the workers stated that they could not afford or continue with higher education due to the financial conditions of the family and lack of resources, otherwise they would have wanted to work in some other profession, instead of working with the bangles where they get paid less and have such harsh working conditions. Upon being asked about their experience of working in the factory over the past few years and the changes they have observed, one worker expressed, "kuch nahi badla...majdoori mehengi ho gayi hai, yahi badlaav hai" (nothing has changed, labour has become more expensive, that is the only change), highlighting that very less progress has taken place in Firozabad with respect to the workers and their working conditions.

Often the workers are made to work for longer hours and under harsh conditions to produce more in less days as the owners would only have to pay them on a daily wage basis. Due to this, there is a surplus of bangles produced in the stock, as a result of which the factories stop functioning for a long duration. Thus, the workers are adversely impacted as they either have to stay at home or look for work elsewhere. In addition to this, they face difficulty in obtaining loans. In situations where they are unable to pay back the exorbitant interests ranging around 20%, they get exploited and often also physically assaulted and beaten. Sometimes workers are also forced to flee the city due to their inability to pay back loans. There is also a labour market (*Mandi*) that is set up in the city everyday where the factory owners come to collect workers according to the kind of labour required. Workers who are otherwise paid ₹200/- ask for ₹300/- and the owners give them the job. In the labour markets everyday around a thousand workers

gather, but by the end of the day only around fifty of them are able to find work. The rest have to go back home. This labour market is set up near the highways and there are no safety provisions for the labourers who are gathered there. They assemble there around five in the morning. There have been instances reported where trucks have driven over and killed the workers waiting at the labour market. In such instances it has been difficult to lodge police complaints and only minimal compensation, if any, is provided to the families. The workers also expressed their aspirations to work with a non-bangle related profession. The workers also expressed other grievances such as the amount of work demanded in factories being disproportionate to the pay that they are given. When asked about how they deal with the exploitation and injustice faced by them, a worker responded by saying, "dua karte rehte hai" (we keep praying). Most of them have lost faith in the government bodies to work for their welfare and improving their conditions.

Job dissatisfaction and lack of other employment opportunities

When Samir was asked, *Aapko yaha kaam karna pasand hai?* (Do you like working here?) he startles, thinks, and smiles lightly. "*Kaam*?" (Work?) There is no other source of income in Firozabad, he says, only glasswork. There was no other opportunity for him, when he started out- he did what he got- *majboori* (helplessness) did not give him many other options, hence glass work is what he believes saved him.

A large number of workers in the factories similarly stated that they are dissatisfied with their work, and cited their "majboori" – helplessness – as the main reason for continuing. The primary motivation for seeking employment is economic hardship. The fiscal void is most often created by the absence of an earning male member. The lack of regular employment and the meagre daily wage results in dissatisfaction. Some of the workers, especially the men, aspired to be doctors and engineers. However, as mentioned before, the inability to afford further education led them to seek work in the bangle industry from an early age. They were remorseful, aware of the fact that these other professions would have earned them more money and respect, two aspects that factory workers lack. One worker, commenting on worker dissatisfaction, noted that nobody in Firozabad is happy, neither the employed nor the unemployed. According to him, the only ones benefiting were the owners, who could capitalise on their work by exploiting the workers. In general, most workers have accepted their fate as pawns on a chessboard.

It is important to note that there have been attempts to set up other factories in Firozabad and provide more employment opportunities to the workers. One such instance was when a factory for producing chips was being proposed to be set up in Firozabad. However, Mulayam Singh Yadav, the then Chief Minister of Uttar Pradesh, did not approve of this proposal. This decision was taken as a new factory meant that labour would be shifted from the bangle factories to other factories, which would decrease the supply of bangle workers and subsequently increase their wages. Additionally, due to this shift in labour, the prices of bangles would also increase in the market. Therefore, the bangle factory owners were not in favour of this decision and were able to influence government ministers to air on their side. Hence, the only opportunity in Firozabad to be employed still remains solely in the glass bangle factory, as larger forces have made sure that that is the case.

Nevertheless, there were a few workers that claimed that despite the lack of job opportunities, they were satisfied with their work in the glass bangle industry. A worker, who was involved in tasks related to the furnace, mentioned that he enjoyed listening to the music playing in the factory. Similarly, godown workers also implied being satisfied with their work. However, the veracity of these claims can be questioned as these responses were heavily influenced by the presence of owners in the vicinity during the interview.

In general, workers who worked in godowns and workshops, rather than factories, reported greater satisfaction than those employed in factories. Nevertheless, a cautious interpretation of this trend would be that the ones not working in industrial units believe that their working conditions are better compared to the harsh factory conditions. Perhaps, if the former group of workers were to evaluate their jobs with respect to different industries, they might be as (dis)satisfied as the workers employed in factories.

Falling Demand

Apart from the apparent dissatisfaction among workers, other threats loom in the horizon for the workers of the glass bangle industry of Firozabad. For example, the question of the falling demand of bangles arises, which may pose a threat to the industry and the workers. Owners, and sellers – unanimously agree- that the demand for glass bangles has decreased. However, the workers we interviewed offered mixed answers: only one of them outrightly stated that the

demand had lessened. The falling demand in bangles can be attributed to a few reasons. Firstly, the industry in Firozabad is in competition with other bangle industries situated all across the country. The brass bangles produced in Hyderabad, the metal ones from Jaipur, and the plastic bangles produced in Ahmedabad can be listed as the main competitors. Moreover, Delhi, Pune, and Mumbai have emerged as hubs of bangles. The glass bangles of Firozabad also have to compete with the shinier bangles produced in China. Typically, these bangles are preferred as they have a longer shelf life, and are of better quality. Interestingly, brass bangles are exported to Firozabad, thereby suggesting that even the residents of the city are considering alternatives.

