



**Assessing the Impact of Local Socio-Cultural  
Milieu on Social Upgrading and Challenges to  
Inclusive Development of Glassware cluster  
Firozabad**

A Research Paper presented by:

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India

in partial fulfilment of the requirements for obtaining the degree of  
MASTERS OF ARTS IN DEVELOPMENT STUDIES

Specialization:

**Local Development Strategies**

LDS

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December 2012

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## List of Acronyms

UNIDO	United Nations Industrial Development Organization
GVC	Global Value Chains
LED	Local Economic Development
MSME	Medium, Small and Micro Enterprises
TTZ	Taj Trapezium Zone
GDP	Gross National Product
NGO	Non-Government Organization
ALC	Assistant Labour Commissioner
DIC	District Industry Center
GMDIC	General Manager District Industry Center
CDGI	Center for Development of Glass Industries
ILO	International Labour Organization
TNC	Trans National Corporation
CSR	Corporate Social Responsibility

## **Abstract**

This research paper explores the impact of the local socio-cultural milieu on the social upgrading of the glassware cluster Firozabad. The Firozabad Glassware Cluster known as the 'Glass City of India' has been manufacturing glass bangles for centuries, but around 3 to 4 decades ago it started diversifying by producing glass products for the international market. The inclusion of the Firozabad glassware cluster in the global value chain was encouraged by the United Nations Industrial Development Organization with support from the national and regional governments of India between July 1992 and 2000 through economic upgrading processes to boost the competitiveness of glassware in the global market. Despite the effort of the economic upgrade, this did not significantly result in an improved competitive position of the glass cluster in global market. The evaluation carried out by UNIDO in 2000 revealed the immediate need of social upgrading but casted doubt on the socio-cultural challenges in achieving social upgrading. Yet, despite this, not much has been done to attempt to assess the impact of the local socio-cultural milieu on social upgrading.

This study thus traces the impact of the local socio-cultural milieu and how it hinders social upgrading. It is important to consider the local socio-cultural milieu embedded into the day-to-day life of Firozabad and how it interacts with the glassware production processes to assess how it impacts social and economic upgrading.

The conclusion is reached that the glassware cluster has been facing serious socio-cultural challenges because the owners of factories are divided into groups based on religion, caste and community and other socio-cultural factors. The cooperation and sharing of knowledge, resources, technology, employment and developing partnerships with businesses are based on socio-cultural factors which results in loss of opportunities and the socio-economic exclusion of certain communities. Moreover, the unfair practices at workplace are making the labour condition worse, insecure and highly unstable. In turn, such practices cause the labour force to have little faith in the factory owners investing in social upgrading which create unhealthy inter-firm relationships and affect the need for social upgrading and therefore the competitive position of glassware in the global market.

## **Relevance to Development Studies**

This research paper traces the impact of local social –cultural milieu on social upgrading of glassware cluster of Firozabad. The relevance of this study lies on importance carry academic or social research in the field of economics, clustering social upgrading or economic upgrading aspect.

This relevance also lies in design social and economic development policy for local development and development of strategy for social and economic development of firms, factories, cluster as a whole and local socio-cultural and economic development.

## **Keywords**

Global Value Chain/Local economy/social upgrading/economic upgrading/local cultural milieu/cluster/inter & intra-firm relationship etc.

# Chapter 1

## Introduction

This research paper attempts to explore the socio-cultural constraints and analyses its direct and indirect impact on the social upgrading of the Firozabad Glassware cluster. The attempt is made to understand the existing socio-cultural scenario and its dynamics which shapes and reshapes the local socio-cultural milieu of the Firozabad Glassware Cluster. It also aims to understand how it affects the inter-firm and intra-firm relationships following the development of the base for a competitive position in local and global value chain. Between the years 1999-2000, the UNIDO encouraged the economic upgrading of the Firozabad Glassware cluster in order to boost its competitiveness in the global market. Later, the evaluation by UNIDO recommended that there was a need to focus on social upgrading in order to fully realize economic upgrading and to stimulate competitiveness in global market. However, this evaluation did not focus on the socio-cultural dimension but it did question the socio-cultural practices which might constrain the social and economic upgrading of the Firozabad Glassware cluster which is a threat to its competitive position on the global market (United Nations Industrial Development Organization 2000).

Thus, the core focus of this research paper was to pursue a scientific approach in order to investigate the socio-cultural milieu and how it hinders achieving social upgrading directly and economic upgrading indirectly. The further section briefly describes the situation of the Glassware cluster and its underlying scenario in the context of the main underlying problem which this research attempts to investigate.

### 1.1 Background

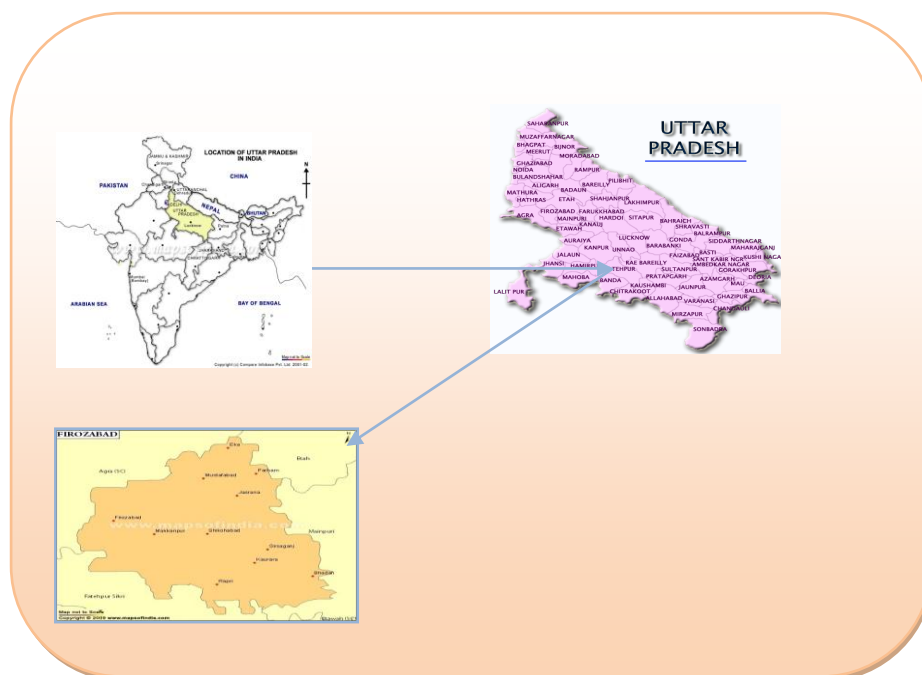
The Firozabad Glassware Cluster has naturally emerged over centuries and has been able to make its mark in the domestic and global market. This cluster, historically a cottage industry, is now a Micro, Small and Medium Enterprise (MSMEs) and important to the local economy which specializes in bangle making, but also produces other glassware products.

Geographically, Firozabad is a district (town) in the province of Uttar Pradesh located 250 km from northwest from Delhi and 45 km from the world-famous tourist destination Agra in the north of central India.

The area of Firozabad is about 0.8% of the total area of Uttar Pradesh and 1.1% of the population of Uttar Pradesh live here. More than half of the workforce is engaged in glassware manufacturing activities('History of Firozabad'2011).



**Map 1.1**  
**Map of Firozabad**



Source: Google images<sup>1</sup>

This industry is trapped in the 'Taj Trapezium Zone'<sup>2</sup> and is facing challenges to reduce hazardous pollution because of the hazardous production processes and its polluted emissions causing an adverse effect on the world heritage site Taj Mahal. The hazardous processes cause severe health problems and reduce the length of the working life. The practices at the workplace and social-cultural challenges are a barrier for household-based companies and micro-entrepreneurs to grow in domestic and global market. This research focuses on investigating the socio-cultural challenges and practices at the workplace that affect the social and economic upgrading of the glassware cluster

The Firozabad glassware cluster is a local economy and falls under the Micro, Small and Medium Enterprises (MSME) sector. In terms of value, the MSMEs sector accounts for about 45% of the manufacturing output and 40% of the total exports of the country. Formal employment in this sector is estimated to be almost 60 million (595 Lakhs) in over 261 lakh enterprises throughout the country. It produces over 6000 products ranging from traditional to high-tech items by the MSMEs in India (MSME, 2011-12). The contribution by MSMEs to the Gross National Product (GDP) reached 8.72% in 2008-09, approximately a 68% share in manufacturing and rest in services by MSMEs in India.

<sup>1</sup> Self illustrated from different locations from <http://www.mapsofindia.com/>

<sup>2</sup> Taj Trapezium Zone (TTZ) is a defined area of 10,400 sq km around the Taj Mahal to protect the monument from pollution. The Supreme Court of India delivered a ruling on December 30, 1996 regarding industries covered under the TTZ, in response to a PIL seeking to protect the Taj Mahal from environmental pollution.

The contribution to the production of different products by the Micro, Small and Medium enterprises are 94.94%, 4.89 and 0.17%, which clearly indicates the significant role of Micro enterprises in the MSMEs sector in India (Ministry of Small Medium and Micro Enterprises 2012). The Firozabad Glassware cluster is considered among one of the important local economies in the MSME sector of India.

The single most important product from this cluster, which put the city on the map, is the glass bangle. Traditionally, Indian women wear bangles and the cluster caters to the demand of all kinds of bangles in the country and they are produced in different attractive designs and colours and marketed in India and overseas as well. The local workers have perfected the art of the production process which is passed on for generations over the past 100 years. The Glassware Industry of Firozabad contributes significantly to the local economy by providing livelihoods to over 0.5 million people (Indian Renewable Energy Efficiency Development Agency Limited 2005). Firozabad is a multi cultural society; people belong to different religions, castes/sub-castes and communities work together with glassware cluster. The following table depicts the social distribution of employment in the glassware industry:

**Table 1.1**  
**social distribution of employees in Glassware Firozabad**

Particulars	Glass Melting Units (A) %	Other Glass Units (B) %	Average % of (A+B)
SC/ST	9.60	20.81	15
Minority	47.26	23.48	35
Women	2.85	32.63	18
General	40.41	23.20	32

Source: MSME3

**Table 1.2**  
**social distribution of proprietorship of glassware factories**

Unit Types	No. of Units	No. of Entrepreneurs	SC/ST	Minority	Women	others
Melting	190	190	0	29	33	128
Design	39	39	5	10	9	15
Metalizing	50	50	0	4	13	33
Micro	8550	8550	1710	2052	1197	3592
Total	8829	8829	1715	2095	1252	3768

Source: MSME

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<sup>3</sup> Annual Report(2011-12): Ministry of Medium, Small and Micro Enterprises Govt. of India (Table 1.1&Table 1.2)

The exports of glassware from India has been growing at a rate of 17% CAGR over the period 2001-02 to 2006-07 from 139 million to 307 million. The products exported include primarily bottles, jars, fiber glass and glass bead works, which together account for more than half of the all glassware exports in 2006-07 (India Brand Equity Foundation 2008). The global market for imported goods from India is fragmented and spread across several countries with no dominant market. USA is the biggest market for Indian glass products and accounts for 14% of exports in 2006-07, UAE with 8%, Poland 6%, Belgium and Italy 5% each and others include the UK, EUs 3% of all exports from India (India Brand Equity Foundation 2008). However, the Growth and Performance data by Ministry of MSMEs revealed a significant increase in terms of employment but there has been a serious decline in the export of products of MSMEs overall from 2000 to 2010 (Ministry of Small Medium and Micro Enterprises 2012).

## 1.2 Statement of the Problem

The Indian Glassware Industry has been affected adversely by the international market. For example; India's export in vacuum flasks has declined from \$ 111.2 million in 1998-99 to US\$64.3 million in 2003-04 (India Brand Equity Foundation 2008). The competitive position of the Indian Glass Industry has in recent years been threatened by globalization processes, outdated technology, insufficient supply of energy needs and high costs involved in the production of goods. For example; in recent decades Chinese import in glassware has been lower in cost and more attractive relative to Indian glassware, this has affected the domestic and international market of Indian Glassware of Firozabad cluster ("The Center for the Development of Glass Industry" 2011).

The inclusion in the global value chain of Firozabad glassware cluster was encouraged by United Nations with collaborative support from the national and regional governments of India between July 1992 and 2000 through economic upgrading processes (United Nations Industrial Development Organization 2000) which aimed to boost the competitiveness of glassware in the global market. However, the effort of economic upgrading did not significantly result with improved competitiveness of the glass cluster in global market. What's more, liberalization of the market has seriously threatened its domestic market as well (United Nations Industrial Development Organization 2000). It is assumed that the lack of social upgrading is challenging the competitiveness of glassware in domestic and global production networks which is constrained by the socio-cultural milieu of Firozabad. The evaluation by UNIDO<sup>4</sup> recommended an improvement of social upgrading; for example the working conditions and health and safety at work place as important aspects when realizing the economic upgrade of the glassware cluster (United Nations Industrial Development Organization 2000). Research suggests that economic upgrading of a cluster or firm in the global value chain largely depends on the degree of

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<sup>4</sup> United National Industrial Development Organization.

social upgrading. Putting it another way, it is not necessary that economic upgrading may lead to social upgrading (Barrientos 2010:3). The study of the Firozabad glassware cluster by UNIDO indicates the urgent need to be addressed in the social upgrading dimension in order to facilitate economic upgrading (United Nations Industrial Development Organization 2000). However, it did not focus on the socio-cultural milieu as a constraint on social and economic upgrading.

At this point, it is important to remember Becattini's (1990) definition of the industrial district as a 'socio-territorial entity which contains the presence of both a community of people and a population of firms in a naturally and bounded area in that firms and community tend to merge'(Nadvi 1994). In this perspective it is assumed that the local cultural milieu of communities has an influence on firms of a territory. Thus, it is important to consider that the local socio-cultural milieu influences social upgrading as well..

This research assumes that it is the local socio-cultural milieu that challenges the social upgrading and constraining economic upgrading to achieve a competitive position in the domestic and global market.

### 1.3 Objectives and Research Questions

This research aims to systematically examine the social-cultural constraints for social upgrading, as it emerges in the context of the local socio-cultural milieu of the glassware cluster of Firozabad. In what ways does this socio-cultural milieu constrain the social upgrading of the glassware cluster, which is determined by the inter-firm and intra-firm relationship and provides a base for a competitive position in the Global Value Chain in global market? As earlier discussed in the problem statement section in this chapter, that having encouraged economic upgrading, the evaluation by UNIDO stresses the immense need of social upgrading and doubts the social-cultural constraints. In addition, up to now, no assessment has been done of the social cultural milieu, which is why the focus on the social-cultural milieu are given much importance and focus in this research.

In a nutshell, this research attempts to achieve the following key objectives:

- To examine and determine the socio-cultural and economic challenges which hinder the enhancement of performance of the glassware industry in the domestic and global market
- To analyze the impact of socio-cultural constraints on upgrading and the threats to a competitive position in the Global market.
- To analyze socio-cultural and economic barriers and opportunities for Glassware in general and household units in particular.

In order to achieve these objectives, this paper designated a central question followed by sub-questions which are:

***“In what ways are socio-cultural factors a constraint on social upgrading of glassware in the global market?”***

To address the central question, the following key sub-questions are asked which are closely and logically related to various dimensions of the main question:

- What are the different socio-cultural factors that have influenced on inter- and intra-firm relationships?
- In what ways constrain or promote inter-firm relationships and intra-firm relationships social upgrading?
- How do vertical and horizontal relationships between the firms and within the firms influence the competitiveness of Firozabad glassware in the domestic and global market?
- What could be the viable approaches and policy strategies to be recommended for Firozabad glassware upgrading to achieve social upgrading and a competitive position?

