



Investment in Imported Textile Machinery

2002-07

The investments in textile sector continued in the same quota influenced direction with major chunk going to upstream sector of spinning and weaving while processing, apparel and made-up sector got less than 22% of the fresh investments.

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1 Introduction

Textiles and clothing sector has a long value chain. The range of textile machinery used in the sector is, therefore, large. More than 80 tariff lines cover the international trade of textile machinery and spare parts which are used directly in manufacturing of textiles and clothing products. A few of which are Ginning, Blow Room, Carding, Drawing, Ring, Winding, Doubling, Twisting, Texturizing, Power loom, Shuttle-less looms, Knitting, Bleaching, Mercerizing, Dyeing, Printing, Stitching etc.

The textiles and clothing industry has grown to be the single largest manufacturing sector in Pakistan; however indigenous textiles machinery manufacturing did not develop along with its growth.

The textile machinery manufacturing sector is underdeveloped with very few manufacturers of textile machinery with very limited product line. Spare parts are manufactured in Pakistan in considerable quantities however very few manufacturers have been able to establish themselves as reliable suppliers in the local market.

The supply-demand gap is so high that textiles and clothing industry is mostly dependent on imports of textile machinery for capacity enhancement and investments in new technology. The quantum of textile machinery and spare parts imports give a fair idea about the overall investment trend in textiles and clothing sector. This report has used the same factor to map the growth in investment in textiles and clothing sector during the last five years.

2 Local Manufacturing and Exports

Although in our economy Textile plays a very vital role as compared to our competitors India and China, yet in last forty years there was no serious effort by the Government or the private sector to promote textile machinery manufacturing in Pakistan and a substantial portion of foreign reserves is spent on the import of machinery. In the 80's and 90's most of the textile machines were based on mechanical engineering and not around electronics, which was the most suitable period to establish textile machinery manufacturing base in Pakistan.

2.1 Public Sector

Two public sector corporations i.e. Textile Machinery Corporation (TMC) and Spinning Machinery Company (SMC) started manufacturing textile spinning machinery in mid-70. The objective was to reduce dependence on imports. These units manufactured ring spinning frames, high draft conversion equipment, draw frames, simplex machines and winding machines. However, the companies could not face the competition from imports due to quality and price and thus closed down.

In the weaving field, Pakistan Engineering Company (PECO) ventured into the looms area but had the same problems and its operations discontinued.

2.2 Private Industry Structure

In the private sector only a few companies are undertaking machinery manufacturing, which is limited to few machines. The focus is mainly on production of spare parts.

To safeguard local textiles and clothing spare parts manufacturing industry, commercial traders were banned to import secondhand/reconditioned spare parts through the Import Policy Order, 2006 (IPO-2006). The list of the banned categories is as follows:

Table 1: List of Spare Parts (used in Textiles and Clothing Industry) IPO 2006

HSCODE	Type of Spare Parts
84482000	PARTS&ACCESORIES MACH 84.44 HD
84483110	TOPS & FLATS CARD CLOTHING
84483190	OTH CARD CLOTHING
84483200	PART ACCESORY MACH TEXT FIBRE
84483310	SPINDLE FLYER RING TRAVLLERS
84483320	SPINDLES TEXTILE MACHINE
84483330	SPINNING RINGS
84483900	OTH PARTS&ACCESSORIES 84.45
84484210	REEDS FOR LOOMS
84484290	OTHER HEALDS & HEALDS FRAME
84484900	OTH PART ACCESSORIES WEAV MACH
84485100	SINKERS NEEDLES & OTH ARTICLES
84485900	PART ACCESSORY MACH HEAD 84.47
84519000	PARTS FOR DRY CLEAN/DYING MACH
84529000	OTHER PARTS OF SEWING MACHINE

2.3 Textile Machinery Exports

Pakistan is although a net importer of textile machinery and spares, however, exports have started to increase significantly. During the last five years, exports in this category have grown from US\$ 1.7 million to US\$ 13.17 million with a compound growth rate of 65.32% per annum.

Table 2: Textile Machinery Exports (US\$ Million)

	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
Machinery	1.764	5.840	5.446	7.598	13.178	65.32%

Growth		230.98%	-6.74%	39.51%	73.44%	
Spare Parts	1.145	0.552	1.331	1.572	2.594	22.70%
Growth		-51.76%	141.00%	18.16%	64.97%	
Total	2.909	6.392	6.777	9.170	15.772	52.60%
Growth		119.73%	6.02%	35.32%	71.99%	

Most of this machinery is exported to Asian countries, namely Bangladesh, Afghanistan, UAE, Dubai and India.

Table 3: Major Export Destinations (US\$ Million)

Destination	2002-03	2003-04	2004-05	2005-06	2006-07	Total	Rank in 2006-07	Compound Growth
Bangladesh	0.517	2.518	1.888	2.625	3.274	10.821	2	58.65%
Afghanistan	0.795	1.578	2.225	2.311	1.561	8.469	4	18.37%
UAE	0.000	0.000	0.793	0.015	6.058	6.865	1	N/A
Dubai	0.224	0.744	0.567	2.265	0.102	3.903	12	-17.97%
India	0.000	0.000	0.183	0.015	1.802	1.999	3	N/A
Saudi Arabia	0.066	0.077	0.422	0.731	0.015	1.310	26	-30.82%
Sharjah	0.000	0.743	0.012	0.078	0.024	0.857	21	N/A
Tanzania	0.007	0.019	0.184	0.111	0.413	0.734	7	172.83%
Hong Kong	0.000	0.000	0.012	0.013	0.500	0.525	5	N/A
USA	0.131	0.130	0.047	0.135	0.051	0.494	15	-20.99%

Processing machinery is the major category of exports whereas certain weaving machines and spare parts are also exported.

