

Term paper

On

**Health and Safety Environment of Readymade Garments
in Bangladesh: A Case Study on Colors and Stitches
Limited (CSL).**

Prepared By
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Term paper

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Submitted To

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Department of Public Administration, Jahangirnagar University.

Subject: Submission of thesis report on health and safety environment of readymade garments in Bangladesh: A case study on colors and stitches limited (CSL).

It is an immense pleasure for me that I am submitting my thesis report on health and safety environment of readymade garments in Bangladesh: A case study on colors and stitches limited (CSL). I am assigned to work at the factory proposed LEED (Gold) Green Knit Garments Factory at JL No. 6, West Dogri. Dogri, Mirzapur, Gazipur Sadar Gazipur, 1704. I have invested my time; skills and hard work for preparing this thesis report following my Supervisors instructions and fulfill all the requirements of this course. This gave me the opportunity to theoretical knowledge in practical field, which help me in my future career. I would like to thank you for giving me the opportunity to work on this topic.

I will be very glad if the report can serve its actual purpose and I am ready to explain anything to you if you feel necessary. Therefore, I pray and hope that you will appreciate my hard work. Your kind advice will encourage me to do further research in future.

Sincerely yours,

Md. Moniruzzaman

ID: 180316

Acknowledgment

To begin with, I would like to acknowledge and extend my heartfelt gratitude to **Farhana Afroze**, my thesis supervisor for providing me this great opportunity to work on this report concerning health and safety environment of readymade garments in Bangladesh: A case study on colors and stitches limited (CSL). I am grateful to her for guiding me and showing her best interest in helping me prepare this report. Without her patience, sincere guidance and suggestion I would not have been able to finish this report properly.

After that, I would like to convey my sincere gratitude to the head of HR and compliance **Capt Md Mamunur Rashid (Ret.)** and factory supervisor Dip Saha of colors and stitches limited for providing their valuable time and cooperate with me. Moreover, I am also thankful to them for providing necessary and valuable information regarding this company and also for being kind to me. Without their help this thesis report would not have been easy to prepare.

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ABSTRACT

A strong health and safety program of any industrial establishment can assure safety and sound health of its employees. The present study is aimed at identifying and comparing the present condition of the health and safety environment in a garment company with the relevant laws. The nature of this study is exclusively a case study where only qualitative data were used. Personal observation and interview schedule were used to conduct the survey. 10% of the total population (i.e. 115) was selected randomly as the sample size which covers workers, concerned departmental executives, supervisors and managers of the garment company. It has been revealed from the present study that the sample organization does not follow all the provisions regarding health, hygiene and safety of workers as per the Bangladesh Labor Act 2006 amended in 2013. This study found out that the organization does not ensure the prescribed space for every worker in a work-room; there is no emergency exit and fire exit; all the dangerous machineries are not securely fenced; the company does not thoroughly examine every part of cranes and other lifting machinery regularly, which may cause accident; the company does not follow the schedule to examine every hoist and lift thoroughly by competent person; the latrines, washrooms, dust beans and spittoons are not clean at all times. Finally, some important recommendations are given to improve the health and safety environment of the sample organization on the basis of findings. Also it has been suggested that the garment organizations, concerned stake holders and regulatory body (including government of Bangladesh) should be sincere to improve the overall health and safety environment of the garment industry in Bangladesh.

Keywords: RMG, BGMEA, Health and Hygiene, Work Safety, Work Environment.

Chapter 01

1.1 INTRODUCTION

Although Bangladesh is predominantly an agricultural country, a large number of large-scale industries based on both indigenous and imported raw materials have been set up. Among them readymade garments, cotton textile, pharmaceuticals, fertilizer, wood product, iron and steel, ceramic, cement, plastic products and chemical are the important ones. The manufacturing sector contributes about 18% of the GDP. Growth rate of manufacturing sector is dominated by ready-made garments (RMG). Bangladesh is the fifth largest garment exporter to the European Union and among the top ten apparel suppliers to the US. In the past two decades Bangladesh has emerged as a very successful manufacturer and exporter of ready-made garments (Statistical Year Book of Bangladesh, 2014).

The export-oriented readymade garments (RMG) sector in Bangladesh, started its journey in late 1970s as a small non-traditional sector of export. Bangladesh's thriving RMG industry has grown from USD 12,000 in exports in 1978 to USD 21.5 billion in 2012-13, and now accounts for about 78% of country's total export-earning. The industry now directly employs some 3.6 million Bangladeshis, 80% of whom are women, mostly from poor rural households. The industry has created a platform for 2.8 million women to engage in new productive role in the society and empowering them. Around 20 million people are directly and indirectly depending on this sector for their immediate livelihoods (www.bgmea.com.bd).

1.2 Objectives of the Study

1.2.1.1 Main Objective

The main objective of this study is to conduct a comprehensive study to observe and compare the present condition of the health and safety environment of the sample organization, i.e., colors and stitches limited (CSL) with the existing relevant laws (i.e. *Bangladesh Labor Act 2006 amended in 2013*).

1.2.1.1.2 Specific Objectives

Followings are the specific objectives of the present study:

- i. To identify the present condition of the employees' health and safety environment of colors and stitches limited (CSL).
- ii. To compare the present condition of the employees' health and safety of colors and stitches limited (CSL) with the relevant laws;
- iii. To identify some deviations regarding employees' health and safety with the laws and provide some recommendations to improve employees' health and safety environment of colors and stitches limited (CSL).

1.2.1 Literature Review

The ready-made garments (RMG) sector in Bangladesh has become the backbone of the Bangladesh economy, producing around 80% of the country's exports. Bangladesh is now the second largest garment exporter in the world, exporting over USD 17 billion worth of clothing in 2011. In recent years the industry has boomed and the number of factories engaged in garment production has increased rapidly. Bangladesh is now estimated to have between four and five thousand garment factories, ranging from large first tier suppliers to small factories largely operating as subcontractors to bigger clients. But in recent few years this industry is facing threat by inadequate safety issue, bad working environment and demolishing workers' rights (Clean Clothes Campaign, 2012). Safety is a very important and mandatory production function. Safety lapses are serious matters and the authorities concerned are harshly punished by the safety regulatory authorities for any acts of omission and commission. Unfortunately in Bangladesh, state safety regulation and intervention are extremely poor. Like everything else, it is also relegated more to a routine than any prevention or inspection function - based only on the whims and desires of the factory owner. Over decades, no worthwhile safety audit has been seen, not even any kind of investigation or positive measures from the RMG factory owners or inspection authorities who are primarily responsible for safety in the work place (Ahmed & Hossain, 2009).

