

# A STUDY : WORKING CONDITIONS OF SMALL SCALE WEAVING UNITS

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Dr. Bhupinder Kaur, passionate about learning new things having a strong academic background and diverse professional experience of 15 years. She is a result driven optimist person, sincere about my responsibilities with good management skills. Her focus areas have been research, training, skill development, content development and management.

## Abstract

The aim of the research is to study the work environment in the weaving units. The study provides an outlook towards the health and safety conditions in the weaving units in Delhi /NCR. The research provides help in improving the health, safety and general working conditions in the weaving units. Increasing weaving industries are responsible for occupational respiratory problems, exposure to the dust, noise, dull lighting and working hours that affects the health of workers. The working conditions of the industry makes the working environment unhealthy and unsafe. The technology in the weaving industry contains many hazards and a high rate of accidents to the workers. As they are manually handling the machinery which poses risks for workers. Also, they are not aware that protective measures should be adopted for their jobs. The research will provide an understanding about the working environment in weaving units of Delhi /NCR.

**Keywords:** Weaving, working conditions, Safety Measures, Small Scale Industry, Textile Industry

## INTRODUCTION

The Indian textile industry is one of the largest in the world with a massive raw material and textiles manufacturing base. Our economy is largely dependent on textile manufacturing and trade in addition to other major industries. About 27% of the foreign exchange earnings are on account of export of textiles and clothing alone. The textiles and clothing sector contributes about 14% to the industrial production and 3% to the gross domestic product of the country. Around 8% of the total excise revenue collection is contributed by the textile industry. The textile industry accounts for as large as 21% of the total employment generated in the economy. Around 35 million people are directly employed in textile manufacturing activities. Indirect employment including the manpower engaged in agricultural based raw-material production like cotton and related trade and handling could be stated to be around another 60 million.

The textile sector also has a direct link with the rural economy and performance of major fibre crops and crafts such as cotton, wool, silk, handicrafts and handlooms, which employ millions of farmers and crafts persons in rural and semi-urban areas. It has been estimated that one out of every six households in the country depends directly or indirectly on this sector.

India has several advantages in the textile sector, including abundant availability of raw material and labour. It is the second largest player in the world cotton trade. It has the largest cotton production, of about nine million hectares and is the third largest producer of cotton fibre in the world. It ranks fourth in terms of staple fibre production and fourth in polyester yarn production. The textile industry is also labour intensive, thus India has an advantage over other countries (<https://www.fibre2fashion.com/industry-article/2363/indian-textile-industry-an-overview>).

**METHODOLOGY**

For present research, convenience and snowball sampling techniques were used to select the weaving units. To study the working conditions of five small scale weaving units of Delhi NCR were selected.

**RESULTS AND DISCUSSION**

**PROVISION OF HEALTH CARE AND SAFETY FACILITIES TO THE WORKERS OF SMALL SCALE WEAVING UNITS**

**Provision of protective wear**

In the weaving units, there are several factors like improper lighting at some units, unawareness of protective wear, and unhygienic conditions that contribute to the ill health of the workers. Table 1 shows the responses of the workers regarding the health care facilities provided to them for protection against health hazards.

Table 1 Provision of protective wear

S.no	Protective workwear	Yes	No	Total units
1.	Masks	3	2	5
2.	Gloves	0	5	5
3.	Lab coats	0	5	5
4.	Aprons	0	5	5
5.	Earbuds	2	3	5
6.	Safety glasses	0	5	5

Results have shown that workers of the 3 units were provided masks, while only 2 units were providing earbuds, but only a rare of them were using it (**Plate 1**). Gloves, lab coats, aprons and safety glasses (**Plate 2**) were not used by any of the units. All the workers had a careless attitude regarding their health (**Plate 3**).

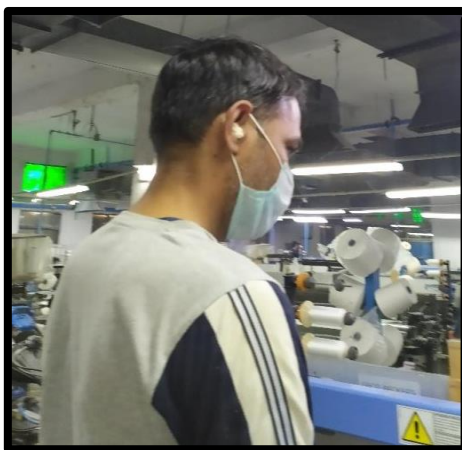


Plate 1 Working with mask and



Plate 2 Working without gloves

earbuds



Plate 3 Working without Mask/Apron

### Provision of medical facilities

First aid is the provision of immediate care to a victim with an injury or illness, and should always have a direct relationship to general health and safety organizations. Performed within a limited skill range. First aid is normally performed until the injury or illness is satisfactorily dealt with (such as in the case of small cuts and blisters) or until the next level of care, such as an ambulance or doctor, arrives.