Table 4: Major Export Machinery (US\$ Million)

HSCODE	Commodity	2002-03	2003-04	2004-05	2005-06	2006-07	Total 2002-07	Compound Growth
84502000	MACHINE DRY LINE CAP EXCE10KG	0.598	1.474	1.976	2.080	0.678	6.806	3.21%
84514010	WASHING MACHINE (INDUSTRIAL)	0.012	0.055	0.163	0.225	5.817	6.271	371.19%
84463000	WEAV MACH FAB >30CM SHUTLES	0.000	0.898	0.422	3.290	0.961	5.570	N/A
84462100	POWER LOOM WEAV FAB EXCED 30CM	0.076	0.362	0.678	0.601	0.370	2.086	48.67%
84451100	CARDING MACHINES	0.000	0.181	0.221	0.000	1.245	1.648	N/A
84462900	OTH MACHINES(LOOMS)	0.095	0.769	0.135	0.300	0.293	1.591	32.58%
84485900	PART ACCESSORY MACH	0.132	0.113	0.126	0.474	0.740	1.584	53.86%

HEAD 84.47								
84484900	OTH PART ACCESSORIES WEAV MACH	0.260	0.103	0.705	0.168	0.125	1.361	-16.76%
84451900	OTH MACH TEXTURE FIBRE ETC	0.174	0.708	0.351	0.019	0.000	1.251	-100.00%
84519000	PARTS FOR DRY CLEAN/DYING MACH	0.026	0.029	0.081	0.082	0.995	1.213	147.81%

3 Investment in Textiles and Clothing Industry (Imports of Textile Machinery)

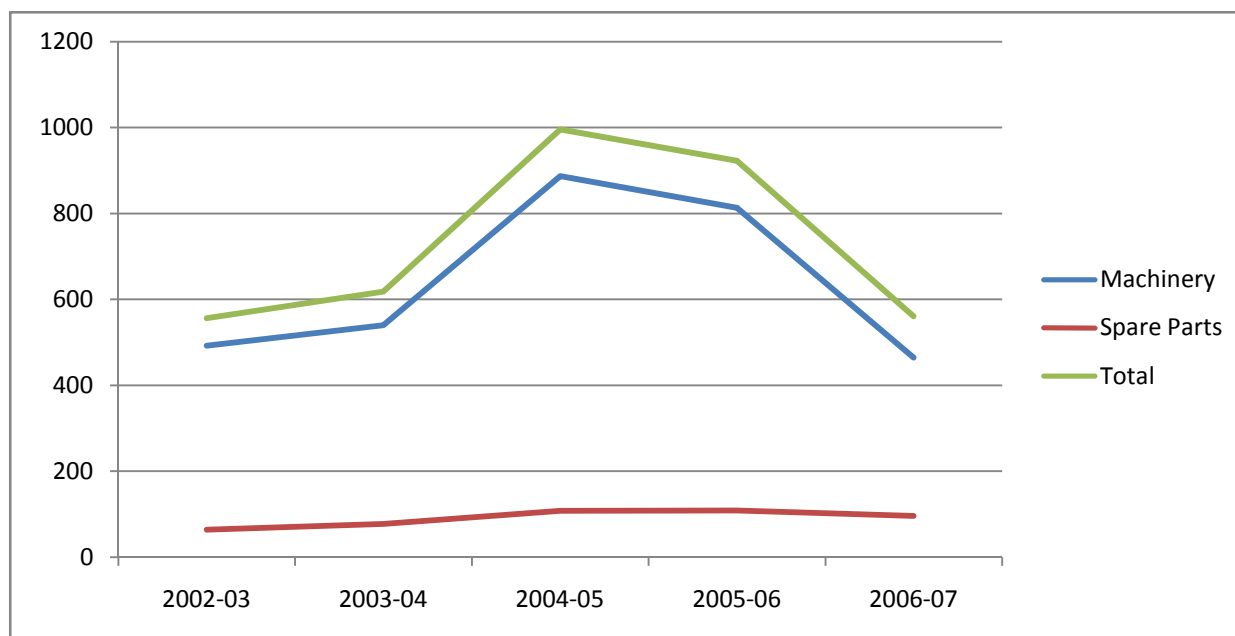
As mentioned in the introduction section, import of textile machinery is the major component of new investments in the textiles and clothing sector. The trend in imports of textile machinery can indicate the overall mindset of the textiles and clothing entrepreneurs and their future business plans.

Table 5: Textile Machinery and Spare Parts Imports (US\$ Million)

	2002-03	2003-04	2004-05	2005-06	2006-07	Cumulative Growth
Machinery	492.33	540.27	887.01	813.08	464.74	-1.43%
Growth		9.74%	64.18%	-8.34%	-42.84%	
Spare Parts	64.37	78.04	108.32	109.07	96.28	10.59%
Growth		21.23%	38.80%	0.69%	-11.72%	
Total	556.70	618.31	995.34	922.14	561.02	0.19%
Growth		11.07%	60.98%	-7.35%	-39.16%	

The table indicates that overall requirement of spare parts has increased which can be associated with the increased production and production capacities. The high upsurge in imports of textile machinery in financial year 2004-05 can be linked to the preparation for post quota regime and launch of "Scheme for Long Term Financing for the Export Oriented Projects" by the State Bank of Pakistan in May 2004. The scheme offered long term loans for the import of machinery at a low rate of interest ranging from 5% to 8%.

Figure 1: Total Imports of Textile Machinery and Spares (US\$ Million)



Investment in textile industry after abolition of quota regime, however, dropped by 8% in 2005-06 and then had a huge decline of 43% in 2006-07. The growth in investment in textiles and clothing industry which faced a tight competition after quota phase out was further hampered by the increased interest rates.

3.1 Major Sources for Textiles Machinery

Table 6: Major Import Partners (US\$ Million)

