

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
MINISTRY OF INDUSTRY  
GENERAL ORGANIZATION FOR TEXTILE INDUSTRY  
THE SYRIAN ARAB REPUBLIC

**STUDY  
ON  
THE DEVELOPMENT  
OF  
THE TEXTILE INDUSTRY  
IN  
THE SYRIAN ARAB REPUBLIC  
(SUMMARY)**

**MARCH 1998**

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## Abbreviations

|        |  |
|--------|--|
| ASEAN  | Association of Southeast Asian Nations                     |
| ATC    | Agreement on Textile and Clothing                          |
| A/W    | Acrylic/wool blended                                       |
| CB     | Convertible bond   |
| CBS    | Central Bureau of Statistics                               |
| CD     | Certificate of deposit                                     |
| CMO    | Cotton Marketing Organization                              |
| CV     | Coefficient of variation                                   |
| DTY    | Draw Textured Yarn   |
| EU     | European Union   |
| FAO    | Food and Agriculture Organization of the United Nations    |
| FMD    | Foreign material detector                                  |
| FSU    | Former Soviet Union  |
| FTC    | Foreign Trade Center                                       |
| FY     | Filament yarn  |
| GATT   | General Agreement on Tariffs and Trade                     |
| GCC    | Gulf Coast Conference                                      |
| GDP    | Gross domestic product                                     |
| GOTT   | General Organization for Textile Industry                  |
| HVI    | High Volume Instruments                                    |
| ICAC   | International Cotton Advisory Committee                    |
| IPI    | Imperfection index   |
| ISO    | International Standard Organization                        |
| ITMF   | International Textile Manufacturing Federation             |
| ITRC   | Industrial Testing & Research Center                       |
| JCSFIF | Japan Cotton and Staple Fiber Fabric Inspecting Foundation |
| JETRO  | Japan External Trade Organization                          |
| JSIF   | Japan Spinners' Inspection Foundation                      |
| L/C    | Letter of Credit   |
| MEDA   | Mediterranean Assistance                                   |
| MFA    | Multi Fiber Arrangement                                    |
| MITI   | Ministry of International Trade and Industry               |
| NAFTA  | North Atlantic Free Trade Area                             |
| Ne     | Number of end  |
| ODA    | Official Development Assistance                            |
| OES    | Open end spinning  |
| OPT    | Outward processing trade                                   |

|       |   |
|-------|---|
| P/C   | Polyester/cotton blended                                    |
| POY   | Partially Oriented Yarn                                     |
| P/R   | Polyester/rayon blended                                     |
| P/W   | Polyester/wool blended                                      |
| QC    | Quality control   |
| QR    | Quick response  |
| SASMO | Syrian Arab Organization for Standardization and Metrology  |
| SEBC  | Syrian European Business Center                             |
| SC    | Sugar content   |
| SF    | Staple fiber  |
| SLM   | Strict low middling   |
| SM    | Strict middling   |
| SOP   | Standard operation procedure                                |
| SP    | Syrian Pound  |
| SPC   | State Planning Commission                                   |
| SSI   | Self-Sufficiency Index                                      |
| SWIFT | Society for Worldwide Interbank Financial Telecommunication |
| TQC   | Total quality control                                       |
| U     | Unevenness of yarn  |
| WTO   | World Trade Organization                                    |

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EXECUTIVE SUMMARY WITH ILLUSTRATIONS (1)

IMPORT TO SYRIA

Tab. 6.2-7 (Tab. S6.2-1) IMPORT OF TEXTILES TO SYRIA BASED ON EXPORTING COUNTRIES STATISTICS

|                              | 92       | 93       | 91       |
|------------------------------|----------|----------|----------|
| Cotton, Wool, Silk, Man-Made | 2,409.8  | 3,284.2  | 4,075.3  |
| FY, Textured-FY, Spun-Yarn   | 45,641.9 | 71,573.6 | 65,507.4 |
| Woven Fabric                 | 4,679.1  | 6,348.2  | 9,626.6  |
| Knitted Fabric               | 803.5    | 1,056.1  | 1,086.1  |
| Woven                        | 25.6     | 11.1     | 11.2     |
| Knitted                      | 15.2     | 5.6      | 15.2     |
| 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 |

DOMESTIC CONSUMPTION

Tab. 6.2-10 (Tab. S6.2-3) DOMESTIC CONSUMPTION OF TEXTILES BY FIBER MATERIAL

|                               | Domestic | Import | Export | Domestic Consumption | (1,000 tons) |
|-------------------------------|----------|--------|--------|----------------------|--------------|
| 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    | -        | (82.6) | (18.0) | (64.6)               | (57.4)       |
| Total                         | 64.0     | 86.5   | 38.0   | 112.5                | 100.0        |

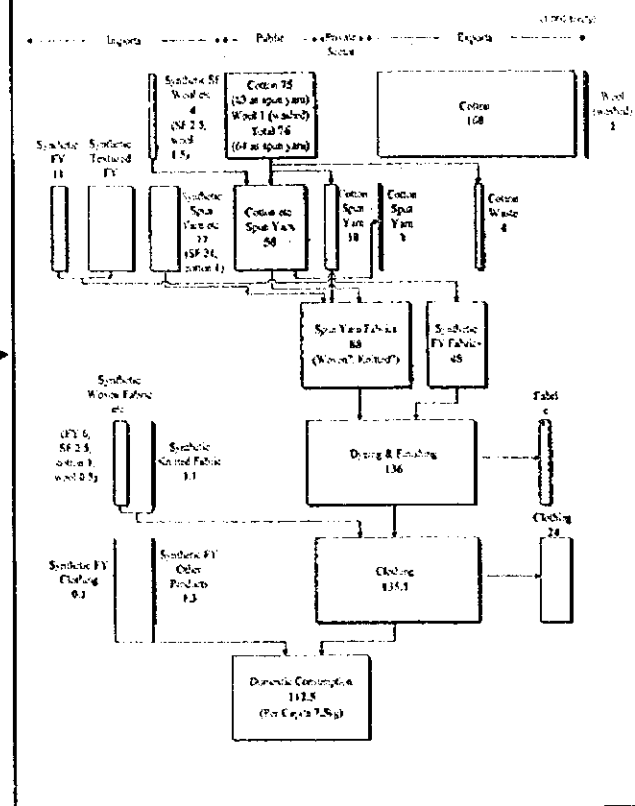
DEMAND FORECAST (~2010)

Tab. 6.3-7 (Tab. S6.3-4) FORECAST OF FIBER CONSUMPTION IN SYRIA (~2010)

|                                      | GDP Growth (%) | 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 (10.6-11.0) |
| Total Fiber Consumption (1,000 tons) | 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)    |

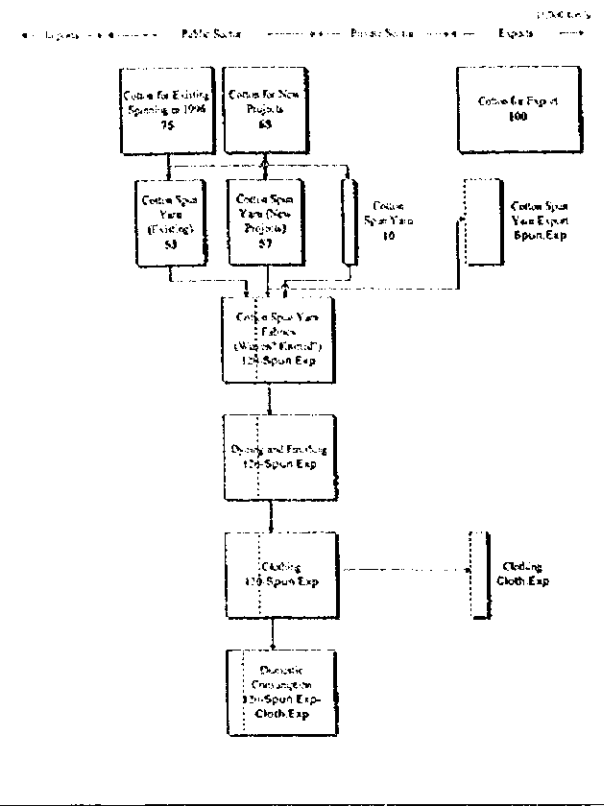
SYRIAN TEXTILE INDUSTRY

Fig. 4.1-1 (Fig. S4.1-1) PRODUCTION, IMPORT AND EXPORT OF TEXTILE INDUSTRY (1)



SYRIAN COTTON IN 2000

Fig. 4.1-8 (Fig. S4.1-8) PRODUCTION, IMPORT AND EXPORT OF COTTON in 2000



ADVANTAGES AND CONSTRAINTS

Tab. 7.1-1 (Tab. S7.1-1) BASIC PREMISES IN FORMULATION OF DEVELOPMENT STRATEGIES OF TEXTILE INDUSTRY IN SYRIA

| Advantages  | Constraints  |
|---|--|
| 1. Availability of raw materials (Cotton, Wool, Synthetic Fiber). | 1. Limited capital resources.                                  |
| 2. Established infrastructure for textile production.             | 2. Limited technical expertise in modern textile technologies. |
| 3. Proximity to major markets in the Middle East and Europe.      | 3. Limited access to international trade agreements.           |
| 4. Government support and incentives for industrial development.  | 4. Limited marketing and distribution networks.                |

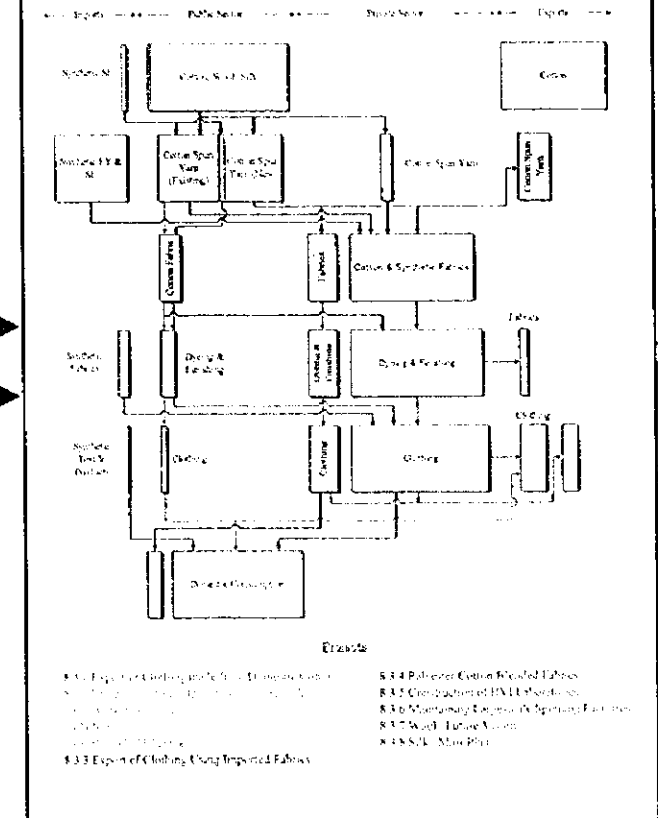
DEVELOPMENT STRATEGIES

Tab. 8.3-1 (Tab. S8.3-1) 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 surplus capacity (particularly clothing using locally produced fabric) | 8.3.1 Export of Clothing Made from Domestic Cotton   |
| 7.1.2.2 Export of surplus capacity (particularly fabric and accessories)                 | 8.3.2 Construction of Cotton Textile Laboratories Introduction of HVI (High Volume Instrument) |
| 7.1.2.3 Efficient use of existing textile production facilities                          | 8.3.3 Upgrade of Existing Textile Mills and Accessories  |
| 7.1.2.4 Import of surplus capacity   | 8.3.4 Production of Cotton Textile (New and Old)   |
| 7.1.2.5 Import of surplus capacity   | 8.3.5 Production of Cotton Textile (New and Old)   |