The rapid expansion of the Readymade Garments (RMG) industry has led to the conversion of many buildings, built for other purposes, into factories, often without the required permits. Others have had extra floors added or have increased the workforce and machinery to levels beyond the safe capacity of the building. Many factories run throughout the day and night in order to meet production targets. The establishment of factories, or the conversions of other buildings into garment factories, has often been done as quickly and as cheaply as possible, resulting in widespread safety problems including faulty electrical circuits, unstable buildings, inadequate escape routes and unsafe equipment (Clean Clothes Campaign, 2012).

In April 2005, 64 garment workers were killed and 80 were injured when the Spectrum factory, producing clothing for Inditex and Karstadt Quelle, collapsed. The incident shone a spotlight on the poor safety record of industry that employs over 3 million workers often in buildings that are not fit for the purpose. Although the spectrum tragedy brought world attention to the safety problems in the garment industry it appears to have done little to encourage either factory owners or the government to take the systematic action required to improve the safety of Bangladesh garment workers. Every year more workers lose their lives or their health as a result (Clean Clothes Campaign, 2012).

The Bangladesh Garment Manufacturers and Exporters Association (BGMEA) is one of the

largest trade associations in the country representing the readymade garment industry, particularly the woven garments, knitwear and sweater sub-sectors with equal importance. Starting its journey in 1983 today BGMEA takes care of an industry that is at the backbone of Bangladesh's economy. BGMEA recognizes the fundamental rights of the workers, particularly access to healthcare facilities. On this spirit BGMEA runs 12 health centers for the garment workers and their families, and provides pre-medical services and medicines at free of cost. Besides, it runs awareness generation program on HIV/AIDS, tuberculosis, reproductive health and the use of contraceptive devices (www.bgmea.com.bd). The Rana Plaza collapse in 2014 and the Tazreen factory fire in 2012 are two sad episodes against the impressive story of our readymade garment industry which has been making outstanding contribution to bringing about revolutionary socio-economic change in Bangladesh by earning a huge amount of foreign currency, alleviating poverty and empowering women. The two tragic incidents brought the workers' safety issue to the fore and at the same time mobilized unprecedented support and commitment to improve working conditions and workplace safety in the RMG industry of Bangladesh (www.bgmea.com.bd).

As the largest association of garment manufacturers and exporters, BGMEA is also determined to bring positive changes in the area of workplace safety. To ensure the safety of apparel workers, the trade body has collaborated with the government, brands/retailers and ILO on several other initiatives. It is also in close cooperation with the Government of Bangladesh in implementing the recommendations made by the United States in the Bangladesh Action Plan 2013. However, BGMEA itself has taken a number of steps to address the issue of workplace safety in its member factories (www.bgmea.com.bd).

The following instructions were given by BGMEA to its member factories to comply with on mandatory basis:

- ✓ Move the generators from any level of the building to the ground floor. Keep all the stairs free for easy and convenient entry and exit to and from the factory floors at all time. No goods/ materials are to be kept on the stairs/passage, which might cause obstruction for free movement of personnel.
- ✓ Factories must keep all the gates open during working hours.
- ✓ Check fire alarm and emergency lights at regular intervals. Arrange required number of fire extinguisher, ensure sufficient water in hydrant and install hose-reel and other related equipment serviceable for use. Factories should hold Fire Drill as per rule and keep records of all such activities.

1.3 Research Gap

From the review of related past studies, it has been observed that, to the best of the researchers' knowledge there is no comprehensive study to compare the present condition of the employees' health and safety environment of the sample organization, i.e., colors and stitches limited (CSL) with the existing relevant laws (i.e. *Bangladesh Labor Act 2006 amended in 2013*). So there is a need to conduct a research to bridge the gap.

1.4 Methodology of the Study

1.4.1 Research Design

The nature of the present study is exclusively a case study which broadly falls under the exploratory study. Basically only qualitative data were used in this study. Personal observation and interview schedule method were used to conduct the survey.

1.4.2 Sampling Technique

Among the 1150 employees of the surveyed organization (colors and stitches limited) 10% of the total surveyed population (i.e. 115) were selected randomly as the sample size, where 80 were workers of different floors and departments, 25 were concerned supervisors and another 10 were departmental managers of the garment company. The study took place from August to September of 2019.

1.4.3 Sources of Data

This study was basically based on the information collected from personal observation, informal conversation with the workers, and face to face interview with the respective officers and staffs of the organization. Secondary data sources were also used in the present study to compare the observed situation with the necessary laws and rules. These sources are discussed below:

1.4.4 Secondary Sources

Sources of secondary data include:

- The Bangladesh Labor Act 2006 and Bangladesh Labor (amendment) Act 2013;
- Guidelines of BGMEA regarding health and safety of garment workers;
- Health and Safety policy of colors and stitches limited (CSL);
- Relevant journals, different newsletters;
- Different relevant websites;

1.4.5 Primary Sources

As the study was about the impact of health and safety on a specific RMG organization in Bangladesh, personal observation, and face to face interview with the respective officers, supervisors, managers and workers of the organization were the main sources of primary data. Primary data were also collected through informal conversation with the workers and consultation with experts of the respective research fields.

1.5 Processing and Analyzing Data

The collected data has been processed by using word processing software (MS Word). As the present study is a case study so it is basically qualitative research in nature. The collected qualitative data has been analyzed in descriptive form.

1.6 Data Collection Method:

1.6.1 Primary Data:

I have collected only primary data from my factory on the specific scheduled questionnaire for research project & I used the following common research instrument of tools.

1.6.2 Secondary Data:

I didn't use any secondary data for this research project.

1.7 Sample Design:

Sample Unit: To study health & safety situation of colors and stitches ltd workers, sample were selected randomly in factory sewing line workers.

Sample Media: The respondents of the sample are reached direct interview.