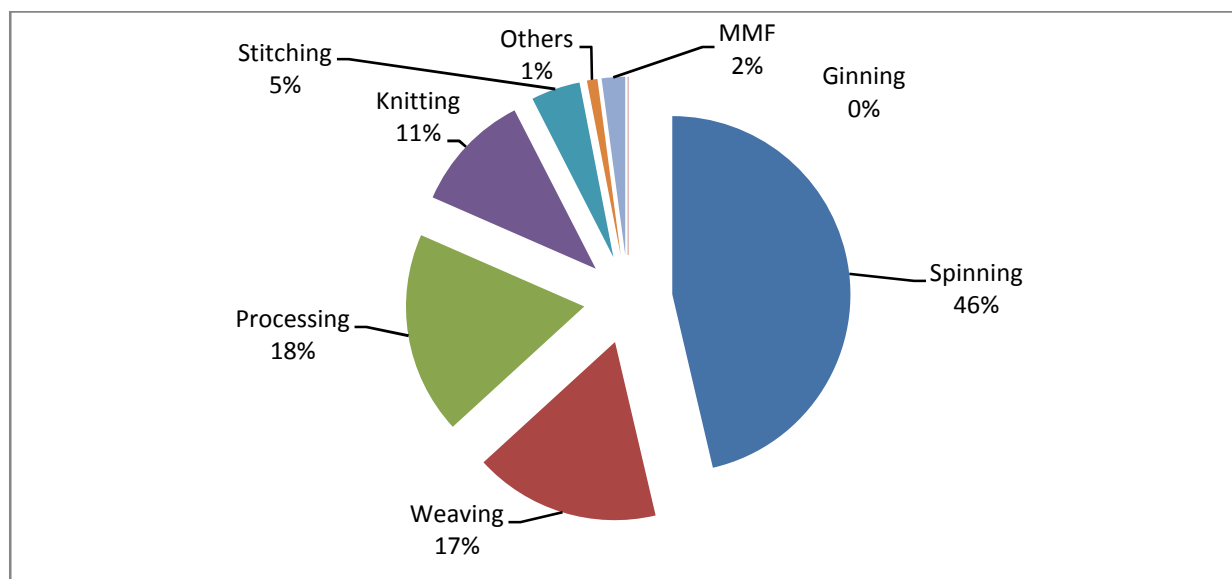
COUNTRY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last Year	Compound Growth
Japan	129.90	119.69	218.31	182.42	139.24	24.82%	1.75%
China	52.28	91.13	110.75	132.57	98.89	17.63%	17.27%
Germany	85.66	102.78	212.14	134.57	87.22	15.55%	0.45%
Switzerland	32.48	37.26	150.95	132.75	68.37	12.19%	20.45%
Italy	43.00	58.30	98.97	102.65	59.37	10.58%	8.40%

Japan is known for manufacturing high technology machines for spinning and weaving sub-sectors and is the top source for imports of textile machinery for Pakistan. Japan and Germany being the top source of textile machinery and spares in the quota regime for Pakistan benefited during the upsurge of investment in 2004-05, however, the imports from these countries have declined to almost same level

of 2002-03. Imports from China, Switzerland and Italy have also declined in 2006-07 however they are still up from their 2002-03 level.

3.2 Investment in various subsectors

Figure 2: Average Import Share 2002-07 by Trade Volume



Spinning sector remained the top investment sub-sector across the value chain during the last five years. The trend is similar if compared with preceding five decades of Pakistan's history. Investment in stitching sector has increased but in for the three years, the figures are stagnant. Stitching sector requires less capital investment but provides high value addition and employment when compared with any other sector of the textile industry.

Table 7: Sector Wise Imports of Textile Machinery & Spare Parts

Sector	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
Spinning	225.58	303.58	507.13	405.36	251.39	2.75%
Weaving	124.14	83.17	144.56	159.11	105.31	-4.03%
Processing	92.00	104.82	189.10	206.90	78.47	-3.90%
Knitting	70.35	68.35	94.91	87.62	76.63	2.16%
Stitching	23.32	24.81	38.01	37.89	38.85	13.61%
Others	4.87	5.25	8.67	8.34	7.60	11.78%
MMF	16.43	28.32	12.95	16.86	2.65	-36.64%
Ginning	0.01	0.01	0.00	0.07	0.13	83.18%

3.2.1 Ginning

Pakistan has almost 1,221 ginning units with the combined capacity to gin 12 million bales per shift which is almost equal to the entire national crop production of cotton at present.

However, it is the most neglected area. No serious effort has been made so far to up-grade the ginning factories and imports of ginning machines and ginning saws have been insignificant as indicated by the following table.

The following table indicates that there is an increase in import of ginning saws however the volume is very low.

Table 8: Total Imports of Ginning Spare Parts (US\$ Million)

Type	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
Spare Parts	0.01	0.01	0.00	0.07	0.13	83.18%
Share in Total Textiles	0.00%	0.00%	0.00%	0.01%	0.02%	

Italy, China, Germany, India and other countries of European Union are major sources of imports for ginning saws.

Table 9: Major Import Partners for Ginning Saws (US\$ Million)

COUNTRY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
Italy	0.01	0.00	0.00	0.01	0.04	33.67%	60.07%
China	0.00	0.01	0.00	0.02	0.02	17.74%	47.43%
European Union	0.00	0.00	0.00	0.00	0.02	13.53%	N/A
India	0.00	0.00	0.00	0.00	0.02	12.50%	N/A
Germany	0.00	0.00	0.00	0.04	0.01	10.97%	N/A

3.2.2 Spinning

Spinning, the largest investment portfolio of entire Textile Value Chain of Pakistan, comprises of 516 units. This sub-sector is well established and is based on ring technology which suits production of finer count yarns.

Table 10: Spinning Machinery and Spare Parts Imports (US\$ Million)

Type	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
Machinery	180.90	249.05	417.09	325.21	185.11	0.58%
Growth		37.68%	67.47%	-22.03%	-43.08%	
Spare Parts	44.69	54.53	90.04	80.15	66.28	10.36%
Growth		22.03%	65.12%	-10.98%	-17.30%	
Total	225.58	303.58	507.13	405.36	251.39	2.75%
Growth		34.58%	67.05%	-20.07%	-37.98%	
Share in Total Textile Machinery	40.52%	49.10%	50.95%	43.96%	44.81%	

During last five years additional investment of almost US\$ 1.7 Billion was made in the subsector through imports of new machinery and spares. Most of this machinery was imported from Japan, while Switzerland, China, Germany and Italy remained other important sources for textile spinning machines and spares.

Table 11: Top Import Partners for Spinning Machinery (US\$ Million)

COUNTRY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
Japan	58.12	63.64	121.07	88.62	59.56	23.69%	0.61%
Switzerland	13.54	25.50	109.88	65.48	48.71	19.38%	37.73%
China	34.08	71.09	75.77	82.40	48.01	19.10%	8.94%
Germany	38.69	50.33	110.47	79.78	47.56	18.92%	5.29%
Italy	9.92	22.75	30.04	36.89	15.95	6.34%	12.61%

Following are the major machinery types in which most of the investments were made during the last five years.