NEW PROJECT PROPOSAL

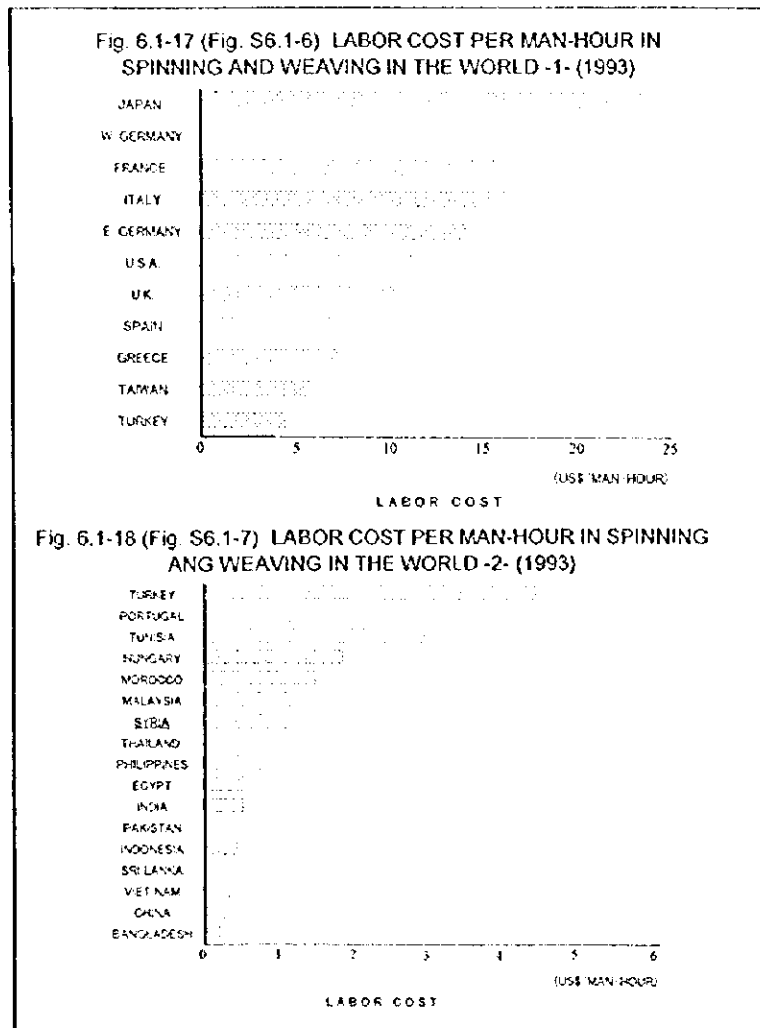
Fig. 8.3-1 (Fig. S8.3-1) SUMMARY OF THE NEW PROJECTS AT COMPANY LEVEL



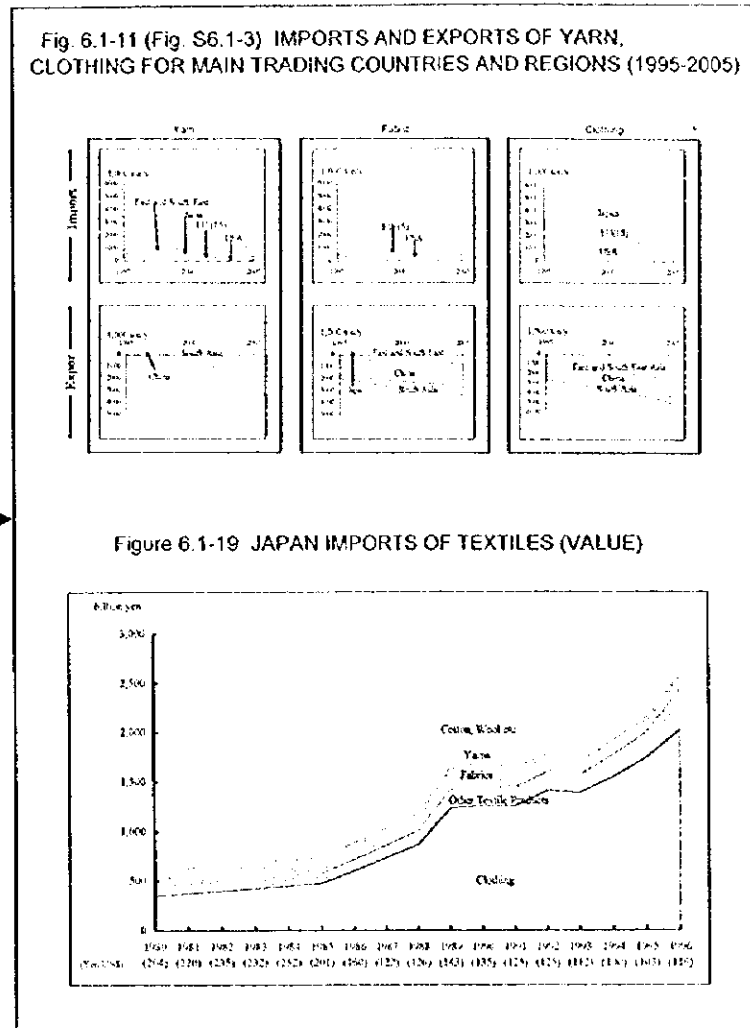
SUMMARY (next page)

EXECUTIVE SUMMARY WITH ILLUSTRATIONS (2)

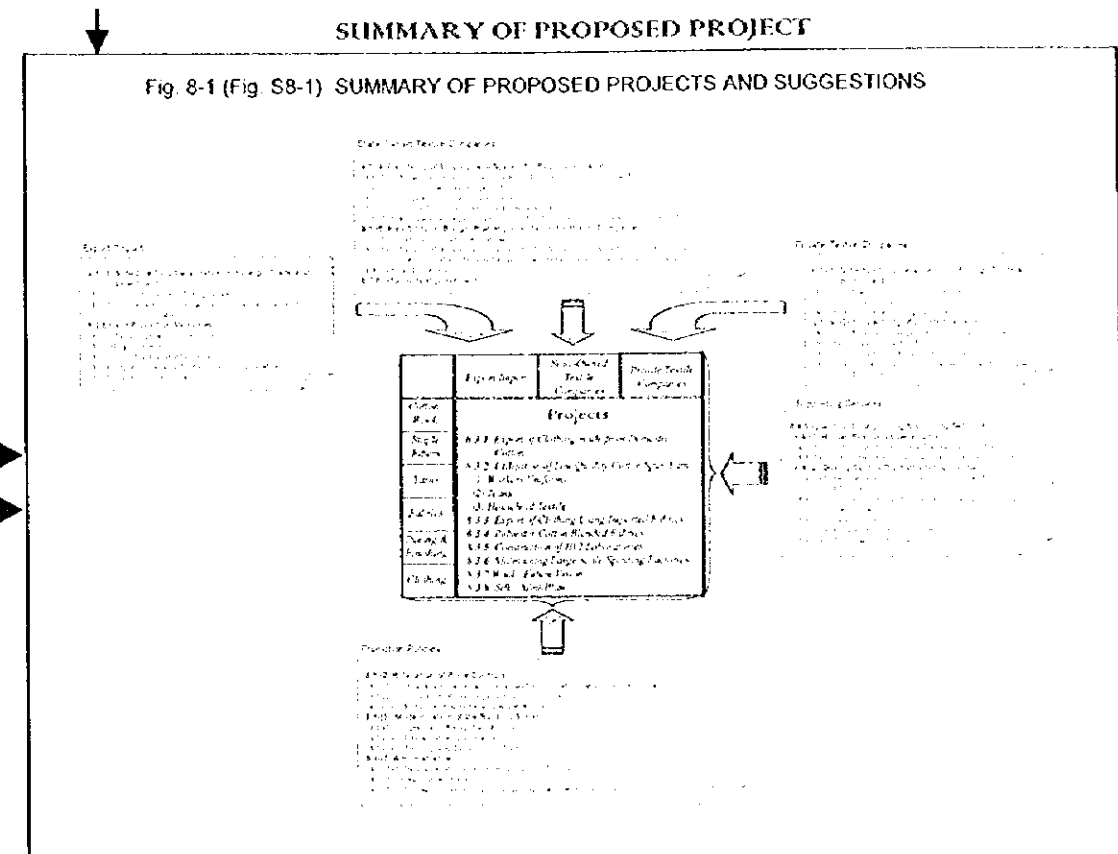
LABOR COST



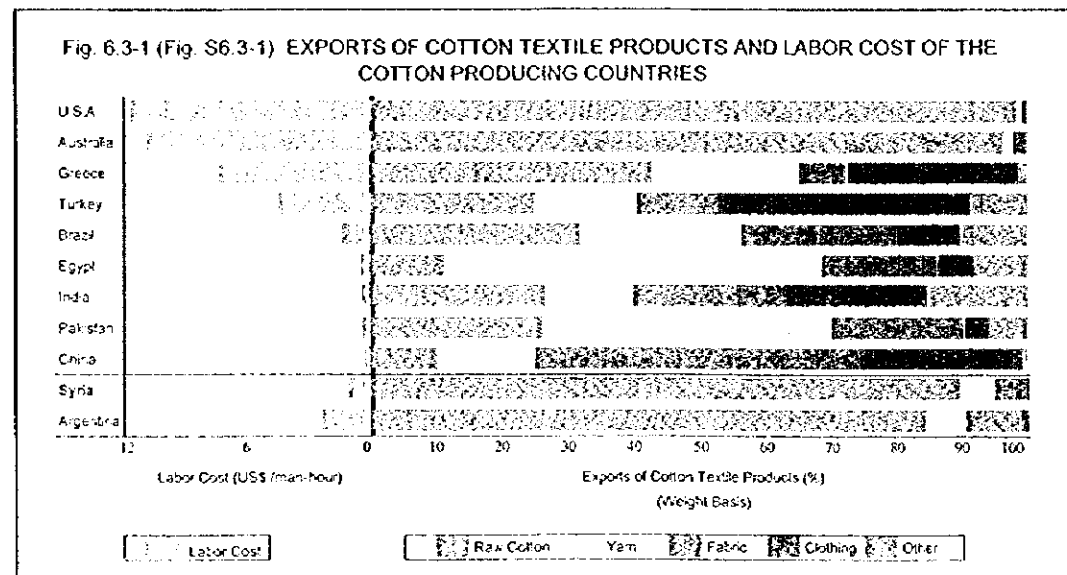
EXPANDING CLOTHING TRADE



NEW PROJECT PROPOSAL (FROM FRONT PAGE)