Secondly, the other glass products produced in the Firozabad cluster threaten the glass bangle industry. Much to the chagrin of factory owners, the State Government is more or less unwillingly to devote funds to glass bangle manufacturing units. Moreover, the unemployment rate in the city is at an all-time high – even though there is a potential slice of the labour force that can be employed, the decreasing demand is making owners reluctant to recruit.

A commonly stated reason for the decline in the popularity of glass bangles is the shifting landscape of 'culture'. According to the owners, the workers, and the sellers that we interviewed, women living in urban areas tend to not wear bangles as much as their rural counterparts do. The migration of women from the domestic sphere to the workforce is partly the reason – wearing glass bangles while working could be a hindrance. Although glass bangles still adorn the wrists of women as *suhaag ki nishaani* (marker of bridehood) in cities and in neighbouring villages, they are no longer required to wear the full set. Instead, as a substitute for glass bangles, working women tend to wear bracelets and *kadas*.

Unlike in the previous decades, women in 'modern' cities wear bangles only for auspicious occasions and festivals. A general trend is that the demand for bangles is the highest during Diwali, Chhath Puja, Karva Chauth, Teej, Rakshabandhan, and other festive occasions. As cultural artefacts, bangles play a pivotal role in weddings—the newly-wed bride goes to the groom's house for the first time wearing a new set of bangles. In Maharashtra and Karnataka, there is a steady demand for green bangles, as the colour is associated with matrimony in these states. Conversely, in Punjab and surrounding regions, red-coloured bangles are preferred.

The trade patterns also depict the low demand for bangles. Of the six interviewees who discussed trade, only two did not say that the trade of glass bangles was restricted to parts of India, thus implying that glass bangles are not exported to other countries. As per the owner of a godown, Maharashtra and Karnataka are the biggest buyers of glass bangles. Among those who do export bangles, popular destinations were Thailand, Egypt, and Afghanistan. However, export is only possible when there is a stable demand. Moreover, to be able to export bangles elsewhere, the production in the state needs to increase.

As stated by one of the respondents, although there is no demand for bangles, bangles continue to be produced. This predictably creates an accumulation of bangles which in turn affects the entire channel or work. Some of the bangles manufactured in factories tend to be of inferior quality, but, instead of recycling them, they are sold at cheaper prices. The decreasing quality of bangles reflects the faith of the consumers in the industry.

In order to increase the demand, the pattern of decorating the bangles has changed. The previously preferred way of decorating the bangles was to polish it with gold. However, these bangles are being replaced with studded bangles, bangles with *zari* (gold dust polish), and other heavily decorated variants. Nevertheless, alternative forms of decoration do not seem to increase the demand for the locally produced bangles. Hence, it is evident that the falling demand of bangles poses a major threat to the industry and its workers that depend on it for their livelihood.

Figure 5.1

A man assembling the bangles that are the most in demand: green and red



Exploitation

Another major concern affecting the industry is the never-ending exploitation of workers. Workers are exploited in many ways, one of which takes place when factory owners cut costs and hence the worker's wages. One instance mentioned by a worker is that factory owners show the government that seventy to eighty bangle sets are made per day, although nine-hundred are made, in order to reduce the taxes that they have to pay. Another way of doing so was to employ less workers in labour-intensive tasks – for example, if a certain stage requires five workers, only four are employed. Moreover, as mentioned before, interviews revealed that the 8 hour work day was recently increased to a 10 hour day, while wages for the same remain the same. The government further aids in this exploitation by not defending the employees and instead fulfilling demands of the owners.

In addition to this the issue of child labour is in particular is a major concern. Samir himself started working at a young age. When asked about the same, he wondered out loud, Did he start working at 12? Was it now? 13?, he does not remember. He does remember, however, that he was the first in his family to delve into the work. He began working at Patel glass, where he worked with *thandi batti* (furnace-related work) and *galai* (melting), a job many young, and indeed underage individuals undertake once they enter the profession. He remembers how it was a skill that was passed on to him by his fellow workers-not professionally taught (training), not a family tradition either- perhaps a tradition, one of *majboori* (helplessness). Over the years, he has worked many jobs and now acts as a junior supervisor in the factory. He teaches what he learned so far, so as to initiate newer workers.

There is no doubt that he is mindful of his words, lest he endangers his own position. However, he does let in slip hints of misery, of children who are chained by their predicament as males forced to grow up early due to their gender roles. New workers, he suggests, do not follow any age paradigm- some are 50, while some mirror his past, young children forced into economic slavery by trying times. He says that while underage children are not allowed in factories, hunger seldom honours law. Additionally, the government also does not enforce any substantial policies for the welfare of the children which would prevent them from becoming victims of child labour.

Moreover, young girls are employed in the informal sector of the industry for activities such as decoration of gold polishing, obscuring their narratives altogether.

Similar to Samir's account, workers' responses revealed that child labour is still prevalent in the glass bangle industry. In spite of the enactment of act prohibiting child labour, these measures have not been implemented in the factories. Many children have to work because their families are in dire need of money. One of the respondents stated that children aged ten to fifteen work in the factory. In the same factory, another person denied this fact which could imply that supervisors and managers are eager to conceal this piece of information as it has legal ramifications.

