



Faculty of Engineering

Department of Textile Engineering

Project Title: Study of Apparel Merchandising Strategy
in a Bangladeshi Knit Garments Buying House.

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A thesis submitted in partial fulfillment of the requirements for the
degree of **Masters of Science in Textile Engineering.**

ACKNOWLEDGEMENT

At first I am grateful to Almighty Allah to complete this thesis work with a successful ending. I must express my gratitude to the honourable persons who have made significant contributions in preparing this report. Their insights, advice and suggestions helped me a lot.

I would like to express my heartiest thanks to my respected and supervising teacher Prof.Dr.Md.Mahbubul Haque, professor and head, Department of Textile Engineering, development and preparation of the report. He has enriched me with necessary ideas and concepts for incessant improvement of the report.

I express my indebtedness to the Honourable Vice chancellor, Chairman, Register and every Department of Daffodil International University of Science & technology for providing me the working facility for my project.

Last but not the least, thanks go to my precious family for their never ending love and inspirations at every stages of my life.

I thank you all from the core of my heart.

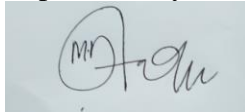
DECLARATION

I hereby declare that, this project has been done by me under the supervision of Prof. Dr. Md. Mahbubul Haque, professor and head, Department of TE, Daffodil International University. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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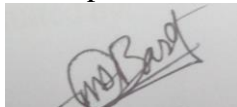
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ABSTRACT

The thesis is a brief about ‘Study of business strategy in a Bangladeshi knit garments buying house’. It explains how the buying house and buying house merchandisers discharge their day to day activities. The main functions of buying houses have been described, which includes Organogram, working principles and procedures. The documents needs to be processed to confirm an order, test requirements and spec sheets and information commercial Inco terms, also covered. Information about the merchandising process, responsibilities of merchandiser, work flow of merchandiser as merchandiser executes the order also included. Norms, standards and qualities of a merchandiser have also been addressed. Details idea about trims and accessories were also included.

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CHAPTER:1

1.1 INTRODUCTION:

Clothing is always a basic requirement for human beings. Bangladesh is one of the leading producer & exporter of knit RMG products. There are around 5000 garments factories in Bangladesh. The garments factory started to produce and export in the year 1980. Since then it was history and at present nearly 82% of our foreign currency is earned through RMG exports. Over the years the RMG sector achieved great expertise in the area of product development and more than 60 types of garments items are now being produced and exported. Some of the important export destinations are Germany, UK, USA, Japan, Canada, Middle East, Australia, and many other countries in the Globe. An important advantage of our export is the cheapest labour cost.

Merchandising is one of the most important aspect and task of garments business activities. Without proper merchandising, the objectives of business will never be fulfilled. A merchandiser deals with all the activities starting from buyer up the stage of shipment from the Chittagong port. In fact a merchandiser is the controller for all the tasks. Once an order is received, the merchandiser at first calculates all the requirements of raw materials, trims and accessories. He/she need to make complete detail plan of action by which he/she can do the shipment in time. In the factories, the merchandisers makes all the orders for accessories need for an order like; amount of fabric need, amount of sewing thread, amount of button, washing if necessary, amount of carton, amount of polybag, shipment arrangement etc. In a way a merchandiser looks after the progress of the whole garments export business.

In order to acquire good knowledge on woven or knit Garments Merchandising, Garments production, testing and Quality control, Operation, Marker making, Cutting & Finishing sector, the project work will be very helpful.

1.2: HISTORY OF BANGLADESH GARMENTS INDUSTRY:

Bangladesh started it's RMG export in the 70s, initially the business was very little but at least showing hope and future. The first consignment of garments was exported in 1973. In 1981-82 the woven sector started to emerge as a significant export item. Since then it was a story of sustained success for the Bangladesh RMG sectors. The knitwear sector has grown over the years at a very high rate and became the country's biggest foreign currency earning sector. Over the years, the contribution of woven export has risen to 42.83% (1990-1991) and the knitwear sector's contribution 41.79% to national export earnings at the end of FY 2008-09(July-April). [5]

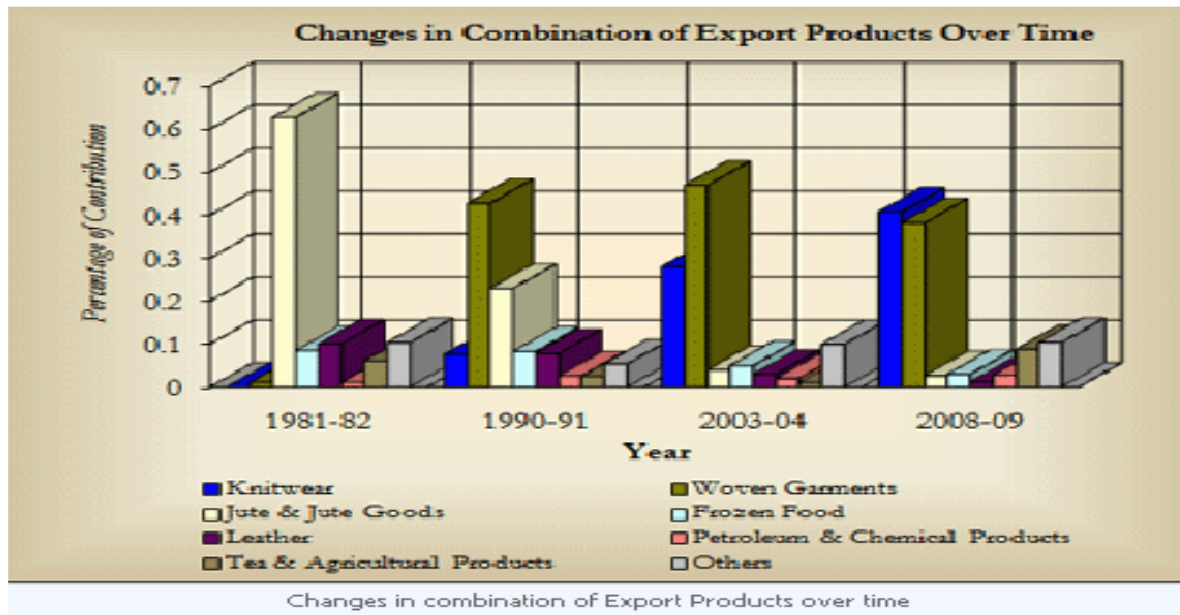


Fig 1: Changes in combination of Export product over time

The knit export sector stepped forward with their performance in the late 80s. As part of this they were able to export US\$14.84 million in the year 1990-90, out of which, US\$ 2.02 million was exported to US. This trend knit sector has been continued due to market access facilities given to the LDCs under the generalized systems of preference (GSP) benefit.