LABOR COST AND CLOTHING EXPORT



SYRIAN COMPETITORS

Tab. 6.3-3 (Tab. S6.3-1) EU'S TOP TEN CLOTHING SUPPLIERS (1994)

| Rank  | Country            | Value (US\$ million) | Share (%) | Change 1995-94 |
|-------|--------------------|----------------------|-----------|----------------|
| 1     | Turkey             | 4,853                | 10.9      | -2.6           |
| 2     | Turkey             | 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       | 13.4           |
| 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              | 1,454                | 3.3       | 15.1           |
| Total |                    | 43,974               | 100.0     | 10.0           |

Tab. 6.3-4 (Tab. S6.3-2) USA : TOP TEN SUPPLIERS OF MFA TEXTILES AND CLOTHING, 1995

| Rank 1995 | Country            | Value (US\$ million) | Share 1995 (%) | Change 1995-94 |
|-----------|--------------------|----------------------|----------------|----------------|
| 1         | China              | 4,853                | 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            | 13.4           |
| 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              | 1,454                | 3.3            | 15.1           |
| Total     |                    | 43,974               | 100.0          | 10.0           |



# **1. Background, Objectives and Scope of the Study**

## **1.1 Objectives of the Study**

- (1) The general outline of the master plan for development of the textile industry toward 2010 is as follows:
  - 1) Macro level
    - (a) Supply and demand forecast of textile and clothing products
    - (b) Recommendations on upgrading of textile industry promotion policy
  - 2) Semi-macro level
    - (a) Plan to strengthen supporting functions to the textile industry
    - (b) Presentation of the future vision of forward and backward linkage of the textile industry
  - 3) Micro level
    - (a) Recommendations on improvement of quality and productivity
    - (b) Modernization plan for selected state-owned companies
- (2) Technology transfer to Syrian counterparts in related areas, including textile industry promotion and modernization of state-owned companies

## **1.2 Background of the Study**

The textile industry in Syria is characterized as agro-industry utilizing local products such as cotton and wool, output of which occupies 27% of the manufacturing sector's total output (1994). Its value of exports accounts for 10.9% of total exports and 35.5% of manufacturing exports (1994). It has a long history and constitutes one of the major sources of employment in the country accounting for 21.7% of the public sector employment (1994).

At the same time, it is coming to a major turning point facing with a variety of issues, including rapid declines in exports to the former USSR and Eastern Europe, weakening international competitiveness in quality, inefficiency of management of state-owned companies under the socialistic economic system, deterioration of production facilities due to aging, and the need for effective measures to improve investment climate inside and outside the country by introduction of the private investment law. Under these circumstances, the Government of Syria has made an official request to the Government of Japan to extend assistance to formulate a

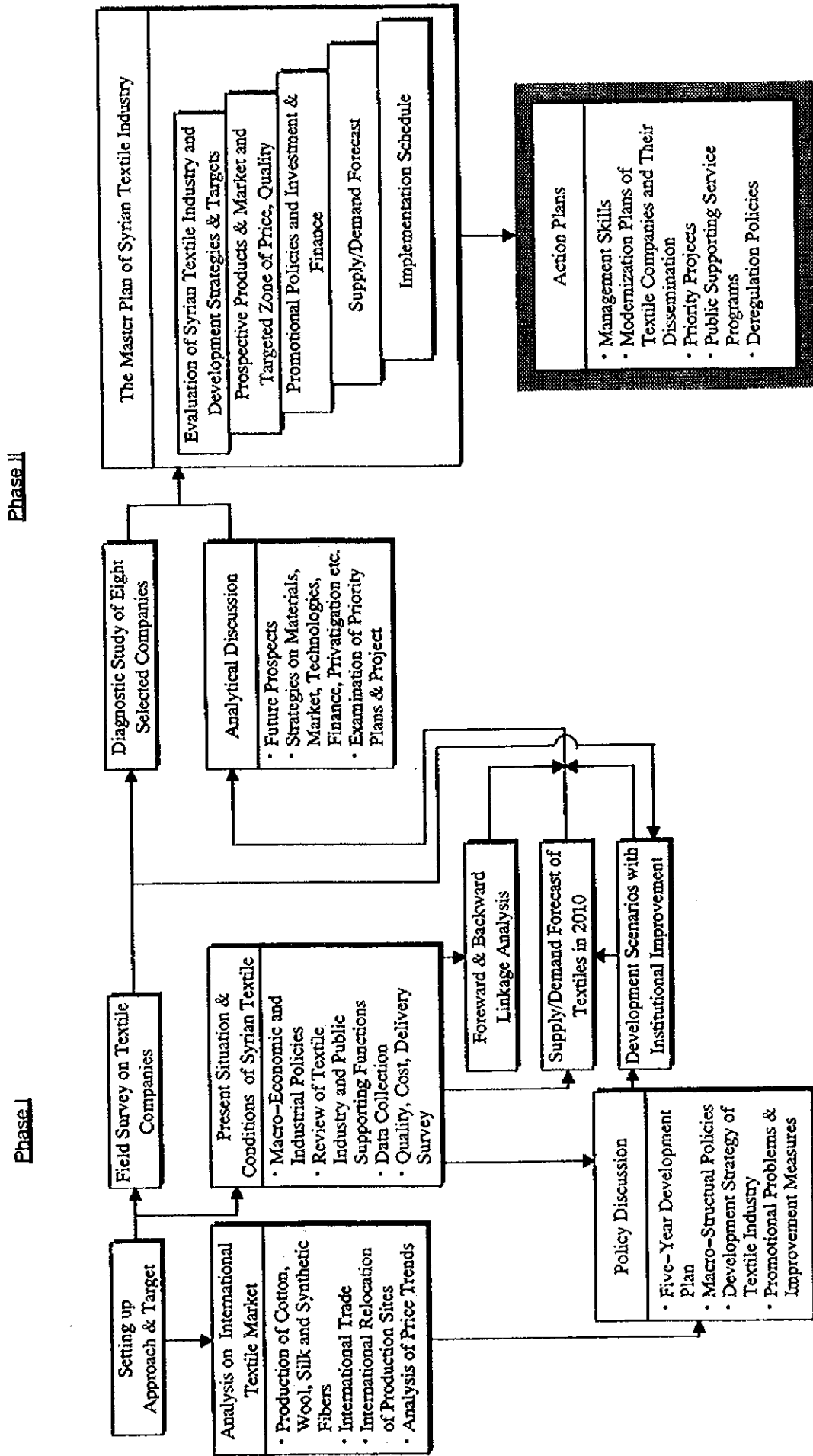
master plan for promotion of the textile industry. In response, Japan International Cooperation Agency (JICA) has sent a survey team to select and confirm the project and to conduct preliminary study. Then, the general outline and framework of the full-scale study was agreed in the Scope of Work (S/W) which was signed by the two counterparts.

### **1.3 Subject and Scope of the Study**

The study is to cover an entire area of Syria. The scope of the study is defined in detail in the Scope of Work, and the planning period will end in 2010 when Syria is expected to join the EU. The study period will last 11 months starting from mid-February 1997, which is divided into Phases 1 and 2, as shown in Figure S1.3-1.



Figure S1.3-1 WORKSTEPS OF THE STUDY





## **2. Development of the Syrian Economy**

### **2.1 Political and Social Development**

Syria has had a free economy from her independence from France in 1946 up to the late 1950s. Though she became a socialist country in the early 1960s through land reform and nationalization of industries and banks, the private sector role has become bigger due to deregulation policies since the 1970s. She published Decree 10, 1986 to admit foreign direct investment through joint ventures with local capital. After the sudden collapse of the Former Soviet Union, and after Gulf war invasion of Kuwait, Syria changed its political stance to be friendly to western world. Syria has stepped up its efforts to make the transition to a market economy by renewing Law 10 in May 1991, and by starting oil exports. These actions and revived foreign aid have resulted in the favorable economic development in the 1990s.

The Syrian population was 14.6 million in 1996. It rapidly increased over the years as a result of high birth rate in the country of 3.3% a year.

### **2.2 Administration System for the Textile Industry**

The Syrian government is composed of 33 ministerial authorities, out of which eight ministries are related to the Syrian textile industry. These are the State Planning Commission (SPC), Ministry of Economy and Foreign Trade, Ministry of Supply and Internal Trade, Ministry of Finance, Ministry of Industry, Ministry of Agriculture and Agrarian Reform, Ministry of Foreign Affairs, Ministry of Higher Education. The SPC has superior status to the other ministries and public companies in resource allocation through development planning.

### **2.3 Macroeconomic Development**

The economic growth rate was low in the 1960s but became better in the 1970s owing to deregulation policies. Syria had experienced a hard time in the 1980s due to a shortage of foreign currency, but the economy revived to about 7% a year in the 1990s as a result of oil exports, recovered foreign aid, resumption of EU trade and tourism. (Table S2.3-1)

The Syrian government has developed a price surveillance system to regulate all the pricing by a principle of cost price plus marginal profit. Inflation, in terms of retail prices has been 8-10% a year in the early 1990s.

The state budget is nearly 30% of GDP, and the budget deficit improved from 18% of GDP in 1980 to 4.1% in 1997. The banking system is underdeveloped. Syria nationalized banks in 1963 and integrated them into five specialized banks.

Syria still controls exports and imports individually. Though the exports have increased since 1989, Syria has recorded a trade deficit. The balance of payment is in surplus owing to capital inflows, tourism and transfers. Foreign exchange management was relaxed in 1990, but the system is complicated with plural exchange rates.

