6.2 Current Analysis of Textile and Clothing Consumption in Syria

To make reliable forecast for textile and clothing demand, it is of primary importance to understand the current situation accurately. For this purpose, various statistical data on textile and clothing consumption in the country were collected and analyzed.

The textile industry in Syria is comprised of state and private companies. State-owned companies are primarily specialized in cotton spinning with a relatively narrow range of operations. They are all large in size. The study team visited all the companies during the field survey and collected necessary data and information for further analysis.

On the other hand, private companies cover a wide range of operations including weaving, knitting, dyeing and finishing, and sewing. There are a large number of these, including many small and medium-sized enterprises. Unlike the state-owned companies, statistical data on these private companies are not readily available, and it is thus difficult to obtain sufficient information to reveal their current situation. For this reason, the current analysis was conducted by comparing various statistical data collected from different sources.

6.2.1 Statistics in Syria

(1) Production statistics

Relevant statistical data of textile and clothing production in Syria as a whole are available (Table 6.2-1) as well as production statistics showing a breakdown of state and private companies (Table 6.2-2). Generally, statistical data on upstream sectors such as raw cotton and spun yarns are widely available, because these sectors are covered by state-owned companies; whereas there is a lack of data on downstream sectors such as clothing.

(2) Import statistics

According to Statistics of Imports into Syria (Table 6.2-3), the country imports around 100,000 tons of textiles each year. Judging from data which indicates the breakdown by fiber type and product type, synthetic filament

yarns amount to around 80,000 tons. On the other hand, imports of synthetic spun yarns are very small (1,000 tons). Although domestic cotton spun yarns are supplied to the market, it is reasonable to expect more imports of synthetic spun yarns and their products, as cotton and synthetic fibers are different in feature. The classification of filament yarns and spun yarns seems to create some confusion.

(3) Export statistics

According to official export statistics (Table 6.2-4), export volumes in 1993-95 were raw fibers (such as cotton and wool) 140,000-180,000 tons and textile products 32,000-56,000 tons. Among the textile products, only synthetic filament yarns (3,000 tons) are clearly distinguishable, however, judging from the forms of textiles exported, synthetics should be included. The Team visited many private companies and got information that they are exporting considerable volumes of synthetics. The Team classified the exports as follows referring to each of the items of the textile export. It should be noted that exports of cotton sewing threads in 1994, around 16,000 tons, will have been a statistical error. Total exports are 38,000 tons: cotton spun yarn 2,000 tons, cotton products 17,000 tons, synthetic products 18,000 tons and carpet 1,000 tons.

(4) Domestic textile and clothing consumption based on Syria's statistics

Assuming that domestic textile and clothing consumption can be estimated from the general equation ("domestic input" + "imports" - "exports"), and by using the average values for 1993-95, domestic consumption is estimated at 97,000 tons (37,000 + 102,000 - 42,000).

6.2.2 Statistics of FAO (Food and Agriculture Organization of the United Nations)

The results of the FAO's surveys on textile and clothing consumption in world countries are summarized in Table 6.2-5, and the average values for 1990-92 (Table 6.2-6). According to Table 6.2-6, inputs of domestic cotton and wool totaled 69,800 tons (average for 1990-92), imports of synthetic fibers 43,000 tons, exports 22,000 tons, resulting in domestic consumption of 91,200 tons, with consumption per capita being around 7kg.

Comparing the statistical data of Syria and the FAO reveals major differences in the following areas (1990-92):

a) Inputs of domestic cotton and wool: 69,800 tons (FAO) vs. 37,000-39,000 tons (Syria)
b) Imports: 43,000 tons (FAO) vs. 36,000-74,000 tons (Syria)
c) Exports: 22,000 tons (FAO) vs. 27,000-35,000 tons (Syria)

A reason for such significant differences is unknown.

6.2.3 UN Statistics

The United Nations have statistics summarizing textile and clothing production, imports, and exports of the country, which vary greatly between years and do not seem to be reliable. These data are presented in ANNEX-3 for reference.

6.2.4 Statistics of Exports from Other Countries to Syria

Given the lack of reliable data, it was decided to estimate import volumes from statistical data in major export countries concerning exports bound to Syria.

(1) Estimation procedures

Estimation procedures are summarized in Figure 6.2-1 and as follows:

a) 28 exporting countries were selected, consisting of 23 industrialized countries and 5 countries exporting synthetic fibers which are not produced in Syria, namely Turkey, Taiwan, Korea, Hong Kong, and Singapore.
b) Export data on the 23 industrialized countries were obtained from UN data, and those on the other countries from the statistics of these countries.
c) Data coverage was up to 1994, which is the latest year shown in the UN's statistics.
d) Hong Kong and Singapore statistics of fabrics and clothing exports show only areas and pieces. These volumes were converted to weight, by

referring to area/weight and pieces/weight relations of similar product's in "Japan Exports and Imports."

e) As for textile blend, breakdown was made on the basis of blend ratio to individual materials (e.g., 100 tons of polyester/cotton (65/35) blend are divided into polyester 65 tons and cotton 35 tons).

(2) Result of data compilation

The process of sorting, adjusting and summing the above data from diverse sources took considerable time and effort. The result of the second round of summation is summarized in ANNEX-3 (The preliminary calculation results are not presented as they are too detailed to provide relevant data). It is assumed that imports from countries other than those included in the estimation process are insignificant.

The database produced from the above process is believed to be a fairly accurate estimation of textile and clothing imports to the country, according to fiber and product type. It is summarized as follows:

a) Imports amount to around 80,000 tons, as shown in Table 6.2-7, mostly synthetic fiber materials.
b) Imports of synthetic filament yarns and spun yarns account for major portions, around 80%.
c) Fabric imports amount to around 10,000 tons, of which 90% are synthetic woven fabric and the remaining 10% synthetic knits.
d) Clothing imports are relatively small, around 100 tons, plus slightly more than 1,000 tons being imported in the form of tire cord and other products.
e) Breakdown by exporting country (Table 6.2-8) indicates that Turkey, Taiwan, and the 23 industrialized countries account for around 20,000 tons each, followed by Korea less than 10,000 tons, and Hong Kong and Singapore 1,000-2,000 tons (combined total).

6.2.5 Summary

Based on comparison of various statistical sources and data, textile and clothing consumption was estimated as follows (as of 1996):

(1) Input of domestic materials to the textile (spinning) industry (Syrian statistics)

Judging from latest information obtained in the first field survey, including the start of a new spinning mill in Lattakia, total input including wool is estimated at 64,000 tons.

(2) Imports (28 countries export statistics)

Based on import volumes from the countries in 1992-94, with adjustments to the yearly variations, preliminary figures were calculated for major fibers and product types. Total imports are estimated to be 86,500 tons.

(3) Exports (Syrian statistics)

As pointed out earlier, cotton sewing thread exports seemed to be unexpectedly high. The figures were excluded for estimation purpose, and the total export volume is estimated at 33,000 tons.

(4) Textile and clothing consumption in Syria

By applying the above estimated input, import and export figures to the equation ("input"+"imports"-"exports"), total textile and clothing consumption in the country is estimated at approximately 112,500 tons, i.e., 64,000+86,500 -38,000.

Assuming that the population is 15 million, per capita consumption is 7.6kg.

6.2.6 Breakdown of Textile and Clothing Consumption in Syria by Material and Product Type

Breakdown of the above data was obtained according to material and product type, as shown in Table 6.2-9. Synthetic filament yarns (FY) account for nearly one half of demand, and combined with synthetic staple fibers (SF), the

share of synthetic fibers in textile and clothing consumption stands at a 54.1% (Synthetics 52.1 and others 2.0). Further breakdown by material, as shown in Table 6.2-10, is polyesters 22%, nylon 13%, acrylics 11%.

Table 6.2-1 PRODUCTION OF FIBERS AND TEXTILES IN SYRIA

(t)

		1989	1990	1991	1992	1993	1994	1995
Cotton	10^3t	430.7	441.2	555.1	688.6	639	-	-
Ginned Cotton	10^3t	119	132	120	162	200	236	209
Cotton Yarn	10^3t	39	37	39	38	33	37	-
Silk and Cotton Textiles	10^3t	30	27	28	26	29	27	-
Wool Wasted	t	14,936	15,698	16,586	17,571	11,116	12,291	13,321
Hair	t	700	603	595	575	857	653	685
Wool Yarn	10^3t	1	1	1	1	1	2	-
Woolen Cloth	t	448	533	61	498	660	424	-
Wool Carpets	10^3m^2	510	403	491	473	403	-	-
Silk Cocoon	t	99	93	118	79	65	89	68
Silk Yarn	t	10	6	5	11	3	3	-
Nylon Industrial Thread	t	103	82	37	533	319	-	-
Underwear	10^3dz	2,454	1,552	1,652	1,800	2,045	2,018	-
Stockings	10^3dz	4,426	2,509	2,693	3,248	3,391	3,709	-
Cotton & Silk Blankets and Sheets	10^3pc	993	579	286	2,083	2,522	-	-
Woolen Blankets	pc	41,100	34,200	44,000	-	35,000	-	-
Towels & Kaflas	10^3pc	5,934	3,839	4,773	7,893	8,248	8,809	-
Silk Carpets	10^3m^2	180	227	126	337	253	-	-

Source : Syrian Arab Rep. Statistical Abstract

Table 6.2-2 MAIN MANUFACTURED INDUSTRIAL PRODUCTS OF SYRIA

		1989	1990	1991	1992	1993	1994	1995
Public Sector								
Ginned Cotton	t	119	132	120	162	200		
Cotton Yarn	t	38,549	37,230	39,062	38,121	32,637	37,280	40,417
Cotton & Mixed Textiles	t	20,503	18,879	19,712	18,529	16,804	15,156	16,597
Mixed Woolen Yarn	t	1,283	837	1,305	1,460	1,321	1,571	1,442
Woolen Cloth	t	448	533	61	498	660	424	186
Synthetic Threads	t	103	82	37	533	319	274	129
Underwear	10^3d	1,918	1,300	1,029	859	1,032	867	1,053
Stocking	10^3d	209	235	237	192	151	169	155
Woolen Blankets	p	41,100	34,200	44,000	-	35,000	33,000	41,000
Woolen Carpets	10^3m^2	510	403	191	473	403	514	538
Silk Carpets	10^3m^2	150	148	43	36	31	-	-
Silk Yarn	t			5	3	3	3	3
Private Sector								
Cotton Textiles	10^3m	36,012	31,975	33,058	29,348	45,018		
Silk and Cotton Blankets	10^3p	337	156	155	408	293	428	
Cotton and Silk Bedsheets	10^3p	656	423	131	1,675	2,229	2,966	
Towels & Kaflas	10^3p	5,934	3,839	4,773	7,893	8,248	8,809	
Nylon Textiles	10^3m	2,411	2,463	873	847	1,501		
Tergal and Trevira Textiles	10^3m	1,117	1,577	934	295	879		
Silk Textiles	10^3m	3,514	1,911	1,671	1,519	2,473		
Tricot	10^3m	6,099	5,475	6,767	13,481	15,313	18,408	
Underwear	10^3p	6,426	3,020	7,478	11,296	12,160		
Stockings	10^3d	4,217	2,274	2,456	3,056	3,240	3,540	
Silk Carpet	10^3m^2	30	79	83	301	222	262	
Synthetic Textiles	10^3p			1,128	1,189	1,142	1,042	

Source : Syrian Arab Rep. Statistical Abstract

Table 6.2-3 IMPORTS OF FIBERS, FABRICS AND GARMENTS INTO SYRIA

(t)

SITC. Rev.3		1990	1991	1992	1993	1994	1995
651.21	Cotton Sewing Thread	554	215	483	315	373	203
50	Synthetic FY	18,355	35,382	30,353	54,808	51,782	42,141
59	Other Synthetic FY	1,083	14,166	22,351	25,038	25,853	29,955
71	Yarn of Artificial FY	1,684	964	1,141	1,803	1,467	740
72	Textured Yarn, not for Retail	402	461	526	750	863	251
81	Yarn Containing 85% or more	1,784	1,099	1,384	1,313	1,282	799
653.10	Fabrics, Woven of Synthetic	781	698	1,876	2,352	5,093	5,901
40	Fabrics, Woven of Synthetic	2,856	2,288	3,470	4,154	3,168	2,803
50	Fabrics, Woven of Artificial	455	873	1,315	2,120	2,537	876
654.21	Fabrics, Woven of Carded	875	122	413	1,035	486	519
657.32	Textile Fabrics Impregnated	6,602	8,114	10,237	12,853	11,121	9,185
71	Wadding of Textile materials	451	936	706	396	53	517
93	Tyre Cord Fabrics	256	288	208	849	581	24
	Total	36,138	65,606	74,463	107,786	104,659	93,914

Source: Syrian Arab Republic, Statistical Abstract

Table 6.2-4 EXPORTS OF FIBERS, FABRICS AND GARMENTS FROM SYRIA (1)

SITC. Rev.3		1990	1991	1992	1993	1994	1995
263.10	Raw Cotton	66,193	81,202	134,924	158,923	150,595	123,660
31	Yarn Waste of Cotton	18,656	17,384	18,582	21,916	8,178	9,660
39	Other Cotton Waste	6,972	4,247	1,656	2,808	6,543	3,123
268.10	Wool Greasy (Washed)	1,770	-	7,626	2,537	3,854	2,626
	Sub-Total (263, 268)	93,591	102,833	162,788	186,184	169,170	139,069
651.21	Cotton Sewing Thread	5,006	2,748	1,866	469	15,662	5,777
652.21	Woven Fabrics of Cotton Unbleached	1,183	701	106	117	7	83
31	Other Woven Fabrics of Cotton, Bleached	108	96	77	23	1	6
32	Other Woven Fabrics of Cotton, Bleached Dyed	54	158	101	49	7	52
34	Other Woven Fabrics of Cotton, Bleached Printed	870	4,563	1,035	865	339	167
60	Other Woven Cotton Fabrics	52	116	-	26	-	4
653.10	Fabrics, Woven of Synthetic Filament Yarn	4,598	3,358	1,144	952	893	1,389
2	Fabrics, Woven of Synthetic cont. 85% fibers	104	87	257	503	919	1,691
4	Fabrics, Woven, of SF Mixed with Other Materials	17	53	154	242	205	159
655.23	Other Fabrics, Warp Knit	2,570	3,234	3,979	7,293	7,781	5,589
656.11	Woven Pile Fabrics and Chenille Fabrics	310	170	166	179	1,108	222
13	Other Woven Fabrics	78	77	71	56	67	73
14	Fabrics Consisting of Warp without Welt	12	3	-	-	-	-
656.30	Gimped yarn Loop Warp Yarn	377	282	301	434	642	552
658.45	Table Linen not Knitted nor Crocheted of Cotton	589	543	627	964	811	554
48	Toilet and Kitchen Linen	125	84	271	449	327	627
659.41	Carpets and Floor Covering of Wool	776	49	234	407	758	1,087
43	Carpets of Other Artificial Textile	441	143	342	144	341	448
60	Carpet of Other Textile Material	542	216	323	847	225	89
841.00	Men's or Boy's Underwear, Knitwear	1,520	2,520	1,844	2,834	4,523	3,842
842.00	Women's or Girls Underwear, Knitwear	1,030	1,734	1,514	2,848	6,128	3,360
843.24	Trousers, Overalls	999	850	682	1,081	1,464	1,354
71	Shirts of Cotton	967	1,427	1,757	2,514	2,360	3,588
845.50	Girdles, Corsets, Garters	253	43	35	37	55	44
846.20	Shawls, Scarves, Knitted	239	306	268	343	14	4
92	Other Gloves, Knitted	104	155	170	389	648	686
93	Shawls, Scarves, Crocheted	10,308	2,814	2,527	5,031	6,690	7,442
	Sub-Total (651-846)	33,232	26,530	19,851	29,096	51,975	38,889
Total		126,823	129,363	182,639	215,280	221,145	177,958

Source: Syrian Arab Republic, Statistical Abstract

Table 6.2-5 APPAREL FIBER CONSUMPTION OF SYRIA (FAO)

(1,000 ton)

Items	1990	1991	1992
Cotton			
Mill Consumtion	55.0	55.0	55.0
Foreign Trade			
Imports Yarn	0.6	0.2	0.5
Fabrics	0.4	0.2	0.5
Clothing	-	-	-
Other Manufactures	0.6	0.8	0.7
Total (Actual Weight)	1.6	1.2	1.7
Total (Fibre Equivalent)	1.9	1.5	2.1
Exports Yarn	7.6	6.2	5.5
Fabrics	2.4	5.5	1.8
Clothing	2.0	1.0	2.0
Other Manufactures	0.7	0.5	1.0
Total (Actual Weight)	12.7	13.2	10.3
Total (Fibre Equivalent)	14.6	15.4	12.3
Balance (Fibre Equivalent)	-12.8	-13.9	-10.2
Available for Home Use	42.2	41.1	44.8
Wool			
Mill Consumtion	16.0	15.0	13.8
Foreign Trade			
Imports Tops	0.1	0.0	0.0
Noils	-	-	-
Yarn	0.1	0.1	0.1
Fabrics	0.9	0.2	0.6
Clothing	0.0	0.0	0.0
Other Manufactures	0.0	0.0	0.0
Total (Actual Weight)	1.1	0.3	0.7
Total (Fibre Equipvalent)	1.2	0.3	0.8
Exports Tops	-	-	-
Noils	-	-	-
Yarn	-	-	-
Fabrics	-	-	-
Clothing	-	-	-
Other Manufactures	-	-	-
Total (Actual Weight)	-	-	-
Total (Fibre Equipvalent)	-	-	-
Balance (Fibre Equivalent)	1.2	0.3	0.8
Available for Home Use	17.2	15.3	14.6
Flax			
Mill Consumtion	-	-	-
Foreign Trade			
Imports Yarn	-	-	-
Fabrics	-	-	-
Clothing	-	-	-
Other Manufactures	-	-	-
Total (Actual Weight)	-	-	-
Total (Fibre Equivalent)	-	-	-
Exports Yarn	-	-	-
Fabrics	-	-	-
Clothing	-	-	-
Other Manufactures	-	-	-
Total (Actual Weight)	-	-	-
Total (Fibre Equivalent)	-	-	-
Balance (Fibre Equivalent)	-	-	-
Available for Home Use	-	-	-