Sample Size: 150

Sample Design: I am prepared this project as descriptive type

1.7.1 Questionnaire:

1. How you are satisfied of services from doctor or nurse in your factory?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

2. Doctor or nurse station is with well facilities with required Equipment's?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

3. How there a sick room with first aid material located in the garments?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

4. Is there any facility of drinking water? Lab testing report available?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

5. Is there have canteen facility their? How is the condition of it?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

6. Toilet & washing facilities condition of your Factory?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

7. Is there any transportation facility provided by the garments & how is the condition?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

8. What is the company policy to grant sick leave when you become sick?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

9. Is there any hazardous working process or working environment that endangering workers health?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

10. How effective the emergency evacuation drill which had been conducted in the factory?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

11. How effective the health and safety related training had been provided to workers?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

12. How is there any documentation of hazardous chemical usage to ensure those chemicals under control?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

13. Is the posted emergency procedure effective & comprehensive for all in production area?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

14. Is there a system of reporting and handling occupational accident and injury?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

15. Is there sufficient functional fire alarm installed in workplace & how it work?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

16. The siren can easily heard from everywhere of your factory.

Very Good	Good	Neither Good or Bad	Bad	Very Bad

17. Is there sufficient number of firefighting equipment installed in the factory?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

18. How is there any emergency light and any other evacuation signal correctly installed?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

19. How is there emergency exits in every room?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

20. What is the company policy for granting maternal leave?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

21. Company initiative regarding health & safety is?

Very Good	Good	Neither Good or Bad	Bad	Very Bad

I am using survey methodology with data base.

1.8 Data Analysis:

The Objectives of the research were studied with the respect to the garment workers who worked minimum more than 1 year in the same factory. Because only they can give the right answer insight about the health & safety situation of the garment. The most important to know the actual condition on the topic.

Table 01: Gender

Gender	No of Respondent	Percentage
Male	50	33%
Female	100	67%

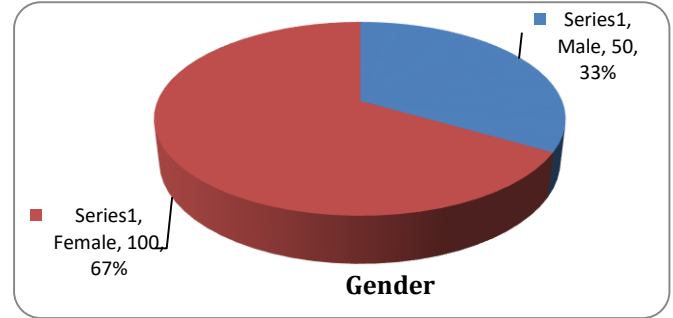


Table 02: Doctor, Nurse & First Aid Materials

Response	No of Respondent	Percentage
Very Good	02	2%
Good	41	27%
Neither Good or Bad	52	35%
Bad	47	31%
Very Bad	8	5%

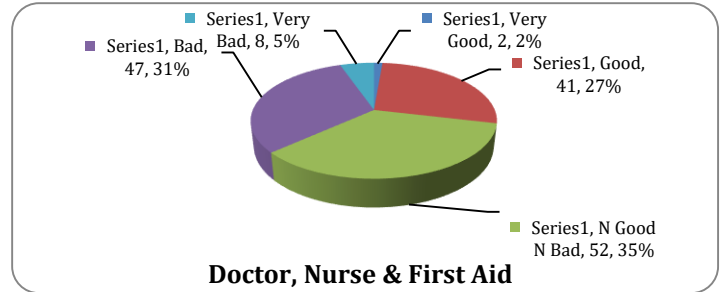


Table 03: Drinking Water, Canteen & Wash Room facilities:

Response	No of Respondent	Percentage
Very Good	01	1%
Good	48	32%
Neither Good or Bad	62	41%
Bad	30	20%
Very Bad	09	6%

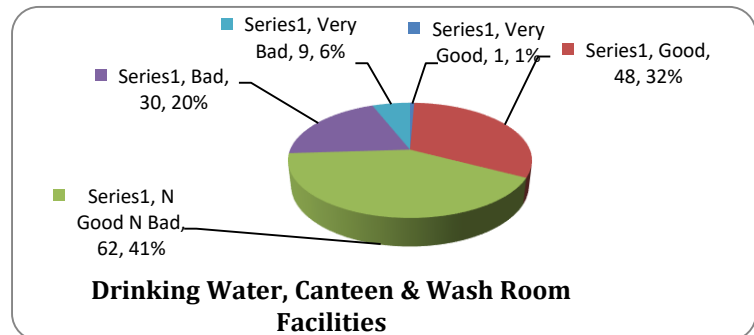


Table 04: Fire Alarm, Fire Defenders & Emergency Exit:

Response	No of Respondent	Percentage
Very Good	04	3%
Good	68	45%
Neither Good or Bad	53	35%
Bad	18	12%
Very Bad	07	5%

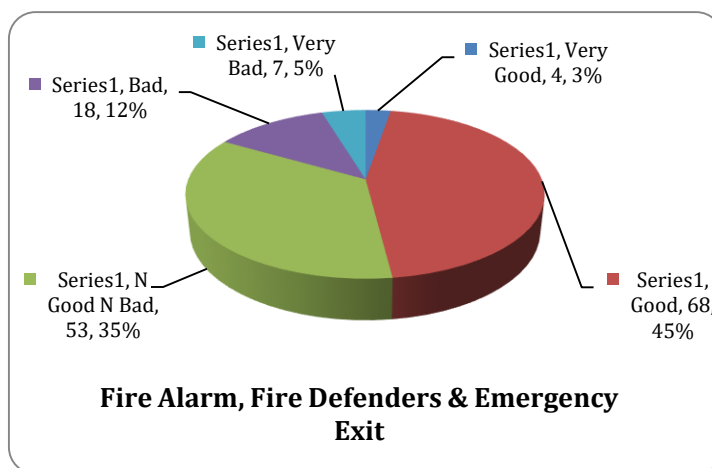
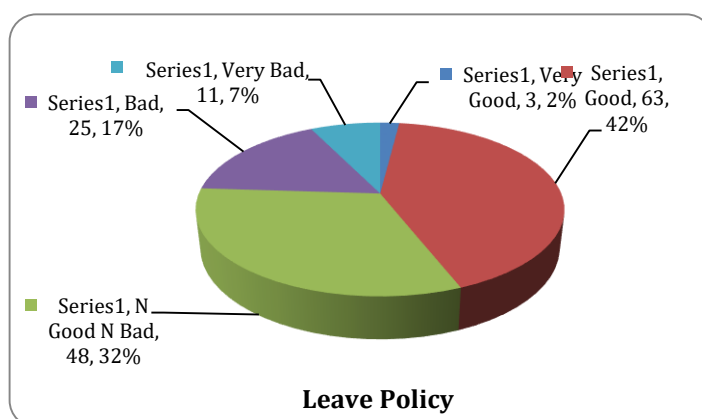