Our interviews with owners and managers also shed some light on child labour. The attitudes toward this topic varied drastically. There was a godown where we noticed that children were working but when we entered, they sent the children away. On the other hand, in one shop, the manager openly admitted that children work there, they decorate bangles. There were factories where they discussed how no children work there but many of the workers employed have been working with bangles since their childhood. Another talked about how earlier young children would work but now due to the law, they start working after turning eighteen. One example of a task that is given to them is to sort out the cracked bangles from the good bangles. The reason that child labour is prevalent is because many families live in abject poverty and cannot afford education for their children. It also benefits the family when more people can earn income to support the household. Factory owners and managers are aware of this and take advantage of the situation by entertaining child labour. This benefits them because they pay less money to children. Additionally, this is one more method used by which they save up on costs.

Workers are exploited in other manners as well. Samir grudgingly recounts an incident that took place nearly five years ago, where a vehicle full of seven labourers was run over by a truck, resulting in a few injuries and even casualties, one of them being Mariam's brother. This incident took place at the eve of elections during the governance of Mulayam Singh of the Samajwadi Party. Due to the ulterior motive of benefiting from the elections and garnering votes, the political party provided a monetary compensation of five lakhs to the affected families. Samir claims that such compensation had only been awarded due to the elections. There were other

political leaders who issued similar compensations for the family members. However, since the factory owners did not have much to gain, unlike the political leaders, they did not compensate the workers or their families in any manner. Any incident that takes place outside the factory settings allows for the owners to take no responsibility for the workers, thereby, escaping the onus to compensate the workers. Therefore, it is evident that workers are treated as the lowest of the low, with no authority stepping in to take responsibility when lives are lost.

The workers of the glass bangle factory are facing many threats as enumerated above. Apart from lack of employment opportunities that is a major source of dissatisfaction, the falling demand for bangles and constant exploitation of workers, continues to adversely impact their lives and make their futures uncertain. Their situation is also worsened by the fact that the workers have no support from owners, government authorities, trade unions or other support groups. Most workers have surrendered to their plight, and hence, their future seems quite pointedly dreary, as many workers would claim it is.

Upaye

Objective 2: To explore solutions that are being proposed to deal with current concerns of the industry.

In terms of solutions to the current situation, mechanization of the bangle making process was a conversation that came up many times during the interviews. Both Samir and Rafiq agree that mechanising the process of bangle-making will be beneficial to the workers. In all honesty, we did not expect this response - our vantage point led to the assumption that replacing workers with machinery would lead to unemployment. Very few workers answered this question-only four. Three of these workers revealed that they would in fact welcome technological upgradation as it could potentially reduce their workload. The remaining worker stated that it would be difficult for machines to do the work that they do, and that these specialised machines have never been developed. This worker also stated that for many years work has been happening in the same fashion with no technological advancement. Nonetheless, they are not hopeful because no specialised equipment has been created to perform tasks that require paying attention to finer details. Moreover, considering the fact that so far there has been no change in the process -

except replacing coal with liquefied petroleum gas that relatively lowered pollution - hoping for the same would be aiming too high.

The owners were rather reserved and offered varying responses. Some of them considered automation as a fiscal challenge, which would strain the owner's finances and lay off cheap labour. In order to prevent unemployment, these owners are firmly against automating their factories. To ensure the prevention of this, many of the owners firmly believed in not letting machines take over this industry not only to assure the workers earn their livelihood but also because they believed that machines would not be able to produce the fine work done by the hands of the workers. The remaining owners, a handful of them, were open to the possibility of introducing new machinery. Nonetheless, the present state of the economy has turned this one-time investment into a distant dream.

Aashayein

Objective 3: To study the aspirations of multiple stakeholder groups

While technology might seem like the golden answer to many of the workers' concerns, the likelihood of technological advancement in the glass bangle industry appears to be slim. Most workers have therefore accepted their fate and are instead hoping for a better future for the next generation. Mariam, like every mother we interviewed, dreams of a better life for her children. Upon being questioned about her aspirations, she immediately says, "hum unko chudiyon se door rakhna chahte hai" (We want to keep them away from bangles) In saying that she wants to keep her children far away from any bangle-related work, she is no different from the other mothers. Their husbands - and often they themselves - bear testament to the gruelling days spent in the factories.

The sole motivator for workers who have children is to help them escape this vicious cycle. This collective hope, shared by the workers, compels them to work harder in order to afford quality education for their children. Samir's family has faith, but their hope is tainted by dejection - neither of them are able to foresee a significant change in their lives. Therefore, being able to educate their children is the only semblance of hope and gratitude that they expressed

On the other hand, Rafiq and Samir believe that change is inevitable, but do not know how appealing the future of the glass bangle industry will be. They insist that we circulate the interview on the Internet. If this information reaches a wider audience, they believe it will solve their problems. Rafiq leans in to express his sole request - "Gareeb pet bhar kar khaana kha sake" (That a poor man should at least be able to fill his stomach). This one statement highlights the plight of the workers: their needs and demands have regressed to the lowermost rung of Maslow's hierarchy of needs, the physiological need of satiating hunger. Their aspirations have been curbed to an extent where they cannot even imagine fulfilling the so-called higher needs like growth, recognition, respect or self-actualisation. Unless their primary needs are fulfilled, upward mobility, growth, and development are merely illusions.

Unlike Samir and his family, other workers seemed utterly hopeless with respect to the industry's future. During one group interview, they described the city's circumstances as dreadful, citing the low employment rate as a factor. Moreover, those who were employed lacked job security as the work was intermittent and inconsistent; this was especially true for the ones working in the informal sector. One worker explained that most of them earned "hand-to-mouth", and believed that "workers in Firozabad would therefore never be able to move up the social and economic ladder". The fact that the glass and glass bangle industry monopolises the options available to the residents compounds the problem. According to Samir, another way of breaking the cycle of poverty is to set up other factories in Firozabad to provide alternate employment opportunities.