Items	1990	1991	1992
Cellulosic Fibres			
Mill Consumption Estimate:			
Fllament: Production	-	-	-
Imports	1.1	1.2	1.2
Exports	-	-	-
Discontinuous:			
Production	-	-	-
Imports	0.0	1.2	0.7
Exports	-	-	-
Mill Consumption	1.1	2.4	1.9
Foreign Trade			
Imports Spun Yarn	0.2	0.1	0.1
Fabrics	0.1	0.1	0.1
Clothing	-	-	-
Other Manufactures	0.2	0.2	0.2
Total (Actual Weight)	0.5	0.4	0.4
Total (Fibre Equivalent)	0.5	0.4	0.4
Exports Spun Yarn	-	-	-
Fabrics	0.0	0.0	0.0
Clothing	0.0	0.0	0.0
Other Manufactures	0.0	0.0	0.0
Total (Actual Weight)	0.0	0.0	0.0
Total (Fibre Equivalent)	0.0	0.0	0.0
Balance (Fibre Equivalent)	0.5	0.4	0.4
Available for Home Use	1.7	2.8	2.3
Synthetic (Non Cellulosic) Fibres			
Mill Consumption Estimate:			
Fllament: Production	-	-	-
Imports	28.0	30.0	29.0
Exports	-	-	-
Discontinuous:			
Production	-	-	-
Imports	0.4	0.4	0.3
Exports	-	-	-
Mill Consumption	28.4	30.4	29.3
Foreign Trade			
Imports Spun Yarn	3.5	1.2	2.3
Fabrics	3.5	4.0	3.5
Clothing	0.0	0.0	0.0
Other Manufactures	2.0	2.2	2.5
Total (Actual Weight)	9.0	7.4	8.3
Total (Fibre Equivalent)	9.8	8.2	9.1
Exports Spun Yarn	-	-	-
Fabrics	5.0	4.5	4.0
Clothing	2.5	2.0	2.0
Other Manufactures	0.4	0.4	0.4
Total (Actual Weight)	7.9	6.9	6.4
Total (Fibre Equivalent)	8.8	7.7	7.1
Balance (Fibre Equivalent)	1.0	0.5	2.0
Available for Home Use	29.4	30.9	31.3
Fibres Available for Home Use	90.5	90.2	93.0
Population (millions)	12.3	12.8	13.2
Availability Per Caput (kgs)			
Cotton	3.4	3.2	3.4
Wool	1.4	1.2	1.1
Flax	-	-	-
Total Natural Fibres	4.8	4.4	4.5
Cellulosic Fibres	0.1	0.2	0.2
Synthetic (Non Celulosic) Fibre	2.4	2.4	2.4
Total Man-Made Fibres	2.5	2.6	2.5
Total Fibres	7.3	7.1	7.0

Source : FAO

Table 6.2-6 APPAREL FIBER CONSUMPTION OF SYRIA (FAO) (1990-92 Average)

(1,000 ton)

		Cotton	Wool	Cellulosic	Synthetic	Total
Domestic		55.0	14.8	0.0		69.8
Import	Staple Fiber			0.6	0.4	1.0
	Spun Yarn	0.4	0.1	0.1	2.3	2.9
	Filament Yarn	-	-	1.2	29.0	30.2
	Fabric	0.4	0.6	0.1	3.7	4.8
	Clothing	-	0.0	0.0	0.0	0.0
	Other Manufactures	0.7	0.0	0.2	2.2	3.1
	Total (actual)	1.5	0.7	2.2	37.6	42.0
	Total (Fiber Equivalent)	1.8	0.8	2.2	38.6	43.4
Export	Yarn	6.4	0.0	0.0	-	6.4
	Fabric	3.2	0.0	0.0	4.5	7.7
	Clothing	1.7	0.0	0.0	2.2	3.9
	Other Manufactures	0.7	0.0	0.0	0.4	1.1
	Total (actual)	12.1	0.0	0.0	7.1	19.2
	Total (Fiber Equivalent)	14.1	0.0	0.0	7.9	22.0
Available for Home Use		42.8	15.7	2.2	30.5	91.2

Source : FAO

Table 6.2-7 IMPORT OF TEXTILES TO SYRIA BASED ON EXPORTING COUNTRIES STATISTICS

(t)

		'92	'93	'94
Cotton, Wool, Silk, Man-Made		2,509.8	3,284.2	4,075.3
FY, Textured-FY, Spun-Yarn		45,647.9	71,573.6	65,507.4
Woven Fabric		4,679.1	8,348.2	9,626.6
Knitted Fabric		803.5	1,086.1	1,086.1
Clothing	Woven	25.6	11.1	11.2
	Knitted	15.2	5.6	15.7
	Unknown	12.6	14.3	127.8
	Sub-Total	(53.4)	(30.9)	(154.7)
Others		1,431.8	1,867.5	1,301.1
Total		55,125.5	86,190.5	81,751.2

Source : UN Trade of the Industrialized Nations with Eastern Europe, the former USSR and the Developing Nations, Supplement to the World Trade Annual Exports from Australia, Austria, Belgium-Luxembourg, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Iteland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States of America.
Trade Statistics of Taiwan, Korea, Hong Kong, Singapore and Turkey.

Table 6.2-8 IMPORT OF TEXTILES INTO SYRIA BASED ON EXPORTING COUNTRIES STATISTICS BY PRODUCT TYPE BY COUNTRY (1994)

(ton)

	Industrialized Nations	Taiwan	Korea	Hong Kong + Singapore	Turkey	Total
Staple Fiber	3,366	402	40	18	249	4,075
Spun Yarn	1,858	2,278	1,133	823	15,016	21,108
Filament Yarn	6,700	64	2,845	0	1,366	10,976
Textured Filament	6,286	15,979	141	0	11,017	33,424
Sub Total	(14,844)	(18,322)	(4,119)	(823)	(27,399)	(65,507)
Spun Woven Fabric	1,561	738	713	261	822	4,095
Filament Woven Fabric	1,199	239	3,627	14	53	5,132
Other Woven Fabric	0	143	246	3	8	400
Sub Total	(2,760)	(1,119)	(4,586)	(278)	(883)	(9,627)
Knitted Fabric	919	79	54	0	34	1,086
Woven Garment	10	0	0	0	1	11
Knitted Garment	14	0	0	0	2	16
(Unknown) Garment	41	87	0	0	0	128
Sub Total	(65)	(87)	(0)	(0)	(3)	(155)
Others (Type Cord etc.)	461	295	10	0	535	1,301
Total	22,415	20,304	8,809	1,120	29,104	81,751

Table 6.2-9 DOMESTIC CONSUMPTION OF TEXTILES BY FIBER

(1,000 ton/y)

	Cotton	Wool	Synthetic FY	Synthetic SF	Total
Domestic Production	63.0 *	1.0	-	-	64.0
Import	2.0	2.0	55.4	27.1	86.5
Export	19.0	1.0	14.0	4.0	38.0
Domestic Consumption	40.0	2.0	41.4	23.1	112.5

Source : UN Trade of the Industrialized Nations with Eastern Europe, the former USSR and the Developing Nations, Supplement to the World Trade Annual Exports from Australia, Austria, Belgium-Luxembourg, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States of America.
Trade Statistics of Taiwan, Korea, Hong Kong, Singapore and Turkey.

Note : Synthetic includes man-made fibers

* : As spun yarn

Table 6.2-10 DOMESTIC CONSUMPTION OF TEXTILES BY FIBER MATERIAL

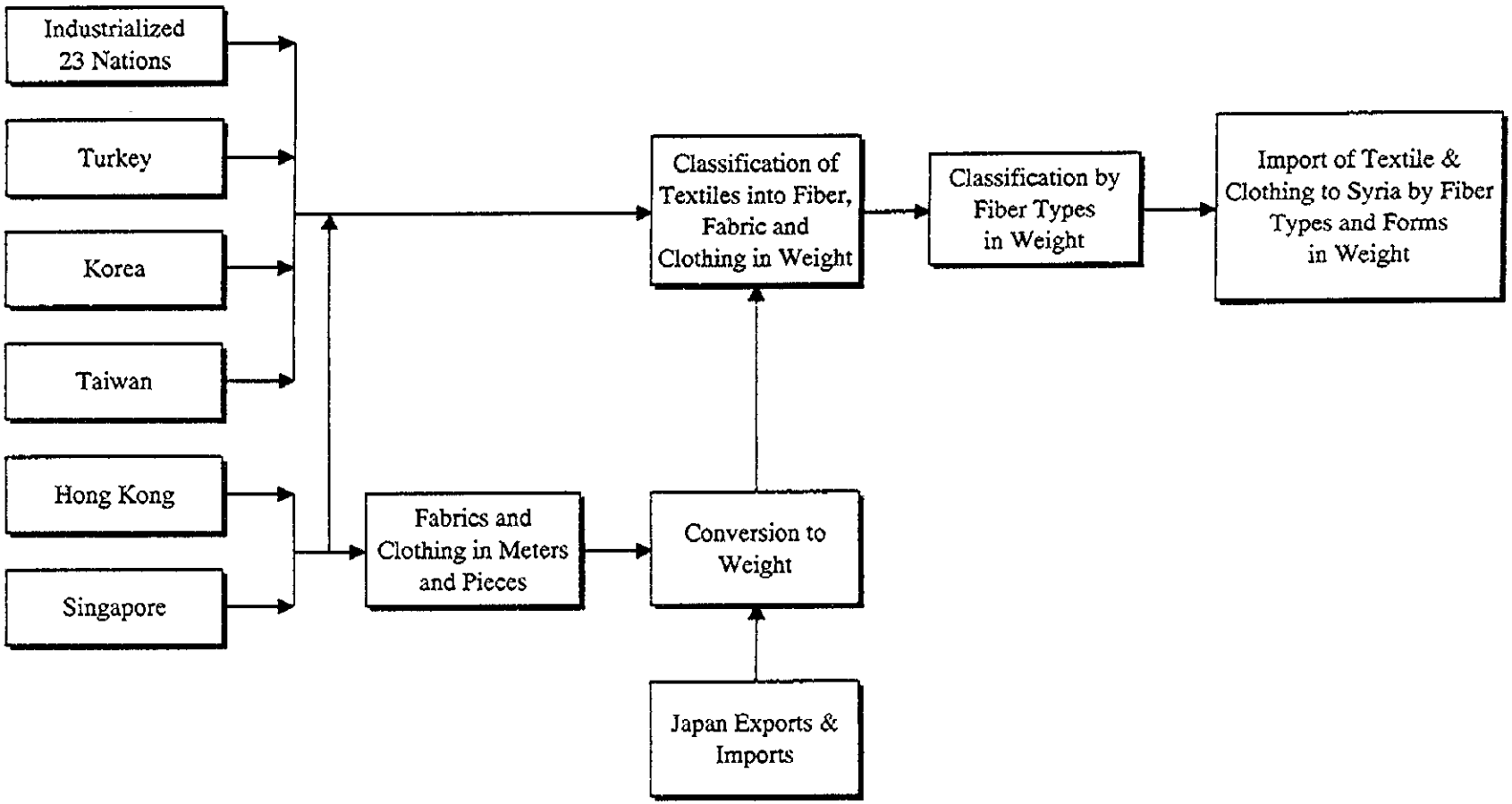
(1,000 tons/y)

	Domestic	Import	Export	Domestic Consumption	
Cotton	63.0	1.7	19.0	45.7	40.6%
Wool	1.0	2.2	1.0	2.2	2.0
Polyester	-	32.1	0.9	31.2	27.7
Nylon	-	18.4	7.0	11.4	10.1
Acrylic	-	15.1	4.0	11.1	9.9
Synthetic	-	9.3	3.3	6.0	5.3
(Synthetic)	-	(74.9)	(15.2)	(59.7)	(53.0)
Rayon	-	4.2	2.0	2.2	2.0
Man-Made	-	0.5	0.1	0.4	0.4
(Synthetic, Rayon and Man-Made)	-	(79.6)	(17.3)	(62.3)	(55.4)
Other, Unknown	-	3.0	0.7	2.3	2.0
(Synthetic, Rayon, Man-Made and Other	-	(82.6)	(18.0)	(64.6)	(57.4)
Total	64.0	86.5	38.0	112.5	100.0

Source : UN Trade of the Industrialized Nations with Eastern Europe, the former USSR and the Developing Nations, Supplement to the World Trade Annual Exports from Australia, Austria, Belgium-Luxembourg, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States of America.
Trade Statistics of Taiwan, Korea, Hong Kong, Singapore and Turkey.

Note : Figures with * are estimated figures proportional to import

Figure 6.2-1 COMPILATION OF EXPORT STATISTICS TO SYRIA



6.3 Textile and Clothing Demand Forecast

6.3.1 Common Factors Related to Domestic and Export Demand (Assumptions)

(1) Syria is not suitable for production of long staple fiber cotton.(confirmed in PROGRESS REPORT I)

Climatic conditions in Syria are unsuitable for production of long staple fiber cotton, called ELS, which is grown in Egypt and other countries.

(2) Syria will not produce synthetic fibers for the foreseeable future.

Syria is now importing approximately 80,000 tons of synthetic fiber, which is divided into various types (FY, SF, polyesters, nylon, and acrylics) each of which involves relatively small quantities, making local production to serve domestic demand unfeasible. On the other hand, production of synthetic fiber for export will entail competition with Asian countries which have already built massive industries including materials and processing. Again, it is not likely to be a viable option. For these reasons, domestic forecasts conducted here assumes that synthetic fiber production will not be initiated over the planning horizon.(confirmed in PROGRESS REPORT I)

(3) Quality improvement will become visible

In particular, quality improvement of spun yarns is critical for the state-owned companies which perform all the spinning work. Better quality of spun yarns is the prerequisite to production of fabrics and clothing having good competitive qualities for export markets.

6.3.2 Factors Affecting Domestic Demand

(1) Projected population growth

Syria's population is 14.6 million as of 1996, with an annual growth rate of 3.1-3.2%. The growth rate is expected to slow down to around 2.5% in or by, 2010.

Population projections for the highest case (growing at 3.2% up to 2010) and the lowest case (declining from 3.2% to 2.5% steadily through 2010) ranges between 22.7 million and 21.2 million by 2010.

For textile and clothing demand forecast, the population is assumed to be 22 million in 2010 (the average of the highest and lowest cases) with 16.3 million in 2000 and 19 million in 2005. The figures are based on an average growth rate of 3.0% through to 2010.

(2) Growth forecast for GDP per capita

At present, GDP grows at an annual rate of 7%. However, some point out that the inevitable decline in oil production will make growth above 5% difficult.

Assuming that future GDP growth will be 5%, the midpoint between the current 7% and the moderate 3%, with the average population growth rate of 3.0%, future GDP per capita (1996 being a baseline year indexed to 1.0) is estimated as shown in Table 6.3-1.

(3) Import substitution

Syria imports large amounts of synthetic fiber products, which may be replaced with domestic cotton.

While synthetic filament yarns (FY) cannot be substituted for by cotton on account of functional requirements, synthetic staple fibers (SF) are a primary candidate. Imports of synthetic SF products (including blended textiles) total slightly less than 30,000 tons annually, mostly spun yarns. These spun yarns are mainly acrylics for which cotton does not serve as a substitute because they have different applications. By substituting all of the synthetic SF products other than acrylics by cotton, the annual volume would be only around 10,000 tons.

Actual import substitution can be accomplished by importing synthetic SF in place of spun yarns and fabrics and producing spun yarns locally.

(4) Production of combed yarns

It is believed that insufficient supply of combed yarns causes imported synthetic fibers to be used to meet local demand, particularly of high grade products using higher count yarns. Sufficient availability of combed yarns is considered to help spur import substitution by local cotton.

6.3.3 Factors Affecting Exports

6.3.3.1 Comparative advantages for Syrian exports

a) Syria is a cotton producing country

Syria produces around 250,000 tons of cotton annually, and most of the surplus after local consumption, estimated at 62,000 tons, is considered as export potential. This is exported mainly in the form of raw cotton, except for small quantity exports of spun yarns and knitted clothing. On the other hand, most of major cotton producing countries in the world export and import cotton and cotton products concurrently. They can be classified into three groups according to production, export and labor cost, and their relations, which are shown in Table 6.3-2 and Figure 6.3-1:

A. Countries with high labor cost and high ratio of exports in the form of raw cotton (locally processed cotton products cannot compete in export markets)
   - The U.S., Australia, and the former USSR.
B. Countries with low labor cost and high ratio of exports in the form of cotton products (spun yarns, fabrics, and clothing) (adding value to raw cotton)
   - China, Pakistan, India, Egypt, Brazil, and Turkey
C. Countries classified in-between
   - Greece

Syria and Argentina are two exceptions to the above classification. They export raw cotton without local processing despite of their low labor cost.