Table 05: Leave Policy:

Response	No of Respondent	Percentage
Very Good	03	3%
Good	63	42%
Neither Good or Bad	48	32%
Bad	25	17%
Very Bad	11	7%



1.9 Analyses and Findings

An industrial organization can run smoothly if its employees and workers are sound as regards their health, skills and efficiencies. Smooth industrial productivity can be ensured when workers are of good health and the safeties of their workplaces are ensured. Colors and stitches limited (CSL) has its own in-house team of qualified health and safety surveyors who are dedicated to provide advice and guidance specifically tailored to the residential management sector. The organization recently launched a comprehensive package named 'Health and Safety Plus' Scheme which aims to provide up to date risk assessments, prompt actions and remedies provided by its surveyor staff following any inspection and report by the enforcing authorities. The company has one part-time MBBS doctor and two full time nurses to ensure proper medical treatment to the workers, regular and injured. Full time nurses attend all days from 8 am to 5 pm. The company also arranges first aid training once in every year.

- **Health Problem for Female Worker by Factory Environment**
-

Age category worker *		Back pain	Eye problem	Headache	Total
18-25	1 Count	2	0	1	3
26-35	2 Count	10	3	5	18
36-45	3 Count	14	7	4	25
46-55	4 Count	7	2	5	14
Total	Count	33	12	15	60

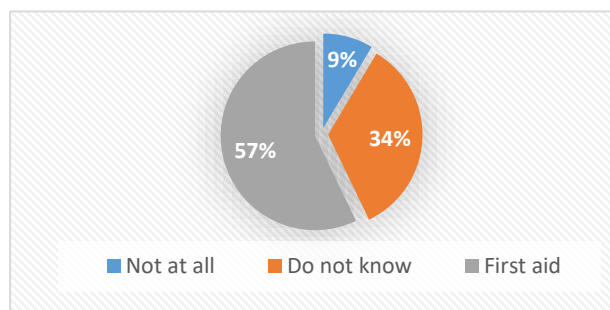
* Workers age category 1=18-25, 2=26-35, 3=36-45 and 4=46-55

Table 3: Cross tabulation for age category and health problem of workers.

• Medical Facilities

Show the frequency distribution for worker's medical facilities percentage of information about medical facilities. From table 3.1 it is found that 24 workers have no idea about medical facilities; according to 6 workers interview there is no medical facilities within their factories. Several stuff both male and female should be trained in basic first aid treatment and it is ensured to present in every shift especially at night.

Valid	Frequency	Percent
Not at all	6	9
Do not know	24	34
First aid	40	57
Total	70	100



• First Aid Treatment

In my survey I'm found that Colors and Stitches Limited (CSL) has designated first aid sections clearly marked. But this section should have well stocked cabinet of medicines and bandage because many small accidents in garment industries can be dealt with immediately. Several stuff both male and female should be trained in basic first aid.



● Accidental Injury Report

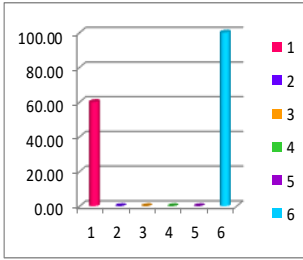
Colors & Stitches LTD

Accidental Injury Report

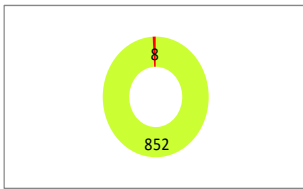
For The Month of August- 2019

Sl. No	Cutting Injury (Scissor, Knif & Cutter)	Blunt Trauma	Needle Injury	S. F. Burn	Snap Button Injury	Others	Total	Remarks
1	3	0	0	0	0	5	8	
Total	60.00	0.00	0.00	0.00	0.00	100.00	160.00	

Sl. No	Type of Illness	Number of Patient	Percentage
01	Cutting Injury (Scissor, Knif & Cu	0	Persons
02	Blunt Trauma	0	Persons
03	Needle Injury	0	Persons
04	S. F. Burn	0	Persons
05	Snap Button Injury	0	Persons
06	Others	5	Persons
TOTAL		8	Persons



Section Wise Total Man Power		Section Wise Accident Person		Total Sickness Person in Percentage
Sewing/Others	614		6	
Cut/Q.I/Finishing	238		2	
Total Man Power	852	No. of Sickness Person	8	0.94%



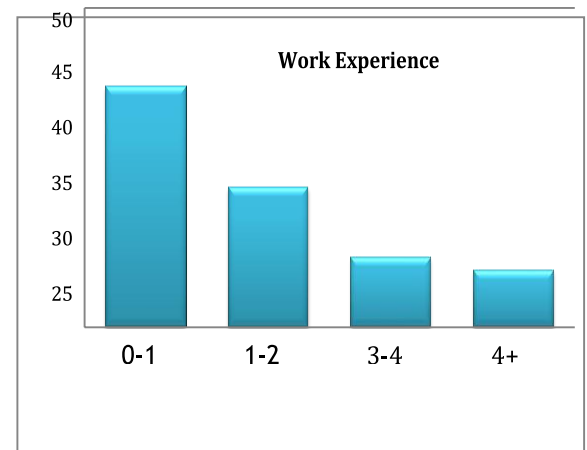
Nurse Medical officer Welfare Officer GCC Head of Admin DGM

Fig: Accidental injury report

● Work Experience

Majority of the respondents (47.5%) worked experience are within 1 year. Based on the respondent years of experience, respondents are classified into four groups. Among the groups, over four years of experience are only 11.2%, while 13.8% are (3-4 years) and 27.5% are in (1-2 years).

Years	Frequency	Percent	Valid Percent	Cumulative Percent
0-1 years	38	47.5	47.5	47.5
1-2years	22	27.5	27.5	75.0
3-4 years	11	13.8	13.8	88.8
4+years	9	11.2	11.2	100.0
Total	80	100.0	100.0	



- **Salary Status of the Respondents**

In the following Table respondents salary status is presented. In Bangladesh, the minimum wage is BDT 8,000. In the salary range category, it is found that most of the respondents are drawing BDT 8,420 is the highest (33.8%), the second highest is fallen BDT 9,845 (27.5%). In general it is found that entry level workers are more than other group. Also results reveal that experience staff or employee or worker is less.

