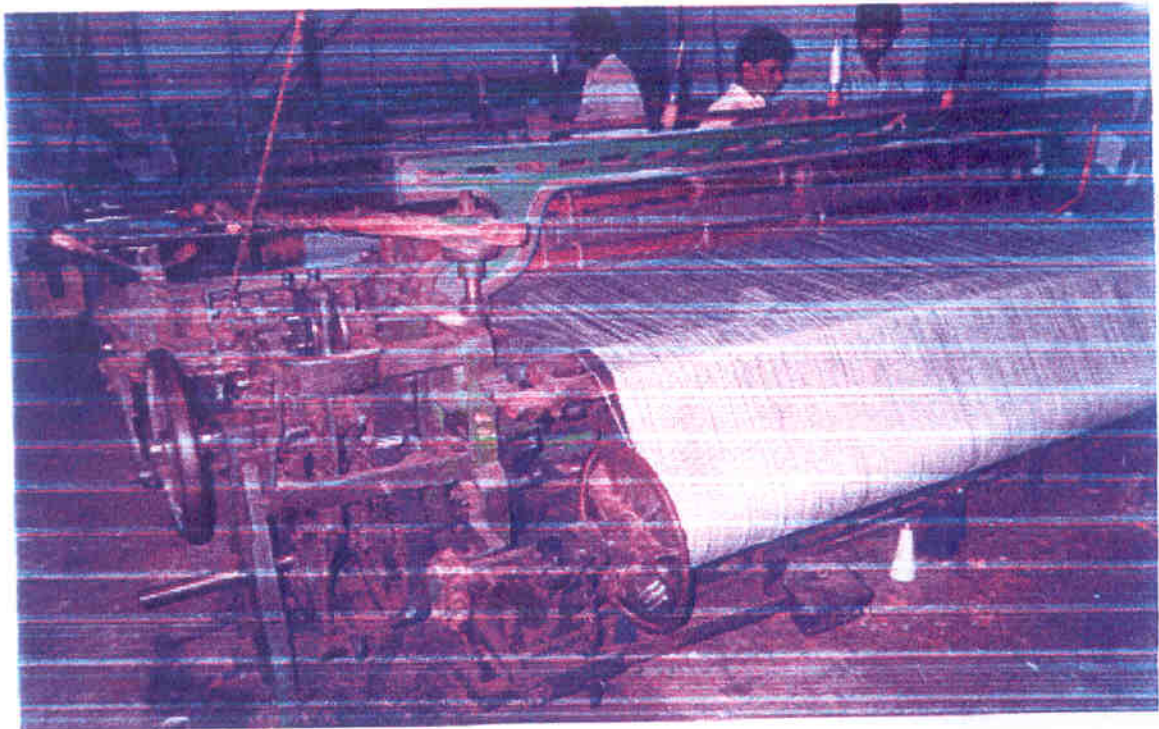


CHAPTER - 6



## CHAPTER 6

### Raw Material, Quality and Usage Pattern

Most of the textile production in the state is made out of cotton yarns and, therefore, cotton yarn is the dominant raw material. The usage of manmade and synthetic yarns is very limited. The type of yarns used is decided by the end products that are being manufactured and, therefore, medium and low count yarns in cotton are seen to be used in the decentralised sector. Tamilnadu is having a large number of spinning mills in the organised as well as under the SSI fold. All these spinning mills are producing cotton yarn and the production of polyester cotton and other blended yarns is not significant. The demand for cotton yarn has facilitated the growth of small-scale units in the spinning segment which have found it profitable to produce and sell lower count yarns for the specific requirements of the local market. It is seen that even in places like Vellakovil and other far off places from Coimbatore, small spinning units are found operating and specializing in the production of lower count yarns.

The job work units from the merchant manufacturers/ masterweavers receive the yarn either in the form of warp beam or in hank form for the warp yarn requirements. In the case of grey fabrics, the sized beams and cone yarns are supplied to the job work units by the master weavers whereas in the case of yarn dyed fabrics, the hank yarns after dyeing are generally supplied. It is not known whether the cone has been converted into hank for the purpose of dyeing or grey hank yarns have been used for dyeing. The usage pattern of different yarns is found to vary from cluster to cluster.

#### 6.1 Yarn consumption pattern

The powerloom sector in Tamilnadu is basically a cotton fabrics producing one. Therefore, cotton yarn forms the basic raw material for the powerloom industry. The share of other fibre yarns, mainly art silk/rayon, polyester etc., constitute a negligible proportion in the total yarn consumption. Based on the sample data and local sources, an estimate has been made regarding the yarn consumption. According to this estimate, 609 million kgs. are the total yarn consumption during the year 2002-03 in the Tamilnadu powerloom sector.