This is one strong indicator that the country can expand exports of cotton products significantly if it successfully building the infrastructure for the

textile industry to focus on product exports and establishes a well-coordinated development plan is executed to solve the issues impeding local production, ie. competitive advantage.

b) Geographical advantages

Syria is in a strategic location in proximity to a large market. Proximity to the EU is a key success factor in clothing exports as it meets quick response requirements, the most important element of the trade. Furthermore, direct linkage with Europe through land (truck) transport constitutes another important locational advantage. They work as competitive edges against Asian countries who are strong competitors for Syria in textile and clothing exports.

c) Absence of import quotas for exports to the EU and the U.S.

In world textile and clothing trade, export controls will continue to exist until 2005 under the remaining MFA regulations, so that exporting countries are restricted by quotas set by importing countries. Note that countries not participating in WTO, such as China, will face similar restrictions after 2005 under bilateral agreements with importing countries.

On the other hand, Syria can freely export to the U.S. and Europe without import quotas. In fact, the EU has granted to Syria the license called "Europe 1" which allows exports without tariff and without quota restrictions. The U.S. does not set forth any restriction on textile and clothing products imported from Syria.

These privileges can be enjoyed as Syria's current exports are small in volume terms. In any case, the absence of quota restrictions works as another competitive advantage against Asian countries.

d) Labor cost (Figures 6.1-17, 18)

Compared to major competitors in the Middle East and Asia, labor costs in the Syrian textile industry are lower than those in Turkey and Tunisia, similar to Malaysia and Thailand, and higher than Egypt, India, Pakistan, Indonesia, Vietnam, China, and Bangladesh. As a potential clothing export country,

therefore, Syria's labor costs are at a relatively high level. However, Syria has sufficient potential to join the clothing export countries, judging from the fact that labor costs in Morocco and Tunisia are higher than in Syria, and are increasing their textile exports to the EU. Syria can compete effectively with others as long as sufficient efforts are made in productivity improvement and other areas.

The labor costs of this document are based on SP21.49/US$ of June, 14, 1993. Based on the present exchange rate of SP45/US$, labor costs in Syria are more competitive.

e) Large private companies are already exporting products successfully

Some of the private companies have expanded their businesses by exporting knitted products using Syrian cotton to large sales organizations in Europe. Also some of the large companies import fabrics and sew them to clothing which are re-exported to "adidas" and other major apparel companies in Europe. Thus, there are already some successful cases in the private sector.

These cases provide more evidence that the time has come to develop the textile industry and elevate it to one of Syria's major export sectors.

f) Prospect for the EU membership

Syria intends to join the EU by 2010. The EU is a huge market for textiles and clothing, and its membership will augment export opportunities significantly.

g) Syrian textile industry has long tradition

6.3.3.2 Unfavorable factors for promotion of Syria's exports

a) Lack of export infrastructure

The textile industry as a whole, with the exception of some private companies, is not ready for product exports in terms of quality control and quality assurance, delivery and distribution systems, packaging, and export

procedures, which are either inadequate or totally lacking. On the other hand, private companies which have made some success in export business have cleared these hurdles.

b) Shortage of textile production facilities and technology for exportable products

Exports of textiles and clothing, especially the latter, require diverse facilities and technology to operate a whole range of production processes which are capable of producing high quality products from spinning to weaving, knitting, dyeing and finishing, and sewing. Most of these are not available in Syria and need to be obtained in a planned manner.

6.3.4 Export Markets

This section analyzes export markets for Syrian products, which are evaluated in terms of export potential.

(1) The EU (See 6.1.3.6 (2))

The EU is the world's largest clothing market in terms of imports. As mentioned earlier, the EU has granted the "Europe 1" license to Syria which can freely export clothing without tariff and quotas, with the intention of encouraging Syria's exports.

Another encouraging factor is steady growth of exports by private companies. During the first field survey, a member of the study team encountered buyers of socks and sportswear from Turkey. Reportedly they visit private companies with a good export record and procure products for large retailers in Western Europe. This information reflects good prospects for Syrian products in the region.

While the EU does not have a cotton producing country as its member, Turkey has joined the EU Customs Union. Although it is potentially a strong competitor to Syria, Turkey is losing competitiveness in some areas due to the increase in labor cost. In addition to Turkey, potential competitors include Asian countries such as China, Tunisia, Morocco, and the former Eastern Europe.

The top ten clothing exporting countries to the EU are shown in Table 6.3-3. As to clothing, China, India, Turkey, Morocco, Tunisia etc. are Syria's competitors.

(2) Former USSR and Eastern Europe (See 6.1.3.6 (10))

As pointed out earlier, textile and clothing production in these regions has dropped sharply since 1990. Now they are struggling to restructure their economies and operate textile production facilities on a commercial basis, and the garment industry is rapidly emerging to serve as an OPT base for textile industries of the EU.

Only after economies in the former USSR and Eastern Europe make a solid recovery, accompanied by increased production of textiles and clothing, will they emerge as export markets for Syrian cotton products. At present, there is not much prospect for exports to these regions.

(3) Middle East (See 6.1.3.6 (12)

Major potential markets are the GCC (Gulf Cooperation Council) countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the UAE), Iran, and Iraq.

In the GCC countries, little textile production is carried out (although Saudi Arabia has synthetic fiber production facilities, no production figures are reported). The region has 16.9 million population in total and its textile and clothing market is estimated at around $6 billion (1991-92, Textile Outlook International, March 1994). Notably, textile and clothing consumption in these countries is bloated by a large resident population of foreigners who buy large amounts for their own consumption and/or take them back to their own countries. Within the region, Dubai in the UAE has developed as a major import base for textiles and clothing as well as an OPT base for clothing. Thus Dubai has extensive infrastructure for textile and clothing trade.

The region mainly imports fabrics for garment production, totaling $2 billion annually. Most of imports are synthetic fibers (according to UN Trade Statistics). Major exporting countries are Korea, China, and Thailand, which

have replaced Japan which had previously dominated the market. Relatively small imports from Pakistan, the region's close neighbor and cotton exporter, indicates small cotton imports.

In fact, regional demand for cotton products is low. In Saudi Arabia, the major market in the region, consumes less than 20,000 tons annually of cotton for garment.

Thus, there is not much prospect for Syria's exports of cotton products to the GCC countries.

Iran has a large population (63 million as of 1992) and its textile and clothing consumption amounts to around 200,000 tons annually. It produces cotton which is consumed locally. At present, the country bans cotton imports, therefore, Iran is not a promising market for Syria. As a the shortage of cotton is expected in Iran, Syria may have an opportunity for raw cotton exports, but exports of cotton products will continue to be a difficult challenge.

Finally, Iraq has a 19 million population (as of 1992) and textile and clothing demand is small, 60,000 tons annually.

The above analysis indicates that there is small hope for the Middle East to become a major market for Syria's cotton products, regardless of the progress of the peace process. If the real peace is realized in the region, its effect will trickle down to Syria's textile industry only after the region attracts foreign investment.

(4) The U.S. (See 6.1.3.6 (1))

The U.S. is the world's largest cotton producer. However, high labor costs impedes price competitiveness of its textiles and clothing. As a result, the country exports approximately 40% of cotton produced and at the same time imports cotton products in large quantities equivalent to its cotton exports. Garments account for 60% of imported cotton products by weight, while the remaining portion is mostly fabrics. Major exporting countries have previously been China, Hong Kong, Korea, and Taiwan, although their

exports are now flattening out, while imports from countries in NAFTA (North Atlantic Free Trade Area) and CBI (Caribbean Basin Initiative) grow rapidly.

To curtail further import growth, the U.S. textile industry focuses on regular products and makes efforts for cost reduction and rationalization in non-manufacturing costs by building powerful QR system networks to ensure timely product delivery, reduction of distribution costs, and minimization of inventory risks. On the other hand, high grade products are mainly procured from foreign sources.

The situation indicates that Syria must select products for U.S.-bound exports which are not QR-oriented.

The volume of Syrian exports to the U.S. is smaller than to the EU, some private companies are exporting textiles exclusively to the U.S. As the structure of the U.S. market is clearly different from the EU market (the lot size is bigger and the quality requirements are generally lower for the EU), there should be good opportunities to expand Syrian exports by finding suitable market areas.

The top ten textiles and clothing exporting countries to the U.S. are shown in Table 6.3-4. The changes in export value in 1995 against 1994 show the decreases for China, Korea and Taiwan, and rapid increases for Mexico and Canada; the NAFTA members.

6.3.5 Local Production Forecast for Staple Fibers and Filament Yarns

6.3.5.1 Cotton production trend and forecast

(1) Cotton production trend

As shown in Table 4.2-2 of Chapter 4, cotton production in Syria was 223,000 tons in 1993/94, 230,000 tons in 1994/95, and 210,000 tons in 1995/96, with an average of 221,000 tons for 1993/94 - 1995/96. A similar production trend is expected in the future.

(2) Cotton production forecast

Assuming that current production is 250,000 tons (forecast for 1996/97), a Syrian cotton expert predicts that production in 2010 will be 275,000 tons, a 10% increase at maximum. Note that 250,000 tons is 11% larger than the average for 1993/94-1995/96 (221,000 tons) and represents the highest production level. 275,000 tons is about 25% larger than the average.

Cotton production in the country has been exceeding the 200,000 ton level since 1991/92 mainly due to the increased cropping area and higher yield as a result of the extension of irrigation systems. In fact, the yield of Syrian cotton is at the world's highest level and is not expected to increase significantly in future. Any further increase in production will inevitably rely very much on the increase in cropping area. According to the expert, however, there are many hurdles to be cleared to achieve the target of 275,000 tons, such as an extension of the irrigation and water supply systems, and the construction of dams.

The maximum achievable production level in 2010 is set at 275,000 tons, more precisely 221,000 tons in 1994/95, 239,000 tons in 2000, 257,000 tons in 2005, and 275,000 tons in 2010. The minimum production level is forecast to be 250,000 tons by assuming that government policy for cotton production will remain unchanged during the period. Note that any increase or decrease due to natural conditions (e.g., weather, outbreak of disease and insect damage) is not the scope of this forecast.

(3) Wool production trend and forecast

The production of greasy wool is approximately 5,000 tons/year (2,750 tons in terms of washed wool). Approximately less than 1,000 tons/year of washed wool is assumed to be supplied to the textile industry. Domestic wool is blended with imported wool to produce yarn for carpets and other products. Since production is fairly small and has minimal impact on overall demand, the current production level is assumed to continue for the forecast period.

(4) Silk production trend and forecast

In Syria, approximately 3 tons of silk fibers are produced annually. As in the case of wool, production is fairly small and has minimal impact on overall demand, so that the current production level is assumed to continue for the forecast period.

(5) Domestic production of synthetic fibers

Synthetic fibers are not manufactured in the country, and it is assumed that production will not start until 2010.

(6) Summary of production forecasts for staple fibers and filament yarns

Production of staple fibers and filament yarns in Syria, by fiber, is forecast as follows:

(thousand tons)

Year	Cotton	Wool	Silk	Total
1995	221	3	0.003	224
2000	239	3	0.003	242
2005	257	3	0.003	260
2010	275	3	0.003	278

6.3.6 Domestic Textile and Clothing Demand Forecasts

(1) Past trend

According to statistics of the FAO (Food and Agriculture Organization of the United Nations), textile and clothing consumption per capita in Syria has been in the range of 7kg to 8kg during the past decade (Table 6.3-5). Per-capita consumption has been relatively stable as GDP per capita (1990 price) showed not much variation during the same period.

Note that GDP per capita in the country varies greatly among different institutions. For the purpose of this forecast, the UN figure ($2,000) was adopted to allow comparison with other countries.

(2) Comparison of textile and clothing consumption with neighboring countries

GDP per capita and textile and clothing consumption per capita in neighboring countries, and textile and clothing consumption in countries which GDP per capita is similar to that in Syria are shown in Figure 6.3-2 and Table 6.3-6. All of these indices show that the current level of textile and clothing consumption is fairly accurately estimated.

Thus, demand forecast was made on the basis of the relationship between GDP per capita and textile and clothing consumption per capita.

(3) Forecast for textile and clothing consumption per capita and in the whole country

Using data of 65 LDCs, GDP per capita and textile and clothing consumption per capita show a close association as shown in Figure 6.3-3. By applying the equation obtained from regression analysis, textile and clothing consumption per capita and in the whole country were estimated, as shown in Table 6.3-5. Note that data in the table were calculated for three cases of population growth, highest, lowest and intermediate, as shown in Table 6.3-1. The higher the population growth rate, growth of GDP per capita slows down, resulting in slower consumption per capita. As a result, national consumption remains mostly unchanged with population growth but changes only by the growth of GDP.

If GDP grows at 3% annually, per capita consumption of textiles and clothing will remain at 7.6kg up to 2010. Meanwhile, national consumption will grow with population increase and reach 167,000 tons in 2010. With GDP growth rate of 5%, per capita consumption will increase from the present 7.6kg to 9.0kg, while national consumption will surge from 113,000 tons to 198,000 tons during the period. Finally, if GDP grows at 7%, per capita national consumption will reach 10.7kg and 235,000 tons in 2010, respectively. (Table 6.3-7)

(4) Breakdown of domestic demand by fiber and product type

In any country, there is an appropriate balance in domestic consumption of textiles between "natural fiber (cotton/wool) and synthetic fiber," between "FY and SF", and between "woven fabrics and knitted fabrics." In other words, instead of extreme consumption patterns such as "cotton (SF)/knitted fabrics 100%," and "synthetic fiber/FY/woven fabrics 100%," the appropriate balance develops and continues on the basis of different functions of fibers (natural and synthetic), the difference between FY and SF, suitability for function and end use according to woven and knitted fabrics, appearance, and other factors. This assumption forms the basis of the demand forecast.

1) Synthetic fiber ratio

The share of synthetic fibers in textile and clothing consumption has been increasing worldwide, approximately 40% at present, and a further increase is expected.

The synthetic fiber ratio in Syria, according to FAO's data, was 34% in 1992 (Table 6.3-5). On the other hand, the ratio estimated by the study team on the basis of statistical data of exporting countries is 52-54%, as shown in Table 6.2-10. The large difference comes from the following discrepancies:

a) FAO's synthetic fiber import data is smaller (FAO 30,000 tons vs. summation of statistics of exporting countries 70,000 tons)
b) FAO's cotton product export data is smaller (FAO 12,000-15,000 tons vs. Syrian statistics 19,000 tons)

The synthetic fiber ratio of neighboring countries ranges between 30% and 40%, as shown in Table 6.3-8. High figures of Saudi Arabia, Oman, and Kuwait reflect consumption by foreign residents who bring back clothing to their own countries, in addition to pure domestic demand.

Judging from the statistics of exporting countries, the synthetic fiber ratio of 52-54% is high, while import volumes of synthetic fibers appear to be fair estimates.

2) Classification by fiber and product type

Assuming the synthetic fiber ratio of 40-60%, cotton consumption can be projected as shown in Table 6.3-9. Furthermore assuming that GDP will grow at an annual rate of 5%, domestic consumption of cotton will be 65,000 tons in 2000, 81,000 tons in 2005, and 99,000 tons in 2010. These amounts of spun yarns can only be supplied after new mills (e.g., second phase of Lattakia and Idleb) come on stream.

Demand for wool and silk is assumed to remain unchanged at 3,000 tons and 3 tons respectively.

Synthetic fiber consumption varies with the synthetic fiber ratio, and the estimation of consumption of synthetic fiber is in the same range as cotton as shown in Table 6.3-9. (Note: Cotton consumption under the synthetic fiber ratio of 40% is equivalent to synthetic fiber consumption under the 60% ratio)

Consumption by product type is estimated as follows.
As for the share of woven and knitted fabrics, cotton consumption is currently dominated by the latter and will continue to be so in future.

Finally, FYs account for two-thirds of imports, and SFs one-third. It is expected that the percentage distribution will prevail in future.

6.3.7 Textile and Clothing Export Demand Forecast

(1) Export trend

Textile and clothing exports from Syria are mainly divided into cotton, cotton products, and synthetic woven fabrics (Tables 6.2-4, 6.2-9, 6.2-10). According Syrian statistics, annual export volumes are cotton 150,000-160,000 tons, cotton products 38,000 tons (mainly clothing, with fabrics representing 20%), and synthetic woven fabrics 3,000 tons.

(2) Export opportunities

As domestic demand will grow steadily while cotton production in the country is not likely to increase rapidly, increased cotton production will be consumed locally, thus export capability will not increase considerably. As discussed in the section on analysis of world textile and clothing supply and demand situation, there is ample demand for cotton worldwide, and it is feasible for Syria to export cotton at a rate of 150,000-160,000 tons annually.

In evaluating export opportunities for Syrian cotton products, the county has comparative advantages which are summarized below. If the country can leverage these advantages and meet various challenges to develop the textile industry into a major export sector, export opportunities will be realized.

a) Syria is a net exporter of cotton.
b) Worldwide textile and clothing trade is expanding, particularly clothing exports.
c) Syria's labor costs are low and offer a basic advantage for the clothing industry.
d) The country has an outstanding geographical advantage, ie. its proximity to a large market in the EU.
e) Proximity to Europe is highly advantageous in meeting quick response requirements which is increasingly critical for the clothing industry.
f) Syria is not subject to import quotas restrictions imposed by the EU and the U.S.

Notably, these advantages are contrasted with the surprising fact that Syria, a cotton producing country with low labor costs, exports most of its cotton without local processing (Figure 6.3-1). Even if the cotton cost in the country is high compared to international standards, it is obvious that exports of clothing which can be made by taking advantage of low labor costs provide economic advantages over exports of raw cotton. Assuming that the country will continue with cotton exports in the future, exports in the form of final products (e.g. clothing) will offer higher competitiveness for the country.