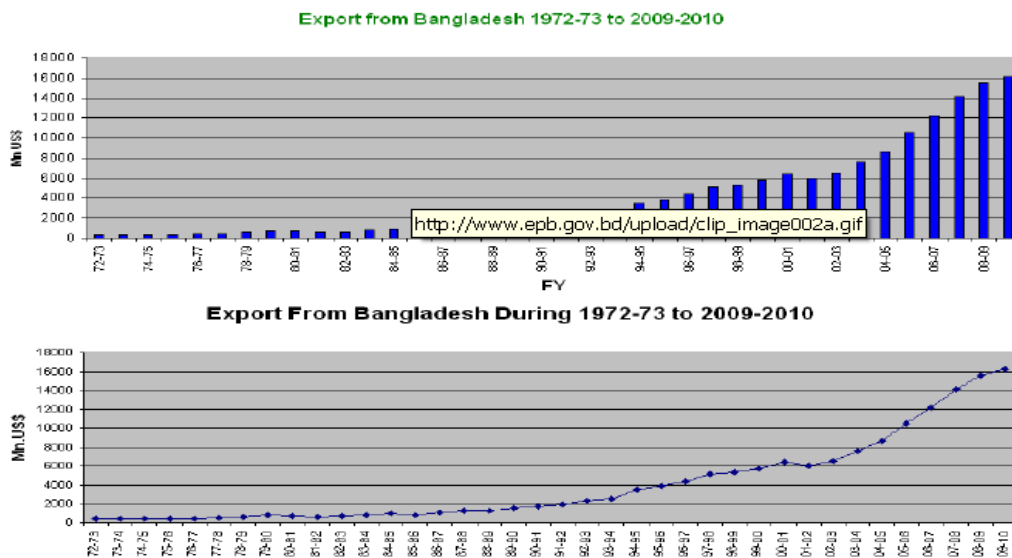


Fig2: Export amount from Bangladesh

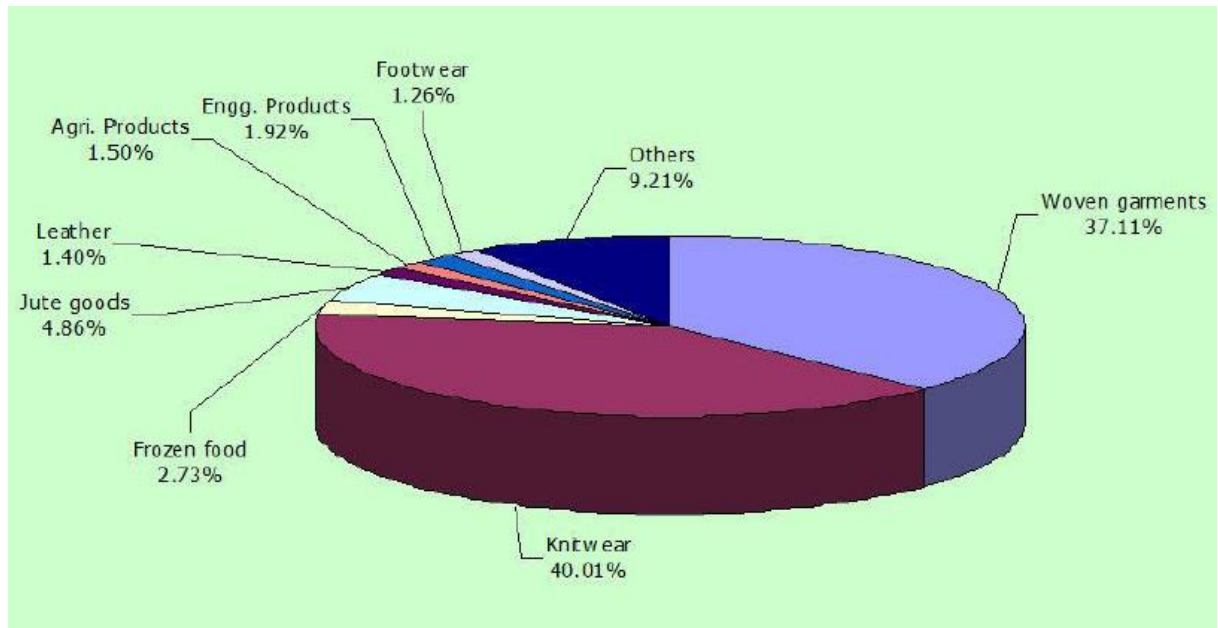


Fig 3: Export percentage for knitwear sector

This is the rejuvenated beginning of the ambitious story of Bangladesh knitwear sector that in true sense has been possible because of huge industrialization in a sustainable way with effect on all probable human development aspects. At present the knitwear sector is increasing day by day at a steady rate of 20%. There is a very bright prospect of further increase in export. An important scenario is that China is highest exporter of RMG products in the world. In the recent years china is facing problem due to increase in the labor cost. According to an unconfirmed report china is losing 30 billion USD a year. Different study suggest that Bangladesh has all the potentials to grab the huge market lost by china. The GSP facility offered by European countries are also great blessing for the Apparel exporters.

Bangladesh's RMG exports to world, calendar year 2009 & 2010 Value in Million US\$

Month	ALL COUNTRIES									
	Woven (MN US\$)		Growth%	Knit (MN US\$)		Growth%	Total (Woven+Knit)		Growth%	
	2009	2010		2009	2010		2009	2010		
January	584.24	570.26	-2.39	562.94	535.06	-4.95	1147.18	1105.32	-3.65	
February	532.57	560.46	5.24	466.87	481.85	3.21	999.44	1042.31	4.29	
March	542.13	615.74	13.58	480.61	552.81	15.02	1022.74	1168.55	14.26	
April	437.79	505.9	15.56	479.96	545.38	13.63	917.75	1051.28	14.55	
May	493.41	555.98	12.68	578.59	632.32	9.29	1072.00	1188.3	10.85	
June	522.62	622.43	19.10	619.66	727.93	17.47	1142.28	1350.36	18.22	
July	521.78	671.28	28.65	651.85	798.66	22.52	1173.63	1469.94	25.25	
August	490.09	645.39	31.69	552.46	790.06	43.01	1042.55	1435.45	37.69	
September	364.76	473.57	29.83	449.63	592.56	31.79	814.39	1066.13	30.91	
October	307.76	559.27	81.72	440.46	706.75	60.46	748.22	1266.02	69.20	
November	439.78	534.87	21.62	487.27	644.94	32.36	927.05	1179.81	27.26	
December	458.49	752.68	64.16	426.27	778.95	82.74	884.76	1531.63	73.11	
Total:	5695.42	7067.83	24.10	6196.57	7787.27	25.67	11891.99	14855.10	24.92	

Table 1: Bangladesh RMG export to world in 2009 & 2010

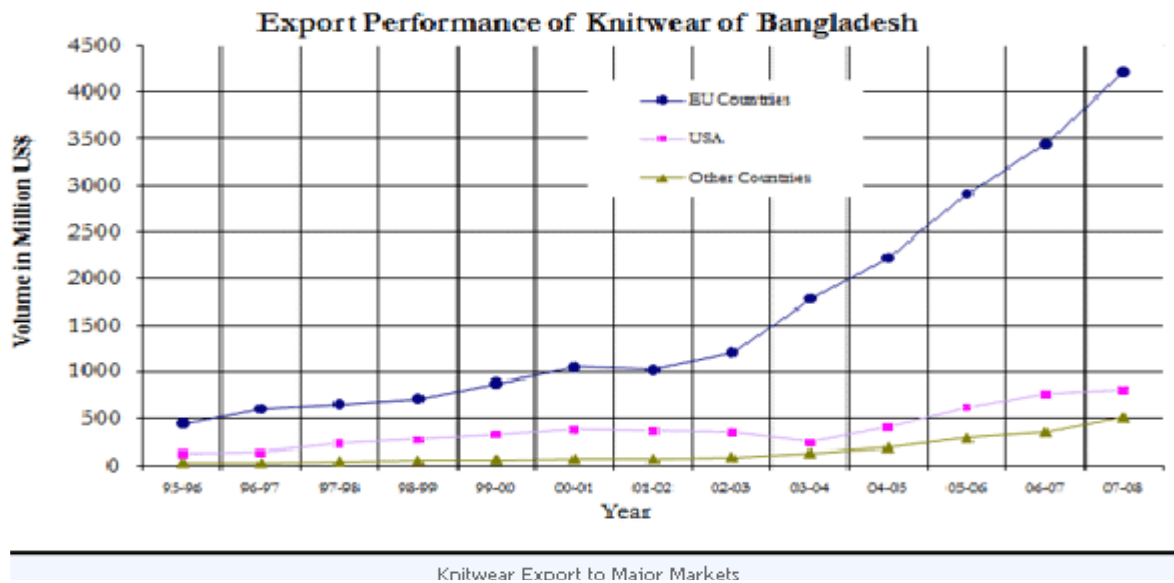


Fig 4: Export performance of knitwear of Bangladesh

RMG sector of Bangladesh was very successfully in overcoming various hurdles and is now in steady race. The sector is now maintaining in a very good and healthy competition in the globe.