**Table S2.3-1 MAIN INDICATORS IN SYRIAN ECONOMY**

|                                      | 1991   | 1992   | 1993   | 1994   | 1995   | 1996  | 1997  |
|--------------------------------------|--------|--------|--------|--------|--------|-------|-------|
| GDP (in real term, %)                | 7.1    | 10.6   | 6.7    | 7.6    | 3.6    | -     | -     |
| Per Capita GDP (SP)                  | 24,867 | 28,680 | 30,893 | 36,377 | 38,894 | -     | -     |
| Inflation (retail price, %)          |        | 11.0   | 13.2   | 15.3   | 7.6    | -     | -     |
| Budget Expenditure (SP bil.)         | 84     | 93     | 123    | 144    | 162    | 187   | 211   |
| Foreign Current Balance over GDP (%) | -7.6   | -11.4  | -13.0  | -12.4  | -7.1   | -     | -     |
| Foreign Exchange Rate (SP/US\$)      |        |        |        |        |        |       |       |
| Official rate                        | 11.25  | 11.25  | 11.25  | 11.25  | 11.25  | 11.25 | 11.25 |
| Neighboring rate                     | 43.00  | 43.00  | 43.00  | 43.00  | 43.00  | 44.00 | 45.50 |
| Black market rate                    | 45.80  | 47.68  | 49.67  | 49.96  | 50.05  | 50.07 | 50.62 |

## **2.4 Big Challenges for Economic Reform**

Syria has not accepted the structural adjustment policies recommended by the IMF or IBRD, but has made efforts towards transformation to a market economy and for harmonization with international economies.

There are two regional integration schemes, namely the Arab Countries Free Trade Area and the Euro-Mediterranean Free Trade Area. Syria has a big challenge to liberalize foreign trade and to reduce custom duties to zero within 10 years. Syria has also two other big tasks namely the unification of foreign exchange rates and the modernization of the banking system.



### **3. Industrial Promotion Policy: Situation and Problems**

#### **3.1 General Feature of Syrian Textile Industry**

Syria produces textile materials. Seed cotton is the second largest crop following wheat and 75% of raw cotton is exported.

|             | <u>Production (tons, 1995)</u> |
|-------------|--------------------------------|
| Seed cotton | 600,000                        |
| Washed wool | 5,000                          |
| Cocoon      | 20                             |

Cotton ginning is done only by public companies. Cotton spinning is mainly operated by public companies under General Organization for Textile Industry (GOTI), while the private sector is playing an important role in the production of textiles downstream, such as underwear, tricot, stockings etc.

#### **3.2 Imbalanced Activity Structure**

It is commonly understood as a reality that Syria will not approve privatization in the sense of a change in ownership from public to private. Instead, the government has promoted private activities in many sectors. A number of private businessmen have become rich, but many public companies are suffering from declining income. There are many problems in public companies themselves, but most of them come from the institutional conditions imposed on public companies.

#### **3.3 Employment and Wages in the Public Companies**

Employment regulations on new recruits, working conditions, wages, which are applied to the civil services, have been also applied to the public companies since 1985 under the Unified Workers Law. It is extremely difficult to close a public company even if it is a loss making company for many years, due to authorization procedure and scarcity of alternative job offering. Managers of the public companies are appointed by the prime minister and related ministers, but the political parties and the labor unions join the decision. Employees of public

complain of low wages compared with those of private companies, and skilled workers, capable managers in public companies are hired away for better compensation by private companies. (Table S3.3-1)

**Table S3.3-1 EMPLOYEES IN INDUSTRY, 1995**

|                               | thousand   |            |            |
|-------------------------------|------------|------------|------------|
|                               | Employees  | Public     | Private    |
| Food, beverages & tobacco     | 55         | 32         | 23         |
| Textile, clothing & leather   | 69         | 32         | 37         |
| Wood & furniture              | 25         | 1          | 24         |
| Paper, printing & publishing  | 3          | 1          | 2          |
| Chemical & petroleum refining | 20         | 14         | 6          |
| Non-metal                     | 15         | 10         | 5          |
| Basic metal                   | 3          | 2          | 1          |
| Metal product                 | 40         | 6          | 34         |
| <b>Manufacturing Total</b>    | <b>246</b> | <b>98</b>  | <b>148</b> |
| Mining & quarrying            |            | 16         |            |
| Electricity & water           |            | 35         |            |
| <b>Industrial Total</b>       |            | <b>149</b> |            |

Sources: Central Bureau of Statistics

### 3.4 Pricing

Pricing of commodities and service charges are regulated by the decree on the principle of cost plus marginal profit. Calculation methodology is detailed and sectoral marginal profit is decided by the Ministry of Supply and Internal Trade. Each company has to report to the government when it changed the price. This rigid price surveillance system causes a problem of stockpiling because of incapable sales.

Cotton price is determined by the government. The price has increased for many reasons, and the Syrian textile industry complains of higher price for raw cotton.

This individual price control cannot stop inflation. Macro economic management is necessary for that purpose.



### **3.5 Accounting**

The Syrian accounting system is based on the Egyptian one, which is similar to the developed countries. Net profit after tax in the public companies are regulated by the budget rule. Liquidity surplus can be used for the replacement and modernization investment or for cash shortage. Budget surplus is divided into two categories of reserves for new investment and budget revenue. New investment finance is provided mainly by the state budget, and loss making public companies are relieved by the state budget also.

Accounting has not been respected due to poor monetary discipline, underdeveloped banking system and tax avoidance behavior of private companies.

### **3.6 Procurement and Marketing**

When a public company buys something more expensive than SP 50,000 per year from outside companies of the General Organization, bidding procedures are necessary. The acquisition of foreign currency is another problem they face for imports of raw materials. The new investment requires the government decision. The import contracts of machine and equipment must be approved by the prime minister.

Marketing abroad is restrictive due to limited measures and traveling abroad of public officials is subject to permission from the minister to obtain, and necessary travel budget allowance.

### **3.7 Foreign Trade and Investment**

There are many restrictions on trade and investment. Raw cotton and cotton seeds can be exported only by the Cotton Marketing Organization. Seed cotton, raw cotton, cotton yarn, cotton fabrics and ready-made garments are prohibited to import. An escalation tariff system is used for customs duties. 6.6% is levied on raw materials, 7-15% for intermediate-processed goods, 29% on spare parts, 35% on finished products and 75-280% on luxury products. Foreign investment in cotton farming and cotton ginning are prohibited. Cotton spinning is allowed on the condition that private company uses its own yarn for weaving or knitting, and dyeing, and sell or export dyed fabrics or clothing. Syria has to abolish

above restrictions and reduce customs duties to zero according to the two schemes of regional free trade with other Arab countries and Europe-Mediterranean countries by 2007 or 2010.

Syrian textile industry has an advantage over other exporting countries, owing to non application of the Agreement on Textile and Clothing (ATC, WTO), but this comparative advantage will disappear in 2005, because textile trade regulations shall be completely liberalized until that year. The Syrian textile industry must strengthen its international competitiveness by 2005.

### **3.8 Finance**

Settlement by check is assured by compulsory deposits to payers' current account before checks are issued or L/C are opened. The deposit required to open a L/C is higher 105% for private companies and 100% for public companies.

People do not want to save their money in banks. There is no stock market or bond market. The state budget has provided investment finance for public companies. Private companies start up on the basis of family savings. Syria depend import finance for machine and equipment on exporters credit.

High cost of compulsory deposit and structural money shortage are serious problems.

### **3.9 Export Promotion Measures**

In Asian countries, government policy and legal system are geared for export promotion, but there are no effective export promotion measures in Syria and also no incentive for export.

### **3.10 Measures to Attract Foreign Investment and Technology**

Syria has Law No. 10 (1990) to encourage investment by Syrian nationals and foreigners as well, but it does not seem to be functioning as expected for the textile industry. One of the reasons is potential threat of warfare. Foreign capital judges the investment from various viewpoints. Risk assessment is an important yardstick. Unfortunately Syria is rated at lower rank both in political and economical status.

### **3.11 Profitability of Public Companies**

At present, Syrian public companies contribute to the state budget more than their total expenditure. However, textile industry is in different situation. Cotton ginning will fall into deficit in 1997. The number of loss making company in GOTI is increasing. 11 companies out of 24 are loss making companies. Only a few companies can survive, but many companies have troubles.

### **3.12 The Administration Function for Industry**

The Ministry of Industry supervises undertakings by public companies in six sectors, namely food, sugar, engineering, chemical, cement and textile. This Ministry has four supporting centers, for standardization, productivity, research and testing and vocational training. The number of total staff at the central office in the Ministry is only 155. The policy function is very weak.

GOTI is the largest body in the six General Organizations under the Ministry of Industry. 180 staff are working. The role of the General Organization is to supervise and to coordinate the related independent public companies by many ways. The legal framework obliges General Organizations to take active leadership among related public companies. However this idea is not materialized in actual practice. GOTI can not stop increasing of the number of loss making companies.

The Syrian government have no information network encompassing the private companies. There are Chamber of Commerce and Chamber of Industry in Damascus and Aleppo, but they are not sufficiently functioning for that purpose.

The Central Bureau of Statistics (CBS) publishes "Statistical Abstract" once a year. This is valuable, but not sufficient for economic analysis due to lack of sales data, monthly data, analytical tool etc. There is no appropriate distribution center of legal documents. Economic news and information on economic policy issues are not disseminated.

### **3.13 Industrial Policy**

Syria has promoted industrialization mainly by investment planning in public companies, foreign trade regulation, plural exchange rate, construction of industrial zones and free trade zones. The Economic Committee meets once a week to discuss and decide economic policy issues. Recently the government started to review sectoral international competitiveness, but there is no central office of policy promotion. Limited number of staff resulted in poor dissemination of policy arguments to the people.

### **3.14 Textile Industry In the National Development Strategy**

The Eighth Five-year Plan 1996-2000 is still under discussion. Planning indicators are subject to revision up to the end of 1997. GDP and manufacturing will grow by 6.4% and 9.9% respectively a year. Local textile materials production will also increase steadily. The capacity of cotton ginning was expanded by about 50% in 1996. (Table S3.14-1)

GOTI submitted the proposed Five-Year Plan to the Ministry of Industry and SPC. The production and value added will increase by 2.3-2.4 times over a five-year period. GOTI is promoting ambitious three projects and also proposes another project. These are all cotton spinning. The spinning capacity of GOTI will be doubled in 2000.

On the other hand, the private textile industry is expected to grow at the high speed of 12% a year. The private sector will keep its leading position in Syrian textile industry in production, investment and employees.