Table 6.3-1 FORECAST OF GDP PER CAPITA IN SYRIA (~2010)

GDP Growth (%/y)	a) Population Increase (%/y)	GDP per capita index (1996 = 1.0)		
		2000	2005	2010
3	3.2	0.99	0.98	0.97
	3.0	1.00	1.00	1.00
	3.2 to 2.5	1.03	1.03	1.04
5	3.2	1.07	1.17	1.27
	3.0	1.08	1.19	1.31
	3.2 to 2.5	1.11	1.22	1.37
7	3.2	1.16	1.38	1.66
	3.0	1.17	1.41	1.71
	3.2 to 2.5	1.20	1.45	1.78

Note : a) Population increase
Maximum : 3.2%/y constant
Minimum : 3.2%/y to 2.5%/y in 2010
Middle : 3.2%/y constant

Table 6.3-2 EXPORT OF COTTON TEXTILE PRODUCTS OF THE COTTON PRODUCING COUNTRIES (1990-92 Average)

(1000 ton/y) (1000 ton/y)

	Production	Available for Home Use	Labor Cost[a] (US$/man-hour)	EXPORT						%					
				Raw Cotton	Yarn	Fabric	Clothing	Other	Total	Raw Cotton	Yarn	Fabric	Clothing	Other	Total
Former USSR	2,375	291	-	1,353.0	4.5	20.0	0.2	0.0	1,377.8	98.2	0.3	1.5	0.0	0.0	100.0
Australia	436	100	10.84	386.3	2.5	1.9	1.9	2.3	395.0	97.8	0.6	0.5	0.5	0.6	100.0
Syria	183	29	1.12	127.3	7.5	3.8	1.9	0.9	141.4	90.0	5.3	2.7	1.4	0.6	100.0
Argentina	232	90	2.47	103.7	6.7	10.2	1.1	0.5	122.1	84.9	5.5	8.4	0.9	0.4	100.0
U.S.A	3,581	2,152	11.61	1,425.3	18.7	94.0	186.2	43.6	1,767.9	80.6	1.1	5.3	10.5	2.5	100.0
Greece	222	32	7.13	93.3	51.8	16.1	60.5	4.1	225.8	41.3	22.9	7.1	26.8	1.8	100.0
Brazil	436	379	1.46	74.0	56.0	53.3	21.9	24.2	229.3	32.3	24.4	23.2	9.6	10.5	100.0
India	2,141	1,016	0.56	166.0	81.5	140.2	143.2	93.8	624.6	26.6	13.0	22.4	22.9	15.0	100.0
Pakistan	1,786	308	0.44	325.3	537.5	249.1	33.4	84.9	1,230.3	26.4	43.7	20.2	2.7	6.9	100.0
Turkey	597	241	4.44	93.0	62.6	47.2	150.1	30.8	383.7	24.2	16.3	12.3	39.1	8.0	100.0
Egypt	315	131	0.57	17.7	89.3	28.4	8.0	13.8	157.2	11.2	56.8	18.0	5.1	8.8	100.0
China	4,909	2,303	0.36	160.7	224.8	780.0	384.8	21.2	1,571.5	10.2	14.3	49.6	24.5	1.3	100.0

a) Werner International

Source: FAO

Table 6.3-3 EU'S TOP TEN CLOTHING SUPPLIERS (1994)

Yarn and Fabrics

	Cotton Yarn	Synthetic SF Woven	Synthetic FY Woven
1	Egypt	Pakistan	Pakistan
2	India	India	Indonesia
3	Turkey	Indonesia	*Japan*
4	*Switzerland*	Thailand	Taiwan
5	Indonesia	Malaysia	Korea
6	Pakistan	China	*USA*
7	Thailand	Turkey	Thailand
8	*Zambia*	*USA*	Malaysia
9	**Morocco**	**Czech**	Turkey
10	*Peru*	*Switzerland*	*Switzerland*

Clothing

	Pullover	T-shirts	Blouses	Dresses	Skirts	Trousers	Overcoats	Women's Suits
1	Turkey	Bangladesh	India	India	India	**Tunisia**	China	China
2	Hong Kong	**Turkey**	Hong Kong	Turkey	China	**Morocco**	**Poland**	India
3	Indonesia	China	**Turkey**	Hong Kong	**Turkey**	Hong Kong	Turkey	**Turkey**
4	China	India	**Poland**	**Morocco**	**Morocco**	Turkey	**Romania**	**Poland**
5	Bangladesh	*Mauritius*	Malaysia	**Tunisia**	**Tunisia**	China	**Morocco**	**Morocco**
6	**Morocco**	Hong Kong	**Morocco**	China	**Poland**	Pakistan	**Tunisia**	**Tunisia**
7	*Mauritius*	**Tunisia**	Sri Lanka	**Poland**	Hong Kong	**Poland**	Hong Kong	**Romania**
8	Korea	**Morocco**	**Tunisia**	Sri Lanka	**Romania**	**Romania**	**Hungary**	**Hungary**
9	Macao	Indonesia	China	**Romania**	**Hungary**	*USA*	**Croatia**	**Slovenia**
10	Taiwan	*USA*	**Romania**	**Hungary**	**Croatia**	**Hungary**	**Slovenia**	**Croatia**

Source : Textile Outlook International, March 1996

Table 6.3-4 USA : TOP TEN SUPPLIERS OF MFA TEXTILES AND CLOTHING, 1995

Rank 1995	Country	Value (US$ million)	Share 1995 (%)	Change 1995/94 (%)
1	China	4,803	10.9	-2.6
2	Hong Kong	4,391	10.0	-0.3
3	Mexico	3,037	6.9	60.1
4	Taiwan	2,757	6.3	-2.6
5	South Korea	2,271	5.2	-7.3
6	Dominican Republic	1,787	4.1	10.4
7	Philippines	1,704	3.9	17.0
8	Canada	1,652	3.8	25.4
9	India	1,615	3.7	6.3
10	Italy	1,464	3.3	15.1
Total		43,974	100.0	10.0

Source : Textile Outlook International, January 1997

Table 6.3-5 PER CAPITA FIBER CONSUMPTION OF SYRIA (1984-92)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
Population (million)	9.93	10.27	10.61	10.97	11.34	11.72	12.12	12.53	12.96
GDP (million US& at constant 1990)	20,951	22,232	21,133	21,536	24,393	22,208	23,904	25,614	28,315
GDP Per Capita (US$)	2,110	2,165	1,992	1,963	2,151	1,895	1,972	2,044	2,185
Total Fiber Consumption (1,000 ton)	16.40	83.70	84.50	85.80	80.90	88.00	90.50	90.20	93.00
Per Capita Fiber Consumption (kg)	7.69	8.15	7.96	7.82	7.13	7.51	7.47	7.20	7.18
Share of Synthetic Fiber Consumption (%)	33.30	26.30	28.20	31.90	32.50	32.20	32.90	33.80	34.30

Source :
Population : UN, Monthly Bulletin of Statistics
GDP : UN, Statistical Yearbook
Fiber Consumption : FAO

Table 6.3-6 PER CAPITA FIBER CONSUMPTION OF THE COUNTRIES, GDP PER CAPITA IS THE SAME LEVEL AS SYRIA (1992)

	Population (million)	GDP per capita (US$)	Fiber Consumption (kg)
Malaysia	18.76	2,674	6.10
Chile	13.54	2,606	9.40
Panama	2.49	2,393	6.80
Syria	**12.96**	**2,257**	**7.00**
Algeria	26.27	2,137	3.30
Costarica	2.94	2,094	6.30

Source : FAO, UN

Table 6.3-7 FORECAST OF FIBER CONSUMPTION IN SYRIA (~2010)

(kg)

	GDP Growth (%/y)	2000	2005	2010
Per Capita Fiber Consumption (kg/y)	3	7.6 (7.6-7.7)	7.6 (7.5-7.7)	7.6 (7.5-7.8)
	5	8.0 (7.9-8.1)	8.5 (8.4-8.6)	9.0 (8.9-9.3)
	7	8.4 (8.3-8.5)	9.5 (9.4-9.6)	10.7 (10.8-11.0)
Total Fiber Consumption (1,000 ton/y)	3	124 (123-126)	144 (143-145)	167 (165-170)
	5	130 (130-131)	161 (159-163)	198 (197-202)
	7	137 (136-137)	180 (178-182)	235 (233-238)

Note : Figures in parenthesis show population increase minimum to maximum.

Table 6.3-8 SHARE OF SYNTHETIC FIBER CONSUMPTION IN NEIGHBORING COUNTRIES (1988-92 Average)

	%
Jordan	42.7
Iran	33.7
Syria	**33.1**
Turkey	32.8
Iraq	31.8
Libya	30.9
Egypt	29.1
Afghanistan	20.0
Sudan	7.3
(Oman	59.9)
(Saudi Arabia	58.8)
(Kuwait	51.3)

Source : FAO

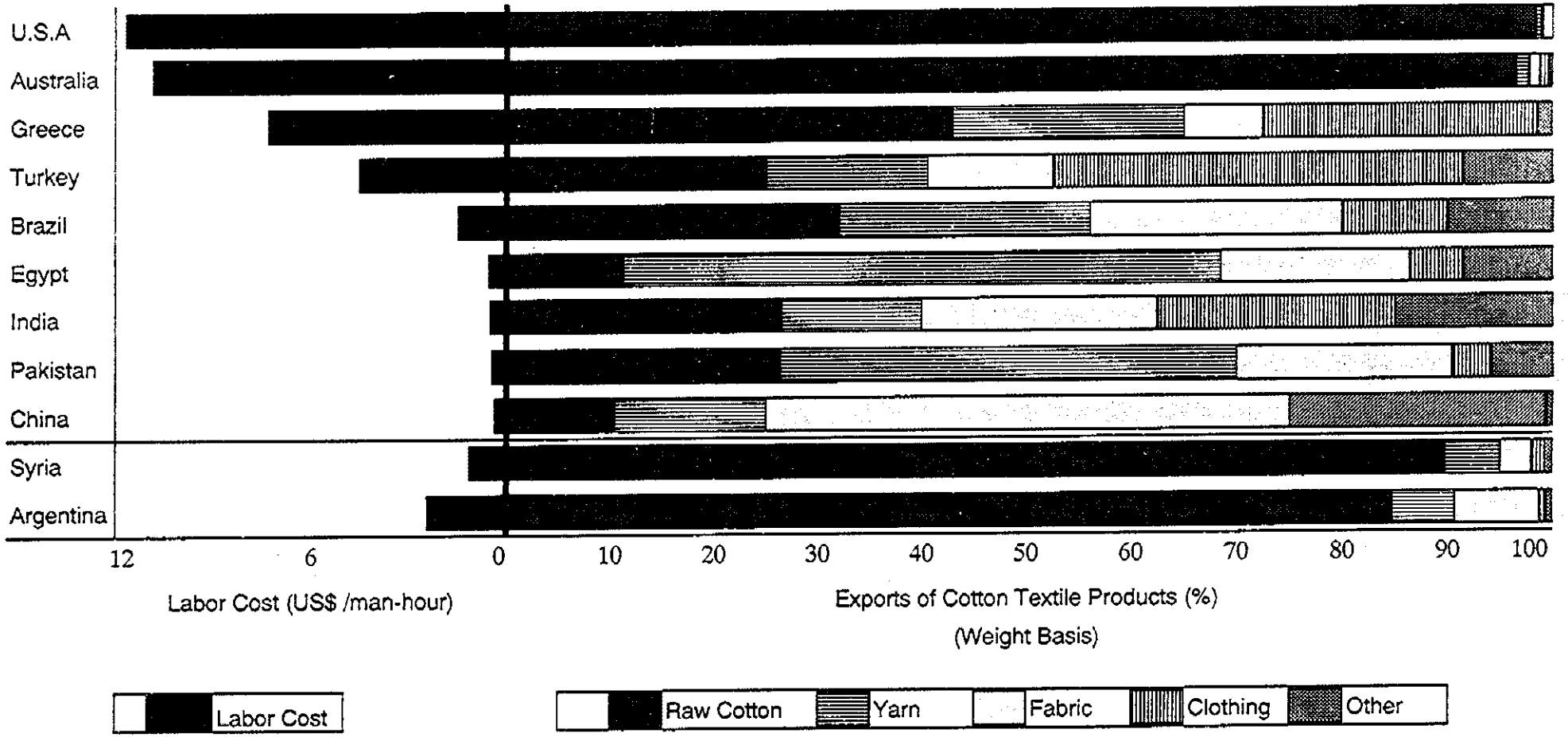
Table 6.3-9 FORECAST OF DOMESTIC CONSUMPTION OF COTTON (SHARE OF SYNTHETIC FIBER CONSUMPTION : 50%)

(1,000 ton)

GDP Growth (%)	(1996)	2000	2005	2010
3	**(57)** (45-68)	**62** (50-74)	**72** (58-86)	**84** (67-100)
5	**(57)** (45-68)	**65** (52-78)	**81** (64-97)	**99** (79-119)
7	**(57)** (45-68)	**69** (55-82)	**90** (72-108)	**118** (94-141)

Note : Figures in parenthesis are for shares of synthetic fiber consumption of 60% to 40%

Figure 6.3-1 EXPORTS OF COTTON TEXTILE PRODUCTS AND LABOR COST OF THE COTTON PRODUCING COUNTRIES



Source; Werner International
FAO

Figure 6.3-2 PER CAPITA FIBER CONSUMPTION OF NEIGHBORING COUNTRIES (1992)

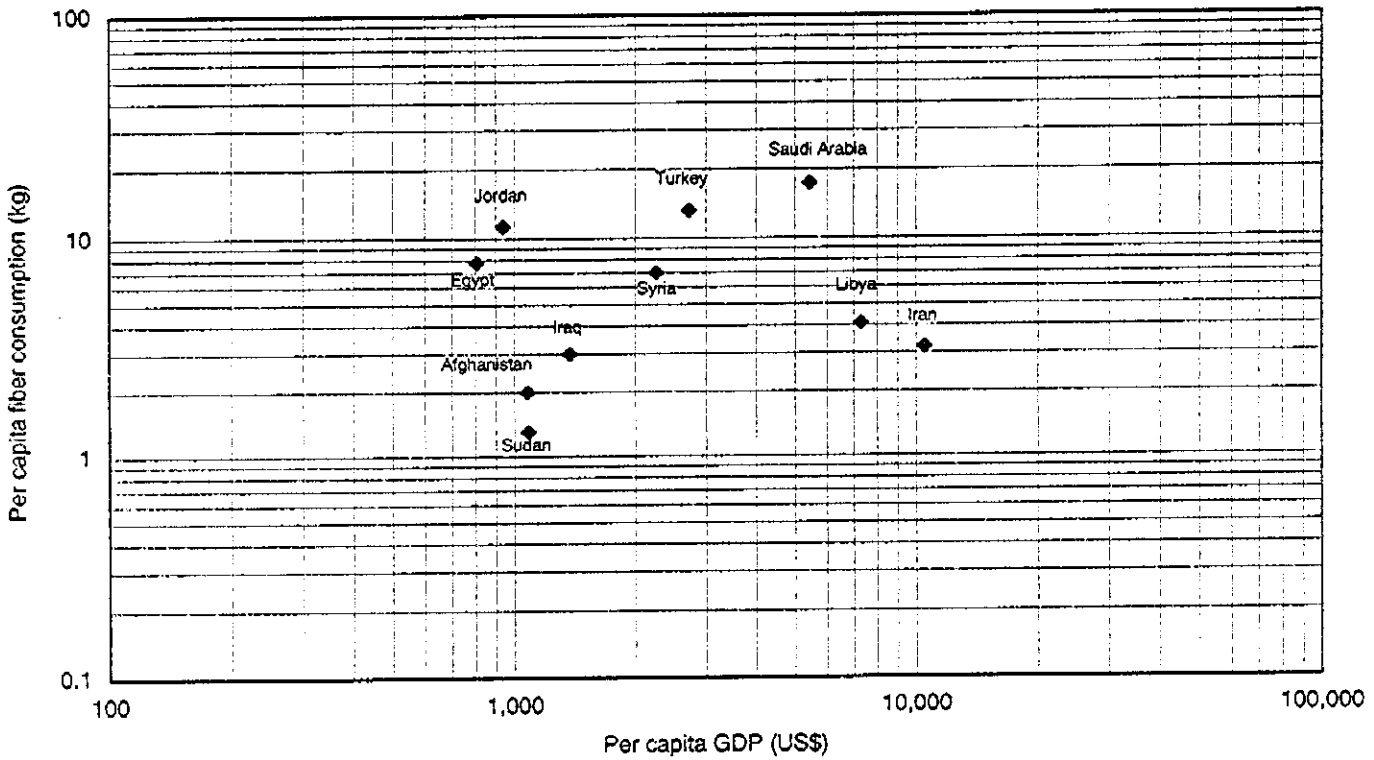
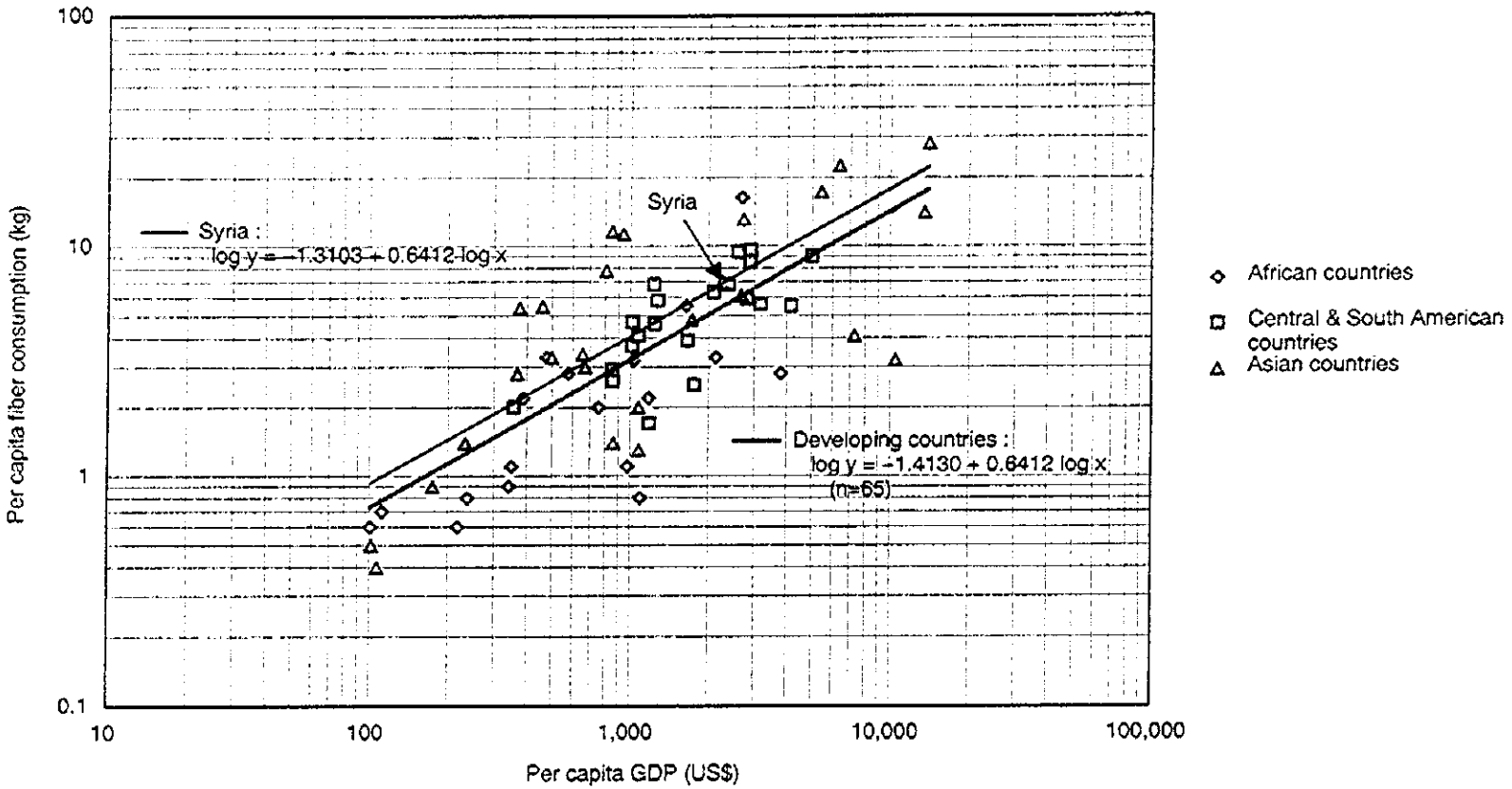