## **1.4 Research Methods, Sample size and Limitations**

This research incorporated a mixed approach of qualitative and quantitative research which was administered into two stages; Desk Research and Field Research. In the desk research stage, a variety of existing resources and relevant literature were synthesized and critically analyzed in order to identify the existing gap and the scope for research, and to develop a thematic and conceptual framework.

The field research incorporated data collection using a variety of research methodologies, tools, approaches and strategies during data collection. The precise description of research methods, sample size and strategies used for data collection are as follows:

A mixed approach with Qualitative and Quantitative research methods for the collection of data was used for this research. The semi-structured questionnaires were administered for data collection.

In order to achieve more authentic and valid information, methods like semi-structured interviews, stakeholder interviews, focused group discussion and observation were incorporated as a strategy in the process of data collection.

The sample size for this research was selected strategically. The key respondents were factory/firm or unit owners of glass ware industry and workers/labourers working in the firms/factories and household units. Apart from these key respondents, other stakeholders, like government institutions working for the glassware industry, NGOs, trade unionists and key local dignitaries were interviewed in a semi-structured method of interviewing follows:

1. 30 Key Respondents; 10 Medium, 10 small and 10 household Glassware manufacturers/firms/unit owners.
2. 30 Key respondents; workers/ labourers working in medium, small and micro units/firms/factories of Glassware production processes.
3. Assistant Labour Commissioner: Department of Labour, Office of Labour Commissioner, Firozabad
4. General Manager: District Industry Center, Firozabad

5. Social Activists: Civil Society Organizations
6. Presidents/Secretaries of 3 Trade Unions working in Firozabad
7. Officials of Center for Development of Glass Industry Firozabad: a central government institute.

In addition to the interviewees above, various dignitaries, and locals who have a lifelong experience of living and working in the Glassware base of Firozabad were interviewed to the grasp contextual scenario of glassware.

## 1.5 Research Strategy and Limitations

The strategy of this research was first to gain insight into the past and present scenario and assess which changes have occurred over time in the context of the local socio-cultural milieu of Firozabad. Because the research was focused on Socio-Cultural aspects, the respondents were selected from various social, economic and cultural backgrounds so as to avoid a bias and obtain authentic information. Along with exploring the Local Socio-Cultural milieu and its dynamics, interviews were conducted with factories and household units engaged in manufacturing processes of glass and bangles

Despite the strategy and research sample size, this research paper faced certain limitations during data collection. These limitations included:

- Resistance from factory owners against the interviews with labourers/workers. Interruption of other workers, especially the management staff, and resistance to entering a factory was common problem.
- Cultural practices or hesitation of women or other workers also had an influence the collection of relevant information
- Government officials have denied to provide data for international research because of certain limitations, specifically special permission needing to be obtained from higher authorities that was much more time consuming and processes oriented.

Nonetheless, this research has done well by this strategy and was able access respondents for example; factory owners, workers, stakeholders. In order to achieve more authentic information regarding Socio-Cultural Milieu, Social Upgrading and Economic Upgrading practices, some interviews with labourers were conducted off-campus.

## 1.6 Overview of Structure

This thesis assesses the impact of local social cultural milieu on social and economic upgrading of glassware in Firozabad. This research paper is divided into six chapters of which the first chapter provides a situational overview of the Glassware Cluster, a brief description of the main problems of this research/problem and argument, that the local social cultural milieu constrains both social upgrading directly and economic upgrading indirectly. This in turn threatens the competitive position of glassware and inclusive development of Firozabad. Further, the the key objectives, main Research Question, sub-questions, Research Methodologies, Sample size and limitations of Research are mentioned briefly as well.

Chapter 2 introduces the approaches to conceptualizing the analytical framework in terms of areas of literature review and framing of concepts. The analytical framework has been conceptualized by incorporating three key variables; social upgrading, economic upgrading and Local Socio-cultural milieu. Figure 2 in this chapter shows the direct and indirect relationship with respectively social and economic upgrading. Further, the social upgrading and economic upgrading are integrated with an arrow in uppermost part to show the degree of insertion of the local economy in the global value chains, dependant on the degree of social upgrading and economic upgrading of a firm or a local economic cluster.

The key indicators of the local socio-cultural milieu of Firozabad are for instance; religion, castes, relationships (like family, relatives), gender, education, rural or urban backgrounds and local festivals and cultural celebrations, the local social identity which is derived from the existing local socio-cultural context in Firozabad. In addition, theories and concepts from existing literature were considered in view of the local socio-socio cultural milieu based on the assumption that local socio-cultural milieu constrains social and economic upgrading followed by competitiveness of glassware into global market and inclusive development of cluster in general.

Despite the local socio-cultural milieu, the development of analytical framework describes two important variables; social upgrading and economic upgrading. On the one hand, to describe Social Upgrading, theories, notions and key indicators were derived from Corporate Social Responsibility, ILO's Decent Work Agenda, and Standards of Labour and other works. Further, the social upgrading indicators were distinguished into two parts: process upgrading and enabling rights. The processes upgrading consisted of health and safety, minimum and equal wages, hours of work, employment security, sexual harassment and working conditions. The enabling rights consisted of freedom of association and discrimination in the workplace. On the other hand, to structure the relationship of socio-cultural milieu with economic upgrading, the definition, theories, notions and key indicators were derived from the key areas as discussed in the 'literature review section of the third chapter.

Chapter 3 deals with the description of the methodological and operational aspects of the key indicators variables; Social upgrading, Economic Upgrading and Local Socio-Cultural Milieu. A detailed description shows how each indicators were operationalized and what has constrained the data collection process.

The next chapter provides a brief description of the historical development of Glassware Firozabad, its diversification into the global value chain and changes over time in relation to the social cultural context.

The following chapter deals with the analyses the data gathered from the primary sources and secondary sources of this research. The analysis deals with synthesis, interpretation and analysis of data and interpreting the degree of the relationship of local socio-cultural milieu indicators with Social Upgrading and Economic Upgrading indicators.

The last chapter concludes the key findings from the analysis and relates how the local socio-cultural milieu has impacted social upgrading and economic upgrading of the glassware cluster Firozabad.

## **Chapter 2**

# **Literature Review and Analytical Framework**

### **Introduction**

This research scientifically explores, organizes and synthesizes the existing literature which contributed in developing the concept and the analytical framework for this research. The central concept is that the degree of insertion/performance of a local economy in the global value chain depends on the degree of social upgrading and economic upgrading. This is determined by characteristics of inter-firm and intra-firm relationships, in order to be competitive in the global market for a local economy. This research assumes that the Local Socio-Cultural Milieu of a local economic base which is embedded into societies, shapes the inter and intra-firm relationship and has a direct influence on social upgrading and an indirect influence on economic upgrading of firms/factories and the industrial cluster in general. Barrientos argues that economic upgrading does not necessarily mean to stimulate social upgrading (Barrientos 2010). This research argues that it is the local socio-cultural milieu constrains or encourages the social upgrading directly and the economic upgrading indirectly and affects further inclusive development of local economy in global value chain. The analytical framework of this research has been conceptualized based on this notion.

### **2.1 Literature Review**

In order to develop the concepts and the analytical framework for this research, theoretical and thematic existing literatures were incorporated. The theoretical literature integrated with the analytical framework has been derived from existing relevant theories on local economic development, Global Value Chains, Inclusion of Local Micro Enterprises and Local Economy into Global Value Chain. In order to contextualize the relationship of the Local Socio-Cultural Milieu with Social and Economic upgrading and conceptualizing an analytical framework, a body of rich theories, research and reviews have been synthesized from areas related to, global labour standard, decent work, labour rights, social upgrading and codes of conducts of MNCs and theories and case studies related to role and notion of Corporate Social Responsibility (CSR) as a social upgrading agent and concepts like; the global production network. Apart from theoretical literature, the thematic literature provided basic information about the socio-economic situation and local cultural aspects of the glassware cluster Firozabad which contributed to contextualizing the background and assumptions in relationship with the local socio-cultural milieu with social and economic upgrading:

- Report on the Industrial development of Glassware industry in Firozabad by UNIDO
- Development of Energy Efficiency projects in Glassware Firozabad by Winrock International



- Glass and Ceramics : Markets and Opportunities by India Brand Equity Foundation
- Annual Reports from Ministry of Micro, Small and Medium Enterprises Government of India

## **2.2 Analytical Framework**

The analytical framework of this research was derived from three key thematic areas of the conceptual framework; Social Upgrading, Economic Upgrading and the Local Socio-Cultural Milieu. This research attempts to establish how the Socio-Cultural milieu constrains Social and Economic upgrading.

The inclusion of the local economy into the global value chain depends on multiple basis. A.H.J. (Bert) Helmsing and Sietze Vellema in their, 'Value Chains, Social Inclusion and Economic Development' explained the multiple basis to achieve inclusion of the local cluster into global value chains. The concept of global value chains and development are considered to be an effective instrumental tool for achieving desired outcomes, such as; poverty alleviation, entrepreneurship and decent labour conditions and in Helmsing, A.H.J. and Vellema, S.R. (2011), Beerepoot's (2005) view; "insertion in international value chains, where global buyers set and enforce the parameters under which other actors in the value chain operate, has an impact on the endogenous upgrading of producers in developing countries in that it hinders the opportunities for cluster-based initiatives and governance" (Helmsing, A. H. J. and Vellema, S.R. 2011). The endogenous upgrading could be distinguished from social upgrading and economic upgrading. The degree of insertion in the local economy depends on the level of the social and economic upgrading of a firm/cluster, which needs to be dealt with separately in order to assess its relationship with the local-socio-cultural milieu.

### ***2.2.1 Social Upgrading***

This section describes how social upgrading is constrained by the local cultural social milieu and how it impacts further inclusive development of the glassware cluster. Bernhardt in reference with Sen (1999) distinguishes Social upgrading from economic upgrading by concluding that Social upgrading can be understood as a process of improvement in the entitlements and rights of workers as social actors, which enhances the quality of their employment (Bernhardt 2011). In this perspective, social upgrading involves the advancement of employment based on decent work and labour standards which can be caused by the enhancement of economic upgrading (Bernhardt 2011)

Posthuma Nathan has defined social and economic upgrading in his 'Labour in Global Production Networks in India' and made a clear distinction between them. The indicators of social upgrading like working hours, working conditions, wage equality and gender were relevant for conceptualizing the analytical framework. According to him, 'Social Upgrading' refers to the processes of improving the conditions of the workers and their quality of employment, skills and wages. It also involves providing social protection and improving

workers' rights, especially for vulnerable categories like women, children, migrants and low skilled-workers(Nathan 2010). Further, social upgrading is considered to improve the well-being of workers, quality of work and labour rights. It also leads to a better well-being of the dependents of workers and has a positive spill over in their community (Nathan 2010). Nathan (2010) categorizes social upgrading into two parts; Measurable Standards and Enabling rights. The first one involves quantifiable aspects such as the category of employment, wage level, contract type, social protection provisions and working hours, whereas the second one comprises aspects such as freedom of association and right to collective bargaining, non-discrimination, empowerment (Nathan 2010).

Further, Novits and Mangan in their 'The Role of Labour Standard in Development; from theories to sustainable development' (2011) described the relevance of Labour standards for social and economic upgrading in general. The Labour Standard aspect deals with various relevant indicators like working conditions, fair wage; working hours, gender equality, relevant for social upgrading.. The concept of social upgrading is closely related to the definition of Decent Work given by International Labour Organization (ILO) which comprises both quantitative and qualitative aspects of work. The Director General (ILO) Mr. Juan Somavia has introduced the concept of Decent Work as "opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity"(International Labour Organization. 2009). According to him, "Decent work brings together four multiple goals – the goals of rights at work, productive employment, social protection and social dialogue. Decent work is central to efforts introduce poverty and is a means for achieving equitable, inclusive and sustainable growth. Decent work is the main objective of the ILO and describes opportunities for women and men to obtain work in conditions of freedom, equity, security and human dignity"(International Labour Organization. 2009).

Additionally, Barrientos et al.(2010) refer to social upgrading as "enhancing the capabilities and entitlements of workers as social actors" and distinguish two aspects; measurable standards that includes quantifiable aspects such wages, health & safety and working hours, and enabling rights including non-discrimination and collective bargaining. Moreover, they provide three types of social upgrading such as 'small-scale workers upgrading' where labour conditions of home-based workers are improved, Labour -intensive upgrading where rural workers are provided better working conditions and 'high skills upgrading' where better wages and social upgrading go hand in hand (Barrientos 2010). Pegler also noted that Trans National Corporations (TNCs) often provide better conditions than those in competing domestic firms (Pegler 2009). The domestic firms integrate into GPNs as suppliers and their upgrading opportunities are further determined by national policies, industrial categories and position of and role these enterprises play in global value chains. Thus, GVCs analysis highlights the linkages between lead companies and their suppliers through bringing product and services from design, conception and production and finally to the market(Nathan 2010).

Renowned authors like Pegler and Knorringa (2007), Blair (2005) and Nadvi (2008) have used GVCs and other methodological approaches to demonstrate and document in which precarious work is created in different export sectors as a responsible producer. In Knorringa's perspective, responsible production

is an umbrella term that includes both fair trade and CSR initiatives (Knorringa 2010). He refers to Responsible production for those situations where the lead actors of supply chains make a deliberate effort to include throughout their supply chain. To which referring to Carroll( 1991) Flinterman added a moral management paradigm moving from social responsiveness to corporate social responsibility and argued that in addition to making a profit and obeying the law, corporations should also be ethical and a good corporate citizen(Flinterman 2010). Further, referring to O'Rourke (2006)Knorringa explains that multi-stakeholder initiatives (MSIs) include other aspects like regulation on health and safety, working hours, equal treatment of women and child labour, the freedom of association, wage level and scope of non-discrimination clauses remain controversial(Knorringa 2010). The core labour standards are the most important ILO conventions relating to freedom of association and the right to collective bargaining, the elimination of all forms of forced or compulsory labour, the effective abolition of child labour and elimination of discrimination in occupation (Murray 2002).

Based on above theories and the notion of the importance of CSR for social upgrading, the following key indicators could be meaningful in assessing the influence of the local socio-cultural milieu on social upgrading in the Firozabad glassware cluster:

**Table 2.1**  
**Social Upgrading indicators**

S.No.	Indicators	
1	*Freedom of association	Right to Bargaining
2	*No discrimination	
3	Health and Safety	Process rights
4	Minimum & Equal Wages	
5	Hours of work & Security of employment	
6	No sexual harassment	
7	Working condition	

Source: Own creation<sup>5</sup>

### ***2.2.2 Economic Upgrading***

Economic upgrading is, though, not the direct focus but because of its relative importance to social upgrading and their mutual influence it was also necessary to consider the indirect influence of the social-cultural milieu on economic upgrading. The Economic Upgrading was defined by Gereffi (2005:171) as “the process in which economic actors-firms and workers move from low-value to relatively high-value activities in global production networks”. According to him, economic upgrading is a multifaceted and complex process, which involves changes in the strategy of business, technology, production structure, key policies and organization of markets (Bernhardt 2011). He further developed a typology of chain governance in order to understand how technological production complexity, or supplier competence may alter the relationship between lead firms and their suppliers (Nathan 2010). This typology illustrated how technological exchange and inter-dependency of firms and suppliers opens the opportunity for economic upgrading. This research assumes that the Firozabad glassware cluster lacks cooperation among firms/factories to ex-

<sup>5</sup> Derived from ILO Core Convention and (Murray 2012)

change knowledge and technologies because of social–cultural practices which could be based on religion, caste, community, relativism and lack of education. On the one hand, this can be beneficial and in the interest of one particular social section because such factors promote the social bond in this community or caste. On the other hand, such practices can be exclusionary for another community.