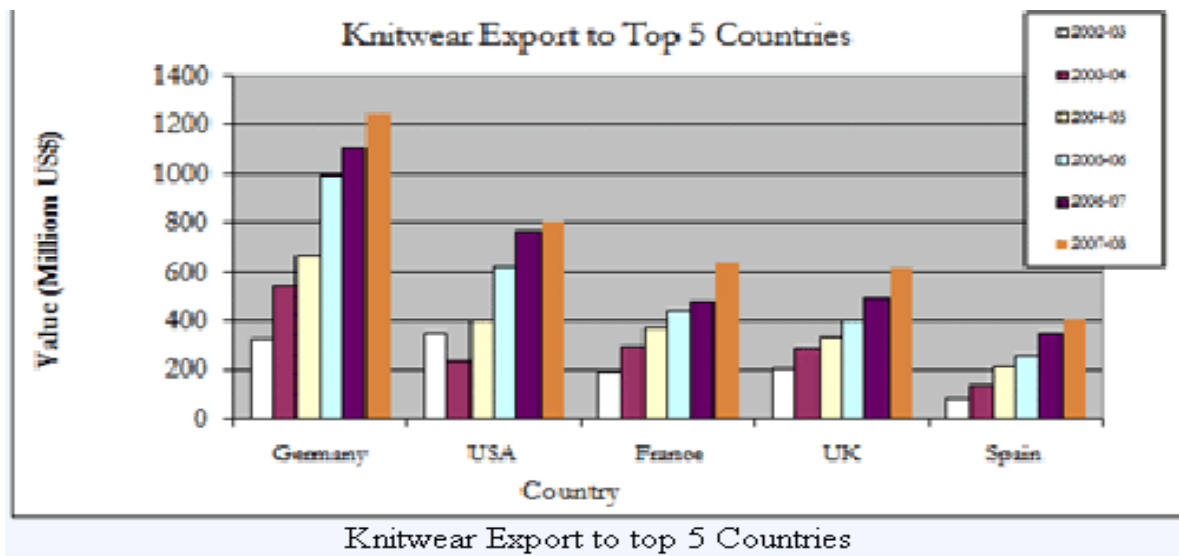


Fig 5: Knitwear export to top 5 countries

In FY 2003-04, Bangladesh exported 91.6 million dozens of knitwear for the first time. Since then the knitwear export has been growing day by day and has also been reducing the gap between woven and knit. The total knitwear export raised to 241.59 million dozens in the year 2007-08.

Comparison of Export Quantity

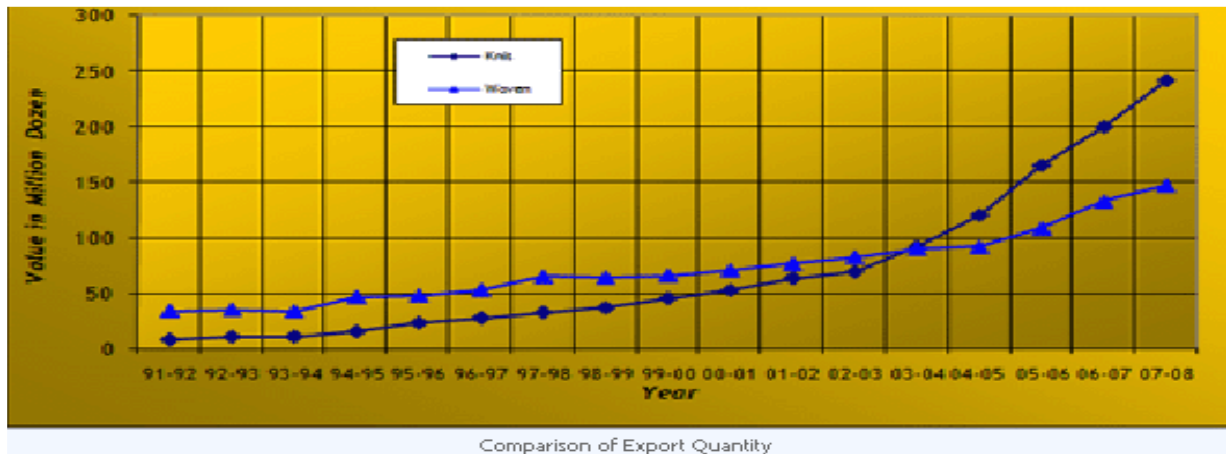


Fig 6: Comparison of export quality

Gradually the knitwear export became an important export item as compared to all export items particularly the woven items. There are various reasons for better performance of knit sector. The main reason was the support from knitting industries. It may be well appreciated that knitting technology is relatively easier than weaving. The variety product in knitting is also very little as compared to woven product. Due to the supply of knit fabric which is the main raw material of knit garments, the knit export boosted very speedily. As a consequences the contribution of knitwear overcome woven wear in the year 2007-8. In that year the earning from woven and knit export were 36.17% and 38.97% . The total export of knitted and woven in 2008-9 was as follows:

Knitwear export in the FY 2008-09(July-April) was US\$ 5231.01 million

Woven export in the FY 2808-09 (July- April) was US\$4902.48 million

Therefore the contribution of knitwear in national export increase is 57.82%.

Chapter 2:

LITERATURE REVIEW:

Apparel or Garment Merchandising is the main ingredient to run the apparel industry and apparel business smoothly. The apparel industry of Bangladesh is the main source of earning foreign exchange. Apparel industrial sector is entirely export oriented and there are more than 5000 garments industries. Majority of the garments industries are owned by domestic owners while some owned by overseas entrepreneurs. The garment industries are scattered all over greater Dhaka while some are clustered in industrial areas and Export Processing Zones (EPZ). Bangladesh government set up EPZs in 1978 to attract foreign capital. Bangladesh Export Processing Zone Authority (BEPZA) was established in 2012 and since then ban on trade union activity has been imposed.

The following terms are associated with the term apparel merchandising-

Merchandise: The word “Merchandise” can be referred as buying and selling of manufactured product. In our country in most cases Merchandise means selling of garment to the foreign buyers. Apparel or Garment is one of the examples of Merchandise.

Apparel Merchandise: The Apparel Merchandise is the apparel that is sold out in abroad basically by the manufacturer or merchandiser in the process of merchandising.

Apparel Merchandising: The term “Apparel Merchandising” is the process of buying and selling of apparel product starting from receiving its order and confirmation of order to shipment. Merchandising department is the core of any business organization. It is the fundamental center for coordinating the order to reach the goods to customers.

Merchandiser: A merchandiser is an individual or a person who involves with the process of Merchandising and making relevant communication with the buyers. [3]

Therefore the term merchandising means to buy and sell products to earn profit. A merchandiser coordinates the from order receiving up to shipment. Apart from this some more literature about merchandising as as follows;

Shakawat (2008) expressed that the activities of a merchandiser may even include display techniques, negotiation techniques, free samples, on-the-spot demonstration, pricing, shelf talkers, special offers, and other sales methods.

Velumani Du.(2009), expressed that merchandiser is a person who act as media or interface between the buyer and seller, and he/she also has to contribute to maintain appropriate interaction among the buying offices/ buying agents/ agency and seller/ exporter in terms of handling and executing an order.

Md. Harun (2007) said that that the activity of sale of goods at retail is merchandising which include display techniques, free samples, spot demonstration, pricing etc.

In Wikipedia it is defined as “In the broadest sense, merchandising is any practice which contributes to the sale of products to a retail consumer. At a retail in-store level, merchandising refers to the variety of products available for sale and the display of those products in such a way that it stimulates interest and entices customers to make a purchase.”