**Table No. : 6.1**

**Estimated Yarn Consumption by the Powerloom Sector in Tamilnadu**

Sr. No.	Type of yarn	Yarn consumption in million kgs.
1	Cotton	548.02
2	Polyester filament	14.06
3	Polyester Cotton blend	19.14
4	Rayon spun	12.20
5	Polyester Viscose blend	12.20
6	Acrylic	3.27
	Total	608.89

Coimbatore cluster : The estimated total yarn consumption in this cluster during the last year is 168.36 million kgs. of cotton and other man-made/blended yarns. Out of this, cotton yarn accounts for 90%. Due to the production of industrial fabrics and school uniforms, polyester cotton and polyester filament yarn is used more in this cluster. In cotton, the counts namely 30s, 40s, 60s etc. are more popular. Lower counts yarns are used less as compared to medium and finer count yarns. The different types of yarns being used in this cluster are cotton, polyester filament, polyester cotton blend, rayon spun and polyester viscose blend.

**Table No. : 6.2**

**Yarn Consumption by Powerloom Units in Coimbatore Cluster**

Sr. No.	Type of yarn	Estimated yarn consumption in million kgs.
1	Cotton	151.52
2	Polyester filament	5.00
3	Polyester cotton blend	5.04
4	Rayon spun	3.40
5	Polyester viscose blend	3.40
	Total	168.36

From the available information from local sources, the following count wise cotton yarn usage pattern in Coimbatore cluster is presented:

**Table No. : 6.3****Count Wise Share of Yarn Usage in Coimbatore Cluster**

Sr. No.	Cotton count	% share
1	0-25s	15
2	30s	10
3	36s	5
4	40	20
5	42	15
6	60 (combed)	10
7	72 (combed)	5
8	80 (combed)	5
9	90 (combed)	5
10	100 (combed)	5
11	2/100(combed)	5
	Total	100

Erode cluster : The estimated total yarn consumption during 2002-03 is 183 million kgs. of cotton and other man-made/blended yarns. Out of this, cotton consumption is more than 90%. In this cluster, due to the production of lungi, saree and other dress materials, the usage of polyester filament yarn in the weft is more significant. Compared to other areas, the polyester yarn consumption is large in Erode cluster. In cotton, the counts namely 6s, 10s, 17s, 2/20s, 2/30s, 40s, 30s, 34s, 60s, 80s etc. are popular. In polyester, 80D and 110D are used more.

**Table No. : 6.3(a)****Yarn Consumption by Powerloom Units in Erode**

Sr. No.	Type of yarn	Estimated yarn consumption in million kgs.
1	Cotton	164.46
2	Polyester filament	3.65
3	Polyester Cotton blend	5.48
4	Rayon spun	3.65
5	Polyester Viscose blend	3.65
6	Acrylic	1.82
	Total	182.71

Karur cluster: The estimated yarn consumption during the last year in this cluster is 88.07 million kgs. in which cotton is having more than 90% share. The other types of yarn used are polyester filament, polyester cotton blend etc. in smaller quantities. The counts in cotton are 2s, 6s, 10s, 2/10s, 20s, 2/20s, 30s, 40s, 2/40s, 60s etc. Further details in this regard may be seen in the following table:

**Table No. : 6.3(b)**

**Usage pattern of yarn in Karur Cluster**

Sr. No.	Type of yarn	Estimated yarn consumption in million kgs.
1	Cotton	79.27
2	Polyester filament	1.76
3	Polyester Cotton blend	3.52
4	Rayon spun	1.76
5	Polyester Viscose blend	1.76
	Total	88.07

Salem cluster: The estimated total yarn consumption in this cluster during the last year is 92.43 million kgs. of cotton and other man-made/blended yarns. Out of this, cotton consumption accounts for more than 90%. Due to the production of lungi, saree and other dress materials, the usage of polyester filament yarn in the weft is more significant in this cluster. As compared to other regions, the polyester yarn consumption is significant in this cluster. In cotton, the counts namely 10s, 17s, 30s, 34s, 40s, 60s, 80s, etc. is more popular. In polyester, 70D, 110D, 120Ds are used.