During the same group interview, the workers mentioned that the circumstances will continue to deteriorate if the government does not intervene. In another interview, a worker stated that the government claims to have brought about positive changes but those do not mirror the reality of their lives. "There has been no development", he says - workers in Firozabad have to continue earning low wages for hazardous work. One worker chimed in stating that "earlier there was more satisfaction" among workers.

Just like Mariam desires, most owners and managers also want to keep their children away from the industry. However, unlike the former's rationale, the latter seemed to voice relatively 'superficial' concerns. According to them, the new generation are no longer attached to

the family business as their predecessors (parents) were. The children do not associate this line of business with family pride and honour, therefore choosing to distance themselves. Alternatively, the owners' efforts to keep their children away might also be a product of the grim future of the bangle industry as a whole or of their own factories. Some owners believe that their children's generation is no longer interested in respecting and following 'traditions', which was cited as a reason for discouraging their children joining the family business. Instead, they wanted their children to educate themselves and pursue respectable professions. Nonetheless, the focus is on migration as they believe that the educational institutes available to them in Firozabad (or in Uttar Pradesh) are not comparable to those elsewhere in the country.

It is therefore evident that most parties involved in glassmaking want to escape the clutches of the industry. They believe that this escape is the only option in order to secure their future. Education can be identified as the key factor that will contribute to socio-economic mobility and hence liberation from glassmaking. However, it is also clear that workers and owners do not operate under any disillusion, and would therefore like researchers such as us to be bearers and sharers of information on their plight. They believe that this information may be sufficient to mobilise groups to put pressure on authorities in order to bring about significant change in their lives. Therefore, all hope does not seem to be lost as workers unite to share their stories in a desperate attempt to gain freedom.

Chapter 6

Khayaal

Conclusion

"Chudiyan toh suhag ka prateek hai"

("Bangles are symbols of bridehood")

The main aim of this research study was to explore the various factors that influenced the lives of the workers of the glass bangle industry of Firozabad. The objective to study the challenges of workers in the industry provided varied insights, most of which did fall in line with the assumptions of this research established based upon the literature reviewed. In terms of the well-being of the workers, the workers' narrative substantiated what has been highlighted in research earlier, however, the owners' responses indicated discrepancies with those of the workers. The draconian conditions of the factories, such as intense heat and potential threat to the lives, result in a plethora of medical conditions, including, but not limited to, eyesight issues, respiratory issues such as Tuberculosis, which according to the workers is still common, and other injuries such as cuts and burns. Due to the inaccessibility of affordable healthcare services, most of the workers resort to enduring their health problems until they no longer can before approaching the doctors. The workers' responses also highlighted that not much improvement has taken place in the working conditions. There are no provisions for compensating the overtime work that most of the workers are subjected to.

Since the literature did not adequately address the economic consequences of the implementation of demonetisation and GST, our research provides an insight into how these policies impacted the workers. They had to bear the brunt of the changes, resulting in reduction of their wages or loss of wages altogether due to the factories being shut down for months. Additionally, there have been long-term consequences which still impact the workers as their wages did not increase to match the pace of the increasing burden of inflation. The common sentiment expressed by most workers was their dissatisfaction with their wages on account of them being disproportionate to the nature and difficulty of work. Another assumption pertaining to the replaceability of labour was also met through our research. Many workers who expressed their dissatisfaction with the working conditions and wages highlighted that they could not put forth their grievances as it would result in them losing their jobs due to the abundance of labour in Firozabad and the ease of replacing a worker with another. This, in turn, results in the stifling of the workers' voices, compelling them to endure the harsh conditions.

Moreover, the majority of the policies discussed in literature and advertised by the government bodies did not prove to manifest at grass-root levels. Thus, the workers claimed that

no such benefits or provisions were extended to them, or even when they did, they did little to rid them of their qualms. Another sphere where our findings contradicted literature was in terms of the unregistered or 'invisible' manufacturing units which are not reflected in the official documents. This suggests that certain labourers were not able to gain access to government schemes as they were not officially registered as daily wage labourers with the government.

In addition to this, a major plight of the workers is the lack of opportunities to attain social and economic mobility. Some of the factors for this predicament were recognised prior to the research, such as lack of accessibility to education and lower wages. However, other factors were also uncovered according to the workers' responses, such as, the government's relentless attempts to stifle any opportunity of alternative employment in Firozabad. Other social factors identified on field were the economic and geographic othering of certain communities of workers on account of their religious identities. This was observed in the form of difference in class and religious status rendering a divide between members belonging to these different groups. Another assumption at the onset of this research was that a dominant population of the workers were Hindu, however, based on the sample we interviewed, it was observed that there was a majority of Muslim workers in the factories. However, this observation warrants caution as this observation could be purely due to our specific sample which might not be entirely representative of the worker population in the industry. Despite the lower literacy rate and lack of access to education being identified as major contributors to the failure of attiing upward mobility, the interaction with the people of Firozabad also highlighted another structural issue. This pertains to the perception regarding education and the lackadaisical attitude exhibited by the school teachers for whom the last concern is that of imparting education to the children.