Mayedul Islam mentioned that garments merchandising absolutely depends on time and action. A merchandiser must be very efficient who can deliver the order in time. Delivery of the goods in time plays an important role during the whole processes and the merchandiser need to coordinate with all the processes and concerned persons. If the coordination is perfect then it will easy to go for shipment in exact date and time.

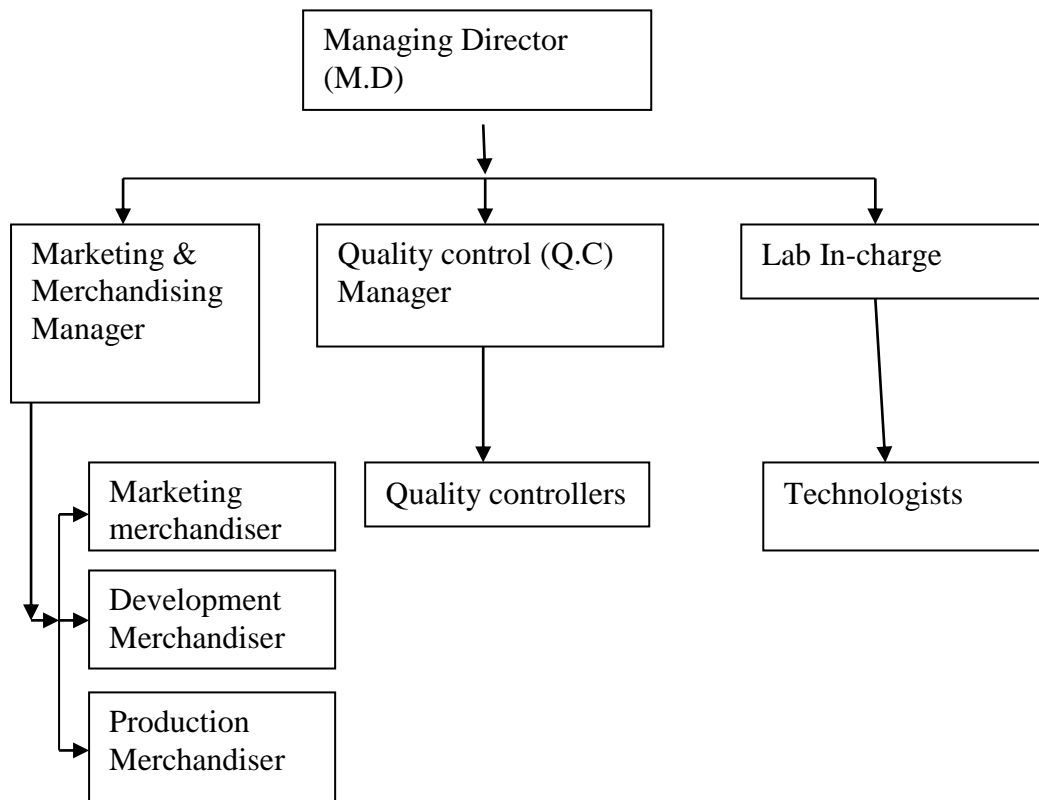
CHAPTER 3

Methodology

3.1 Organogram of a Buying House:

Every buying house like other organization have an organogram which reflects the hierarchy of that buying house. The buying house from where the order is placed, they follow the below organogram for their smooth conduction of activities.

MANAGEMENT BREAKDOWN/ ORGANOGRAM



3.2 Order Place in Garments Factory

After getting an order the buying house placed the order in garments industries. Here the vendor garments are Fashion Power Bangladesh Ltd and Fabrica knit composite Ltd. The vendor garments consumes fabrics entirely from its own source. They have the capacity of producing various knit garments as follows:

- T-Shirts (Long Sleeve & Short Sleeve)
- Polo Shirts
- Ladies Wear
- Sports Wear
- Tank Tops (Gents& Ladies)
- Kids Wear
- Sackets

Ladies Maxi
Trousers etc.

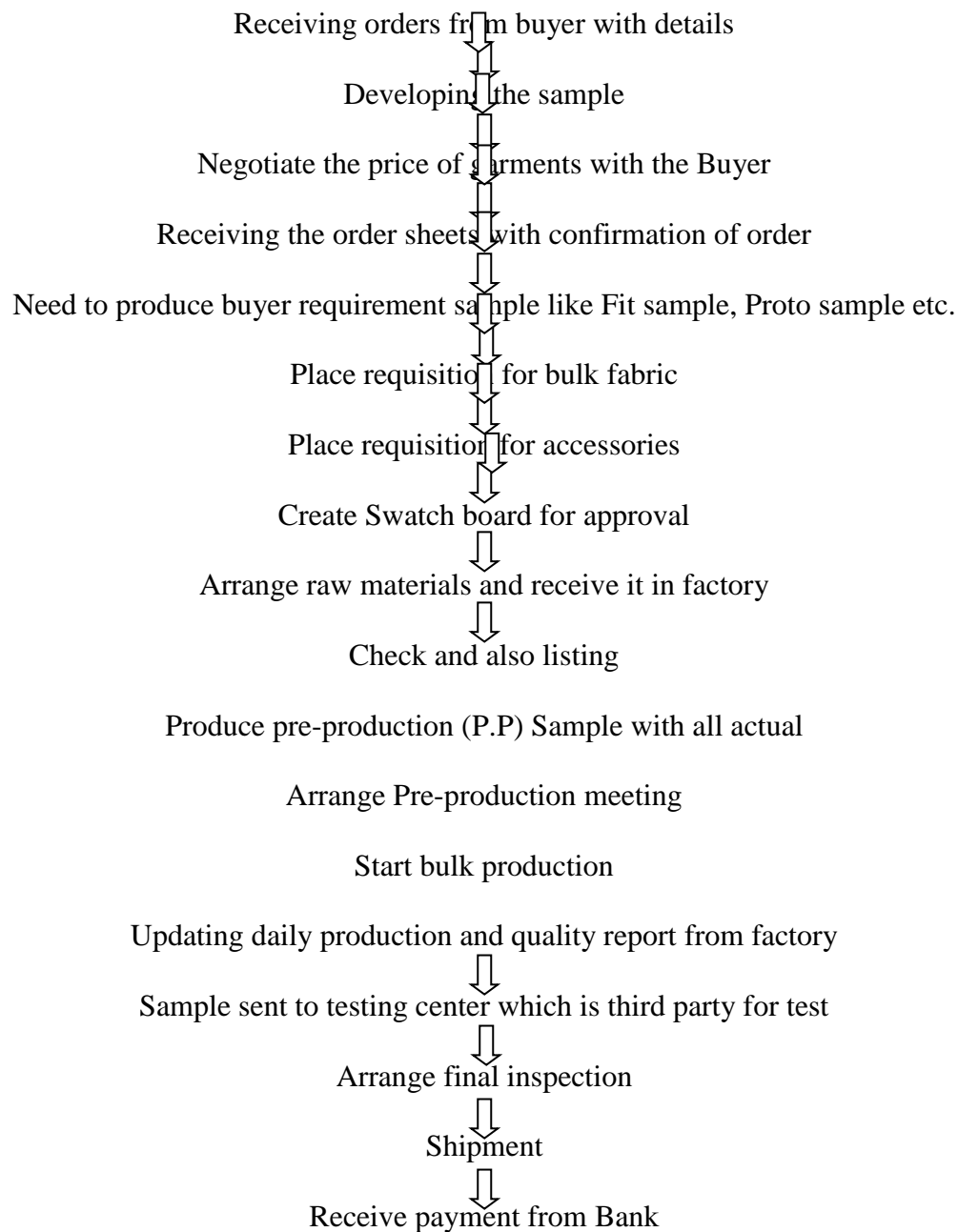
Apart from this the vendor garments industries works for the following buyers-

1. LPP (Poland)
2. Marks & Spencer (UK)
3. TERA MATIC (US)
4. BERSHKA (US)
5. S.Oliver (Germany)
6. G-Star (Netherland)
7. Decathlon (US)
8. Esprit (Germany).