**Table No. : 6.3(c)**

**Yarn Consumption by Powerloom Units in Salem Cluster**

Sr. No.	Type of yarn	Estimated yarn consumption in million kgs.
1	Cotton	92.43
2	Polyester filament	2.05
3	Polyester Cotton blend	3.08
4	Rayon spun	2.05
5	Polyester Viscose blend	2.05
6	Acrylic	1.03

Madurai cluster: The yarn consumption in this cluster during the year 2002-03 is estimated at 41.47 million kgs, out of which the cotton accounts for about 89%. In addition, a small amount of rayon filament, polyester, acrylic and other man-made fibre yarns are used. The major counts in cotton are 10s, 26s, 29s, 30s, 31s, 34s, 40s, 60s and 80s.

**Table No. : 6.3(d)****Yarn Consumption by Powerloom Units in Madurai Cluster**

Sr. No.	Type of yarn	Estimated yarn consumption in million kgs.
1	Cotton	37.31
2	Polyester filament	0.83
3	Polyester Cotton blend	1.25
4	Rayon spun	0.83
5	Polyester Viscose blend	0.83
6	Acrylic	0.42
	Total	41.47

Chennai cluster: The estimated total yarn consumption during last year is 25.59 million kgs. in this cluster. In addition to cotton, some amount of polyester and other man-made/polyester blended yarns are also being used for the production of lungi and other dress materials meant for export.

**Table No. : 6.3(e)****Yarn Consumption by Powerloom Units in Coimbatore Cluster**

Sr. No.	Type of yarn	Estimated yarn consumption in million kgs.
1	Cotton	23.03
2	Polyester filament	0.77
3	Polyester Cotton blend	0.77
4	Rayon filament	0.51
5	Polyester Viscose blend	0.51
	Total	25.59

**6.2 Raw material procurement by entrepreneur units**

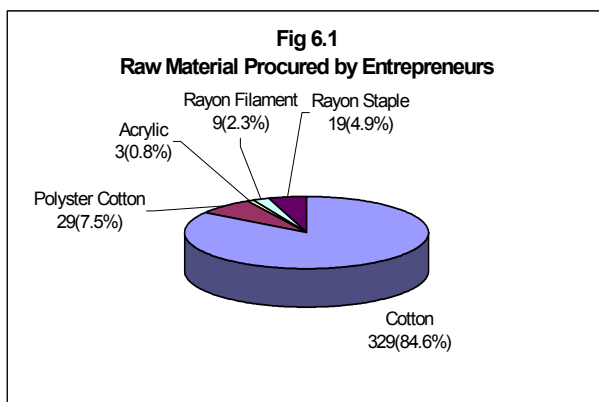
The entrepreneurial units that are procuring yarn from the market and make use of them for weaving have reported the purchase of yarn. The units that are working on job work basis have not provided any data on the yarn supply received from the master weavers. Therefore, data pertaining to the yarn purchase has been compiled only for a part of the surveyed units purchasing yarn for the conversion into fabrics. Most of the units have stated that they are purchasing yarn on credit basis and yarn is purchased in the form of hank and cone. A few units have also reported that they have purchased the yarn in the

form of sized beams also. Following are the different types of forms of yarn being used in the powerlooms:

**Table No. : 6.4**  
**Form of Yarn during Procurement**

Sr. No.	Type of material	Form of yarn	Dyed/Grey	% share
1	Cotton	Hank, Cone, Sized beam	Grey	90.00
2	Polyester – filament	Cone	Dyed	2.00
3	Polyester cotton	Cone	Grey	3.00
4	Acrylic	Cone	Dyed	1.00
5	Rayon filament	Cone	Dyed	2.00
6	Rayon staple	Cone	Grey	2.00
Total				100.00

In the case of Coimbatore cluster, mainly cotton yarn is used. A few units reported the use of polyester cotton yarn also in this cluster. In the case of Erode cluster where yarn



dyed textiles are being manufactured, the use of polyester cotton, polyester, rayon filament and rayon staple yarn have been reported. In Karur, Salem and Madurai clusters also, the yarn types are similar to Erode cluster, the only difference being that acrylic yarn usage is reported both in Salem and Madurai clusters.