Further, having analysed multiple economic sectors; such as apparel, mobile, tourism in different regions of the world, Gereffi found ambiguity in terms of economic upgrading and its relation with social upgrading and found nothing in *directional causality between two* (Bernhardt 2011). While Barrientos (2011) attempts to establish a causal relationship between Social upgrading and Economic upgrading in relation to Global Production Networks, he on the one hand concluded that “Economic upgrading stimulates innovation and competitiveness among firms and one the other hand, Social upgrading promotes employment based on decent work and respect for labour standards. On the contrary he added that whilst economic upgrading can enhance international trade performance, it does not automatically lead to social-upgrading”(Barrientos 2010). This research assumes that the local cultural milieu which is embedded in intra and interfirm relationship directly constrains the positive effects of social upgrading and to some extent constrains aspects of economic upgrading to have a stimulating impact on social upgrading.

How significant is the influence of the Local Social-cultural milieu to intra and inter-firm relationships in an industrial district or cluster like Firozabad glassware? Further, how does the socio-cultural milieu impact indicators of economic upgrading of a cluster? Becattini (1990) defines the industrial district as a ‘socio-territorial entity and characterizes it as an entity which contains the presence of both a community of people and the population of firms in one naturally and historically bounded area in that community and firms tend to merge (Nadvi 1994). Historically, Firozabad has evolved as a cluster known for glassware. The cluster is multi-cultural and includes various religions and castes that exist together, interact and cooperate in terms of economic relationship in glassware. This research assumes that there was some impact of the local social cultural milieu on inter and intra-firm relationship which could be impacting economic upgrading in long run.

Further, Nadvi et al (2004) reviewed in their ‘Industrial Clusters in Less Developed Countries: Review of Experiences and Research Agenda’ how socio-economic dimensions relate to the growth of a local economy. Nadvi examined that economic upgrading and the socio-cultural milieu interrelate in some respects. For example: the local social milieu is influenced by the processes of technological changes and innovations and vice versa. He states two important implications of this notion, first, that small firm clusters possess the element of ‘tacit knowledge’, which includes skills, technology, processes of production and products that is accumulated over an extended historical period. Secondly, innovation is an evolving, incremental and systemic process that builds upon such tacit knowledge through the dynamic interactions between users and producers, which requires commonly accepted codes of behaviour, channels of information and mutual trust (Nadvi 1994). The Social Network Theory also has similar views that companies are embedded in a complex of horizontal, vertical and business support relationships. Triekens referring to Uzzi (1997) mention that not only economic considerations but also concepts like trust, reputation

and power have a key impact on the structure and duration of inter company relationships, network relations may enhance the ‘social capital’ of a company through making feasible access of information, technical know-how and support (Trienekens 2012). In Trienekens (2012), Humphrey and Schmitz (2002) added that such relationships encourage knowledge transfer between partners and reduces transaction costs leading to an improved access to markets (Trienekens 2012). In relation to Firozabad glassware products which has historically evolved and diversified along with bangle manufacturing to a global demand and because of specific skills, artisanship which have been passed on for generations. Being a cluster of various religions, castes and cultures, this research assumes that division among factory owners based on religion, castes or community could adversely impact trust and exchange of technology and tacit knowledge.

In addition, Schmitz (2004) in his ‘Local Enterprises in the Global Economy-Issues of Governance and Challenges’ defined and evaluated theories related to local enterprises, local economic development, Governance of Global Value Chain which are relevant to economic upgrading. Hubert Schmitz (2004) focuses on competitive advantages of embeddedness of an economy in a social territory. According to him, the competitive advantage of a locality arises from a combination of rivalry and cooperation between local enterprises and from partnership of government agencies and private organizations in support of local enterprises (Schmitz 2004). The importance of embeddedness lies in knowing why some actors want to be included in a value chain and others don’t, the participation may provide an opportunity to gain status or to consolidate one’s power in social relationships (Helmsing, A. H. J. and Vellema, S. R. 2011).

This research assumes the existence of some socio-cultural factors like religion, caste and culture which might affect the cooperation and rivalry between firms causing the exclusion of certain castes and minorities to be competitive in the market and gain equal social and economic status.

The following Economic Upgrading indicators are considered impact to local socio-cultural milieu of Firozabad:

**Table 2.2**  
**Economic upgrading indicators**

<b>SNo.</b>	<b>Indicators</b>
1	Use of Technology & degree of automation
2	Product ranges and Market Accessibility
3	Labour intensity : Changes overtime
4	Physical Infrastructure
5	Management System

Source: Own creation<sup>6</sup>

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<sup>6</sup> From ILO Convention and (Murray 2012)

### 2.2.3 Local Socio-cultural Milieu

In relation to the Local Socio-Cultural Milieu, Nadvi (1994) discusses three dimensions of the issue of social embeddedness within the boundaries of a district of a local economy. First, what Garofoli (1993) concluded “as sedimentation of specific and interrelated historical, social and cultural factors in a local area that generates significantly different processes of development that includes a work ethos based upon local religious attitudes and non-confrontational social spirit within firms and between firms that assists in local industrial relations and further to productivity gains(Nadvi 1994).

Secondly, the local social milieu provides a basis for the social provision of market-related information that itself creates a code of behaviour, incorporating rules and sanctions as a regulatory mechanism for both social and production relations within the cluster which Granovetter (1985) summarizes as *social cultural identities* as a basis for trust and reciprocity in inter-firm relations (Nadvi 1994). These identities take place in social networks that are based upon family, caste, ethnicity, race, religion, education and political and corporate backgrounds (Nadvi 1994).

A few studies on small-firm clusters in the LDCs report the presence of local social values and socio-cultural characteristics that both positively and negatively impact the relationships between firms and within firms which influence social upgrading. For example, Kashyap (1992) and Tiwari (1990) state that Ludhiana’s highly successful small regional firms were dominated by Shikh Punjabi; caste and ethnic identities were important criteria in delineating social groups in small firm clusters. On the one hand, these social identities have a set of values that promotes an ethos of hard work, thriftiness, entrepreneurship and family as central to economic and social life (Nadvi 1994).

On the contrary, Meine Peter van Dijk et al in their, ‘The Global Value Chain’ (2012) in general discuss the horizontal and vertical relationship between global players and local producers and social upgrading. Specifically, they focus on the importance local cultural milieu dimensions such as; ethnicity, religion and caste. Specifically, Knorringa’s findings on socio-cultural practices in the Footwear Industry in Agra give insight into the local cultural milieu and indicators like religion, caste and community which provide significant insight in the importance of the local cultural milieu of a cluster and its impact on intra and inter-firm relationship in glassware context of Firozabad.

In Nadvi(1994), Knorringa (1992) reported that social relations can also have a negative effect on growth prospects of a cluster. For instance, in Agra’s footwear industry there were divisions between producers and traders that were heightened by the distinct social castes to which local producers and traders belonged. He explicitly concludes that an antagonistic exchange relationship between producers and traders was reinforced by distrust and social contempt that led to a weakening the prospects of the cooperation (Nadvi 1994).

In Context to the Local Socio-Cultural Milieu of Firozabad, which is characterized by a multi-cultural society with different religious groups; Hindus, Muslims, Christians, Sikh for example. But also, different castes and sub-castes and minorities exist together and are dependent on glassware for their livelihood and socio-economic development. These different socio-cultural communities have their own shared socio-cultural, political and economic values which form the local-culture milieu for Firozabad. In relation to religion, Hinduism is most

dominant religion with 50% of the total population of Firozabad. Muslims amount to 45% and other religions are a minority. Among Hindu religion, there exist various sub-categories of religious faiths like Jainism which further divides into Svetamber and Pitamber sections. Further, based on their beliefs in various deities, there are multiple Hindu-communities. Among Muslims, there are also broad categories, such as the Sunni faith and Devbandi, which differ in some basic beliefs and practices. Furthermore, these categories are divided into various castes like Khan, Beg, Ansari and Sayyed, which differ in their beliefs, and religious practices and rituals. These are embedded in the minds of locals, who create and preserve their religious identities while working together in glassware. This research assumes that there certain practices are influenced by religious attitudes in terms of partnership in business and providing employment in firms. This would have an effect on inter and intra firm relationships. "A caste system is a type of social structure which divides people on the basis of inherited social status. Although many societies could be described in this way, within a caste system, people are rigidly expected to marry and interact with people of the same social class"(What is Caste System'2003).

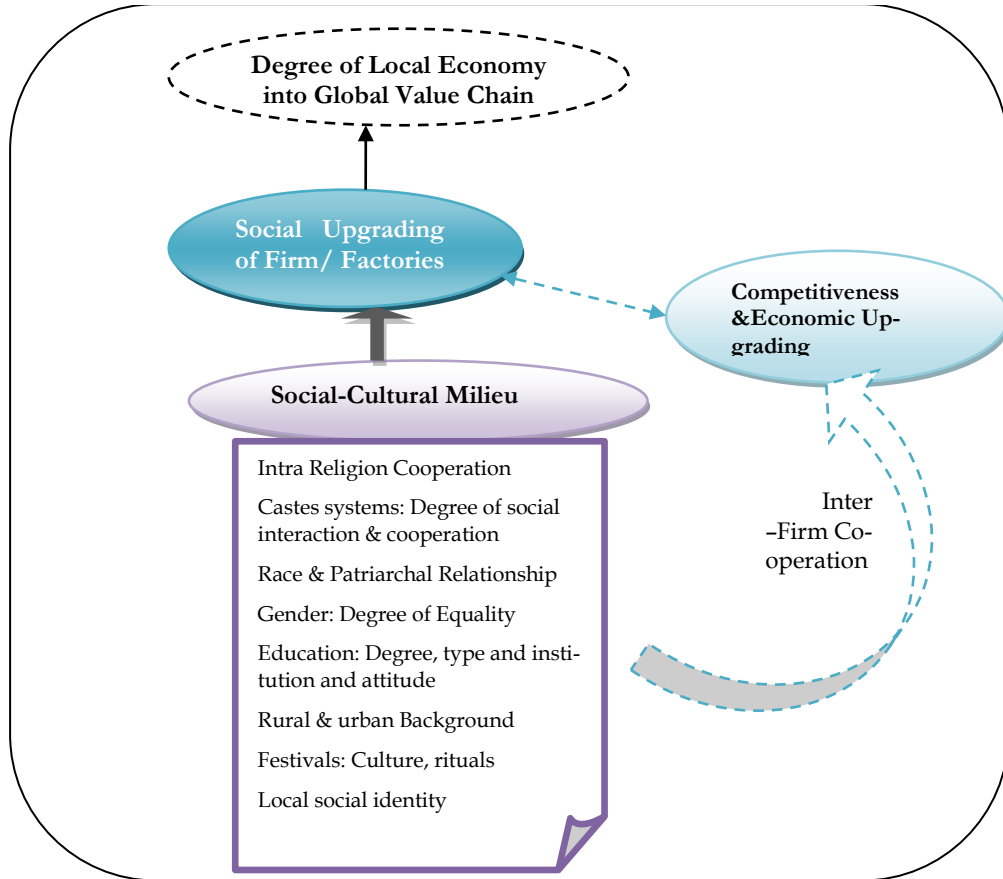
Robert H. Wintrop (1991) defined castes as 'an explicitly hierarchal social system based on hereditary, endogamous groups, in which each is characterized by specific status, occupation, mode of life, and pattern of customary interaction with other groups (Winthrop 1991).

Hindu religion is stratified among different castes in Firozabad. For instance, Baniya and Vaishya (traditional traders), Jatav, Ahir, Aggrwal and Mittal. These castes are also sub-stratified as upper, middle and lower castes based on their socio-economic conditions and occupations. The castes who are in power try to maintain their identity based on their particular beliefs, rituals, social and economic status as well as occupations. The same conditions exist in the Muslim community, which is stratified among different castes and sub castes based on certain beliefs and socio-economic status. Other religions and castes are a minority in Firozabad. This research assumes that there would be a certain division among factory owners based on castes which might affect inter and inter-firm relationship as well as economic upgrading.

Because of the patriarchal relationship which is inherent to the blood relations among families of one caste or community, they show concern for each other and share particular beliefs social and economic values. Though, in some respect it is also hard to maintain an economic relationship to protect the bond of relativism. In respect to Firozabad, it is assumed that an economic relationship exists among factories, which is based on patriarchal relations. These may be exclusionary towards other communities in terms of economic relationships.

Based on these assumption and the theories described above, the following diagram is derived. It depicts the relationship of the local socio-cultural milieu with Socio-economic upgrading of the glassware industry in Firozabad:

**Figure 2.1**  
**Analytical Framework**



Source: Self creation

## Conclusion

This chapter dealt with conceptualizing the analytical framework with three key variables: social upgrading, economic upgrading and social cultural milieu in context to global value chain. The key point of this analytical framework was to focus on social upgrading aspects of the Firozabad glassware cluster and the direct influence of local social cultural milieu on it. The theories and notions of social upgrading attributed to deriving key indicators of social upgrading in context to Firozabad. Economic upgrading isn't the focus of this research but with less emphasis it was incorporated in analytical framework because of its relative importance to social upgrading and the indirect influence of social cultural milieu.



## Chapter 3 Methodology and Operationalization

### Introduction

This chapter describes concisely the methodologies used and the processes of operationalization of this research. As described in the analytical framework (see Chapter 2), the set of three key variables: Social Upgrading, Economic Upgrading and Socio-Cultural Milieu are used in order to investigate the relationship of the Social Cultural Milieu with Social upgrading and with relatively less focus on Economic Upgrading. In order to operationalize the research, certain key indicators from both social upgrading and economic upgrading were derived from the theories and notions from Global Value Chain, Corporate Social Responsibility and Global Production Networks and these indicators were later contextualised with indicators of the local socio-cultural milieu. A mixed method (Qualitative and quantitative) of social research with semi-structured interviews with factory employees, labourers and other stakeholders were administered in order to receive a response to assess the impact of the socio-cultural milieu on social and economic upgrading. The following sections describe the methodologies and the operationalization of all three variables and their indicators in more precisely:

### 3.1 Key Social Upgrading Indicators

The indicators for social upgrading and economic upgrading have been derived from the ILO's agenda of Decent work and ILO Core convention. The key indicators of social upgrading were incorporated in a semi-structured questionnaire which was administered among glassware factory owner, processing units and labourers at the Firozabad cluster. The operationalization of each indicator is as follows:

#### Freedom of Association

The freedom of association is a key indicator of this research which aims to gain insight into the prevailing situation among labourers in terms of collective action and bargaining. In addition, if the labourers have collaborated and were associated with certain Trade Unions or labour organizations in order to remain safe and have rights while working with glassware production processes.

In context of the Social-Cultural Milieu, it was emphasized lies on exploring whether there exists any sort of situation where collective action were inspired by culture, caste, religion or urban/rural phenomena. If there exists a formal or informal group based on caste, religion or culture and how this would affect the intra-firm relationship and inter-firm relationship.