And they work on the following fabrics-

- Single Jersey
- Single jersey plain
- Pique
- Lacoste
- Fleece
- 1x1 Rib Or Plain Rib
- (2x2)Rib
- (2x1)Rib
- (5x5)Rib
- (5x3)Rib
- Waffle
- Flat Back Rib
- Plain Interlock
- Mesh
- Thermal
- Drop Needle

3.3 Process Flow Chart of Apparel or Garments Merchandising:



3.3.1 Sample Development

Sample is developed in sample section with the buyer requirements. Sample section is the main point of the garments. Because the bulk production depends on the sample, if sample making is not correct, the whole purpose of the production would be damaged.

Various types of samples are required for completing a garments order

There can be as many as eight different types of samples needed to complete a **garment order**. These are as follows

- (i)Proto sample
- (ii)Fit sample,
- (iii)Size set sample
- (iv)Counter sample
- (v)Salesman sample
- (vi)Pre-production sample (PPS)
- (vii)Top over production sample (TOP)
- (viii)Shipment sample

All the above garments samples are discussed in the below:

1. Proto sample:

After getting the order this sample is the very first sample which is given to buyer by buyer's specification. It developed in product development dept. This sample no need to produce with main fabric and exact colour. It is for styling how the main design will look like. 2-3 pieces sample may produce, 1 piece sample kept by development merchandiser and others provided to the buyer.

2. Fit sample:

When Proto sample get approval then need to produce fit sample. Fit sample also don't need to produce with actual fabric and actual colour but the fabric GSM need closer. In this sample buyer will check the stitching of garments and measurement of the garments. So the measurement must be as same as they provide the measurement sheet. Fit sample also need to produce 2-3pieces in which 1 piece sample kept by merchandiser and others provided to the buyer.

3. Size set sample:

After getting approval of Fit sample need to produce size set sample.For size set sample need to make pattern of every sizes. Every size sample need to to make 2-3 pieces. From every

size 1 piece kept by merchandiser or manufacturer and 2 pieces of every size have to send to buyer for their approval of size. Before getting approval of size set sample cutting can't be proceed.

4. Counter sample:

Counter sample is for merchandiser. This sample is for comments which commented by buyer.

5. Salesman sample (SMS):

SMS sample is for sales team of buyer. It may 200-300 pieces according to customer and season. This sample is for market feedback of customers. This is for market survey of the garments on basis its design, style etc.

6. Pre-production sample (PPS):

This is the main sample on which basis bulk production will proceed. P.P sample must produce with all actuals like it should produce in actual production line. All fabric, colour, measurement and all other order specifications must be actual. Without getting approval of P.P sample production must not be proceed. If it get rejected revise sample need to submit. In this sample planning of production include. So after planning of production style may not change. Bulk production will follow P.P sample.

7. Top of production sample (TOP):

This samples are sent to buyer from production line for quality purpose. This sample approval is very important for this total order. If somehow this sample get Q.C rejected than the order may get cancelled.

8. Shipment sample:

This sample is the final sample. This sample sent to buyer for their observation on what they are getting finally. This sample sent to buyer when garments are ready for shipment.

3.3.2 Negotiation with buyers:

This is the most important part of the whole work process. Mainly merchandising manager do this job with buyer. Garments costing is provided to buyer by many supplier. Buyer mainly check the price with the quality of the garments. Quality with best price will selected by

buyer so merchandiser need to provide the best price with best quality garments to get selected by buyer.

Business deal must be clear in every step otherwise it will be risky. For smooth working garments exporters need to keep good relation with buyer and get their trust by providing good quality product. Convincing buyer is very important thing to collect the order. If Buyer convinced by merchandiser of insuring of product quality, on time shipment and price than they place the garments order.

3.3.2.1. Researching the needs of both parties:

Buyer and supplier requirements must be clear. Both of them need much understanding. Supplier's profit percentage need to clear to buyer. By this way buyer can understand the original price of the garments and they can place proper mark-up for the garments on garments selling piece.

3.3.2.2. Preparation:

Communication of both supplier and buyer very important. By this way buyer can accept the range of garments price, quantity and most important lead time of order.

3.3.2.3 Offer:

To collect order from buyer is main target for a factory. Then it comes to the production. Mutual understanding between buyer and supplier by various offer is for smooth working is needed. Some important matter are depends on buyer order placement, those are given below-

(1) Audited factory:

The factory must be audited by buyer preferred organization or third party.

(2) Production capacity & Order quantity:

Capacity of the factory per day to finish the order by lead time.

(3) Other facility:

Buyer focuses the factory is composite or not. The factory have its own emboridary/ print facility. On this basis categorize the factory.

3.3.3 Order Execution:

Order execution is main part of an order. This execution monitored by merchandiser. For order execution merchandiser need to follow-up below factors-
Make T&A

- Execute the order by T&A.
- Fabric and accessories booking.
- In house those on time.
- Swatch card making and approval.
- Size set approval
- PP approval
- Cut date
- Starting production
- QC the product
- Test the products
- Test result approval
- Ex-factory/Shipment

3.3.3.1 Various Types of requirements to execute an order:

Buyer Provide tack-pack or various kind of paper for clean understanding of order with clear information for execute the order. Which contains –

- Fabric specification, GSM, details of colour.
- Measurement sheet.
- Print or embroidery or other embellishments information.
- Packing information etc.

Table: 1- Tech Pack

Our Order Number(s):		0		Factory: BANGLADESH		Issue No: COSTING				
Description:		LADIES VARIEGATED RIB L/S SLEEP TEE						Apprvd By:		
		8	10	12	14	16	18	20	22	
	Tol+/-									
A	SHOULDER WIDTH EXCLUDING NECK TRIM	0.5	9	9.3	9.6	9.9	10.2	10.5	10.8	11.1
B	ACROSS FRONT: 13CMS FROM SNP	1	31	32	33	34.3	35.6	37	38.4	40.3
C	ACROSS BACK: 13CMS FROM SNP	1	32	33	34	35.3	36.6	38	39.4	41.3
D	BUST 2.5CMS BELOW UNDERARM	1	39	41	43	45.5	48	51	54	57
E	WAIST WIDTH: 40CMS FROM SNP	1	37.5	39.5	41.5	43	46.5	49.5	52.5	55.5
F	HIP WIDTH 58CMS FROM SNP	1	41	43	45	47.5	50	53	56	59
G	HEM WIDTH	1	46	48	50	52.5	55	58	61	64
H	HEM DEPTH (INC. STITCHING)	0.2	2	2	2	2	2	2	2	2
I	FRONT LENGTH: SNP TO HEM	1	88	89	90	91	92	93	94	95
J	BACK LENGTH: SNP TO HEM	1	88	88.5	89	89.5	90	90.5	91	91.5
K	LENGTH: AT CB TO HEM	1	85.5	86	86.5	87	87.5	88	88.5	89
L	ARMHOLE DIAGONAL	0.5	18.3	18.9	19.5	20.3	21.1	22.1	23.1	24.1
M	BICEP AT UNDERARM	1	14.3	14.9	15.5	16.3	17.1	18.1	19.1	20.1
N	OVERARM: CROWN TO CUFF END	1	58.9	59.3	59.7	60.1	60.5	60.9	61.3	61.7
O	UNDERARM	1	46	46	46	46	46	46	46	46
P	CUFF WIDTH	0.5	9.9	10.2	10.5	10.8	11.1	11.4	11.7	12
Q	CUFF HEM DEPTH (INC. STITCHING)	0.2	2	2	2	2	2	2	2	2
R	BACK NECK WIDTH: SEAM TO SEAM	0.5	18.6	19	19.4	19.8	20.2	21	21.6	22.2
S	FRONT NECK DROP: SEAM TO SEAM	0.5	12.5	12.8	13.1	13.4	13.7	14	14.3	14.6
T	LACE DEPTH	0.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
U	MINIMUM NECK STRETCH	MIN	31	31	31	31	31	31	31	31
V	APPLIQUE POSITION BELOW CF NECK SEAM	0.5			5	TBC				
W										
X										
Y										
Z										