Salary range	Frequency	Percent	Valid Percent	Cumulative Percent
8000 BDT	9	11.2	11.2	11.2
8420 BDT	27	33.8	33.8	45.0
8875 BDT	16	20.0	20.0	65.0
9347 BDT	6	7.5	7.5	72.5
9845 BDT	22	27.5	27.5	100.0

- **Fire Alarm in Factories:**

A fire alarm is a message to the occupants in a factory to be alert about forthcoming fire which may cause enormous damages and casualties. The workers mentioned that due to lack of proper orientation by the factory management many of them cannot operate the alarm system.

Whether the workers know how to operate the fire alarm. Fire alarm operation frequency percentage know 37 52.9 do not know 33 47.1 Total 70 100.0
Source: Colors and stitches limited (CSL) field survey, 2018

Fire alarm operation	Frequency	Percentage
Know	37	52.9
Do not know	33	47.1
Total	70	100.0

• Participation of the Workers in Fire Drill:

Fire drill is supposed to be held in a garment factory in quarterly basis i.e. once in every quarter of a year, but it is not holding in many non-compliant factories at all. Around 43 percent workers illustrated that there is no fire drill in their factory. However, all the factory managers reported that they arrange fire drills regularly. Many respondents (48.5 percent) informed that they participated in the fire drill regularly in their respective factory. Few respondents (8.6 percent) mentioned that they did not participate in the fire drill for a single time.

Participation in fire drill	Frequency	Percentage
There is no fire drill	30	42.9
Participated regularly	34	48.5
Never participated in fire drill	6	8.6
Total	70	100

• Workers' confidence level to fight against fire.

The workers (44.3 percent) have enough confidence to face the fire hazard in the factories but they seek more supports from the factory authorities. Among them, 35.7 percent reported that they have a little confidence and 8.6 percent have somewhat confidence to step forward when fire may erupt. Only 11.4 percent workers do not have any confidence at all to fight against the fire in the factories.



Colors & Stitches Ltd.
Jl No - 6, Dogri, Mirzapur, Gazipur

Fire & Evacuation Drill Record

Date of Fire and Evacuation Drill: 23.01.2018

Type of Drill : Announced / Unannounced

Drill Conducted By	Internal		
	1) Nahid Hasan - Group Compliance Co -ordinator 2) Capt.Md.Mamunur Rashid (Retd) - Head Of HR, Admin		
Start Time : 11:10:00 PM	End Time : 11:12:26 PM	Total Time : 02 min,26 Sec .	
Number of employee : 867		Number of Floor Participated : all Floor.	
Number of Evacuation Person : 794			

Observation

Level of confidence	Frequency	Percentage
Not confident at all	8	11.4
A little confident	25	35.7
Somewhat confident	6	8.6
Very confident	31	44.3
Total	70	100

Observation	Yes	No	Remarks
All Exits open & unblocked.	✓		All Exit Door was open.
All workers evacuate the floor.	✓		Worker was evacuated safely.
All Cleaners staff evacuate the floor.	✓		Cleaners were evacuated safely.
All official staff evacuate the floor.	✓		All staff evacuated safely.
Did the fire fighters react as per S.O.P?	✓		Fire Fighters were ready.
Did the Rescue Team react as per S.O.P?	✓		Rescue team member were ready.
Did the First Aid Team React as per S.O.P?	✓		First Aid team member were ready.
Did the Security Team react as per S.O.P?	✓		First Aid team member were ready.
Did you see any workers carrying their belonging during the drill?		✓	No workers carrying anything.
Was there any casualty during the Evacuation? So: Explain.		✓	All workers safety go out from floor.

Recommendation & Remarks

Recommendation: The Drill was completely and satisfactory. Workers were safety evacuated from floor and didn't face any problem. Workers learnt how to go out from floor if any fire is occurred. All fire alarm, visual alarm, gong bell, fire bell worked properly. workers here the alarm and hearing alarm they were smoothly going out from their floor.

Attachment: A) Photo of fire drill in next page. B) Attendance of fire day.

Source: Colors and stitches limited (CSL) field survey, 2018

1.10.1 Present conditions of employees' Health and Safety at colors and stitches limited (CSL)

The Bangladesh Labor Act 2006 (amendment 2013) provides some provisions regarding the health and safety of industrial workers in Bangladesh. From Section 51 to -60, Health and Hygiene related provisions and from Section 61 to 78 Safety of workers in any establishment are mentioned. Colors and stitches limited (CSL) tries to follow the provisions of the Act to ensure sound health and safety of its employees in the workplace.

- i **Cleanliness:** Colors and stitches ltd (CSL) tries to follow in full the provisions of Section 51 of the Act. As per this section, every establishment shall be kept clean and free from effluvia arising from any drain, privy or other nuisance. The floors of every work-room shall be cleaned regularly, effective means of drainage shall be provided and maintained, the factory shall be re-painted or re- varnished at least once in every three years and be cleaned at least once in every fourteenth months, finally the date on which the processes are carried out shall be entered in the prescribed register.
- ii **Ventilation and Temperature:** Section 52 of the Act states that, in every work-room in every establishment adequate ventilation by the circulation of fresh air and comfortable temperature shall be maintained to prevent workers' injury to health. The work-room of the company is not so comfortable although the office room is much comfortable.
- iii **Dust and Fume:** The organization tries to follow the provisions of Section 53 in full. As per this Section of the Act, in every establishment effective exhaust appliance shall be applied as near as possible to the point of origin of the dust, fume or other impurity, which are likely to be injurious to the workers and such point shall be enclosed so far as possible.
- iv **Disposal of Wastes and Effluents:** According to Section 54, effective arrangements shall be made in every establishment for disposal of wastes and effluents due to the manufacturing process carried on therein. Colors and stitches limited (CSL) has effective arrangements for disposal of waste and effluents, but it has negative effect on environment.
- v **Overcrowding:** As per Section 56 of the Act, to prevent injury to the health of the workers, overcrowding of every work-room in any establishment shall be prevented and at least 9.5 cubic meter of space for every worker employed in a work-room in the establishment shall be provided. But the organization does not ensure the prescribed space for every worker employed in a work-room.
- vi **Lighting:** As per section 57 of the Act, in every part of an establishment where workers are working or passing, there shall be provided and maintained sufficient and suitable lighting, natural or artificial, or both and all glazed windows and skylights used for the lighting of the work-room shall be kept clean on both the outer and inner

surfaces and free from obstruction as far as possible. Colors and stitches limited (CSL) does not maintain the provisions of this section in full. Although the work-room is kept clean regularly but both the surfaces of all glazed windows and skylights are not kept clean regularly.