Table 2 Provision of medical facilities

S.no	Medical facilities	Yes	No	Total units
1.	First aid kits	2	3	5
2.	Regular checkups	0	5	5
3.	Medical allowance	4	1	5
4.	Sick leave	4	1	5
5.	ESI Scheme	4	1	5

Table 2 indicates that two of the units were providing first aid kits to the workers. Four of the units were providing proper medical allowances, sick leave and ESI scheme to the workers. Provision of regular checkups were not a part of these small scale weaving units.

### Provision of fire precautions

The risk of fire in the units is high due to several reasons like too many power generators, power looms, cotton dust and fabric. The provision of fire safety is a must for any workplace and the workers must be trained to use the equipment properly.

Table 3 Provision of fire precautions

So	Fire related facilities	Yes	No	Total units
1.	Proper precautions used	5	0	5
2.	Enough firefighting equipment	3	2	5
3.	Proper exit plans	4	1	5
4.	Proper clearance near stairs & exits	4	1	5

The facilities regarding fire safety were there in all the units (Table 3). Fire extinguishers were present in every unit which is a basic requirement for the safety purpose. It was found that four units had proper clearance near stairs and exits.

### WORKING CONDITIONS OF SMALL SCALE WEAVING UNITS

In the present research, an attempt was made to study the working conditions of the workers of the small scale weaving units and results for the same are tabulated in Table 4.

### Physical working conditions

According to Table 4, the physical working conditions of four of the weaving units were found in the presence of exhaust fans. One unit also found presence of air supply coolers and natural light from windows/ventilators, five of the units were found in artificial light and natural light. There were unhygienic conditions in two of the units while regular cleaning was done in the rest of the units. It was found to have sufficient garbage bins in two units and three units which had no garbage bin. Washrooms were adequate in number in all five units. Eating areas were clean in only three of the units.

Table 4 Physical working conditions of the small scale weaving units

S.no	Physical working conditions	Yes	No	Total units
1.	Exhaust fan	4	1	5
2.	Air supply	5	0	5
3.	Windows/ventilators for light	4	1	5
4.	Artificial light sources	5	0	5
5.	Regular cleaning	3	2	5
6.	Sufficient garbage bins	2	3	5
7.	Clean eating area	3	2	5
8.	Adequate washrooms	5	0	5

### DEVELOPMENT OF PROTECTIVE MASK

A protective mask was made to protect from inhalation of cotton dust through the mouth and nose. Further, it can also be used to protect ears from heavy noise of looms as it has ear plugs. This mask is made up of soft polyester material with air filter mesh which is breathable and comfortable. This face mask can be converted into a head cover also. It is a one size fits all universal mask, can be used by both male and female as it is made with Velcro closure. The suggested safety practices for the workers play a significant role in preventing occupational health hazards and increasing the efficiency of the task.



Plate 4 (a) Mask Front view



Plate 4 (b) Mask side view



Plate 4 (c) Mask back view





**Plate 4 (e) Mask front flat view**



**Plate 4 (f) Mask back flat view**

### **Conclusion**

The Indian textile industry is one of the largest in the world with a massive raw material and textiles manufacturing base. Our economy is largely dependent on textile manufacturing and trade in addition to other major industries. In the weaving units, there are several factors like improper lighting at some units, unawareness of protective wear, and unhygienic conditions that contribute to the ill health of the workers. In present study, the physical working conditions of four of the weaving units were found in the presence of exhaust fans. one unit also found presence of air supply coolers and natural light from windows/ventilators, five of the units were found in artificial light and natural light. There were unhygienic conditions in two of the units while regular cleaning was done in the rest of the units. It was found to have sufficient garbage bins in two units and three units which had no garbage bin. Washrooms were adequate in number in all five units. Eating areas were clean in only three of the units.

### **References**

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