In the context to Economic upgrading, the emphasis lies on if and how freedom of association has an influence on Economic Upgrading processes of firms/Factories of Glassware Cluster.

### **No Discrimination**

This indicator was addressed in semi-structured interviews with workers and factory owners in order to gain insight, in the possibility of discrimination in terms of hiring labourers, their appointment, or promotion.

In the context of the Socio-Cultural Milieu, stress was given to investigating if hiring of labourers and promotion was influenced by Social-Cultural factors like Religion, caste, gender, urban-rural background. Furthermore, this research investigates how these aspects had have affected the Economic Upgrading and performance of the glassware cluster in the global market.

### **Health & Safety Measures**

Health & Safety measures are given extra attention in this research as the Glassware is categorised as a hazardous industry, due to the hazardous processes and chemicals used in the manufacturing process. Health and Safety measures were investigated via semi-structured interviews with factory owners and for the labourers, via a questionnaire. Also, the observation of the living situations in relation to health and safety measures at work place were given priority

In context of social upgrading, it was important to investigate the prevailing situation in relation to current health and safety measures which also has an impact on economic upgrading and relationship between buyers and firms.

### **Minimum & Equal Wages**

The Minimum Wages and Equal wages for both male and female workers were taken into consideration for this research. The semi-structured questionnaire which was administered among factory owners and labourers were incorporated with an in-depth inquiry into Minimum& Equal Wages for both male and female workers for the same type of job and working hours.

In the context of social upgrading and how the prevailing practices affect the implementation of minimum wages & equal wages and how it affects the socio-economic conditions of workers were taken into consideration

However, the impact of prevailing practices in relation to the implementation of minimum wages and equal wage with economic upgrading could not be directly addressed because of certain limitations within the questionnaire. The Social-Cultural dimension provided a limited space to gain insight into the effect of minimum wages with socio-cultural milieu.

### **Hours of Work**

Working hours was incorporated with questionnaire to investigate if there was proper implementation of laws and policies related to working hours. How do the firms/factories practice and what incentives do the workers have for extending their working hours or working days in the factories.

In context to social upgrading it was an important indicator to investigate how it impacts working conditions and the socio-economic conditions of workers. However, there was lack of scope within the questionnaire to directly address the impact of working hours on economic upgrading. The assessment of socio-cultural aspects in relation to working hours did not provide concrete evidence about the impact of the social-cultural milieu on working hours in the glass-

ware industry. However, it did reveal exploitative practices in terms of working hours.

### **Security of Employment/Proper Contracts**

The security of employment or proper contracts was addressed via the questionnaire by inquiring into the type of terms/conditions workers get when working in factories. Also, which negotiation techniques the factory owners use, how the labour force is managed in relation to maintaining the status of this small scale industry. Apart from the questionnaire, the employment practices in terms of social upgrading were investigated in-depth in semi-structured interviews with various stakeholders; trade unionists, government and non-government institutions associated with the glassware cluster.

In context to Socio-Cultural milieu, it is investigated if the employment and security of workers was influenced by Socio-Cultural Factors like religious attitude and castes. However, the impact of the prevailing practices of employment security could not directly be addressed in terms of economic upgrading because of the limitations of the questionnaire. However, informally insight was gained regarding the impact of socio-cultural milieu with Employment Security, proper contracts and promotion.

### **Sexual Harassment/Treatment of Women**

Because this is a sensitive issue and it required much more in-depth analysis and diagnostics, for instance through case studies, this indicator could not be directly addressed through semi-structured interviews with workers and factory owners. However, these aspects were taken into consideration when enquiring with trade unionists, focused group discussion and in meetings with other stakeholders which provided an insight into the prevailing conditions of female workers and have wide scope for future research on this issue.

In context to Socio-Cultural milieu, the Sexual Harassment/treatment of women was considered an important element of enquiry but because of limitations of the questionnaire, it remained difficult to directly relate it to Economic Upgrading and the relationship between firms/factories in the social context of the Firozabad Cluster.

### **Working Conditions**

Working conditions were addressed in this research by observing the current working conditions and how these improved over the last decade. What were the socio-economic and cultural constraints which have impacted the Working Conditions in factories and firms? However, there were limitations with questionnaire to investigate this deeply in relation to Social Upgrading and Economic Upgrading. However, observations in factories and firms provided a better insight into the prevailing working conditions.

### **Child Labour**

This indicator was incorporated in the questionnaire, which was administered among workers/labourers, in order to assess their socio-economic situation. In addition, observations of factories/firms and micro-household based units were made and estimates were gathered from different stakeholders; such as government and non-government institutions and trade unionists.

Information about the relationship between the Socio-Cultural milieu and its impact on Child Labour could be gathered. It shows how it impacts the functioning for different firms/factories and household units.

Thus, there were eight key social upgrading indicators which were the subject of enquiry during semi-structured interviews with workers and factory owners in order to obtain information on the degree of social upgrading and the impact of social cultural milieu on social upgrading.

### **3.2 Key Economic Upgrading Indicators**

As discussed in the objective section of the first chapter, assessing the influence of the local social cultural milieu on key aspects of economic upgrading is relatively important. The indicators for economic upgrading were derived from theories of economic upgrading in relationship with social upgrading as well as with the socio-cultural milieu. The operationalization of the indicators were as following:

#### **Use of Technologies & Degree of Automation**

The use of technologies and the degree of automation that is used in the various manufacturing processes of glassware was included in the semi-structured questionnaire which was administered among factory/firm owners. The technological changes occurred within past 4-5 years in the factories were investigated. In particular, attention was paid to how socio-cultural factors constrain implementing new technologies.

It was a little challenging to assess how the Socio-cultural milieu impacts economic upgrading, because sometimes this is not directly related to economic upgrading but it to some extent connected to social upgrading.

#### **Product ranges and accessing markets**

The product ranges and access to the market in different segments of glassware was incorporated in the questionnaire aimed at factory owners. How socio-cultural factors affect inclusive participation of all social groups into the accessibility of markets and which social-cultural constraints play a role in such situations, were investigated in-depth. In the context of economic upgrading, stress was given to gaining insight in the socio-cultural constraints which impede the quality and range of products.

#### **Labour Intensity: Changes overtime**

The labour intensity, the work labourers typically carry out and the way labourers were treated in their payment of wages and procedures in factories were investigated via the semi-structured questionnaire. Also, how socio-cultural factors constrain inclusive employment was considered in this research.

#### **Physical Infrastructure**

The changes in the physical infrastructure of firms/factories were incorporated in this research and how these changes have impacted the economic upgrading of firms as well as the social upgrading. The Socio-Cultural impact on infrastructure development is assumed to be associated with discrimination in

accessing financial and legal services as well cooperation by institutions and factories.

### **Management System**

The management system of firms/factories of glassware included to investigate if there are socio-cultural challenges which impact the inclusive work opportunities for different social groups or if it is dominated by factors like religion, caste and gender. Furthermore, how prevailing practices impact the socio-cultural matrix of Firozabad in terms of inclusive employment opportunities and social development.

## **3.3 Key Socio-Cultural Milieu Indicators**

Socio-cultural variables are important aspects of human life, which influence the interaction with other social groups. The methodology incorporated in the semi-structured interview with factory owners, labourers and other stakeholders investigates the prevailing situation in the socio-cultural milieu. The interviewees were selected from different socio-economical and cultural groups in order to grasp the situation comprehensively, the interactive impact of the socio-cultural milieu on social upgrading and the inter/intra-firm relationships on economic upgrading. These is a description of methodologies and operationalization of each indicator:

### **Religion**

Religion was taken as one of the most important indicators in the context of socio-cultural milieu of Firozabad. How did the religious mindset, communal feelings and practices affect the working environment in factories, in terms of employment, intra and inter-firm relationship and the cooperation with government institutions, partnerships and markets? How did it affect the social and economic upgrading of firms and factories which were taken into consideration in this study? The semi-structured interview with factory owners and labourers, and focused group discussion as well semi-structured interview with other stakeholders helped to gain insight into socio-cultural dimension and its impact on socio-economic upgrading.

### **Casteism**

Casteism practices are embedded into the almost all social groups and religious communities. This is incorporated as an indicator to investigate its impact on Social Upgrading and Economic upgrading. In order to receive the most authentic information, respondents were selected from different religions and caste group.

### **Education**

Education was taken as a social indicator that is also closely connected to the mindset of communities. This indicator was not directly included in the questionnaire, which needed rigorous framework, but it was included with the semi-structured interviews with firm/factory owners and other stakeholders. How did the degree of education and attitude towards education have affect business, skills and entrepreneurship in different communities in the past and present. How did the degree of education impacted the intra-firm, inter-firm

relationship and the inclusive and participatory development of glassware? Which segment of society/community had lost and had won? How did it impact the labour market and different social groups? Which key aspects were considered appropriate from the point view of education as a socio-cultural milieu indicator?

### **Rural-Urban Background**

The urban–rural practices were incorporated in the questionnaire for factory owners and labourers in order to investigate if there is discrimination in the employment process of labourers which could be based on rural-urban mind-set. This indicator was selected as a Socio-Cultural indicator, because it may indicators related to economic and social upgrading of firm/factories of glassware in Firozabad.

### **Festivals/Rituals**

The festival, though not directly included in the questionnaire, was an important part of the study during the assessment processes and the interviews with labourers and factory owners as well other stakeholders. The festivals of national, religious and local castes' rituals were taken as cumulatively and its impact on functioning of firms, production processes, inter and intra-firm relationships as well as social and economic upgrading were taken into consideration.

### **Gender**

The gender was incorporated as a key indicator in order to inquire into equality in terms of wages and payment as well equality in terms of role and responsibilities. In addition, the gender aspect also provides insight into interaction and cooperation as well as flow of labourers; females are affected by cultural constraints. Thus, Gender is a social indicator that helped to gain insight into its impact on social and economic upgrading.

### **Cultural Practices and Social Identity**

Cultural practices and social identity was incorporated into the questionnaire in order to understand if the local cultural practices, which are stimulated by religious or cultural beliefs, create a social identity. Furthermore, the impact of Social Identity was stressed on social and economic upgrading.

### **Conclusion**

Thus, to operationalize this research, the three key variables; Social Cultural milieu, Social Upgrading and Economic upgrading were incorporated into the questionnaire for data collection. The semi-structured interview with factory owners/labourers and other stakeholders incorporated qualitative and quantitative methods (mixed methods) to assess the relationship between the Local Cultural Milieu and Social upgrading. The emphasis was given to social upgrading and less emphasis on economic upgrading because of the reasons mentioned in chapter 1. Despite some limitations with the questionnaire and challenges during field work, the methods and operationalization processes were sufficiently helpful in gathering meaningful information to assess the influence of the social cultural milieu on social upgrading in the glassware cluster of Firozabad.

## Chapter 4 Description of Firozabad Cluster

### Introduction

This chapter briefly describes the historical development of glassware, innovations and changes occurred. Further, it also provides brief account of diversification and analysis of global value chain of Firozabad glassware cluster. In addition, details of different types of furnaces being used in manufacturing processes of glass and intensiveness of labour force are provided in this chapter. The further paragraph describes about the historical development of glassware.

### 4.1 Historical Development

The Firozabad Glassware Cluster is a naturally emerged cluster throughout centuries which has been able to make its presence with in domestic as well as global market. This cluster, historically being a cottage industry, now a Micro, Small and Medium Enterprise is an important local economy which specialized in bangle making about since 40 years back it diversified and produces glass products of international marketing as well.

The history is recorded since 1566 in the reign of Akbar the Great. Since, the inception of glass in Firozabad, it was famous for handmade bangles. The export of Glassware from Firozabad is not very new and even not mature in global market. It was just started booming since 1990 and export fully started since 1995. The Bangles was marketed only in local markets and was limited in India. Whereas the Glass handicrafts was started exported out of India and started insertion of local economy into global value chain<sup>7</sup>(Interview:28/07/2012).

“Firozabad was established by Firozshah Mughal rural centuries back. And Bangle was invented by a local called Rustam Ustad Siddiqui and known as *‘Adam of Glass Bangle’*. Initially, bangles were produced at very small scale with help of Rav(a whitish of barren land). 72-78 years back the wood of Arhar(pulse) was used as fuel and as it is heated into a pound and unjoint bangles were manufactured. This occupation was largely done by Shishgar(a local muslim community) who were specialized with making glass. These Shishgars belonged from Urmura Village near Shikohabad, Saraiya after Itawa district Jalesar village. All these shishgar came and flourished Firozabad. They used to sell their products in Firozabad and Firozabad had become a Mandi for traders from different parts”<sup>8</sup>(Interview:21/07/2012).

Aprat from inventing Bangle, Rustam also invented POT Furnace that was made up of wood in cylindrical shape and covered with Iron 72-78 Years back and consequently production was increased. Further, upgrading on The TANK Furnace took place around 40 years back and started to manufacture glass items. The Tank Furnace is used for Glass, Lemon Set, Tea Set, Dinner Set,

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<sup>7</sup> Ashish

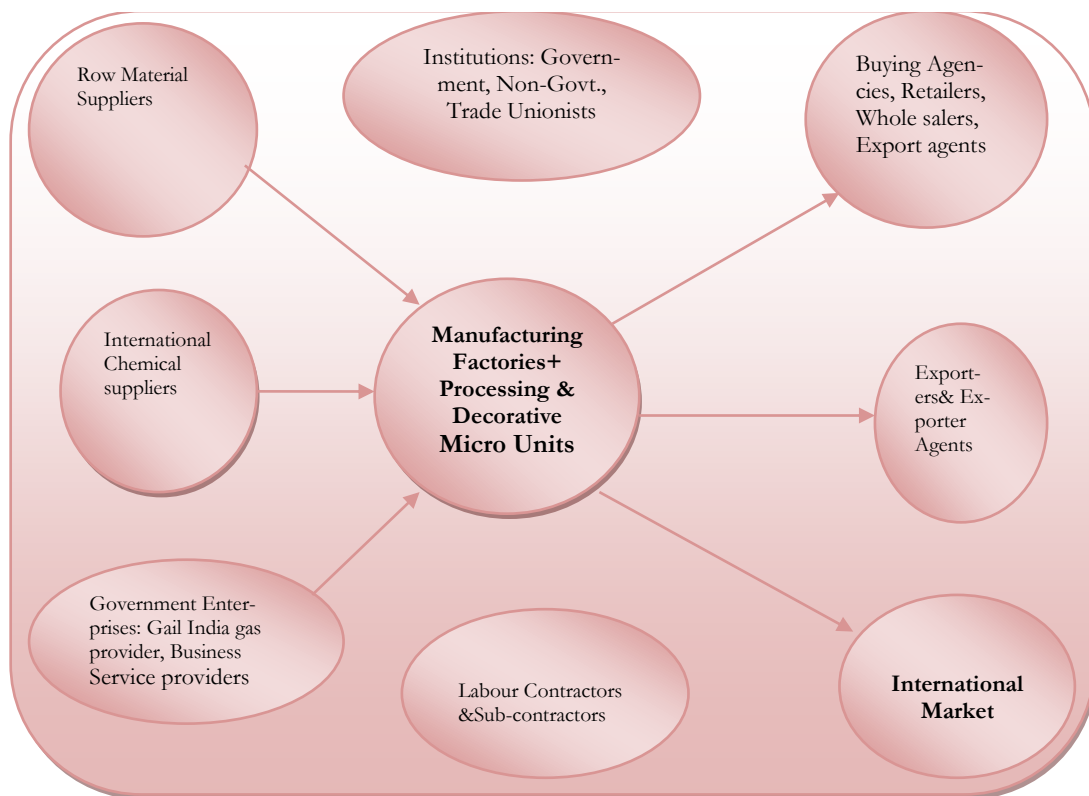
<sup>8</sup> Sultan

Tubes, and Scientific instruments. Till 1975-76, Tank Furnace made products used to be cheap and Pot furnace glass used to be costly. Mr. Haji Shakeel (a shishgar) started making Bangles using Tank Furnace and this work he did secretly and confidentially. The slow diversification started 40 years back with introduction of Tank furnaces but rapidly growth realized after 1990-95 onwards when atomization processes started in around in year 2000.