Another major component of our research findings consisted of an understanding of the gender and power dynamics that operate within the industry. An assumption made prior to research was that the formal sector was dominated by men and the informal being occupied by women. This assumption was met and supplemented with an understanding of how the work was gendered in terms of men being given more 'masculine' tasks within the factories and women being subjected to tasks comparable to their domestic responsibilities. Additionally, an analysis of the power dynamics operating in the industry revealed that for the majority of the workers,

their fate depends on their relations with the owners, highlighting the privilege they hold over the workers on account of their social standing. The power structures also revealed how the government machinery often works in tandem with the owners of the factories to ensure that there is no scope for the workers to address their demands and grievances.

Most importantly, our findings highlighted the aspirations of the various stakeholder groups, especially the workers, and their perspectives regarding the future of the industry. A common sentiment across the workers was that there are limited opportunities for them to grow. Additionally, there are certain threats which face the industry such as falling demand of glass bangles, mainly due to urbanization and modernization due to which a majority of the women are moving away from the tradition of wearing bangles. Moreover, Firozabad has remained in a stasis with little or no improvement in terms of the wages or working conditions. This can be best understood through the lack of technological advancements in the bangle-making process and absence of mechanization in most manufacturing units. However, contrary to our assumptions, the workers were overwhelmingly in favour of technological upgradation which would ease their workload and put less strain on them. On the other hand, the owners presented a stark opposition to the introduction of technology in the industry, by claiming that machines could not perform the intricate tasks that a worker does by hand. This justification at the behest of the owners warrants cautions since their reluctance for introducing technological upgradation also stems from the possible fiscal losses which would be incurred when expensive machinery replaces cheap labour. Another overarching aspiration of almost all workers we interviewed was their hopes of ensuring their children escape the vicious cycle of being entrapped within the clutches of this exploitative industry. This very aspiration drives them to break their backs and work relentlessly while enduring the harsh conditions in order to secure a better future for their children. However, the workers also painted a grim picture of their future where upward mobility is an unattainable desire, and the only hope they have for their future generations is for them to be able to fill their stomach. These aspirations highlight the need for the concerned authorities to provide a concrete resolution of their desires.

While evaluating the research project, it is important to consider the strengths of the research design. Firstly, a purely qualitative method which included semi-structured interviews

and observation was used to obtain data. The documentation of personal narratives allowed for an explorative investigation of the lives of the workers. More importantly however, it allowed us to compare and contrast responses and identify common themes in interviews, in order to dive deeper into our research and gain an insightful understanding of the same. Secondly, various stakeholder groups workers owners, sellers, consumers and health professionals were interviewed. These varying voices in our research allowed us to gain a holistic perspective on the lives of the workers. Furthemore, it allowed us to compare and contrast information across these groups and to verify the veracity of responses. Hence, for the aforementioned reasons, the research design does strengthen this research endeavour.

While this research project has been successful in providing insight into the lives of the workers of the glass bangle industry and the factors that influence them, there are a few limitations that need to be considered when evaluating this research. Firstly, the interviews failed to investigate caste and religious dynamics in the industry. Questions on the same could be perceived as sensitive issues that may make respondents unwilling to divulge information on the same. Hence, we were uncertain about adding these questions to the interviews. Moreover, most of the time, we felt it would be inappropriate to bring up these subjects and as a result of this, we solely relied on observation to gather information on the same. At times, respondents would openly discuss the same without prompting, however, the information on these topics is not sufficient to be able to make larger categorical claims. While this information would have provided another dimension to approach our research, the lack of it does not necessarily take away from our study, as it was arguably not a major component of our objectives.

Secondly, the sample sizes of certain stakeholder groups were too small to ensure reliability and external validity of the information obtained. In particular, the number of interviews conducted on sellers and consumers were not sufficient enough to ensure reliability of responses. Moreover, it is important to note that we were unable to interview government officials and/or representatives as they were unavailable during our research. While we have used government reports and official documents to support the claims that we have made about state intervention and policies currently in place, the fact that interviews with these stakeholders would have provided a holistic understanding, cannot be dismissed.

Thirdly, one of the major setbacks of our research project was the amount of time available to interview workers. The only time that we could approach them was while they worked in their respective factories or go-downs. Other than the fact that the industry workers are daily-wage earners that earn based on productivity, it was also difficult for them to step away from the manufacturing process and devote time to us researchers. As a result of this, we could not interview many workers, or the interviews that we took were short and had sparse responses. Furthermore, it did not allow us to seek clarifications or ask for more elaborate responses. While this was a limitation to the study, it is also important to note that we did interview around 40-50 workers, and this number alone should compensate for the lack of elaborate responses, since we were still able to obtain sufficient information to make substantial claims.

Fourthly, our research was constantly hindered by efforts of factory owners to ensure that we do not communicate with the workers. Apart from their concern that any interaction that we had with them would interfere with the manufacturing process, they also feared that the workers would provide false information or worse, bring to light issues that are very concerning. At one point an owner even stated that you should not talk to workers as "woh gandi baat karenge" (they will speak ill). As a result of this, we could not hold interviews with workers at various moments. At times, owners would also insist on being in the vicinity when we interviewed workers. This intimidated our respondents and hence it is quite possible that their answers were influenced by the presence of the owner. This would imply that their responses were socially desirable and hence not accurate or representative of the truth.

Finally, another limitation that we faced was the constant suspicion that was directed towards us due to the perception of us as outsiders and hence potential threats. Since Firozabad is a small city and we often circulated the same areas, a lot of the city dwellers were aware of our presence. However, our motive was unknown to them. Some inhabitants were extremely hospitable and forthcoming in their efforts to provide us with assistance, without us asking for the same. However, many were still unsure about our intentions. As a result of this, respondents were hesitant to divulge information and kept on reiterating that the maintenance of anonymity was paramount for the sake of their protection, despite the fact that we constantly reassured them that we would maintain confidentiality. This was also worsened by the fact that the time around

which research was conducted on the field was after the implementation of the CAA/NRC. There was a lot of social upheaval in the area due to political turmoil. Hence, our motives as researchers were viewed with even more suspicion. We even had a couple of encounters with the police that was uncalled for and unnecessary. All these factors did act as a hindrance to our research and also limited our scope. Nevertheless, we were still able to achieve our objectives.