**Table S3.14-1 FORECASTS ON SYRIAN TEXTILE INDUSTRY ACTIVITIES**

(August 1997)

|                      |        | 1995   | 1996      | 1997      | 1998      | 1999      | 2000      |
|----------------------|--------|--------|-----------|-----------|-----------|-----------|-----------|
|                      |        | actual | (planned) | (planned) | (planned) | (planned) | (planned) |
| <b>(Public-GOTI)</b> |        |        |           |           |           |           |           |
| Production           | mil.SP | 11,220 | 11,577    | 16,061    | 20,278    | 22,361    | 26,543    |
| Necessary materials  | mil.SP | 7,700  | 7,950     | 11,043    | 13,833    | 15,394    | 18,465    |
| Value added          | mil.SP | 3,520  | 3,626     | 5,017     | 6,444     | 6,967     | 8,078     |
| Investment           | mil.SP | -      | 2,327     | 5,951     | 6,216     | 5,281     | 3,062     |
| Employees            | number | 24,919 | 24,742    | 32,323    | 35,599    | 36,503    | 39,986    |

|                     |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|
| <b>(Private)</b>    |        |        |        |        |        |        |        |
| Production          | mil.SP | 25,372 | 28,417 | 31,827 | 35,646 | 39,923 | 44,714 |
| Necessary materials | mil.SP | 20,109 | 22,522 | 25,225 | 28,252 | 31,642 | 35,439 |
| Value added         | mil.SP | 5,263  | 5,895  | 6,602  | 7,394  | 8,281  | 9,275  |
| Investment          | mil.SP | 2,740  | 3,617  | 4,775  | 6,303  | 8,319  | 10,982 |
| Employees           | number | 46,244 | 51,793 | 58,008 | 64,969 | 72,766 | 81,498 |

Source : General Organization for Textile Industry and Ministry of Industry



## **4. Textile Industry**

*The general profiles of the textile and clothing industry in Syria were developed on the basis of export statistics of 28 countries and Syria's relevant statistics and taking into consideration of the field surveys.*

*The Syrian textile industry can be classified by raw material as domestic cotton and imported synthetic fibers, and by company as cotton and upstream oriented state-owned companies, and midstream/downstream oriented private companies which process imported synthetic fibers and domestic cotton.*

*State-owned companies have problems of operating older facilities, lack of consideration given to the importance of quality and customers. On the other hand, some private companies have profitably exported clothing (using Syrian cotton and/or sewing imported materials) to the EU and the U.S.*

*State-owned companies and private companies act separately without coordination is a serious problem.*

### **4.1 Textile Fibers**

#### **4.1.1 Locally Produced Textile Fibers**

Textile fibers produced in Syria are cotton, wool, and silk, while no synthetic fiber is produced.

Cotton produced in the country is all purchased by the government and sold to state-owned cotton mills or exported. Cotton is the second largest source of foreign currency next to oil, and the textile industry processing cotton serves as a major economic base in terms of employment.

The government currently bans imports of cotton, spun yarns, fabrics, and other products to protect cotton farms and state-owned textile companies. Also, it is restrictive about the entry of private companies to cotton spinning by limiting license to companies who can handle the integrated process of spinning, weaving, and dyeing. As for wool, spinning and carpet production are limited to state-owned companies.

### (1) Cotton

Cotton production in the country amounts to around 250,000 tons annually, of which 75,000 tons is supplied to the domestic industry, and the remaining amount is exported without processing. Cotton yield per unit of cultivation area has already reached the world class levels, and a further increase in cotton production will inevitably rely very much on the increase in cropping area and the expansion of irrigation systems. A cotton expert estimates that cotton production will grow to a maximum 275,000 tons in 2010.

Cotton varieties produced in Syria include Aleppo 33/1 and 40, Rakka 5, and Dier Ezzor 22, of which Aleppo 33/1 offers the best quality and can produce fine fibers up to Ne40 - 50. It is used for high-grade spun yarns produced locally.

Syrian cotton prices, CIF Scandinavia, are of the same level or higher than cotton produced in neighboring countries such as Greece, Turkey, and Pakistan, as well as Africa, indicating that its quality is similarly valued.

Note that extra long staple (ELS) cotton cannot be produced due to climatic conditions.

### (2) Wool

Syria has 6 million sheep (some statistics show 12 million sheep) but the breed is not suitable for commercial wool production. Local wool is generally blended with imported wool in the ratio of approximately 20/80 to produce carpet wool yarns. Production of raw wool is 5,000 tons/year in terms of greasy wool resulting in 2,750 tons/year of washed wool. Domestic consumption is about 1,200 tons/year of washed wool the balance being exported.

### (3) Silk

Production is decreasing and current production is reported to be around 3 tons/year. The reason for the decrease is that the production cost of silk is high.



## **4.1.2 Synthetic Fibers**

Synthetic fibers and regenerated fibers are all imported, and the domestic consumption is larger than cotton.

The country does not produce synthetic fibers or regenerated fibers, and there are no plans to do so. As no raw materials for synthetic fiber are produced, and domestic demand is low, it is safe to assume that synthetic fiber production will not be carried out in Syria for the foreseeable future.

## **4.1.3 Overview of Textile Companies**

### **4.1.3.1 Activity areas of state-owned and private companies**

The overall structure of the textile industry by material, export/import, company ownership (state-owned and private), and process (spinning, weaving, knitting, dyeing and finishing, and sewing) is shown in Figure S 4.1-1. This figure was compiled in conducting demand forecasts discussed in Chapter 6 by using the following statistical data:

- Input of local materials to the textile industry: Syria's official statistics
- Import volume: Statistics of countries exporting textiles to Syria (23 industrialized countries, Korea, Taiwan, Turkey, Singapore, and Hong Kong; totally 28 countries.)
- Export volume: Syria's official statistics of exports
- Activity areas of state-owned and private companies: Activity areas other than those of state-owned companies are assumed to be handled by private companies, because the comprehensive study was made as to the state-owned textile companies.

See Chapter 6 and ANNEX-3 for details

Figure S4.1-1 illustrates general profiles of the textile and clothing industry in Syria, which is described below. Note that the figure is based on estimates as of 1996, and for the purpose of this study, synthetic fiber includes some of rayon regenerated fibers.

(1) Local textile materials

In Syria, 250,000 tons of cotton are produced annually, of which one third is shipped for domestic consumption, and two-thirds exported. Washed wool production is fairly small, 3,000 tons annually. No synthetic fiber is produced locally, it is all imported.

(2) Imported synthetic fiber

Approximately 80,000 tons are imported annually, 80% of which are filament yarns (FY), and the remaining 20% staple fibers (SF). Acrylic yarns account for around 70% of SFs. Polyester staple fiber imports are therefore small, and so is the production of cotton/polyester blended yarns. Imports of blended fabrics are also small, indicating that the market favors FYs.

Some companies import polyester POY and produce DTY (draw textured yarns).

(3) Cotton spinning

Cotton spinning is primarily carried out by state-owned companies, and licenses are granted to private companies which have integrated processes of cotton spinning, weaving, and dyeing. State-owned companies have been actively adding spinning facilities to increase value added exports as far as possible, to replace exporting raw cotton.

Sabbagh and Sharabati is the largest cotton spinning maker in the private sector, which spins, weaves, and dyes cotton yarns for jeans at modern facilities and with modern machines.

(4) Weaving and knitting

Imported synthetic fiber accounts for a larger portion than cotton in the weaving and knitting processes. Although detailed data is not available, knitting seems to account for a larger volume of consumption than weaving.

State-owned companies produce around 15,000 tons of cotton woven fabrics annually. Thick fabrics not used for clothing account for around one half of this total.

In the private sector, Sabbagh and Sharabati seems to have the largest weaving capacity for jeans at around 10,000 tons annually.

Weaving of synthetic FYs is carried out widely by manufacturers in the Klasch Industry Zone, Aleppo, and other areas.

Knitting is undertaken by many private companies, and cotton clothing is exported in volume.

(5) Dyeing and finishing

Production capacities of private companies are much higher than those of state-owned companies. Dyeing and finishing of synthetic fiber are mostly carried out by private companies. In Aleppo and Damascus, there are a large number of commission based dye-houses. In addition, there are reportedly many companies involved in fabric printing. Many of them have high pressure high temperature dyeing machines to process synthetic fiber. They also have synthetic yarn dyeing lines.

(6) Sewing

Again, private companies have much larger production capacities than state-owned companies. Large sewing manufacturers in the private sector can roughly be classified into the following three types:

- Manufacturers of knit underwear and T-shirts using Syrian cotton
- Manufacturers of jeans using Syrian cotton
- Sewing manufacturers using imported fabrics and accessories

All the products except for jeans are largely exported. Some manufacturers do not supply any of their products to the domestic market. Exports are bound for the EU, the U.S., and neighboring countries. In particular, companies which export their products have been adding production lines and building new factories, and hence expanding their businesses rapidly.

The above situation is summarized as follows:

|                                  | State-owned   | Private   |
|----------------------------------|---|---|
| Raw material                     | Domestic  | Import, Domestic  |
| Fiber type                       | mainly Cotton   | mainly Synthetic, Cotton  |
| Processing                       | Upstream (mainly Spinning)<br>Weaving, Knitting, and Dyeing and<br>Finishing are smaller than private | Midstream, Downstream<br>(Knitting, Weaving, Dyeing and<br>Finishing, and Clothing) |
| Export                           | a small volume (cotton spun yarn is<br>exported )   | - Export of Syrian cotton clothing<br>- Export of imported fabric clothing          |
| Number of<br>employees,<br>Sales | smaller than private  | larger than state-owned   |

#### 4.1.3.2 General profiles of the textile and clothing industry by type of material

Figure S4.1-2 - 7 illustrates general profiles of the textile and clothing industry by type of material (assumed to be as of 1996). Note that synthetic fiber includes some rayon regenerated fiber.

##### (1) Cotton (Fig. S4.1-2)

Production of spun yarns is estimated at 63,000 tons annually, 53,000 tons by state-owned companies and 10,000 tons by private companies. In spinning, state-owned companies represent the major portion of production, while private companies account for much larger portion in the subsequent processes. Until 1996, spun yarns were only exported by Hama Cotton and in small quantities. In 1997, however, Lattakia Spinning started operation and is now exporting an estimated 10,000 tons annually.

Exports of clothing which use Syrian cotton (e.g., underwear and T-shirts) are on the increase. Domestic consumption of cotton products is estimated at around 46,000 tons per year.

##### (2) Synthetic filament yarn (FY) (Fig. S4.1-3)

Synthetic FY is imported at a rate of 50,000 tons annually, which represents a large volume for the country and are mostly processed by private companies. State-owned companies also use some synthetic FY to produce DTY.