### 6.3 Form of yarn purchased

It is seen that 23.46% of the units have reported the purchase of yarn for weaving and the remaining 76.54% of the units are of job work nature and did not buy the yarn. In the case of Coimbatore cluster, except 6.48% of units, all the other units covered are of job work units and, therefore, no yarn purchase is reported for that cluster. Considering the above, it may be assumed that for the yarn dyed fabrics, the following forms of yarn purchases are prevalent in the powerloom sector:

**Table No. : 6.5****Form of Yarn during Purchase**

Sr. No.	Fibre	Form of yarn	% of usage
1	Cotton	Hank	76.21
		Cone	20.36
		Beam	3.43
			100.00
2	Polyester Cotton	Hank	4.54
		Cone	81.82
		Beam	13.64
			100.00
3	Acrylic	Cone	100.00
			100.00
4	Rayon filament	Hank	11.77
		Cone	88.23
			100.00
5	Rayon Staple	Hank	4.76
		Cone	95.24
			100.00

In the case of cotton yarn, the major portion of yarn consumption is in the form of hank. For other fibre yarns, it is mostly in the form of cone. Within the non-cotton yarns, the polyester cotton yarn is in the form of grey yarn whereas acrylic, rayon and rayon staple yarns are in dyed form. The usage of other than cotton yarns like polyester filament yarn, polyester cotton blended yarn, acrylic spun yarn, rayon filament and rayon staple yarns is very limited.

**6.4 Yarn purchases on cash/credit**

In the case of units producing grey fabrics and yarn-dyed fabrics in cotton, the yarn purchase is made mainly on credit as 82% have reported purchases on credit and 10% have reported yarn purchases on cash basis. In the case of cotton yarn purchases in hank form, majority of the units have reported credit purchases. But the cotton yarn purchases in the form of cone are more on cash basis rather than on credit. From this we can infer that the grey fabrics manufacturers are comparatively better off in the availability of working capital as compared to yarn dyed textile manufacturers.

In the case of polyester and polyester cotton yarn, mostly (90%) it is on credit basis. Only 10 % of the units have reported to purchase the blended/polyester yarn on cash basis. In the case of acrylic yarn in cone form, the purchases have been reported on the



basis of cash and credit. In the case of other man made fibres like rayon filament and rayon staple yarn also, the same pattern is observed. It can be safely inferred that credit facilities for yarn purchases are very much required and the availability of working capital also is very limited with the powerloom fabric manufacturers.

The Coimbatore cluster presents a different picture as regards the yarn purchases are concerned as compared to other clusters because of its difference in the products manufactured and also due to the presence of large number of organised mills. In the above given situation, the yarn purchases are on credit and cash basis as compared to the overall trend of credit purchases for other clusters. In Erode cluster, a majority of the units have reported the purchase of hank yarn on credit only. In the case of cone yarn also, the same pattern is observed. In the case of Karur, Salem and Madurai clusters, the cotton yarn purchases are more or less equal on credit as well as cash basis. In Chennai cluster, most of the units have reported the purchase of cotton hank yarn on credit basis. The extent of credit purchases only indicates the paucity of working capital with the powerloom units and also the cash flow from marketing of the finished products.

Out of the 271 units reporting yarn purchases, all have reported the purchase of cotton yarn whereas only 29 units have reported the purchase of polyester cotton yarn. Only 3 units have reported the purchase of acrylic yarn. Only 9 units have reported the purchase of rayon yarn and 17 units have purchased the rayon staple. The details of the pattern of yarn purchases are provided below.

**Table No. : 6.6**  
**Yarn Purchase in Cash/Credit**

Sr. No.	Fibre	Form of Yarn	No. of Units in %			
			Cash	Credit	Both	Total
1	Cotton only	Hank	10	82	8	<b>100</b>
		Cone	48	30	22	<b>100</b>
		Beam	17	50	33	<b>100</b>
		<b>Sub-Total</b>	<b>20</b>	<b>67</b>	<b>13</b>	<b>100</b>
2	Polyester Cotton	Hank	-	-	-	-
		Cone	26	67	7	<b>100</b>
		Beam	-	100	-	<b>100</b>
		<b>Sub-Total</b>	<b>24</b>	<b>69</b>	<b>7</b>	<b>100</b>
3	Acrylic	Cone	33	33	34	<b>100</b>
		<b>Sub-Total</b>	<b>33</b>	<b>33</b>	<b>34</b>	<b>100</b>
4	Rayon	Hank	100	-	-	<b>100</b>
		Cone	13	87	-	<b>100</b>
		<b>Sub-Total</b>	<b>22</b>	<b>78</b>	<b>0</b>	<b>100</b>
5	Rayon Staple	Hank	-	-	-	-
		Cone	21	68	11	<b>100</b>
		<b>Sub-Total</b>	<b>21</b>	<b>68</b>	<b>11</b>	<b>100</b>

## 6.5 Production of spun yarn by reporting mills (SIMA) during 2001-02

From the below given yarn production data pertaining to the southern mills coming under SIMA, the demand pattern for yarn of different counts is reflected well. It is seen that the highest production is in the count range of 31-40.