Table: 2- Size spec

After getting an order from buyer without wasting any time need to prepare schedule to do the job in safe and smooth execution. The main task for the job to be done for an export order are as below-

- Go through to master L/C
- Prepare schedule for export L/C
- Booking all accessories.
- Distribution of responsibilities
- Prepare production plan
- Inspection of the produced garments
- Banking & shipment formalities preparation
- Continuous follow-up for progress

3.3.4 Measurement, price consumption & calculation:

Approx. sewing thread consumption of different items:

No	Product Name	Consumption
i	T-Shirts	132 Meter
ii	Polo Shirt	176
iii	Tank Top	50 Meter
Iv	Fleece/Sherpa Jacket	250 Meter
V	Kids Dresses	312-465 Meter
Vi	Long Sleeve Woven Shirt	150 Meter
vii	Short Sleeve Woven Shirt	135 Meter
viii	Long Trouser	365 Meter

Machine wise sewing thread consumption/inch:

1. plain m/c	1 needle	6.25 cm
2. plain m/c	2 needle	12.5 cm
3. over lock	3 thread	33.125 cm
4. over lock	4 thread	41.875 cm
5. over lock	5 thread	46.875 cm
6. flat lock	3 thread	41.875 cm
7. flat lock	5 thread	55.625 cm
8. bar tack stitching	Per operation	Normally 17.5 cm

3.3.4.1 Fabric consumption for 1 dozen men's t-shirt:

For a Men's T-Shirt:

i) GSM (Provided by buyer)

Body : 162

Neck/Rib : 201-222

ii) Sewing & seam allowances (Does not provided by buyer) – 1.5 -3.2cm

iii) Wastage % (not provided by buyer) – 7%

iv) Measurement chart (provided by buyer)

Measurement Chart:

Parameter	Given	Estimated with sewing allowance
a) Chest	58 cm	62 cm
b) HPS	77 cm	81 cm
c) sleeve length	24 cm	28 cm
d) Arm hole	24 cm	52 cm
e) Neck	44 cm	48 cm
f) Neck width	2+2=4 cm	7 cm
g) Bottom hem	2 cm	

Formula:

$$\text{Consumption per dozen} = \frac{L \times W \times 12 \times \text{GSM} \times 2}{10000000} \text{ kg}$$

Where,

L = Length

W = Width

$$\begin{aligned} \text{A) Consumption per dozen (body)} &= \frac{L \times W \times 12 \times \text{GSM} \times 2}{10000000} \text{ kg} \\ &= \frac{81 \times 62 \times 12 \times 160 \times 2}{10000000} \text{ kg} \\ &= 1.00 \text{ kg} \end{aligned}$$

$$\begin{aligned} \text{B) Consumption per dozen (Sleeve)} &= \frac{L \times W \times 12 \times \text{GSM} \times 2}{10000000} \text{ kg} \\ &= \frac{28 \times 52 \times 12 \times 2 \times 160}{10000000} \text{ kg} \\ &= 0.56 \text{ kg} \end{aligned}$$

$$\begin{aligned} \text{C) Consumption per dozen (Neck)} &= \frac{L \times W \times 12 \times \text{GSM}}{10000000} \text{ kg} \\ &= \frac{48 \times 6 \times 12 \times 220}{10000000} \text{ kg} \\ &= 0.07 \text{ kg} \end{aligned}$$

3.3.4.2 Consumption for 1 dozen polo shirt:

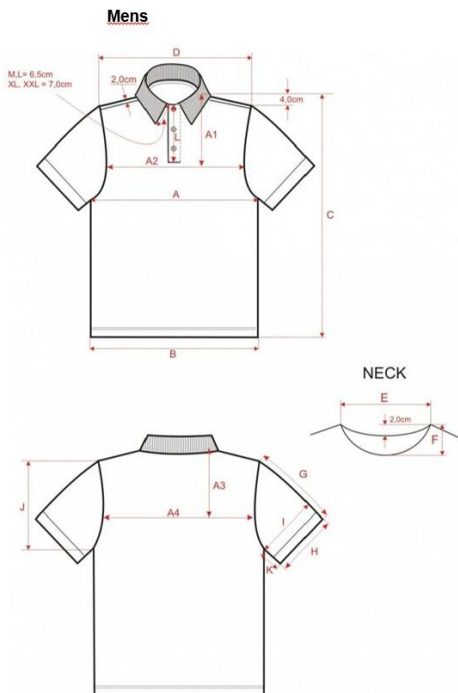


Diagram of polo-Shirt

Here,

a) G.S.M (given by buyer) body		150-200
	Collar(12pcs)	400
	Cuff (12 × 2)	300
b) Sewing & seam allowance		1-3cm
c) Wasted %		7%
d) Measurement chart (given by buyer)		

Measurement Chart:

Parts Name	Given	Estimated
a) Chest	95 cm	101 cm
b) HPS	64 cm	69 cm
c) sleeve length	19 cm	24 cm
d) Arm hole	45 cm	48 cm
e) Collar length	45 cm	45 cm
f) collar width	7 cm	10 cm
g) Cuff length	25 cm	29 cm
h) cuff width	3 cm	5 cm

Formula:

$$\begin{aligned}
 \text{A) Consumption per dozen (body)} &= \frac{L \times W \times 12 \times \text{GSM}}{10000000} \text{ kg} \\
 &= \frac{69 \times 101 \times 12 \times 150}{10000000} \text{ kg} \\
 &= 1.25 \text{ kg}
 \end{aligned}$$

$$\begin{aligned}
 \text{B) Consumption per dozen (Sleeve)} &= \frac{L \times W \times 12 \times 2 \times \text{GSM}}{10000000} \text{ kg} \\
 &= \frac{24 \times 48 \times 12 \times 2 \times 150}{10000000} \text{ kg} \\
 &= 0.41 \text{ kg}
 \end{aligned}$$

$$\begin{aligned}
 \text{C) Consumption per dozen (Collar)} &= \frac{L \times W \times 12 \times \text{GSM}}{10000000} \text{ kg} \\
 &= \frac{45 \times 10 \times 12 \times 400}{10000000} \text{ kg} \\
 &= 0.21 \text{ kg}
 \end{aligned}$$

$$\begin{aligned}
 \text{D) Consumption per dozen (Collar)} &= \frac{L \times W \times 12 \times 2 \times \text{GSM}}{10000000} \text{ kg} \\
 &= \frac{29 \times 5 \times 12 \times 2 \times 300}{10000000} \text{ kg}
 \end{aligned}$$

$$\frac{10000000}{100000000} = 0.104 \text{ kg}$$

So, total Consumption per dozen = A + B + C + D
 = (1.25+ 0.41+ 0.21+ 0.104) kg
 = 1.97 kg

Actual Consumption per dozen = 1.97 kg + 7%
 = 2.10 kg

So, fabric consumption for 1 dozen polo shirt is 2.10kg.