## 4.2 Diversification: Insertion into Global Value Chain

The Glassware Firozabad is very new and immature in Global market. The major diversification took place between 1990-95 when Glassware from Firozabad has started exporting to other countries. However There are only 18 automized glassware factories.

**Figure 4.1**  
**Global Value Chain Analysis**



Source: illustrated from field

Because the diversification took place very late in 1990-95, and only 18 Factories have been able to automized so far<sup>9</sup>(Interview:21/07/2012). The major reasons for lesser number of glass manufacturers in atomization is observed lack of education, lack of highly skilled labourers/ workers, and lesser social

<sup>9</sup> Mohan Aggarwal-President of UP Glass Manufacture's Syndicate



upgrading<sup>10</sup>(Interview:22/07/2012). R.D Singh owners of G.T. Glass works analyses that our technology is not so much advanced as in Europe and China, we have moderate kind of technologies, the lack of sufficient capital and lack of highly skilled labourers or workers becoming a barrier into technological upgrading and competition in Global market(Interview:22/07/2012).

### 4.3 Labour force in Glassware Cluster

The labour force being employed in glassware are generally categorized as Skilled, Semi-skilled and unskilled laborers apart from managerial staffs. The labour force depends of types of furnace and number of furnaces operational in a factory. According to types of furnaces the labour intensity of glassware are as follows:

**Table 4.1**  
**types of furnaces and labour intensiveness**

SNo	Types of Furnace	Type of Factories	Estimated labour Force/day
1	Tank Furnace	Manufacturing	1000-2000
2.	Pot Furnace	Manufacturing	500-750
3.	Closed Furnace	Manufacturing	250-350
4.	Atomized	Manufacturing	200-300

Source: from field work

Apart from above manufacturing units which come under medium and small factories, there are ancillary( household based, micro ) units that provide employment to maximum number of households of Firozabad and there would be more than 200,000 people working in such households units<sup>11</sup>(Interview:23/07/2012).There is no empirical data available on number of workforce and exact number of units because the units are household based and absolutely unorganized, However, based on primary sources following table is produced regarding mirco at Firozabad cluster:

**Table 4.2**  
**labour intensiveness and labour category**

Unit Types	Estimated No. o Units	Type of Labour	No.of workers (ave.)	Negotiation	Wage pattern	Age of Worker
Stock	200	Skilled, Semi-skilled and Unskilled	5-6	verbal Piece rate	Daily, fortnightly and Monthly	Adult male
Godam	10000-12000	Skilled, Semi-skilled and Unskilled	6-10	verbal Piece rate	Daily, fortnightly and Monthly	Children, adolescent male, adult male

<sup>10</sup> Jawed Om Glass

<sup>11</sup> Iqbal

Judai & Sadai	2000	Skilled, Semi-skilled and Unskilled	4-6	verbal Piece rate	Daily, fort- and Monthly	Women, adolescent girls, children, adult male
Design Cutting	1500	Skilled, Semi-skilled and Unskilled	5-7	verbal Piece rate	Daily, fort- and Monthly	Women, adolescent girls, children
Gold Policing	150-200	Skilled, Semi-skilled and Unskilled	6-8	verbal Piece rate	Daily, fort- and Monthly	Adult male, children
Pakai& Sekai	150-200	Skilled, Semi-skilled and Unskilled	9-10	verbal Piece rate	Daily, fort- and Monthly	Adult male
Zari	2000	Skilled, Semi-skilled and Unskilled	10-12	verbal Piece rate	Daily, fort- and Monthly	Adult male and children
Artificial Polish	1500	Skilled, Semi-skilled and Unskilled	8-10	verbal Piece rate	Daily, fort- and Monthly	Children, adult male
Packet Making	1500-2500	Skilled, Semi-skilled and Unskilled	10-20	verbal Piece rate	Daily, fort- and Monthly	children, women, adolescent, male
Scrape/ Glass Junk segregation	1500-2000	Unskilled	5-10	verbal	Daily, fort- and monthly	Women, adolescent girls, children

Source: from field work

## Conclusion

The Glassware Cluster being labour intensive provides employment and livelihood support to more than 0.5 million, the majority of labour force is concentrated into micro units which are quite unorganized. Second, the automated did not reduce the labour intensitivity but added labour force because there is not social and economic upgrading done of older factories and all atomized are factories. Most of laborers are hired on informal contractual on daily wages and work under supervision of Supervisor or Manager of factory. this practice is adversely affect the non-stability of laborer and their poor socio-economic condition, though Bangles units are responsible for providing maximum livelihood supports to people but social and economic conditions are not improving because of contractual system, laborers are under paid below minimum wages and contractors earn commissions.

In order to improve the socio-economic situation of labour force and quality of workforce, the social upgrading of medium, small and specially household unites needs to be taken into consideration, the socio-cultural constraints which is embedded and affecting the inclusive growth and development, are required to deal strategically with strategic interventions with the engagement of corporate, local governments ,NGOs etc.

# **Chapter 5 Analysis of Impact of Local Socio-Cultural Milieu on Social Upgrading**

## **Introduction**

This chapter attempts to analyze the impact of Local Socio-cultural milieu on Social Upgrading and Economic upgrading in relation to Firozabad glassware cluster. The Firozabad Glass cluster which is diversified and complex in terms of local culture and social milieu have had devastating effect on labour conditions and decent work practices, though, the industry have had significant value into global value chain, but local cultural milieu needs to be addressed in order to achieve balanced and inclusive development of glassware and inclusion of all social groups for inclusive socio-economic development of Firozabad as a whole. This section analyses the impact of socio-cultural milieu on social upgrading and Economic upgrading separately.

## **5.1 Impact of Socio-Cultural Milieu on Social Upgrading**

The impact of socio-cultural milieu of Firozabad glassware cluster on different aspects of labour standards and decent practices could be analysed from the key indicators for socio-cultural milieu of this research paper. Following are the analysis and description of Socio-cultural impact on key variables of social-upgrading at Firozabad glass cluster.

### **Freedom of Association**

The freedom of Association being an important variable to assess if there exist associations of labours or trade unions for safeguards of rights to workers based on certain socio-cultural criteria like religion, caste etc. Firozabad glassware labour are found quite unorganized and have not associated with trade unions/labour based organizations. All the workers interviewed during this research responded that they were not associated with any labour organization. There used to be 10-12 labour unionists but because of their political involvement with factories and footloose behaviour labourers have disassociated as their common interest were not met by such organizations and they worked for the interest of factories only<sup>12</sup>(Interview:27/07/2012).

The labourers are unorganized for their rights and not associated because of lack of awareness and education<sup>13</sup>(Interview:01/08/2012).The labour come from both urban and rural areas that did not have education which could be a major challenge for organizing and their social-upgrading by firms<sup>14</sup>(Inter-

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<sup>12</sup> Chetram

<sup>13</sup> Ashish

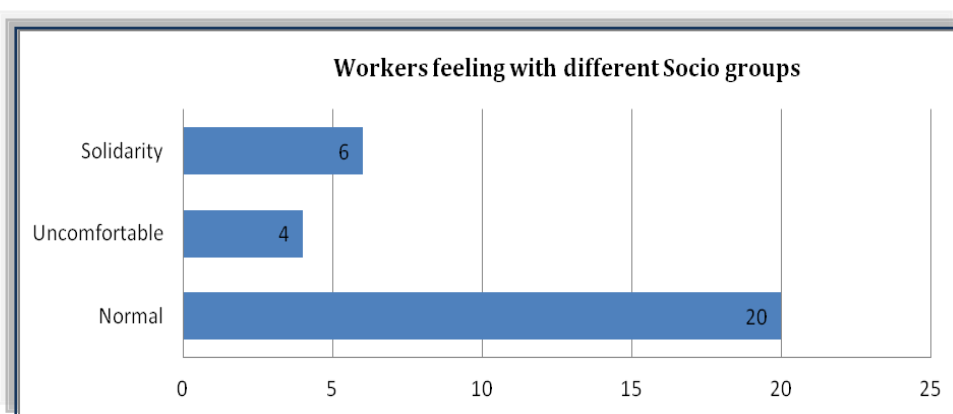
<sup>14</sup> RD Singh

view:01/08/2012). Thus, in context with socio-cultural factors education could be a reason which challenges the organization of labours working in a factory for their rights and social-upgrading. Other factors of socio-cultural milieu do not have impact on freedom of association.

### **Impact of Socio-Cultural Milie on Intra-firm relationship**

Data analysis (Figure5.1) shows there was normal social cooperation among workers. The maximum number of respondents (20 out of 30) responded having normal relationship and 6 respondents had feeling of good cooperaton.However, there were fewest respondents 4, who had uncomfortable feelings which might be because of preference to have lunch with same community which could be considered normal occurrence but not impacting intra-firm relationship negatively, thus there exist normally healthy social relationship among workers in a firm/factory.

**Figure 5.1**  
**impact of social cultural milieu on intra-firm relationship**



Source: Interview data analysis

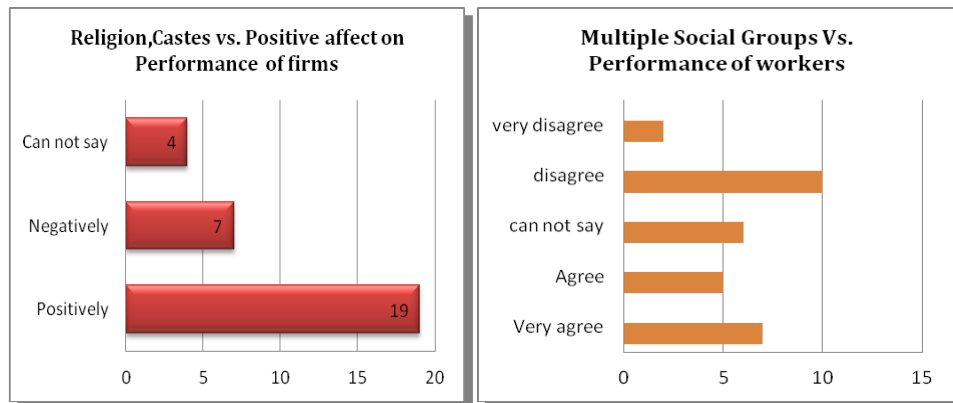
### **Impact of Religion, Castes & Communities on Performance of Firms/Factories**

The factory owners have had positive response regarding the effect of religion, castes and communities on performance of factories and firms. Among 30 respondents, 19 responded that such factors influence positively as it provides a competitive and multi-social environment. There were 7 respondents who had view that such factors did not positively impact on performance.

As the respondents who expressed that there are such factors which impacts negatively, are clear indications that such factors do exists at some extent among workers that influence performance of factories negatively. Which might have some negative relationships among workers? For instance, Mr. Vijit Aggarwal reveals wisely that there are one Ahir community among Hindus , whom factories do not prefer to hire because they force other artisans to reduce production which is sometimes extends issues relating to castes or religion causing negative effect leading to conflict among workers(Interview:24/07/2012).

The multi-social groups do not impact negatively in significance. Less than half respondents out of 30, responded that such factors may have bearing on performance of workers. They argued that workers feel very easy and active while they work with same community, religious or castes groups. However, more than half respondents disagreed and had argument that such factors do not play role because while working we focus on our target not on such factors. Even, they expressed, working with same social groups there is lesser enthusiasm of competitiveness which do not stimulate the increased into performance of workers.

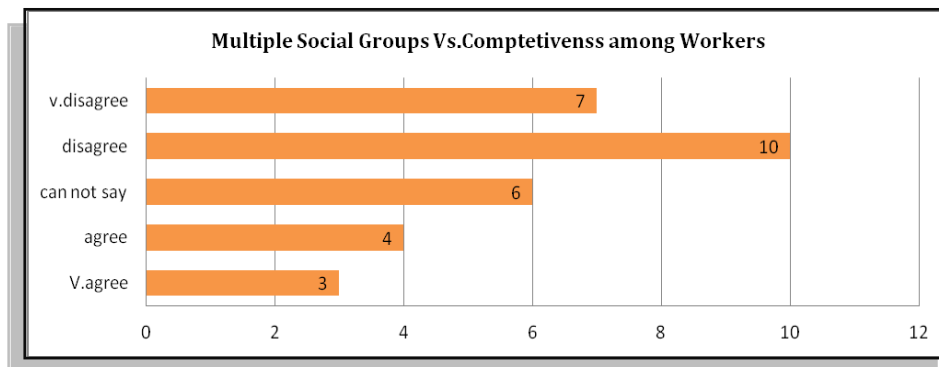
**Figure 5.2**  
**impact of socio-cultural milieu on performance of firms and workers**



Source: interview data analysis

As for as the impact on competitiveness (figure 5.3) is concerned while working with different social groups in a firm or factory, majority responded that such factors do not have major effect on competitiveness among workers while fewer responded that such various have bearing on competitiveness among workers. Ashish (Interview: 02/08/2012) revealed that labourers find easy while working with same social /caste or religious groups which negatively affect their performance while they live more informally. Where working with different social groups helps in giving more production because workers much more concentrate and interact a little bit consciously which improves feelings of competitiveness among workers. Thus analysis reflects that employing multiple social groups leads formal interaction and sense of competitiveness.

**Figure 5.3**  
**impact of socio-cultural milieu on competitiveness**



Source: Interview data analysis

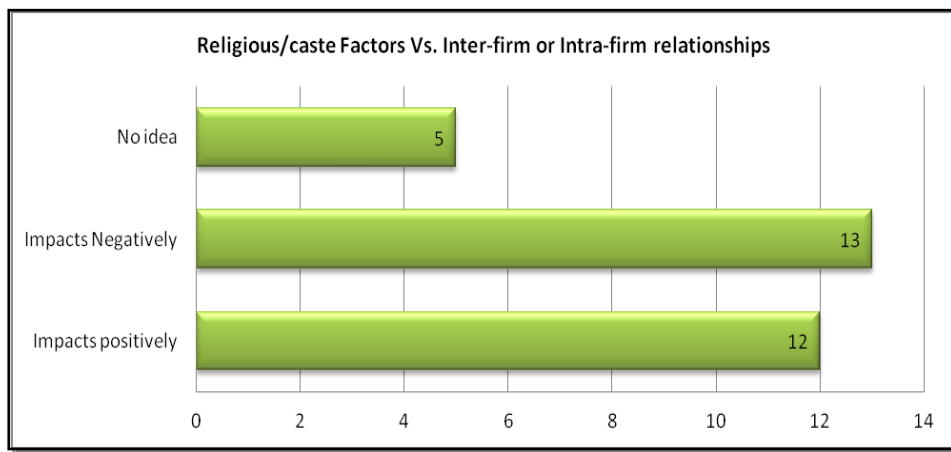
### Social Cultural Milieu vs. Inter-firm relationship

Responding to the questions if religious factors, casteism have effect on inter-firm relationship,. among 30 respondents (labourers) 12 responded that such factors are affecting positively the relationship. On the contrary, 13 respondents experience that religious/casteism etc are affecting inter-firm relationship negatively.