Our primary objective with this research project was to simply explore and effectively report the lives of the workers of the glass bangle factory in Firozabad. Apart from our aim being far from making an effort to uplift the lives of the workers, we are also grossly incapable of the same. However, this comprehensive research report could possibly aid on that front. It highlights in great detail the sheer exploitation of the industry workers and how close to no measures are being taken to ensure their protection. Moreover, we have clearly highlighted the pitfalls in government intervention in this matter. We hope that this provides direction for future research that may focus on planning and proposing effective strategies to prevent workers from facing the challenges that they currently face. Hence, our ultimate goal is for this research report to be able to encourage better policy making and effective state intervention which is clearly the need of the hour. We write this report while the world reels with the impact of the pandemic COVID-19. Hence, we cannot ignore the manner in which daily wage workers much like the ones we have focused on in this report, are being exploited, mistreated and dismissed by the nation. These challenges are similar to the ones outlined in this report, in the sense that they both emerge from structural inequality in society. Therefore, we would like this report to contribute to the already existing academic literature on this issue, in the hopes that these unheard voices are finally heard.

REFERENCES

- Adorno, T. W., & Horkheimer, M. (1947/2002). In E. Jephcott (Trans.) Dialectic of Enlightenment. Stanford: Stanford, University Press.
- Agra Bureau. (2020, Feb 23). We have changed the environment of education: Dinesh Sharma.

 Amar Ujala,

 https://www.amarujala.com/uttar-pradesh/agra/dupty-cm-education-firozabad-agra-news-agr430939875.
- All India Glass Manufacturers' Federation. (2011). Kanch: The Quarterly Journal of the All India Glass Manufacturers' Federation, 4(3), 1-66. http://www.aigmf.com/Kanch-Apr-Jun-2011.pdf.
- Amin, B. J., Patwardhan, D. K., & Roy, H. N. (1953). Liquid gold. Transactions of the Indian Ceramic Society, 12(1), 55-70. http://dx.doi.org/10.1080/0371750X.1953.10877605.
- Arshi, A. (2008). Socio-economic conditions of Muslim artisans in Uttar Pradesh (Masters thesis, Aligarh Muslim University, India). Retrieved from http://ir.amu.ac.in/6663/.
- Bano, N. (2017). Assessment of indoor environmental impacts on human health (Case study: Glass city, Firozabad (India)). Pollution, 3(2), 175-183. doi: 10.7508/pj.2017.02.001.
- Basner, K. S. (2010). A glittering arsenal: Bangles, duty and transgression in North India (Masters thesis, Graduate School of Cornell University, United States of America). Retrieved from https://ecommons.cornell.edu/handle/1813/17635.
- Burra, N. (1986a). Glass factories of Firozabad I: Plight of workers. Economic and Political Weekly, 21(46), 1983-1985. https://www.jstor.org/stable/4376323.
- Burra, N. (1986b). Glass factories of Firozabad II: Plight of child workers. Economic and Political Weekly, 21(47), 2033-2036. https://www.jstor.org/stable/4376352.
- Chandra, A. (2009). Child labor a study from anthropological perspective with special reference to glass industry, Firozabad. The Anthropologist, 11(1), 15-20. doi: 10.1080/09720073.2009.11891073.
- Chauhan, A. (2020, Mar 2). Firozabad: School teacher found dancing on Sapna Chaudhary's song in classroom. The Times of India.

- https://timesofindia.indiatimes.com/city/agra/firozabad-school-teacher-found-dancing-on-sapna-chaudharys-song-in-classroom/articleshow/74442903.cms
- Chari, K. R. (2013). Entrepreneurship: Innovation through root cause analysis for process problem solving a case study. Ushus Journal of Business Management, 12(2), 1-15. doi: 10.12725/ujbm.23.1.
- Dev, A., & Sharma, M. D. (2017, Feb 1). Demonetisation impact: 65% of Firozabad's glass industry still shut, wages fall. The Times of India. https://m.timesofindia.com/city/agra/demonetisation-impact-65-of-firozabads-glass-indus try-still-shut-wages-fall/amp_articleshow/56898477.cms.
- Directorate of Census Operations. (2011). District census handbook: Firozabad. Uttar Pradesh, India: Directorate of Census Operations.
- Google. (n.d.). [Google Map of Firozabad]. Retrieved March 31, 2020. from https://www.google.com/maps/d/u/0/viewer?hl=en&mid=1Rrz4iDR_8cp3T9W7OnSuK-BXRM0zFaQM&ll=27.150889615927387%2C78.39705330372578&z=14
- Government of Uttar Pradesh. (n.d.). National health protection scheme. https://firozabad.nic.in/national-health-protection-scheme/.
- Govind, V. (1970). Some aspects of glass manufacturing in ancient India. IJHS, 2, 281-308.
- Gutting, G. (2005). Foucault: A very short introduction. United States: Oxford University Press.
- Hochschild, A. R., & Machung, A. (1989/2012). The second shift. New York: Penguin Books.
- Imran, S. M. (2009). Child labour and the new legislation: A study of home based bangle industries of Firozabad U.P. (Doctoral thesis, Aligarh Muslim University, India).
 Retrieved from http://ir.amu.ac.in/8373/.
- Jagran. (2019, Apr 20). Entrepreneurs eye talks around negotiation. Jagran, https://www.jagran.com/uttar-pradesh/firozabad-12284842.html.
- Kanungo, A. K. (2001). Glass beads in India archaeology: An ethnoarchaeological approach. Bulletin of the Deccan College Post-Graduate and Research Institute, 60/61, 337-353. https://www.jstor.org/stable/42936623.