3.3.4.3 Consumption for 1 dozen trousers:

- a) G.S.M. (given by buyer) 200-280
- b) Sewing & seam allowance 1-3cm
- c) Wasted % 7%

Measurement Chart:

Parts Name	Given	Estimated
a) Waist	114 cm	116 cm
b) Side seam (length)	106 cm	113 cm
c) Thigh (width)	65 cm	71 cm
d) Front rise	26 cm	
e) Back rise	34 cm	
f) Leg Opening (bottom)	45 cm	

Formula:

$$\begin{aligned} \text{Consumption per dozen} &= \frac{L \times W \times 12 \times \text{GSM}}{100000000} \text{ kg} \\ &= \frac{116 \times 2 \times 72 \times 12 \times 200}{100000000} \text{ kg} \\ &= 4.00 \text{ kg} \end{aligned}$$

Actual Consumption per dozen = (4.00 +7%) kg
 = 4.28 kg

So, fabric consumption for 1 dozen trousers is 4.28kg.

3.3.5. Specimen Local Accessories List:

Local accessories suppliers are available in Bangladesh. Qualities may vary according to market places & prices.

Approx. price range:

- Hanger : 1.70-3.50 dollar
- Papers hang tag : 0.39-1.5 dollar.
- Price tag : 0.30 cent-0.80 cent
- Poly bag : 0.45 cent- 2.5 dollar
- Carton : 1 dollar- 2.5 dollar

(Note: prices are changing according to market price)

Trims

Sewing thread	:	80-95 cent (per cone)
Button	:	1.6-3.2 dollar/gross (144 pcs =1 gross)
Rivet	:	90 cents-1.9 dollar/gross
Hole button/chock button:		10 dollar- 13 dollar/gg (1728pcs=1gg; greater gross)
Zipper	:	2.7 dollar-4.7 dollar/dozen (pant) 10 dollar-17 dollar (jacket)

(Note: the prices depend on the basis of zipper quality like cotton, nylon, polyester etc)

3.3.5.1 Trims & Accessories:

Beside fabric the other raw materials used in sewing room are called Trims.

To make a complete garment which materials are directly attached with the fabric is called trims. Beside the above and below mentioned accessories and trimmings there are also different types of them are used in garments industry for different purpose.

Here is given below the price (USD) of required accessories for the order-

1. Main Label: 0.35 - 0.50/Dz
2. Size Label: 0.75 – 1.10/ Dz
3. Wash care label: 0.08 - 0.21/Dz
4. Polybag: 0.50 - 0.60/Pcs
5. Carton: 2-4/Pcs
6. Sewing Thread: 0.40 -0.55/Cone
7. Gum Tape: 0.25 - 0.30/Roll

Beside the accessories the following print is generally used in garments-

Pigment, Rubber, Plastic Salt, High Density, Sugar Print, Gel Print, Glitter Print, Discharge Print, Reactive Print.

For Embroidery the costing is defined as-

- Per 12000 Stitch = .40-.45 USD (Normal)
= .45 - .50 USD (Appliqué)

Embroidery thread consumption Meter/ Body= Embed. Stitch X .006

Price of Embed. Thread= 1.35 USD/ Cone Normal

Thread contain = 2000 meter/ cone or 3000 meter / cone

Thread contain = 2000 meter/ cone or 3000 meter / cone

Besides accessories and trimmings there are different costs are associated with an order like wash and CM cost. Here is given below of list of such type of costs-

Wash:

1. Normal: 1.90 USD/dz
2. Enzyme: 3.5 USD/dz
3. Pigment: 3.8 USD/kg

4. Acid wash: 3.8 USD/kg
5. Silicon Wash: 2.1 USD/dz

CM:

1. Tee Shirt: 4.5 USD/dz
2. Polo Shirt: 7-10 USD/dz
3. Tank Top: 2.8-3.8 USD/dz

3.3.5.2 Packing Accessories

Accessories that are used in garment packing before garment shipment to the buyer are called packing accessories. Packing accessories depends on garment packing and folding etc which is provided by the buyer. Packing may vary (as per buyer garment packing instruction) in different orders as per instruction of buyer for garments packing. The sea freights depend on the dimensions of the export cartons and the air freights depend on dimensions of the export cartons or gross weights of the cartons. There are different types of cotton. Like-

1. Depend on paper
2. Depend on stitching
3. Depend on ply
4. Depend on liner
5. Depend on size

Carton Consumption:

$$\text{Formula (1)} = \frac{(1+w)(w+h) \times 2 \text{ in cm}}{100 \times 100} \quad (\text{without wastage})$$

$$\text{Formula (2)} = (1+w+6) \times (w+h+4) \times 2/1000 \quad (\text{include wastage})$$

$$\begin{aligned} \text{Price} &= \frac{(1+w)(w+h) \times 2}{100 \times 100} \times \text{rate per square meter} \\ &= \text{rate/pc} \end{aligned}$$

Example, here, l = 55 cm, w=35cm, h=20cm
 From (2) = $(55+35+6) \times (35+20+2) \times 2/10000$
 = 1.09 square meter

Price for a Carton:

Here,
 Let, L=55cm, w=35cm, H=20cm, Rate=0.75(\$)

From Formula,

$$\begin{aligned} &\frac{(55+35+6) \times (35+20+2) \times 2 \times 0.75}{10000} \\ &= 0.817(\$/PCS) \end{aligned}$$

Pre- cost:

- 1) Estimation of cost
 - 2) Fabric, trim and labor costs estimation
 - 3) Keep a record of all materials costs on a work sheet
 - 4) Rough calculation of cost and price
- (Normally overhead cost is 35-45%)

Final costing:

- 1) Exact calculation by concerned department
- 2) Actual figures for fabric, accessories and labor
- 3) Concerned department uses-
 - a. Merchandiser work sheet
 - b. A proto type garment
 - c. Production pattern
- 4) A detailed cost analysis is on cost sheet.

3.3.6 Analysis a cost sheet:

A cost sheet contains the following particulars-

Total amount of material \times (\$ 1) / yd = Total price

Trimming: Button (BTN), thread (THD), interlining (INT), level & packing

Production pattern making, grading, marking, spreading and cutting

Assembly and finishing

Calculated the average time of operations

Overhead cost: Salary, rent, utilities > (35- 45%)

Freight: Air freight / sea freight 7

Quota change

Costing of garments in (FOB) cost:

Costing of a garment consists of:

1. Fabric costing
2. Garment accessories:
3. Finishing accessories:
4. Labor charge
5. Washing charge
6. Commercial and transportation cost.
7. + 10% profit margin.

3.3.7 Commercial Terms:

Various Important terms considered during pricing from shipping point of view-

- FOB: The order was on FOB basis
- CNF
- CIF
- DDP
- DDU

Bill of Lading (BOL):

It is a major document if the goods are dispatched by sea which contains-

- A formal receipt of the goods
- The contract of carriage of the goods between the shipper and the shipping company

A bill of lading may include the following details:

- A description of the goods
- Identification marks and numbers
- Name of the ship

Types of (B/L):

Generally bill of lading is of three types-

- Straight bill of landing
- Memo bill of landing
- Express bill of landing

Letter of credit (L/C):

Business activities normally starts with a purchase order (PO) issued by a customer or buyer to a supplier/manufacturer. Though the order should be considered as a contract involving both parties, but it may not be considered as an agreement or an instruction for the supplier or seller to follow to get payment for the apparel products that has been dispatched/shipped. To tackle these issues the letter of credit widely known as “L/C” comes into the scenario. Letters of credit (L/C) is normally a provisional document extended by the financial organization or bank in connection with presentation of export value. A credit may be regarded as an advise to a beneficiary through another bank (the advising bank) without engagement on the part of the advising bank, but the concerned bank must take appropriate measures to check the apparent genuineness of the credit which it advises. The issuing bank must forward the functioning credit gadget or the functioning adjustment to such advising bank without delay.

Apart from the L/C, there are few other technique of payment of export cost. These are as follows:

- i. By means of letters of credit
- ii. By means of letters of credit advance T.T remittances
- iii. By means of letters of credit Deferred payment
- iv. C.A.D basis etc.