Figure 6.3-3 RELATION BETWEEN PER CAPITA GDP AND PER CAPITA FIBER CONSUMPTION IN THE DEVELOPING COUNTRIES (1992)



7. Development Strategies and Goals

7. Development Strategies and Goals

7.1 Development Strategies

7.1.1 Basic Premises for Formulation of Development Strategies

Comparative advantages and major constraints on the textile and clothing industry in Syria, which are basic premises for formulation of development strategies of the textile industry in Syria are summarized in Table 7.1-1. The details are as follows:

(1) Comparative advantages for Syria

1) Textile raw materials
   The country is a cotton producer as well as exporter.
2) Labor cost
   Low labor cost (the lowest level among countries close to the EU). This is a big advantages in clothing export. (See 6.3 for detail).
3) Market
   (a) It is close to a huge textile and clothing market in Europe, accessible by land transportation. This is the most important factor for clothing production to meet quick response (QR) requirements.
   (b) Syria is not subject to import quota restriction on textile product imposed by the EU and the U.S. Particularly, the EU grants to Syria a special license "Europe-1" to export to the EU without Quota and without import duties.
4) Activated private companies
   (a) The existing textile industry is clearly divided up into state-owned companies which are mainly responsible for upstream operations to produce cotton spun yarns, and private companies which handle midstream and downstream operations. These private businesses are oriented to processing imported synthetic fibers as well as locally produced cotton products, and are much larger in terms of employment and sales (see 4.5 for detail) than their public owned counterparts.
   (b) Some private companies have profitably exported clothing (using Syrian cotton and/or sewing imported materials) to the EU and the U.S.

5) Technology

The textile industry in Syria is a traditional industry with a long history. It has a wealth of technical know-how and occupies a very important position in the country's manufacturing sector.

6) Infrastructure

The Country's infrastructure, including roads, ports and harbors, and electricity is well developed.

7) Political stability, etc.

There is political and macroeconomic stability, with many Syrian merchants living overseas.

(2) Major constraints on the textile and clothing industry in Syria

1) Textile raw materials

(a) Pricing and supply of raw cotton and cotton products are decided by the government.

(b) International competition does not exist in the price and quality of raw cotton and cotton products.

(c) These are the serious obstacles for the development of private companies, and to attract foreign investment.

(d) Synthetic fibers are all imported.

2) Textile industry

(a) Most textile exports are made in raw cotton, and much less in the form of value added products. Thus, the situation discourages the growth of the textile industry which is capable of supplying exportable products (see Chapter 6.3 for detail).

(b) State-owned companies and private companies act separately without coordination, and neither of them seem to have any intention of promoting the textile industry out of national interest.

(c) In particular, state-owned companies, which virtually monopolize the cotton spinning business, seem to be preoccupied with their own interest by exporting high grade yarns produced at their new facilities, instead of supplying them to private companies. They simply fail to give consideration to the development of the entire textile industry, despite the fact that the stable supply of high grade yarns is an essential condition for private companies to produce exportable products.

(d) Most existing textile machinery has deteriorated due to aging. In particular, old spinning machines mean the lack of ability to supply high quality yarns by the upstream sector which is virtually monopolized by state-owned companies, imposing a serious implication on the entire industry.

(e) There are a number of regulations having economic impact, covering a wide range of areas including exports and imports, price, foreign exchange, and the management of state-owned companies. Also, the effective tax rate is very high, and the financial system is undeveloped and has still to adopt business practices as in the West. There is also a lack of resources to support R&D and human resource development.

3) State-owned textile companies

(a) As imports of cotton and cotton products are banned to protect local cotton farms and the textile industries, there is no competition based on product quality.

(b) As the textile industry in the country has long supplied products to the former USSR and Eastern European markets, the mindset of the industry is still set on production volume. Except for a handful of large private and state-owned companies, there is the apparent lack of thinking to give importance to quality, price, delivery schedule, as well as the customer, the market, and marketing.

(c) Employment is one of the objectives of state-owned companies.

(d) At present the state-owned companies have plans for a significant increase in spinning capacity. If spun yarns from these new mills are supplied to private companies in large quantities, the problem of unstable supply of high quality spun yarn will be solved. At the same time, however, they have to find the market for spun yarns with lower quality, which are produced at older spinning mills.

(e) Many state-owned companies are not capable of manufacturing exportable products (due both to equipment and technology), and thus do not have marketing ability to sell their products to the international market.

4) Private textile companies

(a) Private companies are mostly family owned, including large corporations, and managed with own capital.

(b) This imposes limits on growth of the private sector in terms of the number of companies as well as to corporate size.

(c) The country fails to attract foreign investment, and there seem to be numerous obstacles to it, including high taxes, foreign exchange, the undeveloped financial system, sudden changes in the law and legal systems, and the lack of incentives.

5) Political stability

With the persisting Arab-Israel conflict, Syria is still viewed as a risky country in the international community.

(3) General

1) The volume of synthetic fiber imports is larger than the input of local cotton to the textile industry.

2) Private textile companies carry out most of the processing of imported synthetic fibers.

7.1.2 Development Strategy

The basis of the strategy must be ample utilization of low cost labor and produce labor content clothing and textile products, and export them.

7.1.2.1 Export of cotton products, particularly clothing (using locally produced cotton)

(1) Cotton should be exported after being processed to clothing

Cotton should be processed locally into cotton textile products, especially clothing, for export to the EU and the U.S., instead of exporting raw cotton. As discussed in Chapter 6, clothing trade is expanding as a proportion of world textile trade is continuing to increase. Syria should capitalize on the trend and expand clothing exports by leveraging its low labor costs.

(2) Supply of high quality cotton yarns to private companies

To achieve this, the new spinning mills which are being constructed and planned for the export of spun yarns should instead supply high quality yarns to private companies in midstream and downstream processes, enabling them to process and export as value added products, particularly clothing. Then,

industry-wide efforts should be made to promote exports, from downstream to upstream. It is important to realize that exports of spun yarn do not include labor content and require higher packaging and transportation costs/unit value than higher value added products while exportable textile products cannot be produced without high quality yarns. By taking advantage of the fact that state-owned companies play a major role in spinning, high quality yarns (including combed yarns) can be made available to private companies which in turn can increase exports of final products.

(3) Private companies should be encouraged to enter the cotton spinning business

Furthermore, the private sector should be encouraged to enter the spinning business to spur competition with state-owned companies, which will help strengthen international competitiveness in terms of quality, price, and delivery. At present, private companies allowed to enter into spinning operations are limited to those having integrated processes from spinning, knitting, weaving, and dyeing and finishing, in addition to the spinning of blended yarns with synthetic fibers.

(4) Export to the EU and the U.S.

The primary export target is the EU. Some private companies are already successfully exporting knitted products to the region. The EU does not impose import quotas on Syrian products. The second target market is the U.S. to which some private companies already have a track record. The U.S. does not set import quotas against Syrian textile products.

7.1.2.2 Exports of clothing (using imported fabrics and sub-materials)

(1) Export of clothing using imported fabrics(OPT)

It is recommended to seek OPT export opportunities by fully utilizing the country's major advantage in labor cost to sew imported fabrics and sub-materials into clothing for export.

OPT (outward processing trade): "One form of production and trade under which raw materials are exported from a country to another country where they are processed or assembled (value added) into a product by using its

proprietary technology or low labor cost, which is finally re-imported to the original country." (definition of Japan Chemical Fibers Association)

(2) Syria should utilize its advantages of low labor costs and the existence of a major market nearby, i.e. the EU

The current state and outlook for exporting and importing countries in world clothing trade are discussed in detail in Chapter 6. The general trend is, importing countries (the EU, the U.S., and Japan) increase their imports, while exporting countries (China and other Asian countries) boost exports. This clearly reflects the fact that labor costs account for major portions of clothing production. Labor costs account for 35-50% for clothing and 15-20% for fabrics. As Syria offers relatively low labor costs, it is in a favorable clothing export position, together with the presence of a major market nearby, the EU. Syria should realize clearly that Syria satisfies these favorable conditions.

(3) Export to the EU, the U.S., and Syria's neighboring countries

The target export market is the EU, the U.S. and the neighboring countries. Some of private companies are successfully exporting products which are sewed by using imported fabrics and accessories to the EU, the U.S. and the neighboring countries, together with domestic sales. Some of the private companies are almost totally exporting their products and not selling to the domestic market. Expansion of these activities of private companies are very important. The EU, and the U.S. do not set import quotas on Syrian products and do not restrict imports of textile products from the country.

7.1.2.3 Efficient use of existing textile processing facilities

(1) Efficient use of existing state-owned spinning facilities

Syria has textile processing equipment with capacity equivalent to 100,000 tons/year.

Although many of these have deteriorated, they can be utilized more efficiently for higher productivity and quality.

The public sector is undergoing a large scale expansion of cotton spinning, after completion, good quality yarn will be amply available to the market; but

how utilization of the old existing spinning factories will take place thereafter will become an important issue.

(2) Reallocation of existing production facilities of state-owned companies

Existing textile machinery of state-owned companies (see ANNEX-9) poses various problems.

Suppose a company uses new weaving machines side by side with old spinning and dyeing machines, and another company uses new spinning and dyeing machines while their weaving machines are old. In both cases, the new machines cannot maximize their performance as they are operated with the older machines, which are unable to manufacture products of higher quality. Moreover, the situation adversely affects the morale of the workers.

In this case, the best solution is to develop a reallocation plan and an integrated facility upgrading plan for the two companies to ensure productive investment, rather than allowing them to act separately. Similarly, two companies which have both spinning and weaving lines may be encouraged specialized in either process.

Another example is a company which has spinning, weaving, and dyeing machines, where the spinning machines are old. In this case, the company may wish to purchase spun yarns from outside and focus on weaving and dyeing, which may prove to be more economical than investing in new spinning machines.

(3) Export of textile products produced in the existing production facilities of state-owned companies

Production of textile products which can be exported by using low quality yarns from existing textile companies must be investigated.

Actual examples are to produce coarse yarns and then produce thick fabrics; the required quality level of these products is comparatively low compared to thin fabrics.

7.1.2.4 Import substitution

(1) To shift imports from spun yarns blended with synthetic fibers to synthetic SFs

Syria's textile imports are dominated by synthetic fibers. It is not feasible to replace imported synthetic fibers with locally produced cotton because of the difference in functional requirements between them. Instead, the basic strategy should focus on efforts to shift imports from spun yarns blended with synthetic fibers to synthetic SFs for spinning in the country. This serves as import substitution in the form of expanding operations to the upstream sector.

(2) Supply of fine count cotton spun yarns (combed yarns) to private companies

Synthetic fibers account for around 54% of textile and clothing consumption in Syria, considerably higher than the world average of 40%. Although the specific reason for this is unknown, consumers may prefer imported synthetic fiber products to domestic cotton products on account of better quality. Further, as the production volume of Syrian cotton, which is suitable for producing fine count yarns is limited, imports of textile products made of fine count yarns will occur. If this is the case, local production of cotton products of good quality and at low cost could lead to import substitution.

7.1.2.5 Utilization of domestic wool and silk

(1) Improvement in the domestic wool quality by the improvement in the breed of sheep and an increase in the blending ratio of Syrian wool with imported wool for carpet manufacture should be investigated.

(2) Export of silk must be investigated by the introduction of a collective production system of the cocoons, which enables the reduction of production costs and improvement in quality of the cocoons and silk yarns.

Table 7.1-1 BASIC PREMISES IN FORMULATION OF DEVELOPMENT STRATEGIES OF TEXTILE INDUSTRY IN SYRIA

	Comparative advantage	Major constraints
Raw materials	- Cotton producer as well as exporter	- Pricing and supply of cotton are decided by the government. - International competition does not exist in price and quality of cotton. - These are the serious obstacles for the development of private companies, and to attract foreign investment. - Synthetic fibers are all imported.
Labor cost	- Low labor cost	
Market	- Close to the EU, a huge textile market - No quota restrictions to export to the EU and the U.S.	
Textile industry		- Exports are made in raw cotton, and much less in value added products. - State-owned companies and private companies act separately without coordination. - State-owned companies export high grade yarns instead of supplying them to private companies. - Most existing machinery has deteriorated due to aging. - Lack of resources to support R&D and human resource development.
Private textile companies (mainly in midstream and downstream)	- Activated private companies are mainly responsible for midstream/downstream operations and are much larger in employment and sales than state-owned companies - Some private companies have profitably exported clothing(using Syrian cotton and/or sewing imported materials) to the EU and the U.S.	- Mostly family owned and are managed with own capital. - Limits on growth in the number of companies and in corporate size. - No foreign investment.(high taxes, foreign exchange, undeveloped financial system, sudden changes in law and legal systems, and lack of incentives)
State-owned textile companies (mainly in upstream: spinning)		- No competition based on product quality due to an import ban of cotton products to protect state-owned companies. - Lack of consideration given to the importance of quality and customers. - Employment is one of the objectives of state-owned companies. - Have to find markets for spun yarns with lower quality, which are produced in older spinning mills. - Many companies are not capable of manufacturing exportable products.
Technology	- Traditional industry with a long history and occupies a very important position in the manufacturing sector.	
Infrastructure	- Developed to at reasonable extent.	
Political stability	- Stable	- Viewed as a risky country in the international community.

7.2 Development Goals

7.2.1 Export of Knitted Products Using Syrian Cotton

Major competitors include China, Turkey, Bangladesh. While it is desirable for Syria to set its development goal at the highest practicable level, the goal should preferably be set at several stages, in consideration to a number of constraints facing the industry, such as the timing of stable supply of good quality cotton spun yarn, the period necessary for the expansion of midstream and downstream processes in the private textile companies, the apparent lack of quality concern in the industry, and the deteriorating textile processing equipment. The development goals will be set in terms of quality, price, and delivery (timing).

(1) Quality level

Aleppo 33/1, the highest grade variety of Syrian cotton, should be used as a raw material, and the cotton spun yarns produced by the new spinning mills should be used for producing the knitted products to be exported.
The target quality level of clothing is that offered by products made in China and Bangladesh.

(2) Price level

It is very difficult, if not impossible, to foster export-oriented manufacturers or expand production of existing manufacturers over a short period of time, as it involves long-term efforts to improve workers' skills. Instead of setting a high goal from the beginning, the initial goal should aim at low-priced products which can compete with those from China and Pakistan in the EU market.

On the other hand, companies which have already made a success of exporting to the EU and the U.S. should work at technical upgrading and strengthening of their competitiveness to provide products at higher price levels.

(3) Steps toward expansion

Major constrains on expansion are the availability of spun yarns in the upstream sector and capabilities of processing the yarns in midstream and downstream sectors, namely knitting, dyeing and finishing, and sewing. First of all, the new spinning mill in Lattakia has already come on stream and is now producing spun yarns of good quality. The new mill in Idleb is scheduled to start operation soon. So long as these new mills are operated smoothly, the supply of spun yarns of export quality should easily be assured.