Table 12: Major Spinning Machines Imported (US\$ Million)

HS CODE	COMMODITY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
84452000	TEXTILE SPINNING MACHINES	47.49	75.38	156.27	100.54	59.20	23.55%	5.67%
84454090	OTH TEXTILE WINDING MACHINE	29.75	49.14	82.07	71.86	38.84	15.45%	6.89%
84459000	OTH MACH, TEXTILE FIBRE	32.85	36.04	45.10	43.59	27.09	10.77%	-4.71%

84451100	CARDING MACHINES	13.06	24.59	59.45	35.71	25.77	10.25%	18.52%
84451300	DRAWING /ROVING MACHINES	18.12	35.11	59.26	44.22	20.15	8.01%	2.69%

3.2.3 Weaving

Weaving sector which converts yarn into fabric occupied the third position during 2002-07 as far as investment in import of machinery is concerned. The sector attracted an investment of US\$ 0.66 Billion during the last five years.

Table 13: Imports of Weaving Machinery & Spare Parts (US\$ Million)

Type	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
Machinery	114.4611	72.9423	136.6568	145.961	94.70307	-4.63%
Growth		-36.27%	87.35%	6.81%	-35.12%	
Spare Parts	9.674133	10.22523	7.904167	13.15162	10.60203	2.32%
Growth		5.70%	-22.70%	66.39%	-19.39%	
Total Weaving	124.1352	83.16753	144.5609	159.1126	105.3051	-4.03%
Growth		-33.00%	73.82%	10.07%	-33.82%	
Share in Total Textiles	22.30%	13.45%	14.52%	17.25%	18.77%	

Unlike Spinning Sector the Weaving Sector comprises large number of small units of power looms mainly in Faisalabad, Gujranwala, Multan and Kasur. Recent trend, however is to install shuttle less loom units either as independent units or integrating it with spinning or processing units. The following table indicates that shuttle less looms for weaving fabrics of more than 30 cm have been the major imported machine during the last five years.

Table 14: Major Weaving Machines Imported (US\$ Million)

HS CODE	COMMODITY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
84463000	WEAV MACH FAB >30CM SHUTLES	109.83	60.86	124.80	141.99	90.03	85.49%	-4.85%

84484900	OTH PART ACCESSORIES WEAV MACH	8.55	8.85	6.59	11.60	7.92	7.52%	-1.91%
84462900	OTH MACHINES (LOOMS)	0.76	10.38	7.78	2.48	2.71	2.57%	37.49%
84481100	DOBBIES JACQUARD COPY ETC MACH	1.98	1.21	1.47	0.37	1.39	1.32%	-8.44%
84484290	OTHER HEALDS & HEALDS FRAME	0.48	0.55	0.42	0.77	1.37	1.30%	29.89%

Japan is the major source for import of weaving machine as well while Toyoda and Psodokma are its most famous brands in Pakistan. Switzerland's Sulzer and Picanol of Belgium are also being preferred in Pakistan.

Table 15: Top Import Partners for Weaving Machines (US\$ Million)

COUNTRY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
Japan	42.38	33.47	58.72	62.10	49.31	46.82%	3.85%
Switzerland	11.58	7.50	22.24	18.22	12.93	12.27%	2.79%
Germany	4.97	4.68	4.70	12.13	12.48	11.85%	25.88%
Belgium	29.12	6.66	11.03	35.81	7.59	7.21%	-28.54%
Italy	8.60	3.39	19.67	7.57	6.66	6.33%	-6.19%

3.2.4 Knitting

Knitting sector of Pakistan attracted an investment of almost US\$ 0.4 Billion as imported machinery during the last five years. Its share in the total textile machinery imports was 11% during 2002-07.

Table 16: Imports of Knitting Machines and Spare Parts (US\$ Million)

Type	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
Machinery	65.56	60.93	89.96	79.20	66.34	0.29%
Growth		-7.06%	47.64%	-11.96%	-16.23%	
Spare Parts	4.78	7.42	4.95	8.42	10.29	21.10%
Growth		55.05%	-33.25%	70.04%	22.20%	
Total Knitting	70.35	68.35	94.91	87.62	76.63	2.16%

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Growth	-2.84%	38.86%	-7.69%	-12.54%	
Share in Total Textiles	12.64%	11.05%	9.54%	9.50%	13.66%

Japan remained the top source for knitting machines and spares as well, however its share has gone down from 31% to 24% during last five years. The overall decline in imports of textile machinery has not affected the imports from China which have grown with a compound rate of 32.71% per annum during the last five years for knitting machines.

Table 17: Major Source for Imports (Knitting Machines) US\$ Million

COUNTRY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
Japan	21.66	16.39	24.40	18.31	18.14	23.67%	-4.34%
China	5.69	6.50	11.19	14.53	17.64	23.02%	32.71%
Italy	8.29	11.66	21.94	16.35	15.90	20.75%	17.67%
South Korea	5.69	4.71	11.20	13.08	7.07	9.23%	5.60%
Germany	9.91	8.31	5.94	8.58	7.01	9.14%	-8.31%

Stitch-bonding machines and machines for making gimped yarn, tulle, lace etc. remained the major category for imports in this subsector.

Table 18: Major Knitting Machines Imported (US\$ Million)

HS CODE	COMMODITY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
84479000	OTH MACH GIMPED YARN TULE LACE	45.86	35.99	63.36	61.02	32.48	42.39%	-8.26%
84479010	MULTI HEAD EMBROIDERY MACHINES	0.00	0.00	0.00	0.00	11.93	15.57%	N/A
84471100	CYLINDER DIAM NOT EXCED 165 MM	7.16	11.25	9.62	8.21	9.85	12.85%	8.29%
84485100	SINKERS NEEDLES & OTH ARTICLES	2.68	2.62	3.64	4.37	5.67	7.40%	20.64%
84471200	CYLINDER DIAM EXCED 165 MM	10.41	10.91	11.77	9.12	5.27	6.88%	-15.66%

3.2.5 Processing

A total amount of US\$ 0.67 Billion were invested in the form of import of textile processing machinery in Pakistan during the last five years.

Table 19: Imports of Processing Machinery & Spares (US\$ Million)

Type	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
Machinery	89.61	101.43	186.49	203.92	74.20	-4.61%
Growth		13.19%	83.86%	9.34%	-63.61%	
Spare Parts	2.39	3.39	2.60	2.98	4.27	15.56%
Growth		41.78%	-23.32%	14.51%	43.24%	
Total Processing	92.00	104.82	189.10	206.90	78.47	-3.90%
Growth		13.94%	80.39%	9.41%	-62.08%	
Share in Total Textiles	16.53%	16.95%	19.00%	22.44%	13.99%	

The investment in imported processing machinery declined in the last year after a steep growth during 2002-06. While Italy took over Germany's position as the largest import source for processing machinery after 2004-05.