- Khan, A. U. (2019, Aug 13). Why minimum wage won't fix India's woes. LiveMint. https://www.livemint.com/news/india/why-minimum-wage-won-t-fix-india-s-woes-1565 619815429.html.
- Khairoowala, M. (2010). Child labour: A socio legal study with special reference to Aligarh and Firozabad (Doctoral thesis, Aligarh Muslim University, India). Retrieved from http://ir.amu.ac.in/8366/.
- Live Hindustan Team. (2019a, Jul 29). Workers' organization will oppose central government's anti-worker policies. LiveHindustan.com, https://www.livehindustan.com/uttar-pradesh/firozabad/story-workers-organization-will-oppose-central-government-s-anti-worker-policies-2656919.html.
- Live Hindustan Team. (2019b, Dec 20). CAA protest: One shot dead in Firozabad (Uttar Pradesh). LiveHindustan.com,

 https://www.livehindustan.com/uttar-pradesh/story-in-uttar-pradesh-one-shot-dead-in-firo zabad-7-injured-in-firing-in-kanpur-during-anti-caa-and-nrc-protest-2912342.html.
- Maheshwari, D. (2019, Apr 25). In Uttar Pradesh, demonetization & GST hurting BJP in the polls. National Herald.

 https://www.nationalheraldindia.com/india/in-uttar-pradesh-notebandi-and-gst-hurt-bjp-in-the-polls.
- Marx, K. (1867/1959). Das kapital: A critique of political economy. Chicago: H. Regenery.
- Ministry of Labour and Employment. (2014). Action taken by the government on the recommendations/observations contained in the thirty-second report of the Standing Committee on Labour on the 'welfare of glass and bangle workers of Firozabad a case study'. New Delhi, India: Ministry of Labour and Employment.
- Nasiruddin. (2012). Assessing the impact of local socio-cultural milieu on social upgrading and challenges to inclusive development of glassware cluster Firozabad (Masters thesis, Erasmus University, Netherlands). Retrieved from https://thesis.eur.nl/pub/13250/.
- Roy, D. (1998). Rights of child labour: Ethics, production and nation-state. Economic and Political Weekly, 33(5), 25-29. https://www.jstor.org/stable/4406350.

- Sah, D., Paul, S., & Singh, A. K. (2004). Environmental and economic reforms in the scale glass sector of Firozabad through energy conservation. Transactions of the Indian Ceramic Society, 63(4), 231-233. doi: 10.1080/037150X.2004.11012169.
- Sankalia, H. D. (1947). The antiquity of glass bangles in India. Bulletin of the Deccan College Post-Graduate and Research Institute, 8, 252-259. https://www.jstor.org/stable/42929594.
- Shafi, S. (2015, Feb 13). Indian town where glass-making is a household craft. Al Jazeera. Retrieved from https://www.aljazeera.com/indepth/inpictures/2015/02/indian-town-glass-making-househ old-craft-150209200924438.html.
- Sharma, K. D. (1981). Flat glass industry its development and growth in India. Transactions of the Indian Ceramic Society, 40(4), 125-130. https://dx.doi.org/10.1080/0371750X.1981.10822533.
- Soni, P. (2007). Global solutions meeting local needs: Climate change policy instruments for diffusion of cleaner technologies in the small-scale industries in India (Doctoral thesis, Wageningen University and Research Centre, Netherlands).
 https://www.nwo.nl/en/research-and-results/research-projects/i/98/18698.html.
- TERI. (2015). Cluster profile report Firozabad glass industries (Project Report No. 2014IE15). New Delhi, India: The Energy and Resources Institute.
- Tripathi, A., & Shah, P. (2009, Apr 8). Do union leaders have a better chance this time? Times of India,

 https://timesofindia.indiatimes.com/city/lucknow/Do-union-leaders-have-a-better-chance-this-time/articleshow/4371762.cms.
- Wage Indicator Foundation. (n.d.). Glass industry (except the glass bangle making industry) and the miniature bulbs industry.

 https://paycheck.in/salary/minimumwages/21888-uttar-pradesh/21973-glass-industry-except-the-glass-bangle-making.
- Wage Indicator Foundation. (n.d.). Work hours and overtime pay in India. https://paycheck.in/labour-law-india/work-and-wages/work-hours-in-india.

Weiner, M. (1991). The child and the state in India: Child labor and education policy in comparative perspective. Princeton, NJ: Princeton University Press.