- vii. **Drinking Water:** As per Section 58 of the Act, effective arrangement of sufficient supply of wholesome drinking water for all workers employed in every establishment shall be provided and maintained at a suitable point conveniently situated therein. The company ensures purified drinking water for workers and for regular use but the supplied water is not sufficient to the necessity.
- viii. **Latrines and Urinals:** As per Section 59 of the Act, in every establishment sufficient latrines and urinals, separately for male and female workers, adequately lighted, ventilated, conveniently situated and accessible to workers at all times while they are in the establishment shall be provided and maintained in a clean and sanitary condition at all times with suitable detergents and disinfectants. Although the organization provides three latrines and washrooms in every floor but these are not maintained in a clean and sanitary condition at all times.
- ix. **Dust Bean and Spittoon:** As per Section 60 of the Act, in every establishment there shall be provided, at convenient places, sufficient number of dust beans and spittoons which shall be maintained in a clean and hygienic condition. No person shall throw any dirt or spit within the premises of an establishment except in the dust beans and spittoons provided for the purpose. Although the company provides sufficient number of dust beans and spittoons but it cannot maintain these in a clean and hygienic condition for all time.
- x. **Precaution in Case of Fire:** Section 62 of the Act states that, every establishment shall be provided with at least one alternative connection stairway with each floor and such means of escape in case of fire and for carrying fire-fighting apparatus. In every establishment the doors affording exit from any room shall not be locked or fastened so that they can be easily and immediately opened from inside while work is being carried on in the room. In every establishment every window or other exit affording means of escape in case of fire shall be distinctively marked in red Bangla letters of adequate and clearly understandable size. A free passage-way giving access to each means of escape in case of fire shall be maintained for the use of all workers in every room of the establishment. It was seen that, there is no emergency exit and fire exit in colors and stitches limited (CSL), which is very critical for the safety of workers.
- xi. **Fencing of Machinery:** Section 63 of the Act states that, in every establishment all dangerous machinery must be securely fenced; e.g., every moving part of a prime mover, and every fly wheel connected to a prime mover, the head-race and tail-race of every water wheel and water turbine, every part of an electric generator, every

part of transmission machinery and every dangerous part of any machinery. But the all the dangerous machinery of colors and stitches limited (CSL) are not securely fenced, which is dangerous and may cause accident.

- xii. Work on or near Machinery in Motion:** Section 64 of the Act states that, work on or near machinery in motion shall be carried out only by a specially trained adult male worker wearing tight-fitting clothing whose name has been recorded in the register prescribed in this behalf and while engaged he shall not handle a belt at a moving pulley unless the belt is less than fifteen centimeters in width and unless the belt-joint is either laced or flush with the belt. Although specially trained workers usually carry out such activities, they do not always wear the prescribed clothing.
- xiii. Cranes and Other Lifting Machinery:** Section 68 of the Act states that, every part of cranes and other lifting machinery, including the working gear, whether fixed or movable, ropes and chains and anchoring and fixing appliances shall be of good construction, sound material and adequate strength, properly maintained, thoroughly examined by a competent person at least once in every period of twelve months and a register shall be kept containing the prescribed particulars of every such examination. It was seen that as per the provisions of this section the company does not thoroughly examine every part of cranes and other lifting machinery regularly, which may cause accident.
- xiv. Hoists and Lifts:** Section 69 of the Act states that, in every establishment every hoist and lift shall be of good mechanical construction, sound material and adequate strength, properly maintained, shall be thoroughly examined by competent person at least once in every period of six months, a register shall be kept containing the prescribed particulars of every such examination, every hoist way and lift way shall be sufficiently protected by an enclosure fitted with gates, and the hoist or lift and every such enclosure shall be so constructed as to prevent any person or thing from being trapped between any part of the hoist or lift and any fixed structure or moving part, every gate shall be fitted with interlocking or other efficient device to secure that the gate cannot be opened except when the cage is at the landing and that the cage cannot be moved unless the gate is closed. The company does not follow the schedule (at least once in every six months) to examine every hoist and lift thoroughly by competent person.
- xv. Excessive Weights:** Section 74 of the Act states that, no person shall be employed in any establishment to lift, carry or move any load so heavy as to be likely to cause him injury. In colors and stitches limited (CSL) sufficient trolleys and other means are used for this purpose.

1.11.1 Findings

After analyzing the health and safety matters of employees of colors and stitches limited (CSL) the following findings have been revealed:

- The company tries to follow in full the provisions of section 51 of the Bangladesh Labor Act 2006 regarding cleanliness of the work environment.
- The organization has a comprehensive package named 'Health and Safety Plus' Scheme which aims to provide up to date risk assessments, prompt actions and remedies provided by its surveyor staff following any inspection and report by the enforcing authorities.
- The work-room of the company is not so comfortable although the office room is much comfortable.
- The company has effective exhaust appliance to the point of origin of the dust, fume or other impurity, which are likely to be injurious to the workers.
- Colors and stitches limited (CSL) has effective arrangements for disposal of waste and effluents, but it has negative effect on environment.
- The organization does not ensure the prescribed space for every worker employed in a work-room, i.e., at least 9.5 cubic meter of space for every worker.
- Although the work-room is kept clean regularly but both the surfaces of all glazed windows and skylights are not kept clean regularly.
- The company ensures purified drinking water for workers and for regular use but the supplied water is not sufficient.
- The company has two part-time MBBS doctors and three full-time nurses to ensure proper medical treatment to the workers, regular and injured, which is not sufficient.
- The company arranges first aid training once a year.
- Although the organization provides three latrines and washrooms in every floor, these are not maintained in a clean and sanitary condition all the time.
- The company provides sufficient number of dust beans and spittoons but cannot maintain these in a clean and hygienic condition all the time.
- There is no emergency exit and fire exit in colors and stitches limited (CSL) which is very critical for the safety of workers.
- All the dangerous machinery of colors and stitches limited (CSL) are not securely fenced, which is dangerous and may cause accident.
- Although specially trained workers usually carry out activities like work on or near machinery in motion, they do not always wear the prescribed clothing.
- It was seen that as per the provisions of Section 68, the company does not thoroughly examine every part of cranes and other lifting machinery regularly, which may cause accident.