However, from the (Figure 5.4) analysis it can be concluded that there exist casteism or religious factors which is more influential on inter-firm or intra-firm relationships.

The General Manager, District Industry Center (Firozabad) acknowledged that such factors exists and most of diversified factories are concentrated into hands of few social groups ; like Mittal families, Aggarwal and Jain(Interview: 24/ 08/12). There were few groups of industries like Pooja Group of Industries, Advanced Group of Industries which had majority of partners with same community and castes groups and they preferred to work with and partnering with the same community, caste or religion which also causing exclusion of certain social group to be in mainstream with glassware.He also added that there are partiality or non-cooperation for technological or knowledge exchange among factories based on religion, caste and community. .In conclusion, there were division among factories( groupings) based on religion, caste and community, which is causing non-cooperation in sharing technologies, knowledge and partnering even exclusionary for certain social group and communities.

**Figure 5.4**  
**impact of socio-cultural milieu on inter-firm relationship**

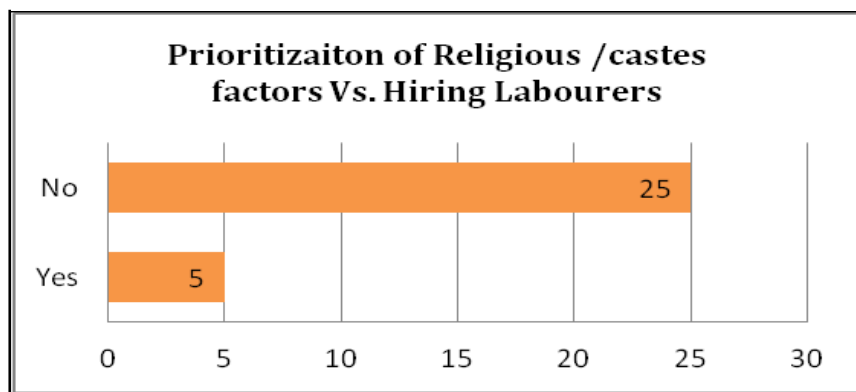


Source: Interview data analysis

## No Discrimination

Responding to question related to discrimination in hiring labourers, 25 respondents out of 30 revealed that socio-cultural factor were not considered in hiring labourers on day to day basis but it was prevalent in hiring staff for management/administrative sections. There were only 5 respondents as (Fig.5.5) who accepted to the existence of such factors. As far as the hiring laborers are concerned, most of laborers are indirectly contracted from informal labour market on day to day basis through sub-contracts who work directly under supervision of their sub-contractors and their supervisors negotiate their wages<sup>15</sup> (interview:02/08/2012). In addition to that work of glassware is too much dependent on skilled laborers who come from various social categories and are mutually inter-dependent<sup>16</sup>(Interview:02/08/2012). In conclusion, it is clear that there was a minimal degree of discrimination in hiring laborers on day to day but the hiring of staffs for administrative or management were discriminated based on religion, caste and communities which was common and prevalent practice.

**Figure 5.5**  
**socio-cultural milieu and hiring of labourers**



Source: field data analysis

## Social Cultural Milieu vs. Employment and Promotion

There is a minimum level of formal employment in terms of administration/management staffs for firms in glassware cluster<sup>17</sup> (interview:02/08/2012). For labour force it is absent even and depends on daily hiring from open/labour market.

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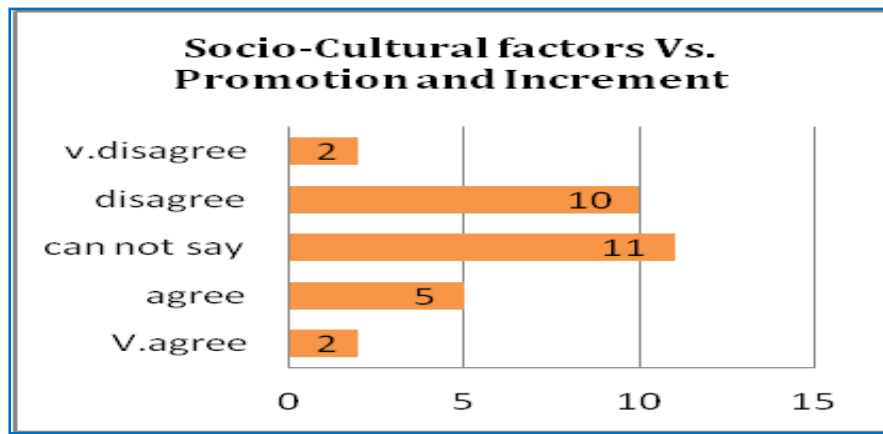
<sup>15</sup> RD Singh

<sup>16</sup> Ashish

<sup>17</sup> RD Singh

The analysis (Fig.5.6&5.7) revealed that there exist least degree of discrimination in promotion etc. which might be in case of administrative or managerial positions at factories. The respondents (labourers) indicated to such practices in appointment and promotion of managerial or administrative staffs were prevalent. Only 7 respondents out of 30 ( factory owners) agreed that social-cultural factors like religion, castes are taken into consideration at certain extent in hiring , promoting workers but ability and skills are much prioritized which is

**Figure 5.6**  
**socio-cultural milieu vs. promotion**



Source: Field data analysis

highly influenced by relativism or based on social networks. There were 21 respondents out of 30 factory owners who strongly disagreed with the fact that promotion or increment is affected by religion, castes, cultures etc. only few factory owners (7 out of 30) acknowledged the existence of discrimination on the basis of religion, caste and communities in terms of promotion and employment.

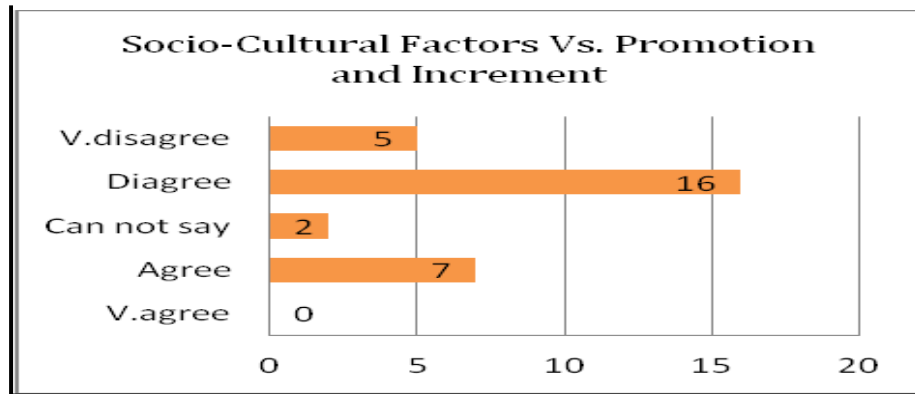
Trade unionist reflected that factory owners intend to appoint workers in managerial or administrative who belong to their own family, friends, religion or culture; even no factory owner can accept the truth<sup>18</sup>(Interview:23/07/2012). In conclusion, it is common practice to seek and provide appointment and promotion which is basically done informally and with social contacts which are encouraged with communal feeling and threats fair practices in terms of employment at glass cluster for managerial or administrative positons.

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<sup>18</sup> Chetram and Hanuman



**Figure 5.7**  
socio-cultural milieu vs. increment



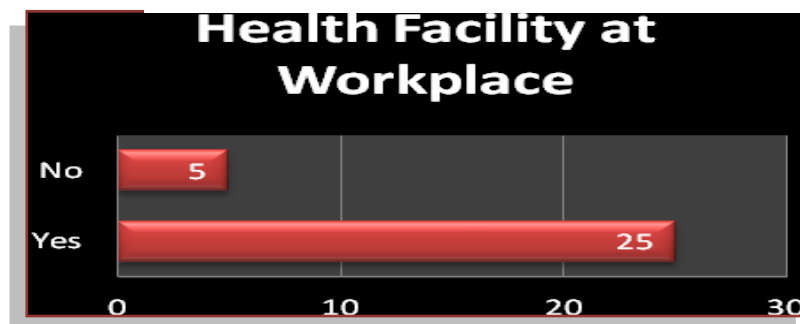
Source: Interview data analysis

### Health & Safety Measures

The Firozabad glass cluster is a hazardous industry which deserve extra attention ,to minimize health risks and promote health security to workers, because of extremely harmful industrial heating, hazardous chemicals, risky operational or manufacturing processes of glassware production<sup>19</sup>(Interview:04/08/2012). The workers have to face various serious health issues; for instance; failure of kidney and lung, Breath related problems, backache, headache, cuts, skin diseases , itching, irritation , Visual disorders , lack of apatite, Tuberculosis (T.B.) , dehydration etc.

This research explored that most of factories provide minimal first aid to workers in case of normal health problem but there is lack of monitoring from corporate, health department and inspectorate of factories in ensuring usages of health and safety measures in factories<sup>20</sup> ( Interview:04/08/2012). In response to available health facilities at workplace 25 respondents out of 30 positively revealed that they were provided with minimal health facilities which were first aid while only few (5) did not fully responded(fig.5.8).

**Figure 5.8**  
health and safety measures at workplace



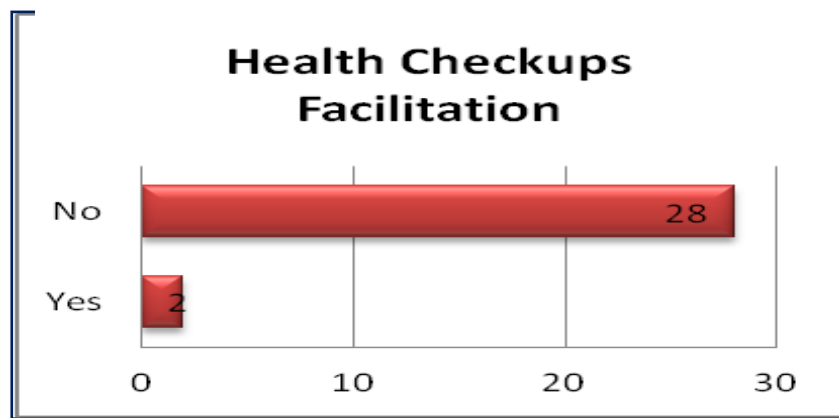
Source: interview analysis

<sup>19</sup> Local Health Officer

<sup>20</sup> Chetram

There is no provisional measures are taken either by government health institutions or by factories in order to have regular health check-ups for labourers<sup>21</sup>(interview:29/07/2012). The concluding the reasons factory owners have attitude laborers are highly mobile and unstable which might cause loss of investment of social upgrading in relation to health checkups.

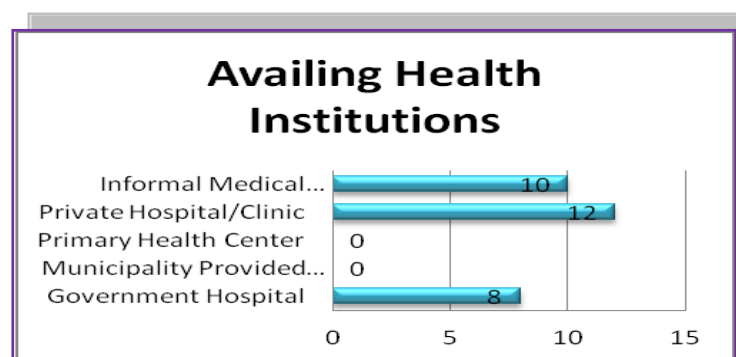
**Figure 5.9**  
health check-ups facilities



Source: Interview data analysis

The Fig.5.10 reflects that most of workers approach to informal health practitioners and private hospital or clinic for their treatment themselves and approach to government hospital. In addition, he included that there was lack of education, health consciousness and high ignorance among laborers and minimal degree of implementation of labour laws and inspection from inspectorate of factories which leads to denial for their health & safety rights at workplace<sup>22</sup> (interview:28/08/2012). In conclusion, health and safety is a major issue of glassware cluster which needs to be considered by factory owners so as to safeguard the health and avoid the risk for workers, the workers also needs to be non-ignorant towards their safety.

**Figure 5.10**  
Availing health institutions



Source: interview data

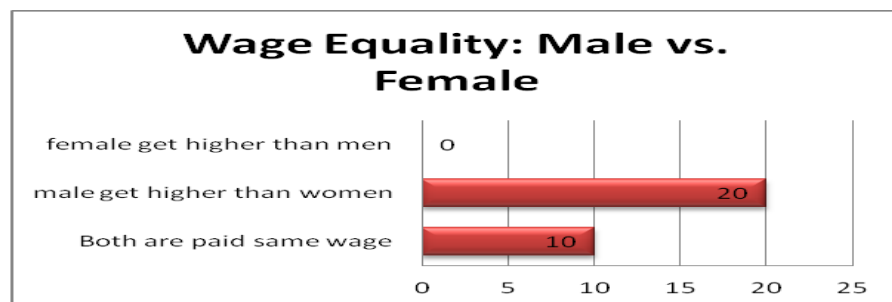
<sup>21</sup> Chetram

<sup>22</sup> GMDIC

### Minimum, Equal Wages& Working Hours

This research investigated into prevailing practices in terms of provision and providing Minimum and equal wages. In majority of cases there are informal practices to offer wages based on piece rate in glass bangle and glassware processing units. Despite the provision of minimum and equal wages there is lack of implementation of labour laws and formally no records are maintained or payment slips are provided against the payment of wages to labourers<sup>23</sup>(Interview:27/08/2012).

**Figure 5.11**  
**wage equality in glassware**



Source: interview sources

In respect to payment of minimum wages analysis shows (Fig.5.11) that there are discrepancy in providing equal wages for equal work between male and female. The female are inequally paid under paid with minimum wages<sup>24</sup>(Interview:25 /08/2012). Further, primary sources revealed that . only 5-9% workers are shown on record of a factory and they get benefits of various provisions of factory act even these workers might be the close relatives, friends and family members and few staffs who work in administration, operation or in management get such kinds of benefits<sup>25</sup>(Interview:27/07/2012).

The wages is informally negotiated between labour contractor/sub-contractors and laborers from open labour market. Some highly skilled, skilled are paid above minimum wage or minimum wages, however, semi-skilled and unskilled or underpaid, which leads exploitation of labourers in terms of wage payment (Ashish, interview, 22 July '12). The data analysis indicates the pattern of daily payment into glassware is highly practiced (Fig.5.12) . Only few workers administrative works get paid only monthly basis and in processing units most of workers are paid based on quantity or finished goods.