Table 20: Major Source for imports of Processing Machinery & Spares (US\$ Million)

COUNTRY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
Italy	14.73	17.27	22.52	35.83	17.40	22.18%	4.26%
Germany	28.80	29.42	84.49	32.24	17.01	21.68%	-12.33%
China	2.52	5.36	10.77	17.66	15.24	19.42%	56.76%
U.S.A	12.10	11.63	16.31	28.33	7.93	10.10%	-10.03%
Spain	1.04	4.78	3.45	4.45	4.32	5.50%	42.73%

Imports of processing machines are dominated by the European branded textile machine like Reggine, Lafer, Arioli, Pinter, Zimmer and Buser.

Table 21: Major Processing Machinery Imported (US\$ Million)

HS CODE	COMMODITY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
84518090	OTH MACH FOR WRINGLING /PASTE	48.02	36.05	64.55	62.37	24.31	30.98%	-15.65%
84514030	DYEING MACHINE	14.54	32.90	37.68	24.98	11.21	14.28%	-6.30%
84514010	WASHING MACHINE (INDUSTRIAL)	1.14	1.40	9.57	10.12	8.47	10.80%	64.97%
84431900	OTH OFFSET Processing MACHINERY	3.91	8.25	15.45	22.13	6.33	8.06%	12.77%
84519000	PARTS FOR DRY CLEAN/DYING MACH	2.39	3.39	2.60	2.98	4.27	5.44%	15.56%

Major investment has gone in Denim processing machines while dyeing machines, industrial washing machines and rotary (other offset processing machinery) are other major imports for processing during the last five years.

3.2.6 Stitching

Investment in value added sector directly relates with the imports of stitching machines. During the last five years the average share of imports in this category was only 5% and a total amount of US\$ 0.16 was invested.

Table 22: Imports of Stitching Machines and Spares (US\$ Million)

Type	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
Machinery	20.50	22.35	35.19	33.59	34.14	13.60%
Growth		6.39%	53.20%	-0.32%	2.53%	
Spare Parts	2.82	2.46	2.83	4.30	4.71	13.65%
Growth		-12.75%	14.69%	52.14%	9.57%	
Total Stitching	23.32	24.81	38.01	37.89	38.85	13.61%
Growth		6.37%	53.22%	-0.33%	2.54%	
Share in Total Textiles	4.19%	4.01%	3.82%	4.11%	6.93%	

A huge decline in post quota period however was not experienced in the imports of stitching machines and spare parts as spotted in other categories of textile machines. The imports increased with a compound growth of 13.6% per annum during 2002-07.

Table 23: Major Stitching Machines and Spares Imports (US\$ million)

HS CODE	COMMODITY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
84522900	OTH SWING MACHINES INDUSTRIAL	20.07	20.21	32.89	30.76	32.37	83.32%	12.70%
84523000	SEWING MACHINE NEEDLES	0.99	1.05	1.51	1.36	1.92	4.95%	18.00%
84529000	OTHER PARTS OF SEWING MACHINE	1.76	1.39	1.30	2.61	1.66	4.27%	-1.51%
84522100	AUTOMETIC UNITS SEWING MACHINE	0.18	1.65	1.56	1.57	0.79	2.02%	43.58%
84529090	OTH PARTS OTH SEWING MACHINE	0.00	0.00	0.00	0.16	0.75	1.92%	N/A

Most of the investment was done in industrial stitching machines, while automatic sewing machines were also imported during last five years.

China is the major source for imports of sewing machines and spare parts.

Table 24: Major Import Partners for Stitching Machines (US\$ Million)

COUNTRY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
China	2.09	3.21	5.66	8.10	10.70	27.54%	50.40%
Japan	2.92	2.78	8.80	7.51	9.15	23.55%	33.02%
Other Asian Countries	3.21	4.28	4.67	4.01	4.04	10.40%	5.90%
Italy	0.87	1.78	2.15	2.98	3.10	7.99%	37.31%
Singapore	7.16	5.21	4.68	4.67	2.89	7.43%	-20.33%

3.2.7 MMF

This category includes machines for extruding, drawing, texturing & cutting manmade textile materials and manufacturing & finishing of felt or nonwovens.

Table 25: Imports of MMF Machinery (US\$ Million)

Type	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
Machinery	16.43	28.32	12.95	16.86	2.65	-36.64%
Growth		72.30%	-54.25%	30.11%	-84.29%	
Share in Total Textiles	2.95%	4.58%	1.30%	1.83%	0.47%	

The average import share of this category in overall textile machinery imports was only 2% during the last five years. This category had also a sharp decline in imports in 2006-07.

Table 26: Major MMF Machinery Imports (US\$ Million)

HS CODE	COMMODITY	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
84440000	MACH EXTRUD CUT MM TXT MATL	14.21	27.66	7.11	15.82	1.59	-42.12%
84490000	MACH MFG FINISH NON WOVENS	2.22	0.66	5.85	1.03	1.05	-17.00%

Most of the investment has gone into extruding and cutting of manmade textile materials while a small portion has gone into finishing of nonwovens.

Table 27: Major Import Partners for MMF Machinery

COUNTRY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
China	6.01	0.43	3.36	5.28	1.56	59.03%	-28.59%
Germany	1.36	8.58	5.36	0.00	0.79	29.99%	-12.66%
Belgium	3.97	9.80	0.19	0.00	0.06	2.42%	-64.37%
Italy	0.38	0.89	0.41	1.09	0.06	2.40%	-35.98%

China is emerging as the leading manufacturer and exporter of these machines and is the origin of MMF brands like Barmag, Nevmag, Rieter and Savio.

3.2.8 Other Machinery

This category includes machines which cannot be associated with a particular sector but are used with machines of spinning, weaving, knitting and processing machines. The import of these machines has increased with a compound rate of 11.78% per annum however like other categories it has also shown a decline in the last year.

Table 28: Imports of OTH AUXILIARY MACHIN HD84.44-47,

Type	2002-03	2003-04	2004-05	2005-06	2006-07	Compound Growth
Machinery	4.87	5.25	8.67	8.34	7.60	11.78%
Share in Total Textiles	0.87%	0.85%	0.87%	0.90%	1.35%	

Switzerland is the major supplier of this machine and 43% of the machines were imported from this country. Belgium, China, Japan and Spain are other major source of the import of other auxiliary machines.