The major application of synthetic FY, however, is knitting. Woven fabrics for native dress are made in the Kaseh Industry Zone, Aleppo, by using Jacquard machines with a production volume of approximately 6,000 tons per year.

Domestic consumption of synthetic FY products is estimated at around 41,000 tons per year.

**(3) Synthetic staple fiber (SF) (Fig. S4.1-4)**

The country imports as much as 27,000 tons of synthetic SF annually, 80% of which are spun yarns and are processed by private companies. Production of synthetic blended yarns by state-owned companies is small, being only around 2,000 tons per year. Acrylic yarns account for about 70% of imported synthetic spun yarns.

Domestic consumption of synthetic SF is estimated at around 23,000 tons, approximately one half that of synthetic FY.

**(4) Wool (Fig. S4.1-5)**

Locally produced wool is not suitable for textile production and is therefore blended with imported wool (approximately 20% of total) to make carpets and similar products.

Domestic consumption of wool is estimated at around 2,000 tons per year.

**(5) Cotton and synthetic SF (Fig. S4.1-6)**

As cotton and synthetic SF are processed in the same way they can be treated collectively as shown in the figure. The volume of their total processing at the fabric stage is approximately 86,000 tons per year.

**(6) Synthetic FY and SF (Fig. S4.1-7)**

For synthetic FY and SF, the processing volume at the fabric stage totals 71,000 tons per year, which exceeds the 62,000 tons of cotton. The 71,000 tons comprises FY70% and SF 30%, and is mostly processed by private companies. Exports are made in both the form of fabrics and clothing.

Domestic consumption of synthetic FY and SF amounts to an estimated 65,000 tons annually, again significantly exceeding the 46,000 tons of cotton.

#### **4.1.3.3 Present situation of state-owned companies**

##### **(1) Production facilities and producing capacities**

ANNEX-9 summarizes the production facilities and producing capacities of the state-owned textile companies of cotton spinning, knitting (underwear), dyeing and finishing, wool spinning, and carpet production.

##### **(2) Problems**

When it exported to the former USSR and Eastern Europe, the textile industry's main concern was quantity rather than quality. After the collapse of the principal markets, the industry is expected to enter export markets which give priority to quality. However, the study team failed to see the willingness and need for such transformation, and the management who consider that quality and production efficiency are important at most of the state-owned companies it visited.

An excessive number of the employees in the state-owned companies is also a big problem. It is also true that production equipment in the state-owned companies is mostly old; however, it is also true that if the old machinery were totally replaced by new machinery all the problems would be cleared up. As pointed out in Chapter 3, there are many institutional matters remain.

##### **(3) Variation in performance among state owned companies**

There are state owned companies that produce spun yarns of high quality by effectively utilizing old equipment and managing their operations in excellent ways. These companies are highly valued by domestic and foreign customers alike. On the other hand, others have massive inventories with problems being seen in every aspect from factory management to quality control. Thus, there is a significant variation in performance among state owned companies, probably due to a variety of factors, including the quality of labor, which is affected by factory location, and difficulty in labor management, and the capability of managers.

##### **(4) Construction of new spinning mills**

As part of the effort to export value added products, new spinning mills have been constructed to manufacture spun yarns solely for export. The Lattakia new spinning mill has already started commercial operation and the Idleb mill will

come on stream soon. Three more projects are planned, Jableh and the second phase of Lattakia, and Tartus.

(5) **Production, exports and domestic consumption of cotton spun yarns in 2000**

These new projects start operation in 2000, then the production/export/domestic consumption will be as shown in Figure 4.1-8. Production of cotton spun yarn will be increased double of the present production and as a result the export of spun yarn or clothing must be increased. However, the export of spun yarn may not be economically profitable and may not represent best interest of the industry in view of promotion of the textile industry. As discussed in detail in Chapter 6, clothing is taking up an increasing share of world textile trade. Syria can capitalize on the world trend and thus needs to boost clothing exports by leveraging its major advantages, low labor cost and proximity to the major market in Europe.

(6) **Growth of textile industries under concerted efforts of state-owned and private companies**

Therefore, a more realistic and viable approach is to use the new spinning mills to supply high quality spun yarns to private companies in large quantities, helping them to expand knitting, weaving, dyeing and finishing, and sewing operations, which will lead to more clothing exports. This is a more likely and feasible scenario for growth of the Syrian textile industry.

State-owned companies should envisage growth under concerted efforts of state-owned and private companies, rather than focusing on their own growth by exporting spun yarns.

#### **4.1.3.4 Present situation of private companies**

(1) **Constitute an integral part of the midstream and downstream**

For the textile and clothing industry in Syria to develop into one of the major exporting industries, expansion and growth of private companies is imperative as they constitute an integral part of the midstream and downstream sectors.

**(2) Many of them are managed under a quality-comes-first policy**

The study team visited mainly large companies, which, compared to the state-owned companies, do not have surplus labor and have newer machines. Activities on the factory floor are very brisk, and the "5S" rules seem to be strictly complied with. Many of them are managed under a quality-comes-first policy.

**(3) Growing by exporting clothing made by using local cotton and by sewing imported materials for EU and the U.S.**

In the export business, there are companies which have been growing by exporting knitwear made by using local cotton, and those which successfully export products by sewing imported materials. The exports are destined for the EU, the U.S., and neighboring countries. Some companies specialize in exporting to the U.S. Many of them have steadily been adding to their production capacities, and the shop floor activity is very brisk. It would appear that they would be able to boost exports further.

**(4) There are many commission based dye-houses**

There are many commission based dye-houses, which have sufficient high temperature, high pressure dyeing machines to process synthetic fibers and fabrics.

**(5) Outline of the private companies visited**

In fact, GOTI does not have detailed data on private companies engaged in textiles and clothing, and the first field survey could not collect sufficient information. During the second field survey, however, the study team identified and visited private companies by obtaining background information from foreign dye companies and through cooperation from the Chamber of Industry. As a result, general profiles of the textiles and clothing industry have finally been gained.

As pointed out earlier, the study team visited relatively large private companies. The 34 companies visited can be roughly classified into the following types (Table 4.1-1):



- 1) Those exporting underwear and T-shirts using Syrian cotton (using high-grade spun yarns produced by Lattakia and Hama)
- 2) Those exporting a variety of clothing including men's suits, trousers, shirts, and women's underwear by sewing imported materials
- 3) Commission based dye-houses (many are located in Aleppo and Damascus and can dye synthetic fabrics)
- 4) Jeans manufacturers (Sabbagh & Sharabati has a modern, integrated production system consisting of spinning, weaving, and dyeing and supplies fabrics for jeans to the domestic market. In addition, there are companies which weave and dye fabrics for jeans and operate jeans shops. Jeans, therefore, make up a large market in Syria.
- 5) Others
  - Acrylic blankets (Sabbagh & Sharabati)
  - Velvet (Sabbagh & Sharabati)
  - Polyester non-woven fabrics (Rankoushi & Dakkak)
  - DTY yarns (Modern Ind. & Commercial)
  - Synthetic FY weaving (Klaseh Industry Zone)
  - Towels (Abu Shaar))

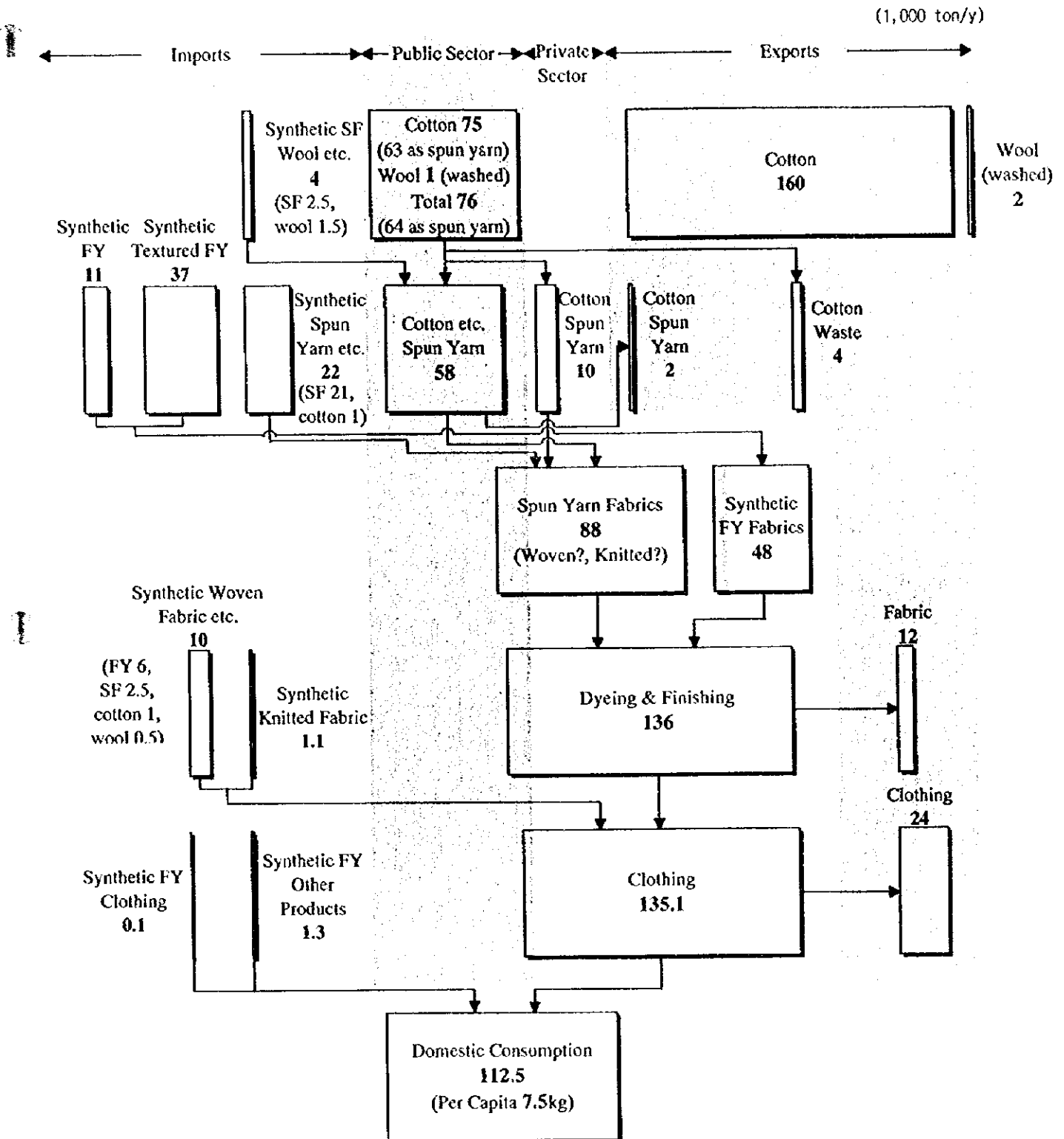
#### **4.1.4 Outline of GOTI (General Organization for Textile Industry) Five-year Plan, (draft, 1996-2000)**

The draft plan is contained in ANNEX-7. It should be noted that the development plan envisages only state-owned companies, and thus there is no development plan for the entire industry including the private sector. Also, data contained in the plan's tables are also partly inconsistent. For these reasons, this section introduces the plan's general outline only. Note that the draft plan may be modified to reflect the Study Team's Report.