**Table No. : 6.7**  
**Production of Spun Yarn by Member Mills of SIMA**

(in 000' kgs)

Sr. No	Cotton yarn counts	1999-2000 (208-221 mills)	%	2000-2001 (205-210 mills)	%	2001-2002 (210-215 mills)	%
1	1-10	42919	9.79	53238	10.90	63456	12.80
2	11-20	59696	13.62	65851	13.48	62696	12.65
3	21-30	65170	14.87	71577	14.66	68430	13.80
4	31-40	96501	22.02	112011	22.94	109430	22.08
5	41-60	46876	10.69	55417	11.35	54805	11.05
6	61-80	26373	6.02	31091	6.37	33189	6.69
7	80+	22448	5.12	24538	5.02	25126	5.07
<b>8</b>	<b>Sub-total</b>	<b>359983</b>	<b>82.13</b>	<b>413723</b>	<b>84.72</b>	<b>417132</b>	<b>84.14</b>
9	Non-cotton yarn	19593	4.47	20246	4.14	22546	4.55
10	Blended yarn	58744	13.40	54396	11.14	56096	11.31
<b>11</b>	<b>Total yarn</b>	<b>438320</b>	<b>100</b>	<b>488364</b>	<b>100</b>	<b>495774</b>	<b>100</b>

Source : SIMA

## 6.6 Yarn production and supply by the mills located in Tamilnadu

In Tamilnadu, the total yarn production during 2001-2002 is 1140 million kgs, out of which more than 84% is of cotton yarn. Blended yarn constitutes another 10%. The balance 6% constitutes of non-cotton yarn.

**Table No. : 6.8**  
**Yarn production in Tamilnadu (in 000' kgs)**

Sr. No.	Type of product	1999-00	2000-01	2001-02
1	Cotton yarn	904947	956718	958839
2	Blended yarn	107596	107232	110147
3	100% Non-cotton yarn	50000	60430	70537
4	<b>Total spun yarn</b>	<b>1062543</b>	<b>1124380</b>	<b>1139523</b>
5	Manmade filament yarn	5756	4700	2026

Source : Compendium of Textile Statistics – 2002

It is seen that around 50-60% of the above production goes into the handloom, powerloom and hosiery sectors in the state and the balance is exported. The powerloom sector alone may be consuming roughly 40% of the total production in the state and the balance yarn requirement is being met from yarn supplies from other states.

## 6.7 Yarn deliveries by organised mill sector in Southern India

In hank yarn, the plain reel yarn is the major production which is also being used by the powerloom sector in the state without any possibility of export to other countries. Cone yarn production is to the extent of 117.6 million kgs. which is partly exported and also used by the powerloom sector. From this data, it is seen that around 30% of the yarn is being exported and the balance 70% is consumed by the domestic industry. In addition to the above, the SSI units are also producing cotton yarn and meeting the requirements of the powerloom industry.

**Table No. : 6.9**  
**Yarn Delivery Details During Last Three Years**

(in 000' kgs)							
Sr. No	Cotton yarn counts	1999-2000	%	2000-2001	%	2001-2002	%
1	Plain reel	71391	30.71	86343	27.69	88707	27.95
2	Cross reel	5441	2.34	7839	2.51	7802	2.46
3	Hosiery	59825	25.74	75565	24.23	76199	24.01
4	Weaving cones	87472	37.63	121394	38.93	117589	37.05
5	Others	8322	3.58	20713	6.64	27077	8.53
<b>6</b>	<b>Total</b>	<b>232451</b>	<b>100</b>	<b>311854</b>	<b>100</b>	<b>317374</b>	<b>100</b>
7	Cotton yarn export	75018	54.98	98493	57.08	93168	56.78
8	Non-cotton	12950	9.49	14712	8.53	14285	8.71
9	Civil exports	2756	2.02	6067	3.52	7103	4.33
10	Blended/civil	37574	27.53	38729	22.45	41960	25.57
11	Exports	8161	5.98	14538	8.43	7562	4.61
	<b>Total</b>	<b>164078</b>	<b>100</b>	<b>172539</b>	<b>100</b>	<b>136459</b>	<b>100</b>

Source : SIMA

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