Types of L/C:

There are various types and nature of Letters of credits e.g.

- i. Irrevocable L/C
- ii. Revocable L/C
- iii. Confirmed and irrevocable letter of credit
- iv. Confirmed letter of credit
 - v. Back to back letter of credit
 - vi. Transferable or divisible letter of credit
 - vii. Sight letter of credit
 - viii. Red clause letter of credit
 - ix. Revolving letter of credit
 - x. Usance letter of credit
 - xi. Stand by letter of credit

All the above letter of credits, must clearly specify whether the L/Cs are revocable or irrevocable. If these are not mentioned the credit shall be considered as revocable.

- i. **A revocable L/C:** May be revised, reviewed or cancelled by the issuing bank at any time without giving any prior notice to the payee or beneficiary.
- ii. **An Irrevocable L/C:** Involves a certain responsibility of the issuing bank, provided that the specified documents are offered, the term and conditions of the credit are complied with.
- iii. **Confirmed letter of credit:** This is a credit for which exporter's bank gives all types of guarantee for the advance of payment.

iv. **Confirmed and irrevocable letter of credit:** This type of L/C cannot be canceled, nor in any way modified, except with the clear consent of all parties involved i.e the buyer, the supplier or seller and the issuing bank. .

v. **Transferable or divisible L/C:** According to this L/C, the beneficiary has the right to request the bank called upon to proceed for payment or receipt or any bank entitled to effect the bargaining to make the credit accessible in whole or in part to one or more other beneficiaries.

vi. **back to back L/C:** This type of L/C is initiated based on an original master L/C.

vii. **Red Clause L/C:** According to this types of L/C, there is provision that allows the supplier to withdraw a certain amount from the advising or paying-bank, in advance of the shipment or before producing the required or necessary papers.

viii. **Sight L/C:** According to this types of L/C, the payments are made immediately – within five to ten days – after the supplier/seller meets the requirements of the **letter of credit**. Sight L/C is the quickest form of payment for suppliers/sellers, who are often selling to overseas buyers..

ix. **Usance L/C:** It is also known as Deferred Payment **Letter of Credit** or Time LC or Term LC is a **letter of credit** payable at a prearranged time / i.e. a particular date after all the necessary documents are presented.

x. **Stand by L/C:** It is also known as LOC, is a lender's assurance of payment to an involved third-party in when the client has on an agreement.

xi. **Revolving L/C:** According to this L/C the supplier or seller can draw money from such L/C up to the amount specified by means of documents, and after drawing , the amount drawn will automatically be adjusted and is available for another drawing another drawing and so on.

Apart from this the above mentioned L/Cs, the following terms are also widely used in the apparel export business.

Consigns:

The organization or person whose name appears on the bill of lading or airway bill is considered as the party to whom the goods are to be delivered by the carrier

PSL (Full Container Load):

A fully loaded container which may be either in weight or in cubic measurement terms, contracted by a shipper, and transported to a consignee and to one destination

LCL Less Container Load:

A shipment of cargo which is an underloaded container, grouped with other consignments for the same destination.

Shipper:

This is the person whose name appears on the bill of lading or airway bill as the party who has contracted the carrier to dispatch the goods.

Shipping Marks:

These are marks essential to identifying cargo and linking that cargo with specific documents.

Garment on Hangers (GOH):

This means that garments are packed into the container on hangers.

Documentation for shipment:

The following documents are necessary for shipment-

- i. Bank account.
- ii. Bill of Lading.
- iii. Commercial invoice
- iv. Export registration certificate
- v. Packing list

3.3.8 Final Inspection:

This is carried out before shipment and is conducted by a third party is regarded as final inspection` AQL is a widely used system for measuring apparel quality.

CHAPTER 4

RESULT AND DISCUSSION

4.1. Price for 1 dozen T-shirt:

Pre-requisites:

	<u>Unit price</u>	<u>Costing</u>
1. Fabric consumption 1.56 kg/dz	\$4.7/kg	\$7.33
2. AOP	\$1.25	\$2.13
3. Placement Print	\$1.00	\$1.00
4. Accessories	\$1.80/dz	\$1.80/dz
5. CM (cost of manufacturing)	\$4/dz	\$4/dz
	<hr/>	
	Total	\$16.26

A) Direct cost (raw materials)/dz = \$16.26

B) Indirect cost (15% to 20% of direct cost)

Indirect cost = $\$16.26 \times 15\%$
= \$2.44
Total = $\$16.26 + \2.44
= \$18.70

C) Profit @10% = $\$18.70 \times 10\%$
= \$1.87

Therefore, total cost = $\$18.70 + \1.87
= \$20.57

So, the cost for 1 dozen mean's T-shirt is \$20.57

4.2 Price for 1 dozen Polo shirt:

Pre-requisites

	<u>Unit price</u>	<u>Costing</u>
1. Fabric consumption 2.10 kg/dz	\$7.0/kg	\$14.70
2. Accessories	\$2/dz	\$2
3. CM	<u>\$6/dz</u>	<u>\$6</u>
	Total	\$22.70

A) Direct cost (raw material)/dz = \$22.70

B) Indirect cost = 15%-20% of direct cost
= \$22.70 × 15%
= \$3.40

Total cost = A + B
= \$22.70 + \$3.40
= \$26.10

C) Profit at 10% = \$26.10 × 10%
= \$2.61
= \$26.10 + \$2.61
= \$28.71

The total cost for 1 dozen polo shirt is \$28.71

4.3. Price for 1 dozen Trousers:

Pre-requisites

	<u>Unit price</u>	<u>Costing</u>
1. Fabric consumption 4.28 kg/dz	\$7.0/kg	\$29.96
2. Accessories	\$2/dz	\$2
3. CM	<u>\$6/dz</u>	<u>\$6</u>
	Total	\$37.96
A) Direct cost (raw material)/dz	= \$37.96	
B) Indirect cost	= 15%-20% of direct cost = \$37.96 × 15% = \$5.69	
Total cost	= A + B = \$37.96 + \$5.76 = \$43.72	
C) Profit at 10%	= \$43.72 × 10% = \$4.37 = \$43.72 + \$4.37 = \$48.09	
The total cost for 1 dozen polo trousers is	\$48.09	

Comprehensive study on Knit Garments Merchandising:

Merchandising is a very important term for textiles, especially for garments trade. From this project we get all the information about merchandising and its importance in garments sector. Here also included the activities & qualities of a merchandiser which will be very helpful to continue this job. Here also included some technical knowledge about the fabrics & accessories, which is very important for this trade. Now-a-days in many buying house & garments factory hiring foreign people to continue the work smoothly, because of the lackage of available efficient stuffs in Bangladesh. We should try to make our manpower from our own country as they can compete with the foreign stuffs and they can do their own jobs without the help of foreigners. We hope, one day we will be able to do our own jobs by our own & that time our country will be more benefited which we really deserve.

Chapter 5

Conclusion

The thesis reported the step by step of the works done by a merchandiser. Some of the important works includes Sample development, apparel costing procedure, and monitoring quality, banking procedure, negotiation with buyer's or their representative. Apart from this calculation of fabric consumption, thread consumption and requirements of trims and accessories were also reported in the thesis. It is expected that the works and data given in the thesis will very helpful for people working in this sector.

Though buying houses are facing many problems due to lacking of technical manpower and also for fabric sourcing but it is the time for them to take necessary steps to ensure their better future. Buying houses have to emphasize to build strong relationship with buyers by providing the best price and best quality products for doing business. Buying house needs some training program to strengthen their manpower, which is the key strength of buying house. Buying house act as a buyer to the factory and place order & control the process behalf of the end buyer/importer. Placing order, execute the order in time with perfect quality is the main key work of a buying house. So, Building strong relationship with the buyer as well as manufacturer is also important for a buying house.

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