Table 29: Major Import Partners for Other Machinery (US\$ Million)

COUNTRY	2002-03	2003-04	2004-05	2005-06	2006-07	Share in Last year	Compound Growth
Switzerland	0.29	0.98	2.93	0.73	3.30	43.48%	83.74%
Belgium	1.60	0.09	0.00	0.61	0.98	12.86%	-11.62%
China	0.03	2.40	0.22	0.21	0.58	7.61%	114.75%
Japan	0.00	0.16	0.45	1.04	0.55	7.30%	286.61%
Spain	0.05	0.08	0.39	0.10	0.52	6.89%	76.20%

4 Government Schemes

4.1 R&D Subsidy

To bail out the Textile Industry from its difficulties, cash support in the form of R&D was extended initially to Garment sector in FY2005-06. Later on its scope was extended to cover Home-textiles and Fabrics. The major objectives included enhancing operations through product development, innovation, human resource development and technological up-gradation.

An amount of Rs. 30 Billion have been disbursed during last two and a half years to the garments, processing and made-ups manufacturing industry. However the scheme having no direct link with the investment in new upgraded machinery was unable to induce technological upgradation.

4.2 LMM

LMM (loans for purchase of local machinery) scheme was also available at concessionary rates, however, no new loans were extended during last five years. The non-utilization of LMM scheme also put light onto undeveloped machinery manufacturing industry in Pakistan.

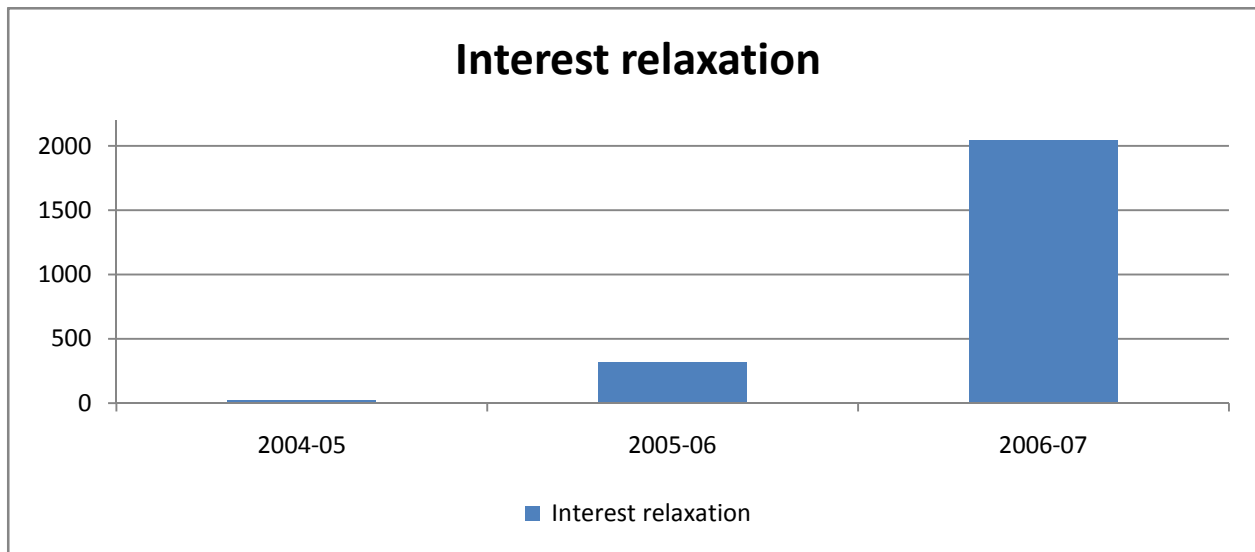
4.3 LTF-EOP

To support investment in new machinery, State Bank of Pakistan designed a scheme titled "Scheme for Long Term Financing for the Export oriented Projects". The scheme was launched in May 2004 with attractive interest rates of 5%, 6.8% and 7.9% (inclusive of 3% bank spread) applicable on financing upto two years, over two years but upto three years, and over three years upto seven and half years respectively. These rates were 5% below the KIBOR of relevant maturities. Spread for commercial banks was further reduced to 2% from 3% in July 2006 to give additional support to the industry.

A total amount of Rs. 47.7 Billion were disbursed to the industry including Rs. 34 Billion in debt swap for textile industry during 2004-07. The debt swap was an opportunity for the textile sector (excluding spinning sector but including its six sub sectors) to swap their long term loans taken from commercial banks and DFIs during January 1, 2003 to 31st December, 2006 for import of machinery for their units under LTF-EOP Scheme.

The estimated benefit to the textile industry due to subsidized interest rate was around Rs. 2.4 Billion during 2004-07.

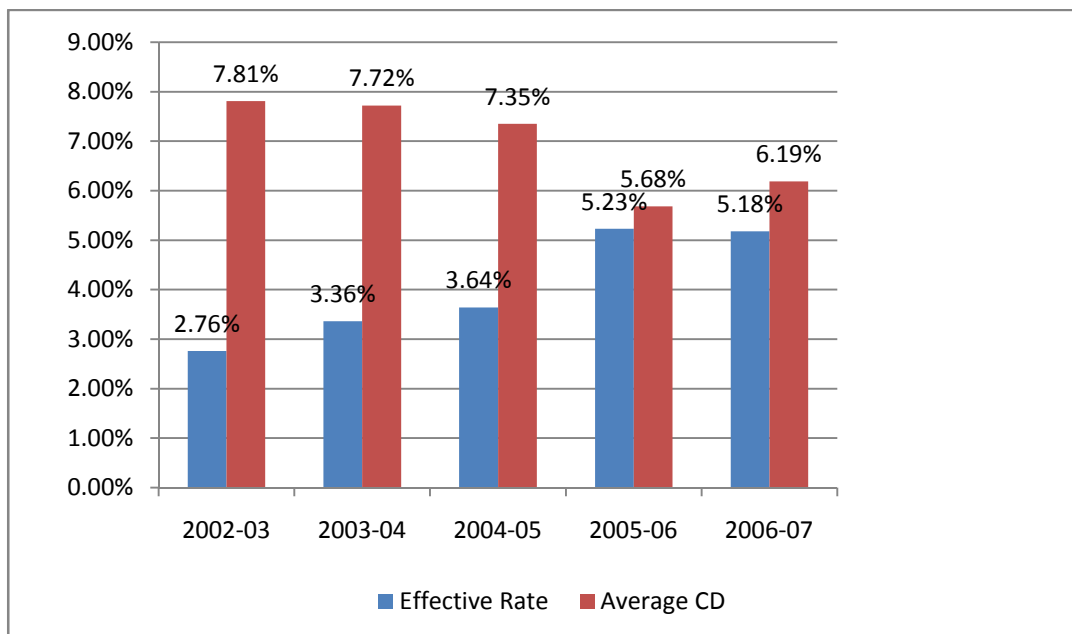
Figure 3: Year wise Interest Rate Differential under LTF-EOP (Rs. Million)



5 Tax regime

To support investment in imported machinery, CBR provided zero rating facility on import of machinery for BMR and new investments, however, the facility was discontinued after 2004-05. The decision increased the effective rate for the industry which is also evident in the following table.