**Table S 4.1-1 LIST OF THE PRIVATE TEXTILE COMPANIES VISITED**

| <b>Name of the Company</b>                             | <b>Fibers used</b>                   | <b>Products</b>                               |
|--|--------------------------------------|---|
| Chebib Brothers  | Syrian Cotton                        | Knitting, Dyeing, Garment                     |
| Bawadekji Tex. Co. Ltd.                                | Syrian Cotton                        | Knitting, Garment                             |
| Koucfati   | Syrian Cotton                        | Dyeing, Garment, Sales of Jeans               |
| Habi Tex   | Syrian Cotton                        | Knitting, Dyeing, Garment                     |
| Syrian Cotton Development                              | Syrian Cotton                        | Knitting, Baby's Garment                      |
| Industry and Commerce Tissues                          | Syrian Cotton                        | Knitting, Garment                             |
| Sabbagh & Sharabati                                    | Syrian Cotton                        | Cotton Spinning, Weaving, Dyeing for Jeans    |
| Khalil and Tujjar Comp.                                | Syrian Cotton                        | Knitting, Garment                             |
| Abdel Abu Shaar & Son.                                 | Syrian Cotton                        | Terry Towel                                   |
| Balalo   | Syrian Cotton                        | Weaving, Dyeing for Denim                     |
| Omanzino and Children Co.<br>(Klaseh Industry Zone)    | Polyester filament<br>(jacquard)     | Weaving                                       |
| Mohamed Ahmad Hilal and<br>Children's Co.              | Polyester filament<br>(jacquard)     | Weaving                                       |
| Samarli & Hamammi                                      | Commission dyeing                    | Dyeing  |
| Al-Fourkan   | Commission dyeing                    | Weaving, Dyeing                               |
| Khodair and Bibi, Company                              | Commission dyeing                    | Dyeing (yarn)                                 |
| Khouthaz Dyehouse                                      | Commission dyeing                    | Dyeing (yarn)                                 |
| Shantex  | Commission dyeing                    | Dyeing  |
| Bahra & Co.  | Commission dyeing                    | Dyeing  |
| Modern Co. for Dyeing and<br>Finishing                 | Commission dyeing                    | Dyeing  |
| SEEMA Dyeing and Finishing                             | Commission dyeing                    | Dyeing  |
| Sabbagh  | Acrylic                              | Blanket & Velvet                              |
| "adidas", RIAD SEIF, MAJED<br>ZAYED & SONS             | Imported fabrics                     | Garment                                       |
| SAFE BROS.   | Imported fabrics                     | Garment, Suits, Shirts, Children's            |
| Abdel Ahad Bros.                                       | Imported fabrics                     | Garment, Suits                                |
| Assia  | Imported fabrics                     | Garment Men's suits, pants, shirts            |
| Asseel Co. for Industry and Trade                      | Imported fabrics                     | Garment, Lady's underwear                     |
| "Benetton", (Amal Samha Co.)                           | Imported fabrics                     | Garment                                       |
| Anas Economic Establishment Co.<br>(former name Kalas) | Syrian Cotton<br>Imported fabrics    | Garment, Jeans Garment, Men's & Ladies' suits |
| Lord (Hamwi & Kalai Co.)                               | Imported fabrics<br>Domestic fabrics | Dyeing, Garment, Jeans                        |
| Adel & Hassan Hassanein                                | Wool, Silk                           | Gowns, Trousers                               |
| Arab Fancy Gowns-Abaya                                 | Cotton, Synthetic                    | Weaving, Arab gowns                           |
| Rankoushi & Dakkak                                     | Polyester                            | Non-woven fabrics, polyester                  |
| Modern Ind. & Commercial                               | Polyester                            | Texturizing                                   |
| Wail Y Tabbaa  | Polyester, Nylon                     | Texturizing, Curtains, Ladies underwear       |

Figure S4.1-1 PRODUCTION, IMPORT AND EXPORT OF TEXTILE INDUSTRY (1)



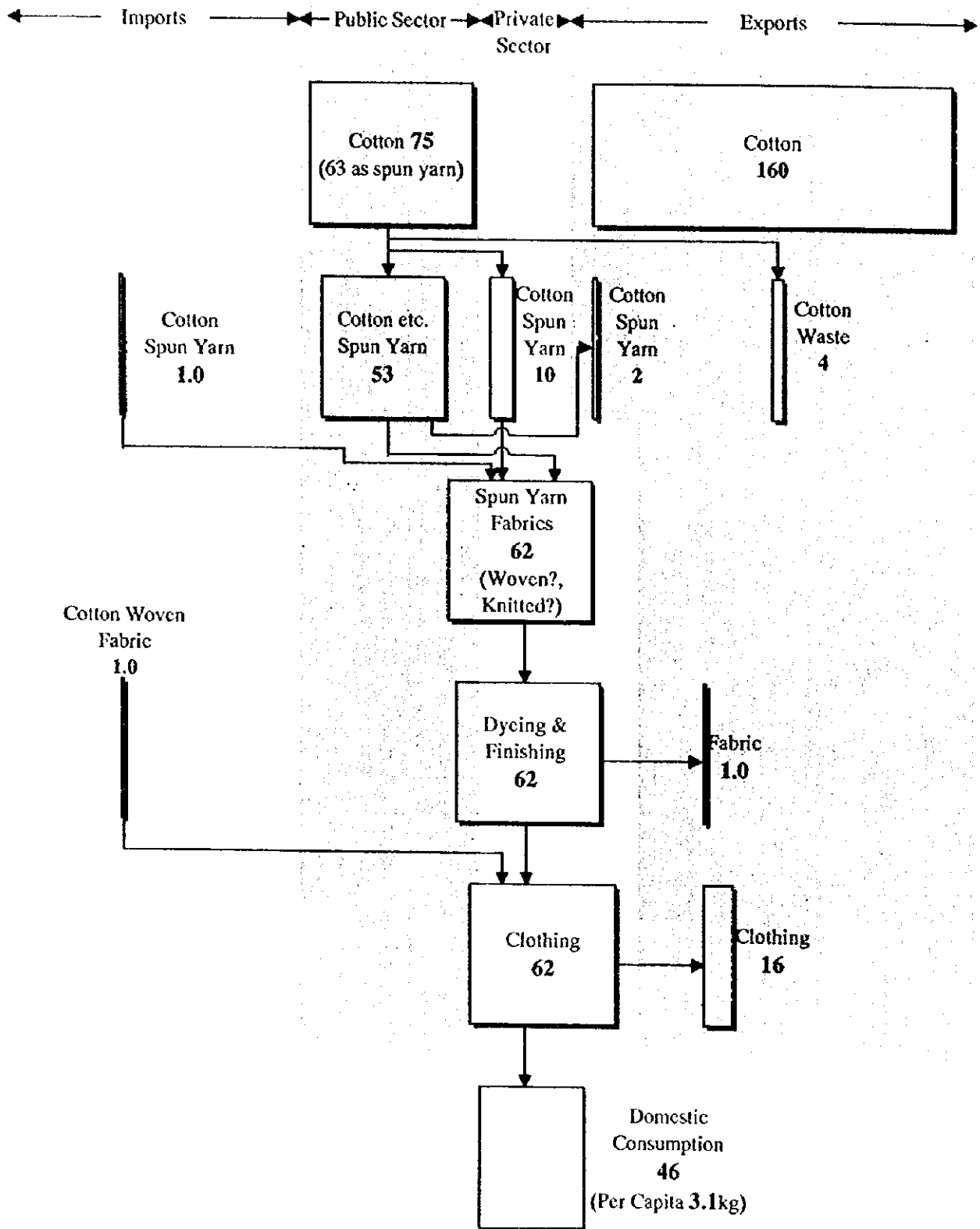
Source : Import of textiles to Syria based on exporting countries statistics

Note : 1) "Synthetic" includes small quantity of rayon.

2) The figures are shown approximately in "Fiber equivalent" not actual weight.

3) The figures are the estimate as of 1996.

Figure S4.1-2 PRODUCTION, IMPORT AND EXPORT OF COTTON (2) (1,000 ton/y)