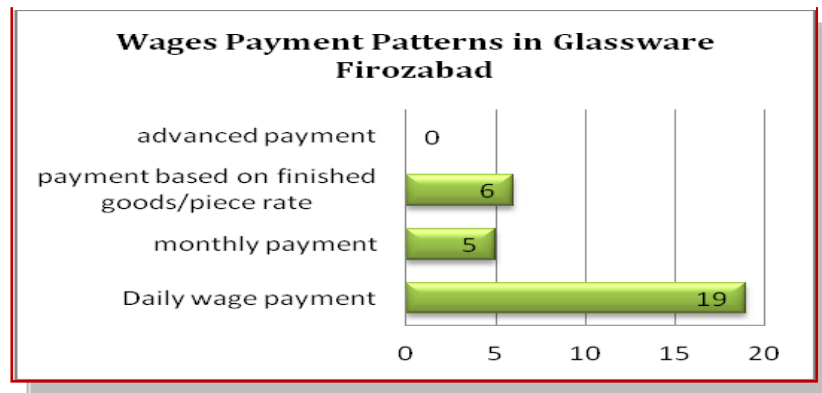
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<sup>23</sup> GMDIC

<sup>24</sup> RD Singh

<sup>25</sup> RD Singh

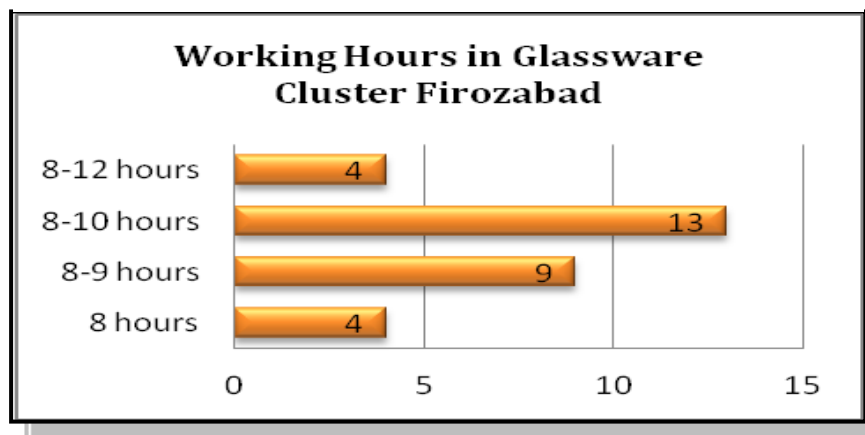
**Figure 5.12**  
**wage pattern**



Source: Interview Field Work

The automated factories generally operate 8-10 hours daily against 8 hours by State laws for factories (Chetram, interview, 22 July '12). Other ancillary, household units work between 8-12 hours per day. While there are few furnaces like (bangle) which operate 8-9 hours daily basis (Fig. 5.13).

**Figure 5.13**  
**working hours in glassware cluster**

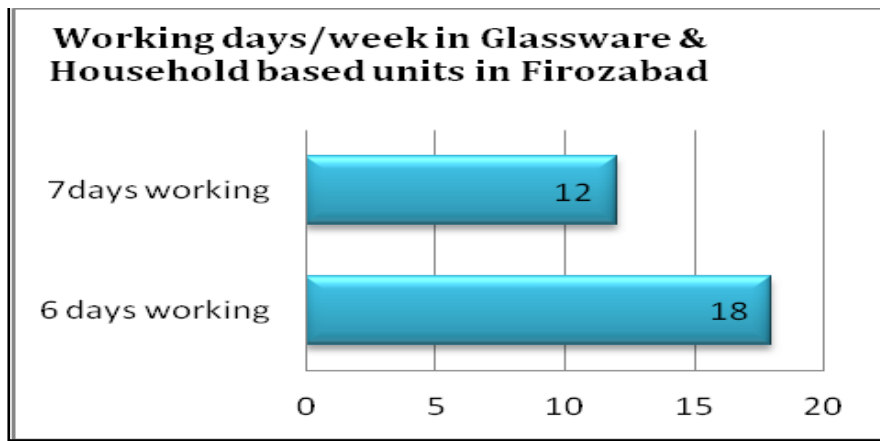


Source: interview from field

The Figure 5.14 shows that most of manufacturing units work only for 6 days per week while automated and processing units are open all days in a week, though it is prohibited according to labour laws but such practices are common at Firozabad glassware cluster (Chetram, Interview, 22 July '12).

In context to socio-cultural milieu such labour exploitative practices are common. The lack of education, awareness and absence of organization of labourers are making conditions worse in glassware cluster which might be to fulfill the gap because of local festivals and rituals labourers become absent and go on longer holidays which causes closing of factories for longer days (GMDIC, interview, 27 July '12). In conclusion, the unfair practices with underpayment of minimum and unequal wages and overworking hours need to be addressed strategically to safeguard the workers from exploitative practices in Firozabad.

**Figure 5.14**  
working days per week in glassware



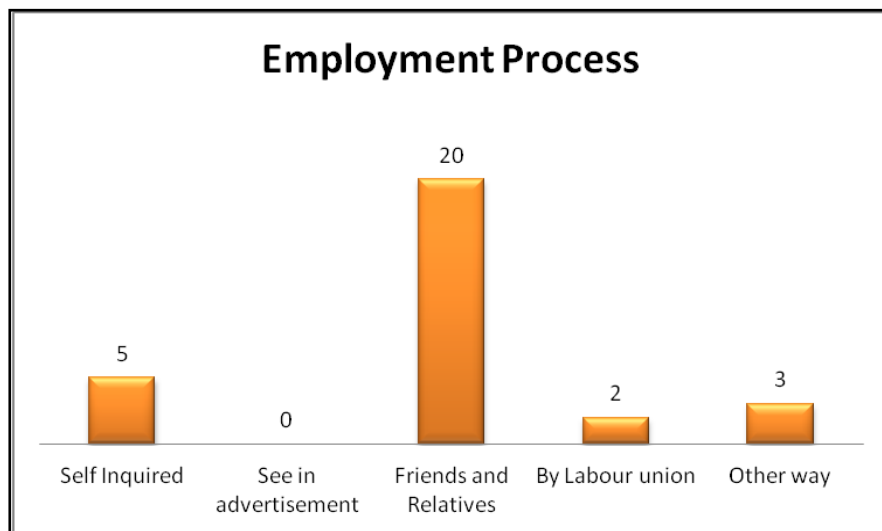
Source: interview from field

### Security of Employment/Proper Contracts

The processes of providing employment or hiring for labourers in glassware cluster are highly informal which is primarily based on social contacts, friends, relativism etc. Even, in cases for employment in administrative positions, at certain extent, are influenced by socio-cultural milieu and biased with religion, castes, education etc<sup>26</sup>(Interview: 23/07/2012).

The Fig.5.15 shows that maximum number of workers approached based on their social contacts like friends or relatives because of lack of formal and procedural employment by advertisement etc(Interview:27/07/2012).

**Figure 5.15**  
Employment process

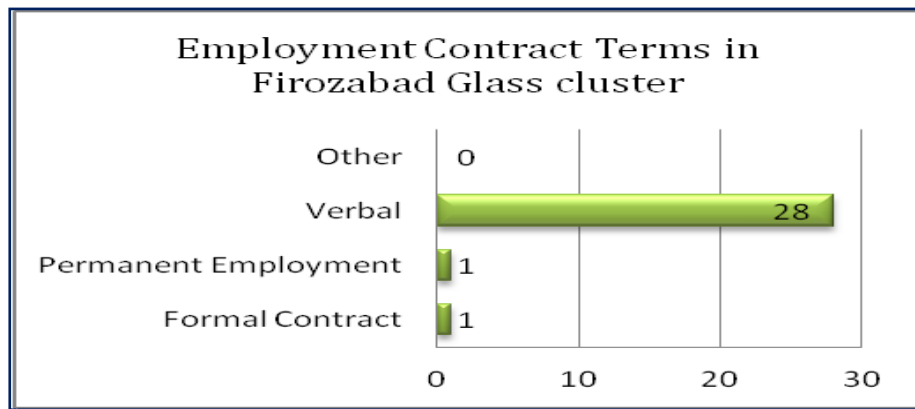


Source: Interview Field Work

<sup>26</sup> Ashish

The table 5.16 show that degree of verbal negotiation of employment is high while the formal contracts is provided to administrative workers or managers and employment benefits; PEF, ESI, etc are only entitled to 7-9% workers in a firm/factory who belong close in relationship, friends, castes of factory owners and employee, specially labourers are completely insecure and unstable<sup>27</sup> (Interview: 23/07/2012). In conclusion, the employment in glassware is highly insecure for workers; the verbal negotiation, hiring based on social contacts, no provision of employment benefits makes employment insecure.

**Figure 5.16**  
**Employment terms and conditions**



Source: interview from field

### **Treatment with Women**

This research had limitation with the questionnaire to investigate into situation of female workers in terms of treatment with them at workplace, however, it focused on equality of wages and working hours and basic facilities for women. The research observed there was inequality in terms of wages and working hours between men and women and work of women were limited to cleaning and scraping, while other processes of manufacturing and management were dominated by male workers. In terms of cultural constraints, women from one community or caste avoid to go for work in another caste/communities' owned workplace, for example; Muslim women or Hindu Jatav community women did not go for work in another communities and concentrate on their household units. In other words, there exist divisions among various social sections, communities based on religion, caste and cultural practices. In relation to treatment with women at work place, the stakeholders, trade unions, NGOs activists reported there were high prevalent practices of sexual(60-70%, specially first time job seekers) and physical harassment, which could be taken for future research .

<sup>2727</sup> Chetram

## Working Conditions

This research had focused on working conditions of factories. The research observed there was a little bit improving into the working conditions in automatized factories only. The automatized factories heightening walls to access better ventilation, basic health facilities, and controlling with industrial heat. However, the mouth blowing furnaces( tank furnace and bangle making furnace) still lagging behind with no efforts. The observation showed there were almost absence of health and safety measures, poor conditions of basic facilities and lighting, suffocation and extremely hot working environment deserved extra attention for improvement. In terms of social upgrading, the situation of workers have not yet been focused because of informal practices with employment, under payment against minimum wages, insecure and highly mobile/unstable labour force and are highly influenced by local social cultural milieu negatively. Moreover, the exploitative environment in terms of overtime work, pressure and threat to expelling from work, sexual harassment with women are reported to commonly practices<sup>28</sup> (Interview:12/08/2012).In conclusion, though there is positive efforts towards improvement of working conditions in automatized factories, bangle manufacturing and household units deserve strategic intervention to improve existing working conditions and practices.

## Child Labour Situation

The glassware industry of Firozabad severely suffers with high degree of child labour practices. Though, automatized and bangle manufacturing did not directly employ children, however, the other process of production chain for example; processing units, decorative units, traders, export processing firms, and all kinds of ancillary (household based micro) units engage children rampantly hazardous glassware<sup>29</sup> (Interview:16/08/2012)who get exposed with harmful, poisonous chemicals and industrial heating and unsafe work practices and sever exploitation. According to recent media ( local new report) there would be above 9000 children were working in the various processes of glassware in Firozabad as follows:

**Table 5.1**  
**Child labour situation**

SNo.	Category of Child labourers	Estimate Number
1	Children working in hazardous processes	1922
2	Children working in household units	4132
3	Children working in another works	2680
4	Children working on Godam/Firms	191
5	Children working in factories	44

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<sup>28</sup> Rahul

<sup>29</sup> Ashish

6	Children working in workshop	65
7	Children working on shops	45
8	Children working on other places	138
<b>Total child labours</b>		<b>9217</b>
<b>Social Category of Working Children</b>		<b>No. Of Children</b>
1	Hindu child labourers	2411
2.	Muslim child labourers	2190
3.	Shikh child labourer	01
<b>Family Type</b>		<b>No. Of children</b>
1	Children coming from Joint Family	80
2	Children coming from nuclear family	4522
<b>Gender Break-ups of child labourers</b>		<b>No. Of children</b>
1	Male child labourers	2413
2	Female child labourers	2159
<b>Non-school going</b>		<b>No. Of Children</b>
1	Non-schooling going	2413

Source: local news paper<sup>30</sup>

Nonetheless, the stakeholders estimate working children between 15000-17000 in all the processes of chain<sup>31</sup> (Interview:13/08/2012). Many stakeholders observed maximum number of working children coming from Muslim communities who have maximum household units and because of poor socio-economic conditions and living in highly poverty practices more child labour and more than 8000 would be coming from poorer Muslim communities. In addition, there is poor cultural attitude to not to educate children among Muslim and other non-muslim backwards castes (specially girl) while more relying on skilful work for life-long practices<sup>32</sup>(Interview:13/08/2012).

In conclusion, the entire analysis of impact of socio-cultural milieu on social upgrading reflected there existed divisions among factories based on religious, castes and cultural attitude which discriminate various social sections in terms of availing equal opportunities for livelihood and mutually inclusive stake in global value chain with supply and marketing of products, making insecure and unstable labour force denying their basic rights at workplace and creates situations for exploitative practices. Moreover, this research observed the prevalent unfair practices unsafe and risky working conditions, cultural constraint in smooth flow of female workforce from one community to another. Last but not least, the ignorance and fear to invest into social upgrading of workforce (because of highly immobile and unstable labour force) challenges the performance of glassware into global value chain and constraints further economic upgrading. The non-cooperation among factories in terms of technological and knowledge sharing based on religion and castes as well as partnership with only same communities and castes discourage minorities to be competitive in the production and marketing processes of glassware.

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<sup>30</sup> Published on 2nd Aug'2012

<sup>31</sup> Hanuman

<sup>32</sup> Naval



## 5.2 Impact of Socio-Cultural Milieu on Economic Upgrading

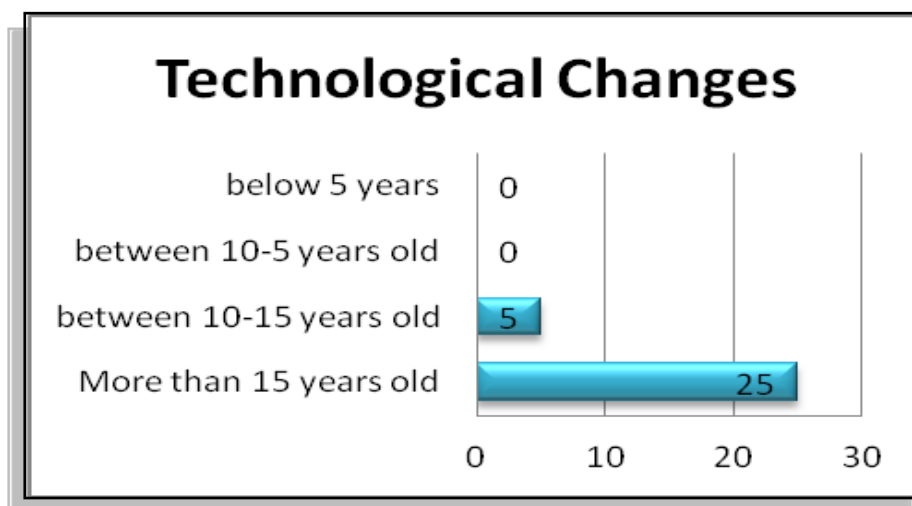
This research, despite certain limitations to much focus on Economic upgrading, analysed impact of local socio-cultural milieu which either directly or indirectly influence economic upgrading of glassware Firozabad. These key indicators were degree of automation, product ranges, changes in employment and infrastructure upgrading, accessibility of market and evolvement of managerial system and practices. Following there are brief descriptions of analysis in relation to local-socio-cultural context.

### Degree of Automation/Technological Changes

In respect to level of automation and use of technology is concerned, the technology is moderate, not advanced like China and Europe. The technologies used are more than 25 years old in the market, there has not happened any changes within decades<sup>33</sup> (Fig.5.17)(Interview:13/08/2012).