- The company does not follow the schedule (at least once in six months) to examine every hoist and lift thoroughly by competent person.
- In colors and stitches limited (CSL), sufficient trolleys and other means are used to carry or move heavy load which is likely to cause injury to workers.

1.12.1 Scope and Limitation of the Study

The present study is on a single garment company which is representing the garment industry in Bangladesh. The area of study is limited to observe and compare the present condition of the health and safety environment of the sample organization, i.e., colors and stitches limited (CSL) with the existing relevant laws (i.e. Bangladesh Labor Act 2006 amended in 2013). The present study is not covering all the sections of Bangladesh Labor Act 2006 followed and practiced by the sample organization. The study took place from August to September of 2019

A few problems were faced while conducting the study. A whole hearted effort was applied to conduct the study to bring a reliable and fruitful result. In spite of that, there exist some limitations which acted as barriers to conduct the study. The interviews were conducted by using interview schedule that consist of views and opinions of those particular respondents, which might raise the hesitation, hide and seek of the information of the respondents. In some cases some of them were not able to provide concrete facts or figures. In this case some assumptions had to be made. Some other limitations are:

- Only a cross section of workers, supervisors and managers have been interviewed as sample respondents;
- Due to time constraints it was not possible to conduct extensive interviews and surveys covering all employees and stakeholders of the garment organization which could make the research paper more informative;
- The researchers are in the primary stage of their field of research; and
- Time constraints is another important barrier.

Beside these limitations, the researchers have tried their level best to make the study up to the mark. Experts' opinions have also been taken to ensure the quality as well as the standard of the research. So it can be said that the above limitations could not make any constraint to conduct this qualitative research work.

1.13.1 About the Sample Garment Organization

The present study has been conducted on a single garment industry in Bangladesh named colors and stitches limited (CSL). Colors and stitches limited (CSL) a sister concern of the Colors and stitches Group, is one of the leading export oriented garments. It started business with basic T-shirt production but now it exports different items of knitwear for all groups and ages. It is a 100% export-oriented readymade knitwear garment industry, which started commercial production in 2007 in JL No. 6, West Dogri, Dogri, Mirzapur, Gazipur Sadar Gazipur, 1704 and has been meeting the growing demand of quality trousers, shorts, T-shirt, polo shirt, ladies wear, tank top, etc. of customized designs. Its knitting capacity is about 8000 kgs per day and dyeing capacity is about 6000 kgs per day. The company has high quality sophisticated dyeing finishing machineries from USA, Germany and Asian origin along with Water Treatment Plant (WTP) and Effluent Treatment Plant (ETP). This organization is also adapting some important policies like getting official approval of ISO Quality Standard practices, ensuring total compliance of various Code of Conduct requirements of prestigious buyers across the world, prioritizing the need for creation of ideal work conditions for the workers and ensuring proper health care & safety for them (www.colorsandstitches.com).

1.14 Conclusion and Recommendation

1.14.1 Recommendations

After all the analysis and the findings about the health and safety of the employees of colors and stitches limited (CSL), some important recommendations are given below that will hopefully make the company more effective and efficient:

- Management should find out a sound way of disposing waste materials without hampering the environment.
- Management should try to ensure more hygienic work environment, because workers are the core element of production.
- Company should ensure that workers are getting proper treatment from the medical team.
- Enough pure drinking water should be supplied and abuse of water should be checked.
- Latrines should be kept clean and washed regularly, because the unclean and unhygienic latrines may cause fatal diseases.
- According to The Bangladesh Labor Act 2006, every company should have emergency exit. So colors and stitches limited (CSL should make an emergency exit for workers during danger situations.
- Dangerous machinery should be well fenced to avoid unexpected accident. If the machinery remains fenced, workers will be able to do their job fairly.
- Workers should be well trained so that they can deal with the machines properly. If workers become well trained rate of production will be more.
- Company should emphasize on maintaining the law so that they can avoid risk.
- The MBBS doctors should attend each working day to ensure proper treatment of the employees.
- There should be numerous nurses to serve the employees properly.
- First aid training program should be held twice in one year.
- Every first aid box should have necessary equipment for better treatment.
- Finally it can be recommended that, besides the sample organization, the concerned stakeholders and regulatory body of the garment organization (including Government of the People's Republic of Bangladesh) should be sincere to improve the overall health and safety environment of the garment industry in Bangladesh.

1.14.2 Conclusion

A strong health and safety program of any industrial establishment can assure safety and sound health of its employees. It can be concluded from the present study that the sample organization (Colors and stitches limited) does not follow all the provisions regarding health, hygiene and safety of workers as per the Bangladesh Labor Act 2006 amended in 2013. So the above recommendations should be followed by the sample organization. Not only the sample garment organization but also the concerned stake holders and regulatory body (including Government of Bangladesh) should be sincere to improve the overall health and safety environment of the garment industry in Bangladesh. If it is possible to improve the health and safety environment of the garment organization, the overall productivity, performance of the workers as well as the organizations could be improved which will contribute in the economic development of Bangladesh.

Chapter 02

The Organization



Colors & Stitches Limited

(A 100% Exported Oriented Knit Garments)



2.1 INTRODUCTION

With a view to the current global apparel and fashion market and commendable position of Bangladesh alongside its magnitude of growth prospect, we, a four member team have logically been motivated to put up a 100% export oriented knit garment manufacturing unit named Colors & Stitches Limited (CSL) in Dhaka, Bangladesh. This proposed venture is teamed up to cater to the global fashion market with value added product offered by developing our own design for our clientele which will be our focus alongside the regular orders from them (our clientele). Here we will implement green and lean concept with all the necessary compliance requirements installed and practiced like any modern state of the art garment factory globally.

2.2 BACKGROUND

It is obvious that Bangladesh's potential to cater to the global apparel demand and dynamism within the country has motivated the team to undertake such project. Particularly, this proposed project would focus on value added knitwear products that will mostly be produced with imported fabrics, as the objective is to manufacture sportswear and fashion garment. Having this concept in mind, we will also procure and source local fabric, as we will also keep basic products in the line. A few practical points have influenced the reason behind such focus and they are:

- a. Scenario that are prevailed in Bangladesh regarding the infrastructure and energy sector, which have been a key factor for the growth and diversity of textile and garment industry, a dependency on captive power generation has developed due to non-reliability on the National grid i.e. frequent power cuts. However, with today's scenario and the government policies in place, captive power generation is no more an option for textile, primarily composite units. Further, dependency on power from national grid will also prove to be inefficient for any such venture. Nevertheless, in our case, i.e. garments industry, is not highly dependent on power, and therefore, power cuts will not have any impact on our production.
- b. Our focus on specialized garmenting is based on broadening the spectrum to cater to the variety of products that are in global demand. Having a composite textile production unit will limit the capability of fabric only to the configurations of the fabric mill. Since we will not focus on a composite textile, we will possess the flexibility to source variety of fabric both from local and international markets. This will also help us to look for value added products that will ensure better profitability.