Figure 4: Average Custom Duty Rate on Imports of Textile Machinery



The above table indicates that although average custom duty rates have declined however due to dismantling of special incentive of zero rating the effective rates have gone up. The increase in effective

rates effects negatively on the investment and decline in imports in last two years can be linked to the blockage of zero rating facility.

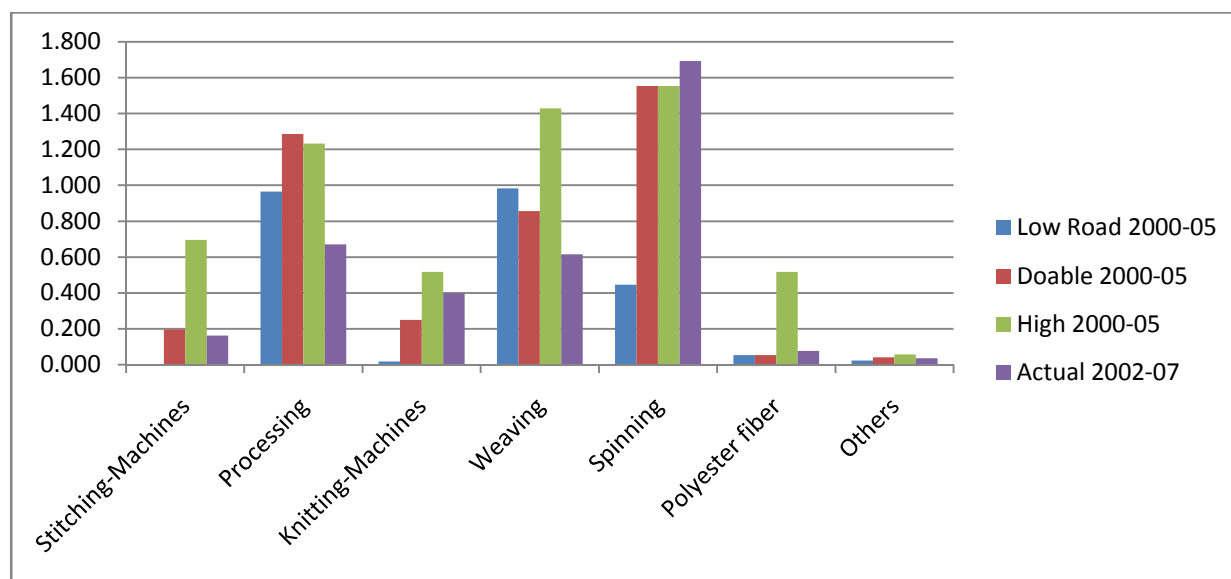
6 Investment Analysis

Textile Vision 2005 recommended an investment of 6 billion USD (US\$ 1.2 Billion per annum) during 2000-05 in textile machinery for technological upgradation and achieving economies of scale to compete in the quota phase out scenario. The imports increased during this period with a compound growth of 28% per annum however the actual investment was only 2.8 billion USD during 2000-05 with a maximum imports of US\$ 887 million in 2004-05.

After quota phase out, there was a decline and Pakistan could not achieve the target of US\$ 1.2 Billion per annum as well.

As far as sector wise investment is concerned, other than spinning and knitting, textile industry was unable to achieve the middle road (doable) targets and in few cases even the low road targets set by Textile Vision were not met.

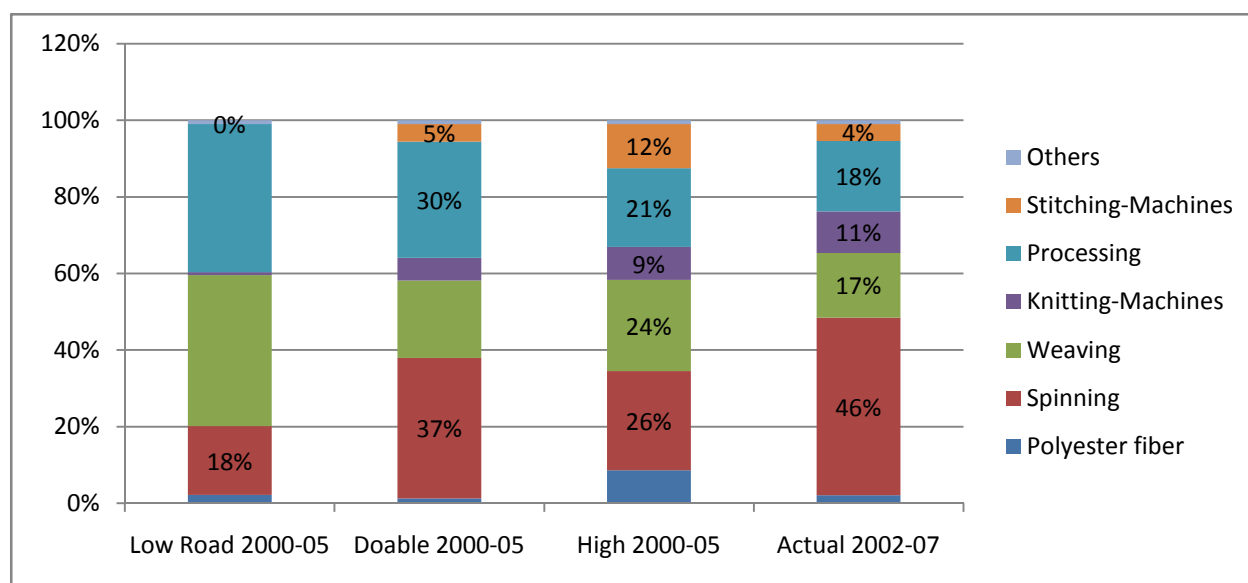
Figure 5: Comparison with Textile Vision Targets



The national policy framework was not structured to facilitate adjustment of investment-portfolio as a whole with the changing global demands and competition. Investment in low end of Textile value chain provided less risk with good return while quota regime also supported the growth in quantities exported rather than value addition, quality enhancement and diversification.