This research revealed that the glassware cluster had been facing problem with lack of highly skilled social capital which impede the installation of advanced technologies in factories<sup>34</sup> (Interview:22/08/2012). There exist division and group-ism among factory owners which are highly biased with religion, casteism and socio-cultural factors in terms of knowledge and technological exchange and sharing <sup>35</sup>(Interview:13/08/2012).Consequently, the diversified had been concentrated into proprietorship of two big groups for example; Advanced Group of Companies and Pooja Group, who belong from same caste and relatives and family.

**Figure 5.17**  
use of technology and automation



Source: interview from field

<sup>33</sup> RD Singh

<sup>34</sup> Ashish

<sup>35</sup> Chetram

### Product ranges and access to markets:

The Firozabad Glassware successfully diversified with upgrading product ranges from Glass Bangle to products of international markets which are exported globally<sup>36</sup> (Interview: 16/08/2012). The artisans are uneducated and have skills transferred through generations which constrain them to be innovative and develop themselves through formal trainings in line with modern demands of markets. This research did not find the relationship of other social factors like religion, casteism etc having impact on product ranges and quality of production.

### Changes in Employment

The investigation in relation to changes in the number of workers since last 4-5 years, research revealed that there had been decreased of labourers because of upgrading in automization processes while in glass bangles manufacturing labourers had increased and labourers shifted from atomized to non-atomized factories of glass production(Fig.5.18). The data received from District Industry Centre, revealed that the industry had been labour intensive which employs formal and informal labourers of highly skilled, skilled, semi-skilled and unskilled category. The Glass bangle manufacturing, glassware and household based units offer maximum number of labourers for livelihood support to 100,000 directly and 200,000 indirectly in the processes of glass and bangle productions at Firozabad level<sup>37</sup> (DIC:2011).Because of lack of education among labourers and their dependency on artisanship for livelihood had always resisted for the technological upgrading because of fear of losing livelihood by artisans<sup>38</sup>(Interview: 27 /07/2012).More over because of non-cooperation among factories influenced by religion, castes and communities there is lack of technological progress in other factories so there is not declining in the labour intensity of glassware.

**Figure 5.18**  
changes in employment



Source: interview from field

<sup>36</sup>Hanuman

<sup>37</sup> District Industry Center

<sup>38</sup> GMDIC

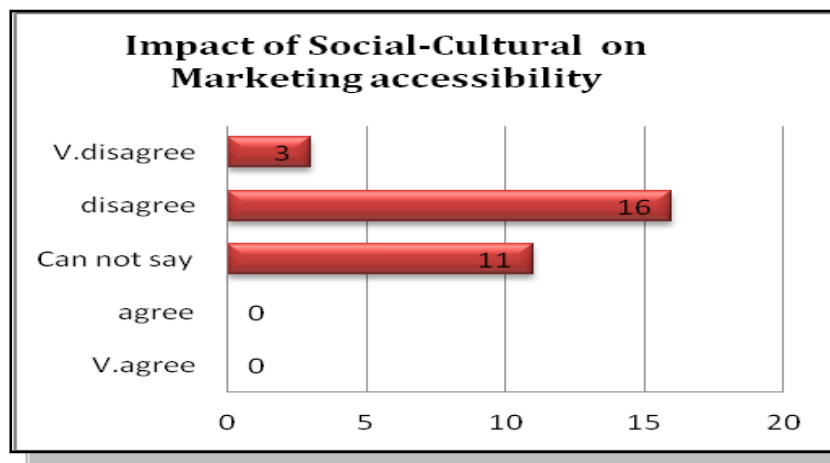
### Physical Infrastructure

The physical infrastructure of diversified (glass) has significantly improved since last 30 years with expansion of space, heightening the walls and installing ventilation measure etc. Though, directly, there is some challenges for instances; access to finance for infrastructural upgrading which is based social network of factories with government and financial institutions; discrimination by institutions based on religion, caste and culture challenges the inclusive infrastructure development<sup>39</sup> (Interview:22/08/2012).

### Accessibility to Market

In response to accessibility of products in domestic and international market the research reflected that socio-cultural factors did not had impact on economic upgrading. On the other hand, focusing to social-cultural practices in which partnership for marketing remain biased religious/casteism, relativism etc, which excludes other social category in the production and marketing processes(Interview: 19/08/2012). This way, the socio-cultural factors, though not directly but indirectly have had bearing on the accessibility of local and global markets but there is discrimination in partnering for mutual businesses were biased with religions and casteism.

**Figure 5.19**  
social cultural milieu vs. market accessibility



Source: interview from field

### Management System

The factories which had successfully diversified and atomized themselves, they practice management system but lacking with professionalism <sup>40</sup>(Interview:18/08/2012). The appointment of workers in managerial sections biased with socio-cultural factors like religion, castes, friendship etc (ibid). In most of diversified factories it is quite common to have majority working people in

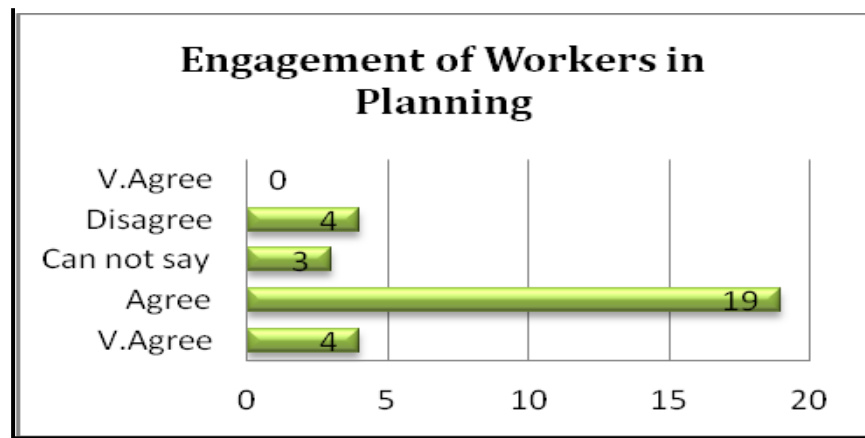
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<sup>39</sup> Sultan

<sup>40</sup> Jawed

management with their own family, friends, and relatives or in social work<sup>41</sup>(Interview:14/08/2012). Nathan agreed that because of informal behaviour of emerging management system, the non-engagement of labours or workers makes the labours force more unstable<sup>42</sup> (Interview: 27/08/2012).

**Figure 5.20**  
**engagement of workers in planning**



Source: interview from field

## Conclusion

This section briefs the analysis of the impact of social cultural milieu how it negatively influences social upgrading process and constraining to economic upgrading.

The social cultural milieu influences intra-firm and intra firm relationship of glassware cluster. There is lack of organization among labourers that causes denial of their basic rights and exploitation at workplace. The Embedded practices based on religious feeling, caste and community, have led to the division among factory owners and resulting exclusion from partnership in business, non-cooperation in terms of financial, technological and knowledge exchange are causing exclusion of minorities to be main stream and upgrading their factories.

Despite, providing minimal first aid, there is almost absence of adoption of health and safety measures at workplace of hazardous manufacturing processes of glassware. Further, there is gender inequality in terms of equal wages for the same job between male and female workers. The female workers are less paid than male workers even women's job is confined to cleaning; scraping etc and other areas of production is dominant with male workers. Except under minimum wage to semi-skilled and unskilled, the unpaid overworking hour is a common practice in glassware. The working hours ranges between 8 to 12 hours in a day against maximum 8 hours by labour laws.

The analysis reflects there are practices of discrimination based on religion, caste and communities. For example, the partnership for business, sharing of

<sup>41</sup> Sultan

<sup>42</sup> Dev Nathan

technologies and knowledge is highly influenced by these factors which lead to economic exclusion for minorities. Moreover, the discrimination also prevail in terms of employment in managerial or administrative positions and employment is provided informally. The factory owners emphasis on social contacts to seek candidates belonging to their own family, friends, relatives, castes and communities. The most of the labours are hired from labour market on daily wage basis and only limited number of workers 7-8% is provided with employment benefit provisions and such workers belong closely as relatives, family or friend to factory owners.

Moreover, the factories are lacking with basic facilities like toilets, staff room, resting hall, safe and clean drinking water etc. There is rampant practices of child labour in different manufacturing processes directly or indirectly. It is estimated more than 9000 children are engaged in different hazardous processes of manufacturing that make the working condition more uncondusive.

The analysis reveals that despite producing all ranges of products of international market, there is lack of technological advancement, the glassware is using more than 25 years old technologies. The socio-cultural milieu encourages the non-cooperation in terms of sharing technology and knowledge upgrading products and factories, exclusion of weaker and minority's social group from accessing market, availing work opportunities constraints economic upgrading.

In a nutshell, the local social cultural milieu of Firozabad have impact social upgrading processes and economic as well negatively which could be considered a major constrain for the inclusive development of cluster as whole. The last chapter concludes the overall impact of local social cultural milieu on social upgrading and inclusive development of Firozabad cluster elaborately.

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## Chapter 6 Conclusion

This research paper traced the impact of local socio-cultural milieu on social upgrading and how it constraining economic upgrading and competitiveness of the Firozabad Glassware cluster. The attention was given to explore that how the local social cultural milieu which consist with religion, caste, gender, urban rural-rural background, festivals and rituals have been influencing the inter-firm and intra firm relationships among factories of glassware. Further, how the inter-firm and intra-firm relationships influencing social upgrading directly and constrain economic upgrading indirectly.

The main finding of this research revealed that local social cultural milieu has negative influence on social upgrading. The local socio-cultural milieu is embedded into the unfair practices, such as informal and insecure employment, ignorance in the adoption of health and safety measures, under payment to minimum and equal wages, gender inequality, discrimination and exploitation in glassware cluster. Consequently, such practices resulted into insecure and highly unstable labour force causing lack of faith between factory owners and labourers which created fear among factory owner to invest into social upgrading processes. More, the local social cultural milieu have led division among factories based on religion, caste, communities etc which is resulting in exclusion from business partnership, non-cooperation in terms of sharing technology and knowledge, accessing markets and products for weaker and minority communities which further constraining economic upgrading and inclusive development of Firozabad as whole.

This research revealed that the lack of organization among laborers encouraged the denial of their basic rights by factory owners. Further, the absence of organizations for promoting and safeguarding the rights and interests of labourers, prepare the situation for their exploitation. The analysis indicated that though factories provided minimal first aid, there is almost absence of health and safety measures at workplace. The practices in the manufacturing units are extremely hazardous that causes expose to harmful chemicals, dangerous industrial heating, cutting, irritating, breath related disease, T.B, lounge failure etc. Except providing minimal First Aid, the glassware has been ignorant to health and safety measures at workplace.

The employment in glassware cluster is highly insecure, informal and discriminative. This research investigated that maximum labourers are hired from labour market on daily wage basis with verbal terms and conditions. Further, for the administrative, account and managerial positions, the factories give priority to candidates belonging to their own caste, religion, relatives or community. Such discriminative practices results in loss of opportunity and exclusion of promising candidates from achieving right employment. Being labour intensive industry, the factory owners only provide employment benefits like insurance, Provident Fund to only 8-9% workers of total workforce that are also influenced by caste, relatives or community based attitudes.

The analysis disclosed that there is inequality in wages between male and female workers. The female workers are underpaid to minimum wages and get lesser wages than male workers. Further, the highly skilled and skilled are

paid above minimum wages whereas semi-skilled and unskilled are paid below minimum wages.

Despite, the existing labour law for 8 hours as maximum working hours, this research shows that in practice, the working hours goes above 8 hours and upto 12 hours in a day. Even, there are very limited provisions for providing leaves to workers only on occasion of nationally recognized festivals. The observations show that the factories are lacking with basic facilities like toilets, resting room, clean and safe drinking water, proper ventilation etc at workplace. In addition, this research observed that exploitation of women at workplace is common which is needed in-depth scientific investigation. The stakeholders reported that 60-70% women are exploited and harassed severely in most cases sexually <sup>43</sup>(interviews). More, the glassware cluster is suffering with child labour issues and it is estimated that more than 9000 children are engaged in different hazardous manufacturing processes directly and indirectly.

In spite of above, the local social cultural milieu has negatively influenced the intra-firm relationships. There is division among factories based on religion, castes and communities which results in lack of social and economic cooperation, non-cooperation in sharing technology and knowledge, exclusion from associating in business, access to product design and markets for weaker and minority communities. In addition, this research investigated that societies are geographically divided based on religion, castes and community hinders the flow of labourers especially female workers from their community to work in other community. For example; Muslims or Jatav women are restricted to work in their own community by some cultural prohibition. Consequently, female labourers are concentrated into their household units.

It is important to minimize the socio-cultural constraints in order to stimulate social upgrading and achieve economic upgrading and competitiveness in the Firozabad glassware cluster. As discussed in analytical framework part of this paper, Helmsing (2011) connotes that concept of Global Value Chain and development are considered as an effective instrumental tool for poverty alleviation, entrepreneurship and achieving decent labour conditions (Helmsing, A. H. J. and Vellema, S.R. 2011). This connotation supports the definition of social upgrading given by Nathan (2010) as a process of enhancing the conditions of workers and quality of employment, improved wages and skill, providing social protection and safeguarding worker's rights with special focus on vulnerable categories like women and children (Nathan 2010). According to him, these considerations could lead in well being of workers, quality of work and labour right, well being of dependents and would have positive spill over to their community. These parameters for achieving social upgrading is also closely related to ILO's agenda of Labour Standards and Decent work. The Labour Standards aspect includes indicators like working conditions, fair wages, working hours, gender equality etc while decent work was described by Mr. Juan Somavia as opportunities for women and men to obtain decent work in conditions of freedom, equality and security. It also bring together four multiple goals; rights at work, productive employment, social protection and social dia-

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<sup>43</sup>Social Activist, Rahul

logue which are key to reduce poverty, achieving equitable, inclusive and sustainable growth (International Labour Organization. 2009).

To promote organizations among labourers and safeguard their basic rights, policy should include provisions of formal engagement of labour based organizations and trade unions in the implementation processes of existing labour laws and codes of corporate conduct. Apart from voluntary role of civil societies in creating awareness among labourers for their basic rights, the policy should be considerate for mandatory social auditing of factories by external auditors along with inspectorate department of local and regional governments. More, it is worthwhile to incorporate in policy framework the provision of private public partnership to enhance the working conditions and labour conditions at workplace.

In addition, to encourage the inclusive development of cluster in long run, a policy intervention for integration of house hold based units at one platform, their relocation and rehabilitation out of community could be worthwhile. This policy provision could be of help in reducing child labour practices and create a situation for socio-economic growth of poor and excluded communities. As Knorringa(2010) emphasized on responsible production which includes both fair trade and CSR initiatives (Knorringa 2010), it is important to include in cluster policy to establish a formal institution to monitor and audit the inclusive and responsible production and encourage corporate to undertake CSR initiatives towards socio-economic inclusion of weaker and excluded communities. Further, the alternative policy of corporate should include the strategic measures to enhance education, health and entrepreneurship development for excluded, minorities and underprivileged communities.

Further, to reduce the labour intensiveness of glassware an alternative policy for diversification of youths through entrepreneurship, promoting higher education through fellowship could be of added advantage for development of cluster in long run. The local and regional government in their policy should include establishing separate health institutions, labour welfare institution which could be of helpful in dealing with discrimination, exclusion and exploitation issues. Last but not least, the promotion of Socio- cultural enhancement program could be of helpful in socio-cultural integration in long-run which would create situations by minimizing local cultural constraint for social upgrading processes and boosting economic upgrading and inclusive development of Firozabad glassware cluster in long run.



# Appendices

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