On the other hand, it is estimated that there will be some available export capacity of knitting, dyeing/finishing, and sewing processes, because at present these capacities are not fully utilized.

7.2.2 Export of Clothing (Using Imported Fabrics and Accessories)

Major competitors include Turkey, the former Eastern Europe, Tunisia, Morocco, and India.

All of the countries which have rapidly expanded exports of clothing, including Bangladesh, Vietnam, and Turkey, have accomplished their results by enticing foreign capital. The sewing business does not use local materials and requires only manpower and sewing equipment. As a result, investment is smaller than for textile production such as spinning and weaving, and production can start within a very short period of time. The ability to turn a large number of people into a highly productivity work force within a short period of time and as small investment cost is the major reason why the above countries have rapidly boosted exports of clothing.

Thus, once the government provides a good investment climate for foreign capital, the industry has potential to achieve rapid growth. In fact, exports of clothing can be carried out much more easily than that of clothing which uses Syrian cotton.

Finally, exports of clothing can serve as a success model for the export of knitted products using local cotton, thus allowing smooth entry.

(1) Quality level

Since raw materials and accessories will all be imported, quality is solely governed by sewing techniques. While there are many competitors, the Syrian industry will be able to achieve a high quality level as evidenced from the success of various private companies which already export to the EU and the U.S. The major challenge is how quickly a large number of companies will be able to take advantage of wealth of know-how built by the pioneering companies over a decade or two, including quality awareness, quality control techniques, quick response practice, employee training to improve sewing techniques, and good labor relations. In this connection, the introduction of foreign capital and technology in the form of licensing or alliances holds the key, as seen in many other countries which have made successes in clothing exports.

(2) Price level

The cost of clothing is determined by unit labor cost and work efficiency. While the former is not a problem, the improvement of work efficiency requires education and training. Naturally, this is done by many countries and can easily be accomplished in Syria if suitable foreign partners are found.

The fact that some private companies have established themselves in the export of clothing proves the potential competitiveness of the Syrian industry.

(3) Steps toward expansion

Factors limiting expansion of the industry are discussed in 4.4.3.

7.2.3 Efficient Use of Existing Processing Facilities

This is a project to produce textile products which can be exported by using low quality yarns from existing textile companies. Actual examples are to produce thick fabrics such as jeans, working uniforms, and household textile products such as sheets and curtains.

(1) Quality level

All the products does not require high quality level. As the manufacturing of working wears involve labor cost as added value, the exportable quality should be the target in future.

(2) Price level

The target price level should be low level.

(3) Steps towards expansion

At the first step of the development, the domestic market should be the target. After establishing and confirming the technology level, exports market should be the target.

7.2.4 Production of Synthetic Fiber Blended Yarns (Import Substitution)

Currently imported yarns blended with synthetic fibers will be replaced with synthetic SFs to localize production of blended yarns. The products will be used for local consumption, rather than export.

(1) Quality level

The target quality level should be set at the level suitable for domestic consumption. Export quality will not be considered for some time as it is not viable to compete with Asian products.

(2) Price level

The target price level should be lower than that of imported blended yarns.

(3) Steps towards expansion

The finest blended yarn which can be produced by utilizing existing facilities will be Ne 40, due to the restrictive factors of the existing facilities. To substitute imported products by domestic production, producing Ne 45 requires the constructing of a new integrated plant consisting of spinning, weaving and dyeing and finishing.

8. Proposals for Textile Industry Promotion

8. Proposals for Textile Industry Promotion

Direction of Syrian textile industrial development lies in export promotion of clothing along the international framework and trend of textiles and clothing trade. The private sector is playing the main role in this field. The details of the projects, which are considered appropriate to be implemented, are described in Chapter 9,10 and 11. The outline of the projects is summarized in this chapter. Each of them has been discussed in the course of the 2nd field survey with the Syrian counterpart team and have been selected from a long list of possible projects.

This chapter presents the proposal package for promotion of the textile industry, consisting of the upgrading of promotion policies, projects at company level, and the improvement of support functions. Figure 8-1 summarizes its general outline, where the projects at company level are listed with accompanying promotion policies and support functions which need to be strengthened to achieve the objective. The details of the projects at company level, including export and import plans, the division of responsibility between state and private companies, are summarized in Figure 8.3-1.

8.1 Improvement of Promotion Policies

The following proposals have the objective of contributing to further advancement of the nation by achieving a more efficient market economy, flexible management of public companies, and proper administration over private companies. Institutional improvements recommended here also involve other sectors than the textile industry. The following are described in detail in Chapter 9.

(1) Schedule for Liberalization of Foreign Trade and Investment

1) Import restriction

The Arab Countries Free Trade Area (ACFTA) starts to function at the beginning of 1998 and has the purpose of lifting all import controls and reducing customs duties to zero by 2007. Syria should announce its schedule of trade liberalization in the near future, in coordination with ACFTA plans.

2) Management of foreign currencies and foreign exchange rates

Foreign currencies are held by governmental bodies, the Commercial Bank and private exporters and are exchanged at rates that are determined according to the

status of the parties involved. Syria should integrate and transfer management of the exchange process to the Central Bank so that all transactions can be done at a single rate.

3) Market participation of private business in the public monopoly sector

Public monopolies still remain in some sectors. Syria should consider opening these sectors to the private sector.

4) Promotion of foreign direct investment

Law No.10 (1991) was enacted to promote foreign direct investment but has not yielded fruitful results. Syria should remove, step by step, the obstacles preventing the law from accomplishing its purpose.

(2) Relaxation of Price Controls

1) Price determination based on demand-supply relations rather than cost plus profit

Syrian pricing system has been based on the cost-plus-marginal-profit principle, but this is not realistic. Syria should change this practice for more realistic one.

2) Elimination of price reporting system for less important items

A price reporting system is a meaningless burden for producers except in case of monopoly or oligopoly. Syria should stop imposing reporting requirements for less important goods.

3) Reduction of items for government decision

The government itself decides on many prices or prices changes. Syria should consider to reduce the number of these items.

(3) Modernization of the Banking System

1) Approval of foreign bank branches

The Syrian banking system is underdeveloped. The EU has helped Syria to start a modernization program but it will take many years to complete. Syria should authorize foreign banks to set up branches.

2) Liberalization of interest rates

Interest rates have been fixed for many years by regulation. Syria should liberalize the interest rate scheme.

3) Two-step loan for investment finance

Private companies always have a money shortage problem. If interest rates are liberalized, it will become very difficult to finance investment. If budget provisions for the funding of public companies are not sufficient, the latter has to seek other financial sources. Syria should consider use of two - step loans.

(4) Flexibility of Employment System for Public Companies

1) Re-assignment, internal promotion and dismissal of employees by the director-general

Public companies have to comply with Unified Labor Law (1985), which requires them to use bureaucratic procedures for employment matters. Syria should give autonomy in employment affairs to the director-general of each company.

2) Simplified appointment procedure

Nomination of high ranked directors in public companies is regulated by bureaucratic procedures. Syria should simplify these practices.

3) Frequent review of job descriptions

In public companies the directorate and its job descriptions have been fixed so many years. Syria should change the regulations so that job descriptions can be changed when needed.

4) New body to review wages in the public sector

The wages system of public companies does not conform to the realities of the current labor market. Syria should set up a new body to review the wage differences for the similar jobs between private companies and public ones, and make recommendations on necessary improvements.

5) Re-regulation for public companies to free them from restraints under the current Unified Labor Law

Public companies need more flexibility in employment practices if they are to survive. Syria should provide a new legal framework for them, freeing them from the requirements of the current Unified Labor Law.

(5) Flexibility on Budget Plan Implementation for Public Companies

1) Bidding, contracts, travel abroad

Procurement, contracts, travel abroad, etc. of a public company and its officials are regulated by the state budget rules. This is not realistic. Syria should relax the rule for public companies.

2) Division of the state budget into a general budget and a special budget for public companies

The state budget covers public companies. This is one of the most serious constraints they face. Syria should separate the state budget into two parts, that is for administration and for public companies.

3) Correction of the imbalance in foreign exchange between state-owned and private companies

The government strictly regulates foreign currencies under Decree No. 24. The privileged exchange rate which is applied to public sector companies for the importation of machinery will expire in 1998, after which the advantage enjoyed by the public sector over the private sector will be reduced. Furthermore, the disadvantage of public sector exporters who have to sell any surplus foreign currency to the government at a lower exchange rate than private exporters, and the disadvantage of non-exporting public sector companies in buying foreign currency than non-exporting private sector companies, will remain.

Syria should improve the management of foreign currencies to create a better balance between public and private companies.

(6) Orderly Activity of Private Businesses

1) Registration and periodical survey of business activities

There are many cases when private companies do not register. The government therefore cannot monitor their activities well. Syria should encourage private businesses to register with the Ministry of Industry and conduct a periodic sample survey on their activities.

2) Authorized audit office for financial report

The accounting system is established, but in actuality the practices are very poor. Syria should pass legislation authorizing creation of audit offices that will check the financial reports for public purpose.

3) Reduction of the corporation tax rate

The corporation tax rate, by being very high for larger companies, has the adverse effects of discouraging registration, honest reporting, or driving part of the private sector into the underground economy. Syria should consider reducing the corporation tax rate.

4) Setting up of private associations by sector and by region

The government has no administrative network for private companies. Chambers of Commerce and Chambers of Industry are functioning, but are not sufficient. Syria should encourage the private sector to set up voluntary business associations by sector and by region.

(7) Administration

1) Integration of General Organizations into Ministries

The public companies will be more independent in the future. General Organizations will lose their original roles. The government is urged to improve sectoral policies including those related to the private sector. Syria should integrate the current General Organizations with the related Ministries.

2) Statistics and Laws

Statistics are provided only on an annual basis, are poor in coverage of the private sector, and include many inconsistencies. It is difficult for businessmen to get copies of Laws, Decrees, Resolutions. Syria should improve statistics and set up a legal information center.

3) Release of more information to the people on economic policy issues

Syria provides much information to the people, but economic news is rare. Syria should provide more information on economic news and policy issues.

Figure 8-1 SUMMARY OF PROPOSED PROJECTS AND SUGGESTIONS

State-Owned Textile Companies

8.1-(4) Flexibility of Employment System for Public Companies
- 8.1-(4)-1) Re-assignment, internal promotion and dismissal of employees by the director-general
- 8.1-(4)-2) Simplified appointment procedure
- 8.1-(4)-3) Frequent review of job descriptions
- 8.1-(4)-4) New body to review wages in the public sector
- 8.1-(4)-5) Re-regulation for public companies to free them from restraints under the current Unified Labor Law

8.1-(5) Flexibility on Budget Plan Implementation for Public Companies
- 8.1-(5)-1) Bidding, contracts, travel abroad
- 8.1-(5)-2) Division of the state budget into a general budget and a special budget for public companies
- 8.1-(5)-3) Correction of imbalance in foreign exchange between state-owned and private companies
- 8.4-(2)-5) GOTT Laboratory

8.7 Productivity Improvement

Export/Import

8.1-(1) Schedule for Liberalization of Foreign Trade and Investment
- 8.1-(1)-1) Liberalization of Foreign Trade
- 8.1-(1)-2) Management of foreign currencies and unification of exchange rates

8.2 Export Promotion Measures
- 8.2-1) Tax exemption on export income
- 8.2-2) Export finance
- 8.2-3) Providing market information
- 8.2-4) Export cooperative-Textile Exporters' Association
- 8.2-5) Export Processing Zone

Private Textile Companies

8.1-(1) Schedule for Liberalization of Foreign Trade and Investment
- 8.1-(1)-3) Market participation of private business in the public monopoly sector
- 8.1-(1)-4) Promotion of foreign direct investment

8.1-(6) Orderly Activity of Private Business
- 8.1-(6)-1) Registration and periodical survey of business activities
- 8.1-(6)-2) Authorized audit office for financial report
- 8.1-(6)-3) Reduction of the corporation tax rate
- 8.1-(6)-4) Institution building of private associations by sector and by region

	Export/Import	*State-Owned Textile Companies*	*Private Textile Companies*
Cotton, Wool, Silk	**Projects**		
Staple Fibers	*8.3.1 Export of Clothing made from Domestic Cotton*		
Yarns	*8.3.2 Utilization of Low Quality Cotton Spun Yarn* (1) Workers Uniforms (2) Jeans (3) Household Textile		
Fabrics	*8.3.3 Export of Clothing Using Imported Fabrics*		
Dyeing & Finishing	*8.3.4 Polyester/Cotton Blended Fabrics*		
	8.3.5 Construction of HVI Laboratories		
	8.3.6 Maintaining Large-scale Spinning Factories		
Clothing	*8.3.7 Wool : Future Vision*		
	8.3.8 Silk : Mini-Plan		

Supporting Services

8.4 Suggestion for Improving Supporting Services

8.4-(1) Human Resources Development
- 8.4-(1)-1) Installation of equipment in Damascus Intermediate Institute
- 8.4-(1)-2) Establishment of textile related faculty in Homs University

8.4-(2) Quality Control/Productivity Improvement
- 8.4-(2)-1) Installation of testing equipment of textile products in FTC/TRC
- 8.4-(2)-2) Centralized organization for publicity and guidance of quality control practice
- 8.4-(2)-3) Packaging Development Center
- 8.4-(2)-4) Reinforcement of equipment and staff of SASMO
- 8.4-(2)-6) Textile and Clothing Development Centers

Promotion Policies

8.1-(2) Relaxation of Price Controls
- 8.1-(2)-1) Price determination based on demand-supply relations rather than cost plus profit
- 8.1-(2)-2) Elimination of reporting system for less important items
- 8.1-(2)-3) Reduction of items for government decision

8.1-(3) Modernization of the Banking System
- 8.1-(3)-1) Approval of foreign bank branches
- 8.1-(3)-2) Liberalization of interest rates
- 8.1-(3)-3) Two-step loan for investment finance

8.1-(7) Administration
- 8.1-(7)-1) Integration of General Organizations into Ministries
- 8.1-(7)-2) Statistics and Laws
- 8.1-(7)-3) Release of more information to the people on economic policy issues

8.2 Export Promotion Measures

The Table 8.2-1 shows the present availability of supporting services provided by the Syrian governmental and other organizations. In the table, basic export promotion measures usually required are shown under the group title "Export Promotion". The table shows that many measures are unsatisfactory or non-existent, and required in Syria. The Team chose several projects and discussed with the Syrian authorities. As a result, following suggestions and projects are selected:

1) Tax exemption on export income

This would remove some of contradicting nature the government policy in export promotion, and show government intention to promote export clearly to all Syrian enterprises, thus increasing the credibility of the cohesiveness of the government policy.

2) Export finance

The Team suggests that export finance system be introduced. In the process of export business, there are many occasions when exporters need financing; preparation for production, purchase of raw materials, sight given to buyers, etc.

3) Providing market information

The Chambers of Commerce and Industry are to set up a department or subsidiary organization to provide market information to Syrian textile companies.

4) Export cooperative - Textile Exporters' Association

The export cooperative involving public and private companies be set up under the Chambers of Commerce and Industry. This organization could serve as strong and effective communication channel between the government and the industry.

5) Export Processing Zone

Export processing zones with competitive utilities and facilities with incentives such as lower utility prices, better communication facilities, a single-window service etc. are to be established for promotion of export and inducement of foreign capital investment.

Table 8.2-1 AVAILABILITY OF SUPPORTING SERVICES

	Export Promotion					Human Resources Development				Technical Assistance								
	Export Tax Exemption	Export Finance	Market Information	Export Cooperative	Export Processing Zone	Seminar	Vocational Training	Intermediate Level Training	University Faculty	Extension Services	Research and Development	Inspection and Testing	Calibration	Certification	Standard	Packaging	Quality Control ISO9000	Technical Information
Universities									x									
Intermediate Institutes								P										
Vocational Training Centers							P											
SASMO						0							P		P		X	P
ITRC						0					0	0	P	P		X	X	P
FTC														P				
GOTI Laboratory												P		X				
Cotton Bureau											0			0				
Chamber of Commerce			P	X														
Chamber of Industry						P												P
Textile and Clothing Center						P				P								
JICA Experts												P			P		P	P
UNDP				P		P				P							P	P
SEBC			P	P											P		P	P
Min. of Finance	X																	
BANKS		X																
Min. of Industry				X														
Free Trade Zones					P													

Notes: 0 means that the required service is available.

P means that the required service is partly available, and improvement of facilities etc. is required.

X means that the required service is not available, although the institute/organization is usually expected to render the service.

8.3 New Project at Company Level

Table 8.3-1 shows the relationship between the proposed projects and the development strategies discussed in Chapter 7. The projects are summarized in Figure 8.3-1 by identifying raw materials and processes to be used, and proposed implementation bodies. Note that the figure was prepared on the basis of Figures 4.1-1 and 4.1-8, and also lists production capacities of the Syrian textile industry by process and ownership (state/private company).

8.3.1 Export of Clothing Made from Domestic Cotton

As is described in more detail in Chapter 7.1.2, cotton should be processed locally to cotton products, especially clothing, for export to industrialized countries, instead of just exporting raw cotton.

To achieve this, the new spinning mills which have been constructed and those planned for the export of spun yarns should also supply high quality yarns to local private companies in midstream and downstream processes, enabling them to process and export value added products, particularly clothing. Then, industry-wide efforts should be made to promote exports, from downstream to upstream. An ample supply of high quality cotton spun yarn from the public sector to the private sector is essential for the success of this Project.

8.3.2 Projects to Produce Coarse Count Yarns and Heavy/Thick Fabrics by Utilizing Low Quality Syrian Cotton Spun Yarn.

The quality of spun yarns in the existing older state-owned spinning companies is not so good except in a few cases and their spinning machinery is almost worn out. From this viewpoint it would be more favorable to produce not fine count yarns but yarns of coarse count, those which are less demanding in terms of quality and production efficiency.