The investments in textile sector continued in the same quota influenced direction with major chunk going to upstream sector of spinning and weaving while processing, apparel and made-up sector got less than 22% of the fresh investments.

Figure 6: Comparison with Textile Vision Targets (Share)



Furthermore, Textile Vision suggested investment in higher technologies; however, the actual investment remained scattered along various technology levels.

7 Findings

- Textile machinery manufacturing has been the grey area despite heavy dependence of export oriented industry on it.
- Inconsistency in investment policy and fluctuating interest rates will keep hampering investors' confidence until a long term hedged credit scheme is launched.
- Government expectations of revenue generation through custom duties, income tax and sales tax from textile industry would hinder the main objective of earning foreign exchange and creating employment opportunities.
- If deliberate and focused policy interventions are not taken to strengthen value added sector of textiles and clothing, historical trends of investments by private sector would hinder automatic shift to high value addition and our Textile Industry will remain stuck in the vicious circle of low margins and cheap product category.

8 Recommendations

8.1 Textile Machinery Manufacturing

Textile machinery manufacturing is an essential sector for the production chain. Investment in this sector needs to be encouraged to decrease dependence on imports and ultimately lead to export of not only textiles and clothing products but machinery and spares parts as well, taking cue from the India, which now is manufacturing machines worth Indian Rs. 5 billion and plan to increase it to Indian Rs. 300 billion.

One of the main reasons for the failure of the textile machinery manufacturing is the lack of innovation and product development and research in metallurgy. The government should facilitate investment in the sector through providing research facilities, testing facilities, heat treatment facilities, recognition for quality, standardization, human resource development and creating a feasible platform for attracting FDI or joint ventures in this area.

8.2 Investment Schemes

The R&D support in the current form is essentially an ad-hoc measure and has therefore been renewed annually. However, such annual interventions do not create brighter perception about the future profitability of the industry.

New investment in machinery requires long term fiscal commitments from the government. Under such condition where the R&D support is renewed on yearly basis, confidence among entrepreneurs could not be built. The reliability of the continuation of R&D support was never established. This is why R&D support has failed to attract positive response in the area of capacity enhancement and installation of new machines.

As investment decision is always based on current profitability and also the long-term prospects of the industry, it is genuinely feared that a sudden withdrawal of R&D support will further reduce the quantum of fresh investments. If we are not able to maintain a reasonable level of fresh investments, the balancing and modernization deficit of few years would have long term adverse effects on the future health of the industry. That's why the recommended course of action may be formulated along the following lines;

- a. Withdraw the R& D cash support in a gradual manner and announce the spread of this programme for a longer period of five years instead of renewing it on annual basis.
- b. The quantum of subsidy for the next five years may remain the same but the amount saved from the gradual reduction in the current R&D support may be utilized to subsidize fresh investment in new textile machinery.

LTFF scheme can also be redesigned to incorporate investment facilitation on equity investments.

The schemes of Textile Parks and various sub-sector cities may be launched with exclusive facilitation frameworks to attract investment in preferred technologies.

8.3 Suggestions for Sub-sector Investments

8.3.1 Ginning

The local machine engineering industry provides machinery & tool base for the ginning sector and few can be graded upto international quality mark. Despite of the presence of these quality machine manufacturers, most of the ginning process is done on obsolete machinery with sub-standard parts and non-replacement of ginning saws in timely manner. The method of manual sharpening rather than replacement reduces efficiency and further deteriorates the fiber quality.

Cotton Control Act 1966 for the province of Punjab and Sindh provide guidance for compliance as well as have legal frame work for the prosecution of non-compliant ginning factories.

Government should ensure implementation of cotton control act as well as a reward system may be introduced for the most compliant factories and extension workers in the district.

8.3.2 Spinning

Recent studies have proven that longer ring frames having more number of spindles which are used for manufacturing of finer counts are economical as well, if compared with shorter ones.

Rotor spinning is more economical technology for the manufacturing of coarser counts.

Use of compact spinning machines, Twisting, Doubling, Combing, Slubbing, Lycra & Yarn Dyeing and singeing should be promoted.

8.3.3 Weaving

The weaving sector has small and medium units of which 90% are unorganized. This disassociation from the upstream industry (spinning sector), which is entirely organized, creates huge imbalance in the textile value chain.

Power loom industry which has major share of the production capacity is not designed to support garment industry which requires finer fabric.

Investment schemes tuned to upgrade and divert weaving sector towards latest technologies like shuttle less (airjet, rapier and water jet) are required.

8.3.4 Processing

The processing industry of Pakistan is mainly based on wider width capacity and supports bed-ware and made-up industry of Pakistan in a proficient manner; however, these machines are not economically viable for the dyeing of clothing fabric, which is of less width. Furthermore, dyeing shorter width fabric on the wider width capacity machine damages the rollers by creating grooves thus diminishing the roller life.

Emphasis should be given to promote narrow width processing, automation and new technologies like pad-steam and pad-thermosole.

8.3.5 Stitching

Investment in stitching sector should be promoted on wider scale. Projects like garment cities should be launched on a larger scale with favorable platform for FDIs and Joint ventures.

RESEARCH, DEVELOPMENT & ADVISORY CELL

Ministry of Textile Industry has established a Research, Development and Advisory Cell (RDA CELL) to devise policy guidelines for the government to facilitate the growth and development of Textiles and Clothing sector.

RDA CELL has a mandate to study and analyze existing textile policy and align it for the future drive of the industry. It establishes benchmarks for textile policies of regional and intra-regional textile players of the world. The Cell analyzes trade performance of different sub-sectors and thereby devises policies to encourage investment in future growing textile businesses. The Cell further formulates frameworks to enhance the human resource, technology and infrastructure of the textile industry of Pakistan. RDA CELL publishes weekly, monthly, quarterly and yearly reports on various issues relating to trade and industry.

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