APPENDIX

A. CONSENT FORM

Signature of researcher

FLAME University Discover India Program

Chudiyan: A study into the lives of Firozabad's glass bangle industry workers

Consent to take part in research	
 I understand that even if I agree to part to answer any question without any core. I understand that I can withdraw permit the material will be deleted. I have had the purpose and nature of opportunity to ask questions about the standard that participation involves documentation. I understand that I will not benefit directed agree to my interview being audio-rected. I understand that all the information I provided to any external organisation. I understand that in any report on the released to any external organisation. I understand that information from documentary 	ission to use data from my interview, in which case of the study explained to me and I have had the study. Is a verbal questionnaire, audio-visual recording and early from participating in this research.
Signature of participant Dat	re

Date

B. SURVEYS

Note: The following surveys were also translated into Hindi

B.1.Worker

- 1 Name
- 2. Age
- 3. Religion
- 4 Education:

WORKING CONDITIONS

- 5. How long have you been working in the industry?
- 6. Have you worked in any other factory/godown/ workshop before this?
- 7. If yes, why did you leave or shift?
- 8. What makes you work in the bangle industry?
- 9. Are you part of any trade union?
- 10. What work do you do?
- 11. How many hours do you work in a day?
- 12. How many days a week do you work for?
- 13. What is your income?
- 14. Piece rate or monthly payment basis?
- 15. Do you get paid on time?
- 16. Do your wages get cut sometimes? If yes, why?
- 17. Do you get any leave from work? If yes, what is the process or criterion for leave?
- 18. Is the leave paid or unpaid leave?
- 19. Do you think the pay is sufficient?
- 20. What do you think about your job, do you like it?
- 21. How many family members do you have?
- 22. Do others in your family work?
- 23. If yes, what work do they do?
- 24. How many people are dependent on your income?
- 25. Average income in your household?
- 26. Do your children work? If yes, what work do they do?

HEALTH

27. Do you suffer from any health conditions due to working in the factory/godown/workshop?

- 28. If yes, please specify.
- 29. Does your workplace conduct health checkups or medical camps?
- 30. If yes, who is it organised by? (Private, Public, NGO, Government)
- 31. Do they provide basic first-aid in the workplace?
- 32. Which hospital/clinic do you go to (government/private)? How far is it from the workplace/ your house?
- 33. How much do you spend on health care on a monthly basis?
- 34. In case of a medical emergency, do you get medical leave or do the owners pay for the medical expenses?
- 35. What safety equipment is provided by the workplace?
- 36. Is there any safety training provided?

BANGLES

- 37. What do you think is the significance of bangles today?
- 38. Which colour bangles are produced the most? Which type/colour of bangles take the most amount of time to be made?

B. 2. Owner/ Manager

- 1 Name
- 2. Age
- 3 Education

ECONOMIC ASPECTS

- 4. How long have you owned this factory/godown/workshop?
- 5. How did you acquire this factory/godown/workshop?
- 6. Do you own any other factory/godown/workshop?
- 7. Are your family members involved in this factory/godown/workshop?
- 8. Would you want your children to work in the factory/godown/workshop?
- 9. Do you produce other bangle products except glass bangles?
- 10. How many employees do you have?
- 11. On what basis was the location of the workplace decided?
- 12. Which market(s) do you cater to? (Domestic, Foreign)
- 13. How is labour organised in the workplace?
- 14. Has GST had an impact on your business?
- 15. Has demonetisation affected your business?
- 16. Has the demand for bangles decreased?

17. If yes, why do you think this has happened?

BANGLES

- 18. What do you think is the significance of bangles today?
- 19. What are the different types of bangles produced?
- 20. Which colour bangles are produced the most? Which type/colour of bangles take the most amount of time to be made?
- 21. Does a specific colour of bangle reduce/increase the labour of the workers?
- 22. What are the seasonal demands of bangles?
- 23. Do you think the glass bangles will be the centre of the glass industry or will the focus shift to other glass products? (Future of the business)

WORKERS (employers)

- 24. On what basis do you hire workers?
- 25. Do you hire both male and female workers?
- 26. Do you provide workers with leave? If yes, on what basis (medical/festivals); What is the process or criterion for leave?
- 27. (If leave is provided) Is the leave paid or unpaid?
- 28. What is the impact of the factory working conditions/nature of work on workers' health?
- 29. If your workers are unwell, do you provide them with medical support?(example, provide transport to the hospital)
- 30. How do you think your workers are treated?
- 31. How much do you pay the workers?
- 32. What is the minimum number of hours the worker has to work in a day?
- 33. Do you cut the worker's wages? If yes, for what reason?

B.3. Bangle Seller

- 1. Where do you get your bangles from?
- 2. How many years have you been selling bangles?
- 3. What kind of bangles sell the most?
- 4. What colour bangles get sold the most?
- 5. What time of the year does the demand for bangles increase?
- 6. Do any of your family members work in the bangle industry?
- 7. What age group do you cater to for bangles? Which age group buys the most bangles?

- 8. Are your customers mainly from here or tourists?
- 9. What do you think is the significance of Firozabad glass bangles?
- 10. Is the demand for glass bangles the same or is it shifting to bangles of other types of materials?

B.4. Doctor

- 1. What are the usual complaints?
- 2. What are the treatments for those complaints?
- 3. How many come with insurance or some benefit?
- 4. What do you think causes these ailments?
- 5. What can they do to protect themselves?
- 6. Any stories?

Glossary

Baniyas a Hindu (traders) caste

Chhatai sorting of bangles

Galai melting

Ghunghat veil

Gunda-raj mafia

Jankalyaan Vibhaag public welfare department

Jhalai straightening of bangles

Kancher term used for Hindu workers (from the Hindi word 'kaanch', meaning

glass)

Katai designing by grinders

Mandi labour market

Mashwaras discussions

Murai designing by the use of forceps

Pakai bhatti pot and tank furnaces

Raddi waste
Reh silica

Sadai/judai joining two ends of a bangle

Śankh valaya chank bangle

Shishgars glassmakers

Suhag wifehood

Suhag ka prateek markers of bridehood/wifehood

Thandi Batti furnace related work (normally assigned to amateur workers due to less

heat)

Thekedars contractors

Toras 312 bangles rolled in strings

Zari gold dust polish