Three Projects are proposed as follows:

(1) Workers uniforms for export based on low quality spun yarn produced in existing textile companies

The percentage of the labor cost for sewing in the cost of production of workers uniforms is high, particularly for uniforms with as multi-functional requiring many sewing operations. From the viewpoint of Syrian competitiveness in labor cost and the experience in producing army uniforms, the production of 100% cotton workers uniforms for export is recommended.

1) Target market

At a first step, the market should be the domestic market, thereafter, the exports to the EU and the U.S. should be the target.

To conduct a national campaign which promotes the use of workers uniforms in the Syrian companies, particularly in the state-owned companies, is recommended.

2) Production facilities

The production facilities necessary for this project are already installed in the state-owned integrated spinning/weaving/dyeing and finishing companies and ready-made garment companies. However, improvement in production facilities and technologies will be necessary to respond to export market requirement.

3) Sewing facilities required, production capacity and raw material consumption(an example)

Products	:a set of jacket and slacks
Raw materials	:Cotton 100% woven fabrics (width 1.5 m, 153 g/m^2)
Out put	:2,000 pieces/day, or 580,000 pieces/year
	(4 pieces/day/machine)
Sewing machines	:500 machines, press iron. etc.
Workers	:600
Fabric consumption	:360 tons /year
	(1.5 m/jacket, 1.2 m/slacks, 2.7 m/set, 620 g/set)
Investment	:Machinery approx. 4 million US$

(2) Production of denim fabrics for jeans based on low quality spun yarn produced in existing state-owned textile companies

Denim is a fabric made from coarse spun yarns and is a heavy construction fabric. Private companies already in jeans fabric production: eg. "Sabbagh and Sharabati" is producing high-grade fabrics in modern integrated plants on a large scale for the high-priced market.

In Syria, jeans are quite popular among the nationals. Therefore, in addition to the high-priced market, a low-grade and low-priced market does exists.

A project for the production of jeans fabrics of lower quality for the low-priced market by utilizing the facilities of existing state-owned textile companies as follows.

1) Raw material:

Cotton OES yarn Ne 6. Al Shahba Spinning and Weaving, and others are assumed to be the suppliers of yarn.

2) Required yarn quantity, and production:

Yarn: 9,800 tons/year, production: 12,000,000 m/year

3) Estimated investment cost:

9.2 million US. dollars (Main machinery, auxiliary machinery and spare parts)

(3) Production of household textiles based on low quality spun yarn produced in existing state-owned textile companies

The project aims at the production of wide fabric for home use, such as bed sheets, covers, curtains, etc. by using coarse count spun yarns.

However, as the percentage of the labor cost in the total production cost of household textile products is relatively low, competitiveness in the international market will be limited. The market will, therefore, be limited to the Syrian domestic one.

1) Raw material:

Gray cloth woven from carded yarn of warp and weft count Ne 14 and with the number of ends 56 x 55/inch. Woven width : 105 inch (2,667 mm).

2) Required yarn quantity:

4,600 tons/year

3) Product:

Cotton 100% fabric of home use products (bleached 50%, printed 50%), Finished width : 2,530 mm, Weight 1,530 g/linear m (575 g/m²)

4) Production plan and required equipment:

10,000 m/day, which can be produced by one shift operation running 4 jiggers.

5) Estimated investment cost :

About 8 million US$.

8.3.3 Export of Clothing Using Imported Fabrics and Accessories

It is recommended to seek OPT (Outward Processing Trade, refer to 7.1.2.2) export opportunities by fully utilizing the country's major advantage in low labor cost to sew imported fabrics and accessories into clothing for export: this type of export is thriving in Asian countries as the export of their labor.

The target export markets are the EU and the USA. The EU and the USA do not set import quota on Syrian products and do not restrict imports of textile products from the country.

8.3.4 Construction of an Integrated Factory of Polyester/Cotton Blended Spinning, Weaving, and Dyeing and Finishing

The Team proposes to construct a new integrated plant, not utilizing existing plant, for polyester/cotton blended: spinning, weaving and, dyeing and finishing plant.

The new plant will produce fine count yarns of Ne 45; of olyester/cotton = 50/50% existing spinning plant, which can produce Ne 32 100% cotton yarn, may produce polyester/cotton blended yarn of maximum Ne 40 due to the limited functions of the existing machinery. The dyeing of polyester fiber cannot be carried out in the same way as cotton dyeing.

A detailed explanation of this project is as follows:

(1) Purpose: Import substitution of foreign cotton textile products by Syrian cotton, and the substitution of polyester/cotton blended yarns and fabric imports by polyester staple fiber imports.

(2) The private sector will not easily enter into this business, because high investment is necessary for constructing integrated plant.

(3) Products: Polyester/cotton = 50/50% yarns and fabrics for shirting.
(If polyester/cotton = 65/35% finer yarn can be produced.)

(4) Production machinery and production.
Spinning: 57,344 S/P, 4,600 t/y
Weaving: 235 looms, 5,000 t/y
(Blended fabric 3,000 t/y, Cotton fabric 2,000 t/y)
Dyeing: Fabric dyeing and yarn dyeing.

(5) Total investment will be roughly 100 million US$.

8.3.5 Construction of Cotton Inspection Laboratories-Introduction of HVI (High Volume Instrument)

8.3.5.1 Significance of Introduction of HVI

The introduction of HVI has automated and unified the conventional fiber bundle testing, permitting a tremendous increase in testing capacity and sample throughput. Its data is objective and accurate, and independent of personnel factors and is reliably used by cotton growers, ginning factories, exporters, classifying stations and spinning mills.

8.3.5.2 Suggested Projects

To construct three cotton laboratories equipped with 2 HVI sets each in Aleppo, Hama and Hassakeh respectively and provide a service for Cotton Bureaus, ginning factories, and cotton growing farmers.

8.3.6 Maintaining Stable Operation of the Newly Constructed Large-Scale Spinning Factories

A large-scale spinning factory was recently constructed in Lattakia, and further large-scale spinning factories are being planned in Syria. However, the production of many types of product, in small lots, by large-scale factories, which the market now demands, can result in a deterioration of productivity and difficulty in maintaining stable operations.

With reference to maintaining the stable operation of the large-scale spinning factory in Lattakia, and to the planning of future large-scale spinning factories in Syria, the current attitude regarding the construction of such large-scale factories worldwide is summarized as follows:

(1) Example of spinning mill scale in the world

1) The Indonesian textile industry has about 8 million spindles. In Indonesia, there are only 3 factories equipped with more than 100,000 spindles as cited above, even if you take into consideration the remaining two hundred or so. Two of the three factories are examples of successful cases, in which management is carried out thoroughly employing more than ten expatriate engineers from Taiwan, Korea, Hong Kong, India and Japan. The remaining factory is suffering from problems arising from its size, in terms of management and cost, and has been unsuccessful. The two successful plants were constructed more than ten years ago as complexes of many mills in the same company on the same site.
2) There are large-scale spinning factories of more than 100,000 spindles in Egypt, but they were divided into several mills/buildings and are run individually.
3) In India, there are enterprises possessing several spinning mills whose total installed spindles surpass 100 thousand. However, no single factory exists of this size.

(2) Conclusion

In conclusion, newly constructed factories with more than 100,000 spindles are now very rare in the world. In Syria, however, there are recently constructed new spinning factories with more than 100,000 spindles, and others are planned, which is exceptional.

The reason why spinning mills with more than 100,000 spindles are not now generally constructed is the difficulty in responding to the market need for many types of products in small production lots. In the era of fiber shortages in the former Soviet Union, high production of a few types of products was required, and for this large sized plants were constructed. Recently, however, customers needs have diversified and the economic production of many types of products is required; therefore, a production system which can respond quickly to customers' needs is required (Quick Response).

Large-scale spinning factories are not now generally constructed as they are not effective in producing many types of product, in small lots, at required modern productivity levels. The Team would, therefore, propose to divide the large-scale plant in Lattakia into two mills; a combed yarn mill and a carded yarn mill, and operate them independently, and for the mills to engage as many experts as possible for a long period of time so that they can be operated extremely efficiently.

Further, the Team would propose that the future construction of large-scale spinning factories be planned to meet the market needs of producing many types of product in small lots.

8.3.7 Wool "Future Vision"

A Future Vision for wool carpet production by a gradual increase in the blending ratio of Syrian wool is illustrated (Refer to Figure 10.7-1). This is based on the successful improvement in Syrian sheep breeding, which is being carried out in the research and development center of the public sector.

To achieve the goal of the Future Vision, improvement in sheep breeding is the most important factor. The objectives of the research and development center are improvements in meat and milk yields of the sheep along with the expected enhancement in wool quality. The improvement in wool quality attained will not be enough: in addition to this, a research and development for the improvement of wool such as breeding of sheep suitable for carpet production and cross breeding of sheep, must be carried out.

In addition to the above, improvements in the classification of raw wool and in spinning process controls and machinery are required. Also in modernizing the carpet factory it is planned to introduce computerized Jacquard looms to increase the number of new pattern designs. (as to the details of the modernization of spinning and carpet manufacturing, refer to ANNEX-4).

8.3.8 Silk "Mini-Plan"

For details please refer to ANNEX-6 "Mini-Plan" for Silk Production.
In order to establish the basis of high quality exportable silk yarn production, "mini-plan" for producing 13,500 kgs of silk yarn per year, which corresponds to one set of automatic reeling machine is proposed; cocoons are produced by cooperative unions of the farmers, not by individual farmer, to produce uniform quality cocoons with increased production.

8.3.9 Possibility of Polyester Fiber Production in Syria (Reference)

Syrian imports of synthetic fibers stand at approximately 80,000 tons/year. Of the imports, polyester fiber dominates with more than 40,000 tons/year.
Polyester is the most popularly and widely used of all synthetic fibers in the world. For reference, the present situation of polyester fiber production in the world is summarized (For detail refer to 10.9).

Even if the demand for polyester fibers were to increase to 60,000 tons/year, the scale of the demand is still very small compared with the demand in the polyester producing countries in the world. It can easily be understood that the production of polyester fiber will not and should not be carried out in countries with such small demand.

8.3.10 Priority Setting for the Proposed Projects

While all of the proposed projects need to be implemented urgently, they can be classified into several categories according to their characteristics and requirements, as follows:

(1) Projects which are characterized as expansion of existing projects

The following projects should be led by the private sector under the government's assistance.

1) Exports of clothing using Syrian cotton (8.3.1)

To further promote the project, the premier requirement is that state companies ensure abundant supply of high quality cotton yarns to private companies, instead of exports which are currently given of priority.

2) Exports of clothing using imported fabrics and accessories (8.3.3)

Foreign investment is the prerequisite to promotion of the project. Constraints related to the inducement of foreign investment are summarized in Main Report 7.1.1 (2) 6) and 7).

(2) Projects currently implemented under leadership of state-owned companies

- Projects producing large count, thick clothing fabrics by using locally available, low-quality cotton yarns

The following three projects are proposed, of which projects (1) and (3) can be implemented immediately as they do not require new investment when production is relatively small:

1) Exports of workers uniforms by using low-quality spun yarns which are produced at state-owned companies
2) Production of denim fabrics for jeans by using low-quality spun yarns which are produced at state-owned companies
3) Production of home textile products by using low-quality spun yarns which are produced at state-owned companies

(3) Projects requiring new facilities and equipment

Two projects which require new facilities and equipment are proposed; "construction of a cotton textile laboratory - introduction of HVI (high volume instrument) (8.3.5)"; and "construction of an integrated manufacturing plant for polyester/cotton blended products (spinning, weaving, dyeing, and finishing) (8.3.4). Construction of the HVI laboratory should be given of priority as it requires a relatively small amount of investment and plays a crucial role in examination of cotton quality.

(4) Recommendation to be urgently addressed

"Maintaining stable production at new, large-scale spinning mills" (8.3.6)

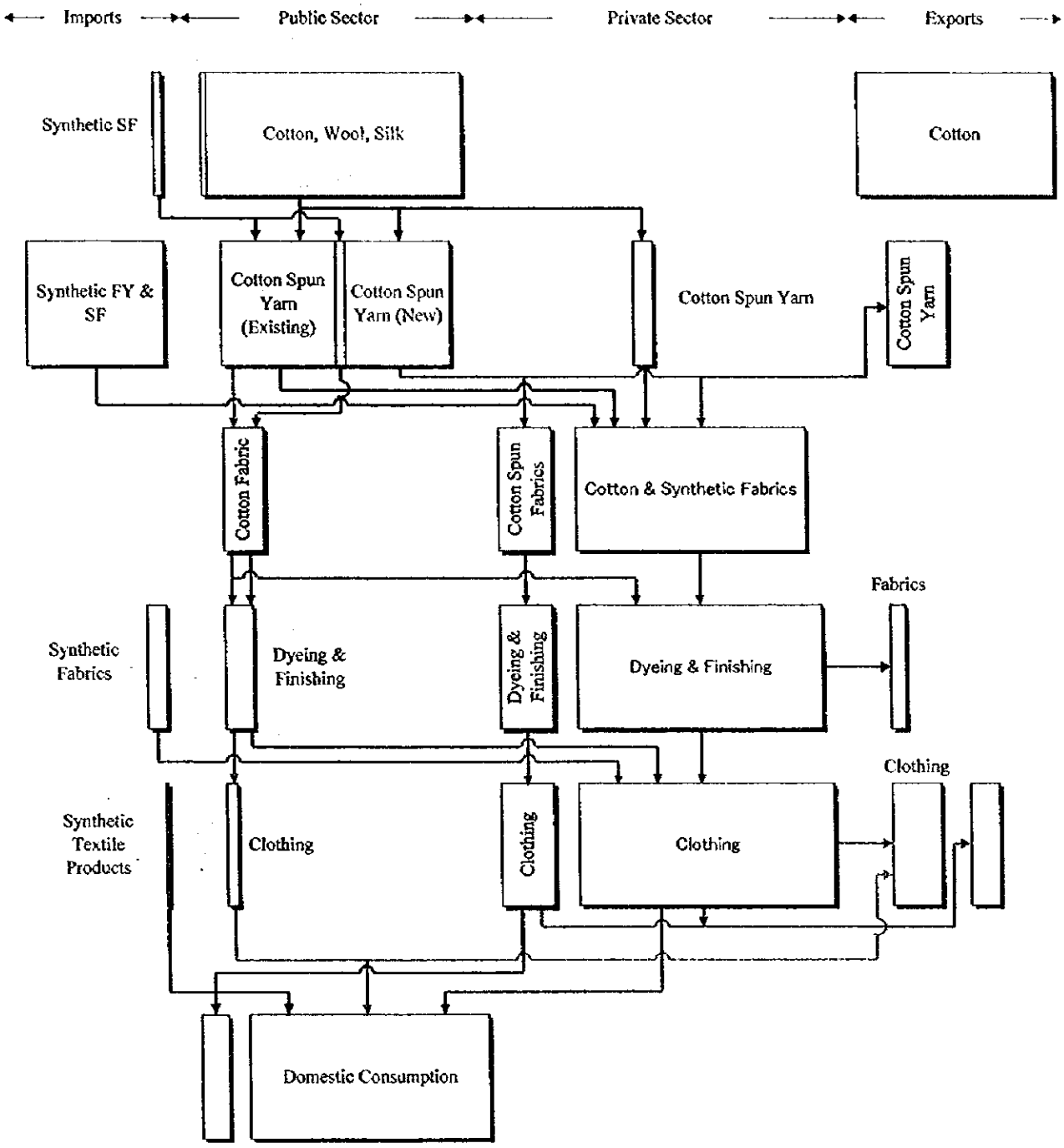
(5) Projects recommended for implementation, which have smaller impacts on the textile industry

"Wool Future Vision" (8.3.7)
"Silk Mini-plan" (8.3.8)

Table 8.3-1 RELATION BETWEEN THE DEVELOPMENT STRATEGY AND NEW PROJECT AT COMPANY LEVEL

7.1.2 Development Strategy	8.3 New Project at Company Level
7.1.2.1 Export of cotton products, particularly clothing (using locally produced cotton)	**8.3.1** Export of Clothing Made from Domestic Cotton **8.3.5** Construction of Cotton Inspection Laboratories-introduction of HVI (High Volume Instrument)
7.1.2.2 Exports of clothing (using imported fabrics and sub-materials)	**8.3.3** Export of Clothing Using Imported Fabrics and Accessories
7.1.2.3 Efficient use of existing textile processing facilities	**8.3.2** Projects to Produce Coarse Count Yarns and Heavy/ Thick fabrics by Utilizing Low Quality Syrian Cotton Spun Yarn. (1) Workers uniforms for export based on low quality spun yarn produced in existing textile companies (2) Production of denim fabrics for jeans based on low quality spun yarn produced in existing state-owned textile companies (3) Production of household textiles based on low quality spun yarn produced in existing state-owned textile companies
7.1.2.4 Import substitution	**8.3.4** Construction of an Integrated Factory of Polyester/ Cotton Blended Spinning, Weaving, and Dyeing and Finishing
7.1.2.5 Utilization of domestic wool and silk	**8.3.7** Wool "Future Vision" **8.3.8** Silk "Mini-Plan"

Figure 8.3-1 SUMMARY OF THE NEW PROJECTS AT COMPANY LEVEL



Projects

8.3.1 Export of Clothing made from Domestic Cotton
8.3.2 Utilization of Low Quality Cotton Spun Yarn
(1) Workers Uniforms
(2) Jeans
(3) Household Textile
8.3.3 Export of Clothing Using Imported Fabrics
8.3.4 Polyester/Cotton Blended Fabrics
8.3.5 Construction of HVI Laboratories
8.3.6 Maintaining Large-scale Spinning Factories
8.3.7 Wool : Future Vision
8.3.8 Silk : Mini-Plan

8.4 Suggestions for Improving Supporting Services

Syrian institutes rendering supporting services to the textile industry, the services available, and the services lacking are shown in the Table 8.2-1. The Team chose several projects and discussed with the Syrian authorities. As a result, following suggestions and projects, categorized in two; Human Resources Development, and Quality Control/Productivity Improvement, are selected:

8.4.1 Human Resources Development

(1) Installation of equipment in Damascus Intermediate Institute

The Intermediate Institute of Textile Industry in Damascus is very well managed, and any additional equipment could best be utilized.