- c. Further, from Return on Investment (ROI) perspective such flexibility will help us, since better quality fabric with variety of range will give the global sourcing companies a stronger outlook on the manufacturer (CSL).
- d. Opportunity as other non-compliant small and medium scale factories are shutting down, we find that there is a vacuum created in the industry as the standard buyers are looking for a value addition in their products through compliant and standardized factories in Bangladesh

2.3 COMPANY STRUCTURE

Name of the Project	COLORS & STITCHES LIMITED
Proposed Address:	Rajendrapur, Gazipur (Office & Factory)
Type of Organization	Private Limited Company
Type of the Project	100% Export Oriented Ready Made Garments Industry
Project Cost	USD 3 Million (USD Three Million Only)
Sponsor's Equity	USD 1 Million (USD One Million Only)
Employment Generation	650 (initially)
Total number of Lines	15 Lines with 25 machines per line

2.4 ABOUT COLORS & STITCHES LIMITED:

Overview:

The proposed project, when implemented would fulfill the following objects:

- i. Earn good return on investment by way of value addition;
- ii. Attract buyers to this project being based on LEAN and GREEN concept;
- iii. Create a good number of employment opportunities;
- iv. Generate adequate profit for the sponsors;
- v. Revenue to the national exchequer;
- vi. Ensure timely supply of quality garments to high-end brand retailers of international market as well as unconventional destinations.

2.5 Organizational Chart

2.5.1 Mission

Our mission is to manufacture top quality readymade garments by practicing advanced technology in production processes to attain superior customer satisfaction and maintain excellence.

2.5.2 Vision

Our vision is to become a leader as a dependable and trend setter supplier of readymade garments in global fashion business by;

- Strictly following the latest fashion trends and industry needs
- Offering world class products using advanced technologies
- and always adhering to on time deliveries

2.5.3 Values

Our core values are built on superior customer satisfaction principles we strive to achieve every day by maintaining;

- ✓ Fashion sensibility
- ✓ Service quality
- ✓ Corporate dignity and reliability
- ✓ Legal, ethical, social and environmental responsibility
- ✓ Personal sincerity
- ✓ and latest technology

2.6 Potential Buyers:

- Next, UK
- Primark, UK
- Decathlon, France
- Inditex, Spain
- Mango, Spain
- Matalan, UK
- M & S, UK
- K-Mart, Australia
- Zaza, Japan
- Delta Galil, USA
- Target, USA

2.7 Manufacturing Process:

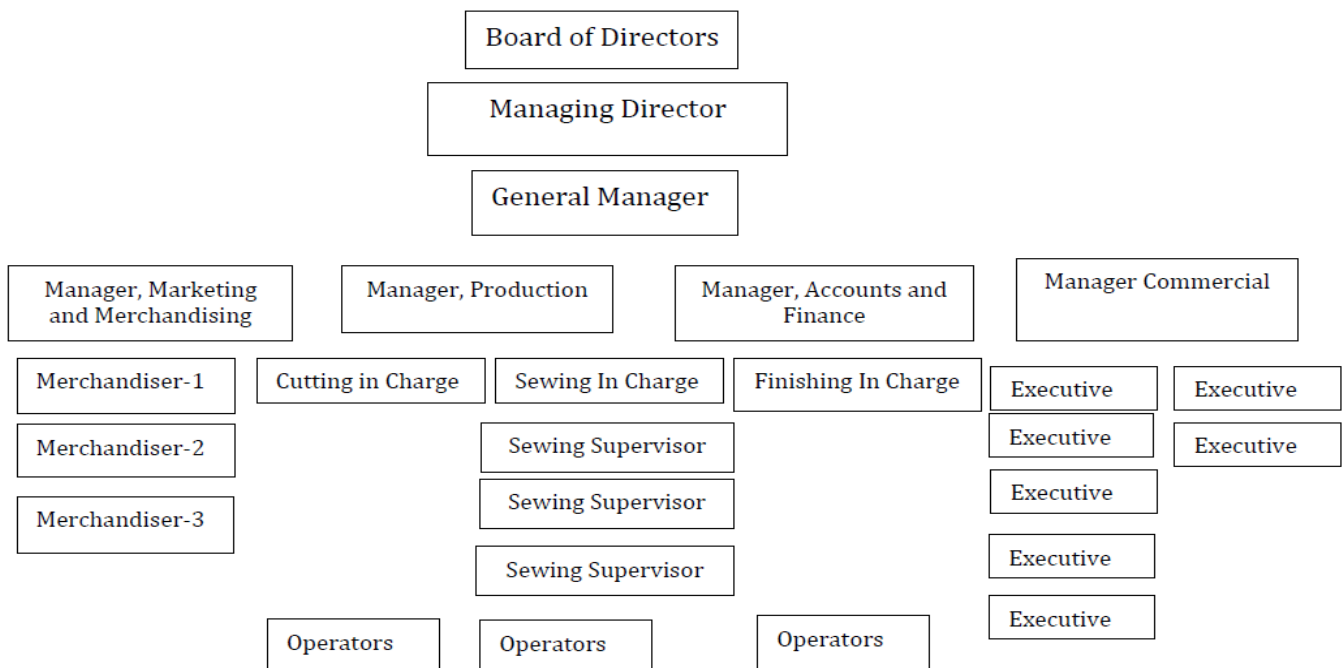
CSL's manufacturing process intends to follow the following flow chart in order each its efficient production goal. We would like to display the entire thought through a table that explains each of the major steps in a vertical flow.

Sales and Marketing	Pre-production Activities	Production
>Receive Queries	>Develop Samples and Attain Approval	>Cutting
>Develop Samples	>Sourcing Raw Material for Production	>Sewing
>Order Confirmation		>Packaging and Inspection
		>Shipment

2.8 Organizational structure

The organizational set up of the project is shown below:

ORGANIZATION CHART



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