(2) Establishment of textile related faculty in Homs University

As there is no textile engineering faculty in Syrian universities, the plan to establish a textile engineering department in Homs University is an urgent matter.

8.4.2 Quality Control/Productivity Improvement

(1) Installation of testing equipment of textile products in FTC/ITRC

Test equipment for export quality certification should be reinforced at FTC, ITRC and/or GOTI laboratory.

(2) Centralized organization for publicity and guidance of quality control practice

The Team proposes that an organization be set up for centralized publicity of the importance of quality control and guidance/training of quality control measures and ISO9000 practice.

(3) Packaging Development Center

Packaging is the basic infrastructure of the industry and consumer welfare. A center for the development of packaging technology and its insemination is recommended.

(4) Reinforcement of equipment and staff of SASMO

For industrial development, standardization is one of the prerequisites. It is recommended to improve and reinforce equipment and human resources at SASMO.

(5) GOTI Laboratory

Equipment to be renewed, and new functions, such as comparative quality test of products of GOTI companies, to be assigned.

(6) Textile and Clothing Development Centers

The project is to be encouraged and supported. The Centers are expected to assist public and private textile companies mainly in technical and design fields.

8.4.3 Urgency and Priority

The projects and actions listed above are all important, and all have to be eventually realized, however, the priority list in consideration of the status of the Syrian textile industry was made as follows: A stands for the highest priority projects and actions, B for the next priority, C for those with less urgency and priority within the scope of the present study.

8.4.3.1 Export promotion measures

(1) Tax exemption for export income	A
(2) Export finance	A
(3) Provision of market data	B
(4) Textile Exporters' Association	A
(5) Export Processing Zones	B

The Export markets are most important for the future development of the Syrian textile industry. As there are currently no effective measures or incentives to encourage exporters/exports, tax exemptions on export income and the introduction of an export finance system are the most urgent and basic measures now required in Syria. The Textile Exporters' Association could assist companies to develop exports.

8.4.3.2 Human resources development

(1) Installation of equipment in Damascus Intermediate Institute A
(2) Establishment of textile related faculty in Homs University A

Human resource development naturally requires a long initial period including the period for education. If the project starts immediately, at the earliest it could take 6 years (2003) before the first graduates are available to industry, considering construction and education periods. The Damascus Intermediate Institute urgently requires reinforcement of its equipment. In the long term and considering the importance and needs for the university graduates, Homs university's project for the textile engineering faculty should also be given top priority.

8.4.3.3 Quality control/productivity improvement

(1) Installation of testing equipment for textile products in FTC/ITRC A
(2) Centralized organization for publicity and guidance of quality control practice B
(3) Packaging Development Center C
(4) Reinforcement of equipment and staff of SASMO C
(5) GOTI Laboratory B
(6) Textile and Clothing Development Center A

Following human resource development, quality control and productivity improvements are high in importance. It is not easy to prioritize to each project, and consideration is only given in regard to the requirements of the textile industry. Plans to render services covering both state-owned and private textile companies, and the reinforcement of equipment at FTC/ITRC (and/or GOTI Laboratory), which are urgently required for the quality control of exports, are considered priority projects.

8.5 Sources of Funds for Projects

When a company or a governmental organization promotes a project, it will look for a funding source to cover the investment cost of the project. Normally, if it does not have enough cash in hand, it will rely on loans from domestic banks or funds raised in the securities market. In Syria, neither the banking system nor the securities market are ready to respond to the financial requirements of projects.

Government budgets could be the most important sources if the projects are in line with their priority policies, and if the funds are available for budget allocation.

The next and the most probable source of funds for the projects are foreign countries. International organizations such as UNDP, EU etc., or banks for assisting developments such as the IMF, the World Bank, the Islamic Bank etc. have various schemes. Individual governments of developed countries are also supplying funds through Official Development Assistance (ODA). Some smaller-size projects in categories like emergency needs, basic human needs and others are usually funded by grants/gifts. Other projects are covered by loan arrangements, usually with more attractive conditions such as lower interest rates, longer repayment periods, longer grace periods etc. Some of the Arab countries and regional organizations are likewise supplying funds for projects. In Syria, there is a directorate in charge of receiving assistance from other governments and organizations within the State Planning Commission (SPC), and the directorate has expertise in handling these matters.

In the case of the Japanese ODA, JICA is in charge of technical assistance and grants, and the OECF is in charge of loans, usually called yen-credits. The OECF has a system called the two step loan, whereby government to government loans are distributed into smaller size second-step loans by the local banks to small/medium sized enterprises and/or projects.

For commercial or industrial projects, the funds are usually covered by the export credit schemes of the countries supplying equipment/technology, and the banking system of the country of the project for local currency needs. It should be noted that due to the past problems of overdue repayments of international loans to Syria, the lender nations are not applying credit insurance so that the export credit/loan

arrangements to Syria are difficult, improvements in loan repayments are required to pave the way for further international inflows of funds.

8.6 Projects Recommended to be Implemented Under Foreign Assistance

(1) Preparation of the implementation plan for promotion of clothing exports

To ensure the future development of the Syrian textile industry, promotion of clothing exports is essential. In particular, preparation of implementation plans for two projects is required: "exports of clothing using Syrian cotton (8.3.1)" and "exports of clothing using imported fabrics and accessories (8.3.3)."
To ensure the successful promotion of clothing exports, a detailed implementation plan must be prepared.

Syria has great potential for developing clothing exports in terms of its labor cost, markets, and cotton production. Actually, some private companies are already successful in this business. Population and unemployment increases will be major problems for Syria in the future.
The Syrian government is unaware of the activities of private textile companies and the obstacles facing them with regard to the increase in clothing exports.

A detailed survey of the activities of Syrian private textile and clothing companies must be undertaken to clarify the present situation and problems, and effective measures to be undertaken by Syrian government must be summarized. A survey of Syria's competitors also must be carried out.

(2) To invite dyeing and finishing experts

The study team visited many factories and found the shortage of competent dyeing and finishing experts. Dyeing and finishing experts require pre-requisite knowledge of chemistry, they cannot be fully trained through field training alone, unlike technicians in the spinning, weaving, and knitting processes.

Dyeing and finishing techniques are directly related to the quality of clothing, therefore, improvement in the techniques is a critical factor for the country to increase clothing exports as planned. Thus, on-site visit to dyeing and finishing companies by foreign experts invited for training of the techniques need to be given highest priority.

(3) Recommendations related to the reinforcement of support functions

(a) Upgrading and addition of equipment at Damascus Intermediate Institute
(b) The establishment of Textile Engineering Faculty in Homs University
(c) Upgrading and addition of equipment at FTC/ITRC (Foreign Trade Center/Industrial Testing & Research Center)
(d) Support by UNDP Textile and Clothing Development Center

(4) Silk "Mini-plan"

In 8.3.8, a fostering plan for the silk industry is proposed. Naturally, a detailed implementation plan will be required to put the plan into practice.

8.7 Productivity Improvement[1)]

8.7.1 Objective of Productivity Improvement

This section discusses the major issues relating to improvements in productivity among state-owned textile companies (in the area of cotton textile products) and makes recommendations on actions to be taken for that purpose. Private companies are not included because the study has primarily focused on state-owned textile companies in most aspects.

The primary purpose of targeting productivity improvements is to strengthen the competitiveness of a company's products in the marketplace, thereby allowing the company to conduct its business continuously, while making a meaningful contribution to society.

In terms of competitiveness, state-owned textile companies in Syria concentrate in the upstream sub-sector (cotton spinning) and virtually monopolize this market with little competition. In addition, their market is mostly limited to Syria itself and since imports of cotton products are banned, they are protected from international competition.

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1) Chitoku Kumagai (1994). "SEISAN KEIEI RON" (Production Management Theory) Tokyo, Japan: The Society for the Promotion of the University of the Air.

As one of the primary purposes of the-owned companies is to create and maintain employment, the economic success of the business is not necessarily a major objective of their operation.

These basic problems are pointed out in Chapters 3 (3.2, 3.3, 3.5, 3.6), 4 (4.3, 4.9, 4.10, 4.11), and 12 (12.1, 12.2), while the proposals for overcoming them are presented in Chapters 8 (8.1(4), 8.1(5)) and 9 (9.4, 9.5). Undoubtedly, numerous regulatory constraints on the state-owned companies, as discussed in these chapters, are impeding productivity improvements.

The following sections identify, and account for, major obstacles to improving productivity and, particularly, how regulatory restrictions prevent progress.

8.7.2 Q-D-C (Quality, Delivery, Cost)

First of all, productivity should be viewed from three aspects: 1) quality of the product supplied to the customer; 2) delivery (timeliness); and 3) cost. These are collectively referred to as "Q-D-C" for short. In fact, the Q-D-C represents the overall value of the product to the customer who has purchased it. Manufacturers are required to satisfy the Q-D-C requirements in an optimum balance. In particular, delivery involves the concept of timeliness, which simply means providing the product to the customer when needed by the customer. This is a critical factor because, even if the manufacturer makes a product of high quality at low cost, the failure to supply it to the customer on time nullifies the value.

For manufacturers, the principal control elements required to meet the Q-D-C requirements are raw materials, equipment, and labor.

With the above requirements in mind, the following section reviews the problems that state-owned textile companies (primarily spinning) are facing.

8.7.3 Major Issues Relating to the Productivity of State-Owned Textile Companies and Improvement Proposals

A major difficulty facing state-owned companies as a whole is how they may effectively consolidate and co-ordinate product lines that are offered by them. Furthermore, spinning mills are located in various areas for the purpose of securing

employment, and some of them are located in rural areas not favorable for adequate labor supply.

In addition, investment decisions need to be made in consideration to the overall distribution of state-owned factories, e.g., if a factory with spinning, weaving and dyeing lines feels the need to replace an old spinning line, consideration should be given to the need for the reallocation of such production facilities and capacities among the state-owned companies as a whole.

It is important to reappraise the current location of state-owned companies as well as the allocation of production facilities and processes.

Major quality issues facing individual companies, particularly related to Q-D-C aspects, and proposals for improvement are now presented in the following sections.

8.7.3.1 Quality

Quality is governed by raw materials, equipment, and labor, which are supported by technology. Cotton is a raw material used by state-owned textile companies. As imports of cotton are banned, state-owned companies vie for high grade cotton produced in Syria. Nevertheless, supply capacity is limited and state-owned companies cannot always obtain cotton of the desired quality.

Production equipment in the state-owned textile companies is mostly old and clearly constitutes a major obstacle to efficient production yet, the lack of effort to ensure adequate maintenance is chronic and must be pointed.

As for labor, state-owned companies are mandated to create and maintain employment as its major mission, so that they inevitably hire and keep an excessive number of employees regardless of need or quality. They are not allowed to transfer or dismiss employees once hired.

Efforts to improve technology levels are hindered by regulatory constraints on raw materials, equipment, and labor. In particular, state-owned companies are not free to choose their own sources of raw materials. They also cannot obtain the necessary parts and components for equipment maintenance. Finally, they suffer

from a shortage of qualified engineers and technicians who are attracted to, and recruited by, private companies.

State-owned companies claim that, under these circumstances, they are unable to make products of high quality.

In Syria, spun yarns are almost exclusively produced by state-owned companies and, as imports are banned, competition for quality is limited to the supply side, i.e., among state-owned companies. From the demand side, private companies are virtually excluded from purchasing high quality spun yarns as state-owned companies primarily export them (including combed cotton). Instead, they are forced to purchase spun yarns as supplied by GOTI. As a result, they cannot chose their suppliers in most cases, and supply is not stable.

Thus, the lack of competition ironically warrants sales of spun yarns produced by state-owned companies, regardless of quality. For state-owned companies, competition only exists among themselves in the domestic market, rather than competing to win customers. As a result, there is little incentive for manufacturers to improve product quality. The result of a quality analysis of state-owned companies' products is summarized in 4.9, and major problems in the area of quality control in 12.1.

The first step to promote quality improvement by state-owned companies with a view to developing international competitiveness in the future should be taken by having production personnel (not sales persons) visit customers to try to understand their problems relating to the quality of products they have produced (practice learning about the quality control axiom "the subsequent production step is your customer"). At the same time, various regulatory measures are required to encourage state-owned companies to take quality control initiatives, such as requiring them to export a portion of their production, no matter how small it is, or setting quality targets for each company according to its resource conditions (raw materials, equipment, labor). In addition, these quality control initiatives should start from a designated organization, rather than launching them on a company-wide basis involving all the factory workers.

8.7.3.2 Delivery (Timeliness)

In delivery, time is of the essence. Timely delivery is referred to as the supply of the product when the customer needs it. In fact, timely delivery holds the key to proper inventory control of raw materials, intermediate products, and final products which have now built up at state-owned textile companies. Accumulated inventories indicate that products have been produced without consideration to the timeliness of delivery to the customer (who is the subsequent production step). The build up of intermediate and final products are tell-tale signs of a production practice that focuses on the convenience of the manufacturer, not of the customer.

In fact, the excess inventory buildup reflects fundamental problems of production monopoly by state-owned textile companies including the institutional ones. These problems are analyzed in 3.4, and improvement proposals are presented in 8.1(2), 9.2, and 12.1.

The actions for improvement should start by making factory management aware of the major evil of excess inventory. Also, timeliness of delivery should be learned by employees by requiring state-owned textile companies to export some of their products, which will serve as a good opportunity to force them to realize the importance of timely delivery in the international marketplace and the competition it presents.

8.7.3.3 Cost

High production costs of state-owned textile companies are generally attributed to costly raw materials, obsolete production equipment with poor quality, and excess numbers of poorly skilled workers.

The issues related to high costs of raw materials are discussed in 4.2.1.4. While old equipment is certainly responsible for the high production costs, the lack of proper equipment maintenance also makes some contribution.

The labor surplus certainly has an additional cost impact. Major factors for increased production costs are low levels of labor productivity as well as low equipment productivity.

So far as state-owned textile companies are required to create employment, they have to keep an excessive number of workers, which causes productivity per employee to decline. However, it is important to recognize that a manufacturer's competitive strength is determined by the productivity per worker directly engaged in production activity, rather than productivity per employee.

Japanese manufacturers, during recession, have been dividing factory workers into two categories; workers required for production and surplus workers. Then, they have been minimizing the number of workers engaged in production activity in an attempt to maximize productivity per production worker. Excess workers have been assigned to activities not directly related to productivity improvement, such as painting, cleaning of factory buildings, and gardening. Thus, Japanese manufacturers have been successfully attempting to raise labor productivity under recession, which is clearly reflected in their international competitiveness.

Indeed, Japanese manufacturers have been applying similar practices to production equipment. For instance, instead of operating 100 machines at 50%, they scrapped 20-30 machines producing poor quality and reused some parts and components on the rest of machines to raise the capacity utilization rate, thereby improving the operating rate and productivity per machine.

What can be done in Syria now is to divide factory management indices into those which can be controlled by the factory, and those which are governed by external factors, and are, therefore, outside of the factory's control. In this way, the factory can be managed to achieve target levels set for the former managerial indices. This means, continuous efforts are being made to improve the manufacturer's competitiveness.

8.7.4 Case Study in Hama Cotton Yarn Company

The company is renowned for its excellence in meeting the Q-D-C requirement among state-owned companies. It exports its products and boasts the highest profitability within GOTI even though its production equipment is not very new, mostly made in the 1970s. Also state-owned companies are fettered by many regulations that constitute a major obstacle to their productivity improvement so why is this company so successful? The answer is found in the company's management. Some believe that the company is favorably located in Hama without

the major presence of the industries. If it is true, other companies operating in Hama must also report good performance. This is not the case.

The company is certainly managed by excellent people, most particularly in the person of the Managing Director. The Managing Director is renowned in Syria, for his leadership and drive. He works longer hours than all of his managers, and his enthusiasm, organizational and personnel skills carry his managers, supervisors and workers along - as they say themselves, like private sector workers whilst being paid public sector wages.

Whilst it is one of state-owned companies which operation and management are strictly regulated, it has obviously overcome the situation by taking many years. Clearly, Ham Cotton presents a model case for all other state enterprises to follow in every respect, including how to meet the Q-D-C requirements and control raw materials, equipment and labor that are basic elements of meeting the goal.

8.7.5 Competition with Imported Synthetic Fibers

As explained earlier, state-owned textile companies are almost exclusively controlling cotton spinning operations in Syria, while being free from international competition due to the import ban on cotton products. Nevertheless, competition with imported synthetic fibers exists. Failure of state-owned textile companies to achieve high Q-D-C levels has resulted in wide use of imported synthetic fibers in the country, as reflected in a very high rate of synthetic fiber consumption (see 6.3.6). This trend is likely to further accelerate as the Syrian economy grows.

If state-owned companies fail to make conscious efforts to improve productivity, the domestic market will soon be flooded with imported synthetic fibers, eventually forcing the country to export raw cotton without processing it which will create important added value. To avoid such consequences, it is important to remove the obstacles to the development of state-owned companies through major deregulation, while learning from the successful case of Hama Cotton and its excellent management as an example, or model, to follow.