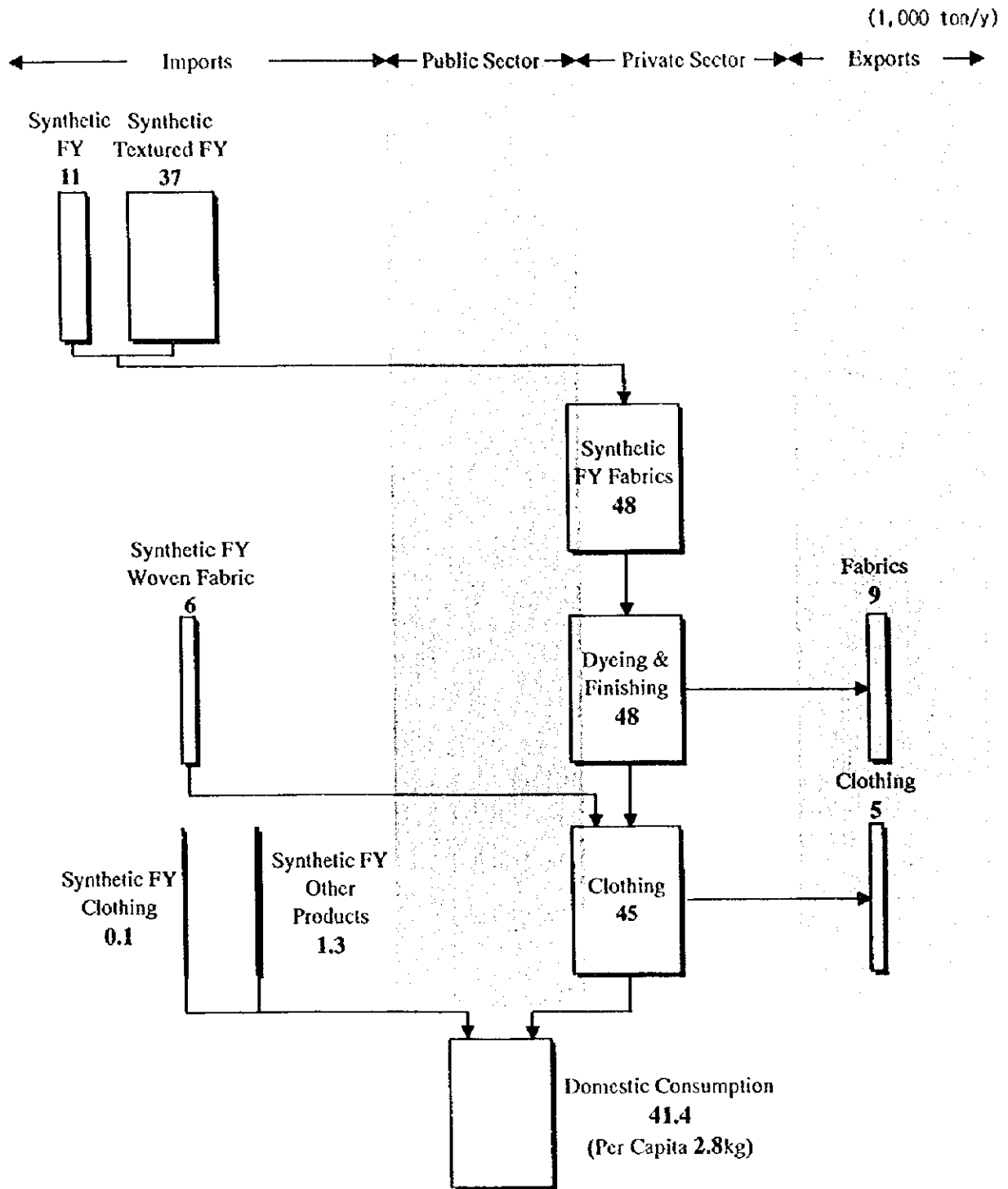
Source : Import of textiles to Syria based on exporting countries statistics

Note : 1) "Synthetic" includes small quantity of rayon.

2) The figures are shown approximately in "Fiber equivalent" not actual weight.

3) The figures are the estimate as of 1996.

**Figure S4.1-3 PRODUCTION, IMPORT AND EXPORT OF SYNTHETIC FY (3)**



Source : Import of textiles to Syria based on exporting countries statistics

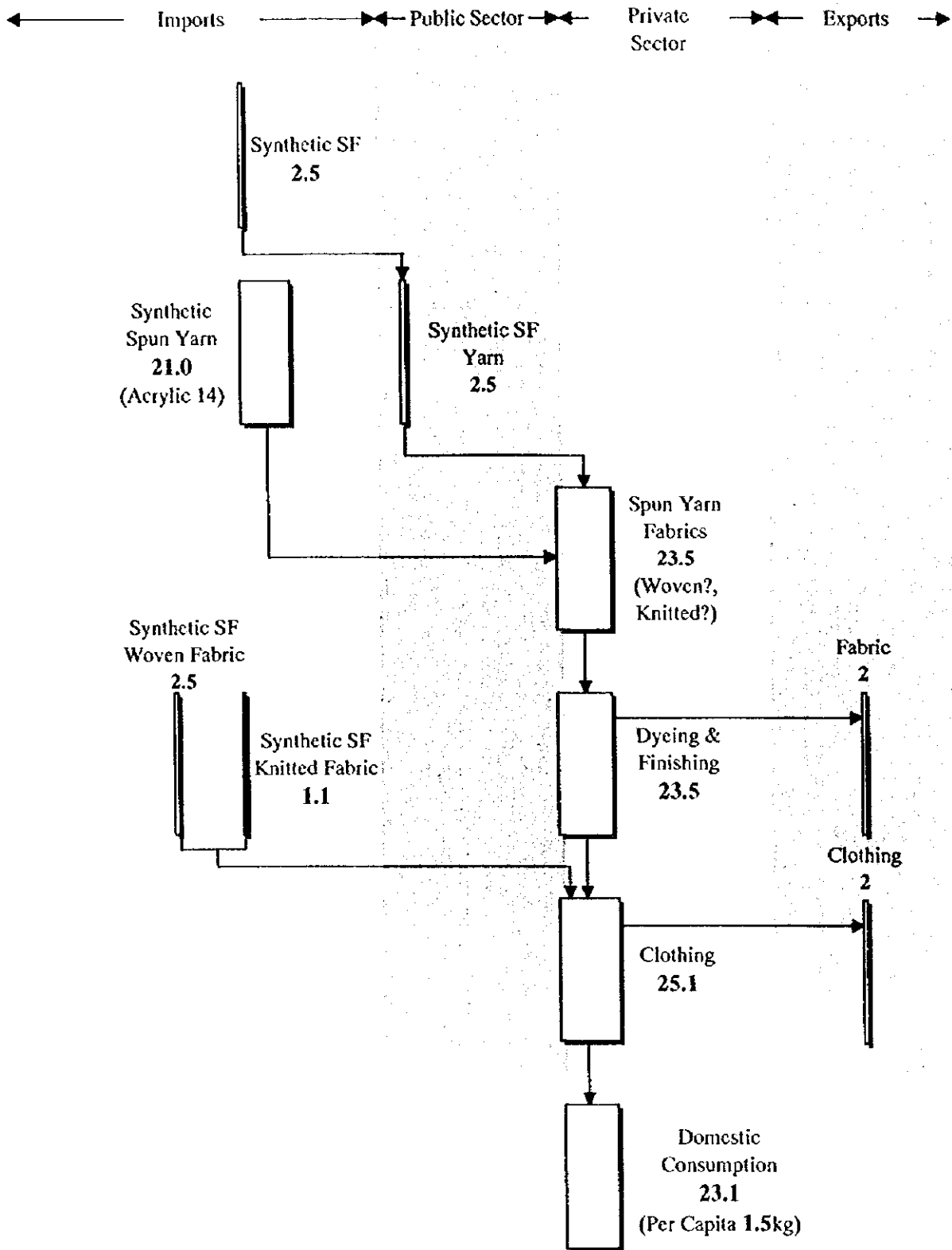
Note : 1) "Synthetic" includes small quantity of rayon.

2) The figures are shown approximately in "Fiber equivalent" not actual weight.

3) The figures are the estimate as of 1996.

Figure S4.1-4 PRODUCTION, IMPORT AND EXPORT OF SYNTHETIC SF (4)

(1,000 ton/y)



Source : Import of textiles to Syria based on exporting countries statistics

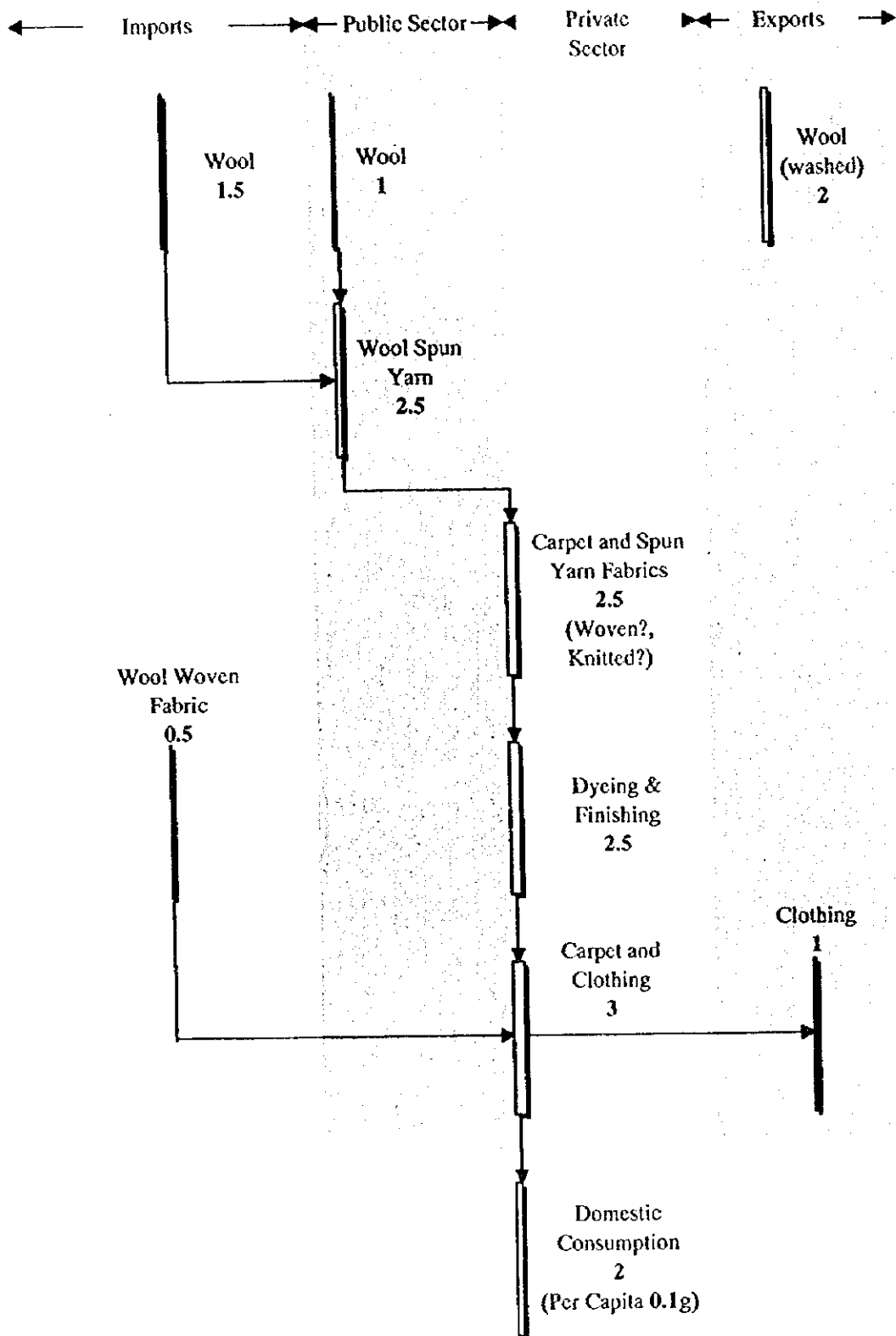
Note : 1) "Synthetic" includes small quantity of rayon.

2) The figures are shown approximately in "Fiber equivalent" not actual weight.

3) The figures are the estimate as of 1996.

Figure S4.1-5 PRODUCTION, IMPORT AND EXPORT OF WOOL (5)

(1,000 ton/y)



Source : Import of textiles to Syria based on exporting countries statistics

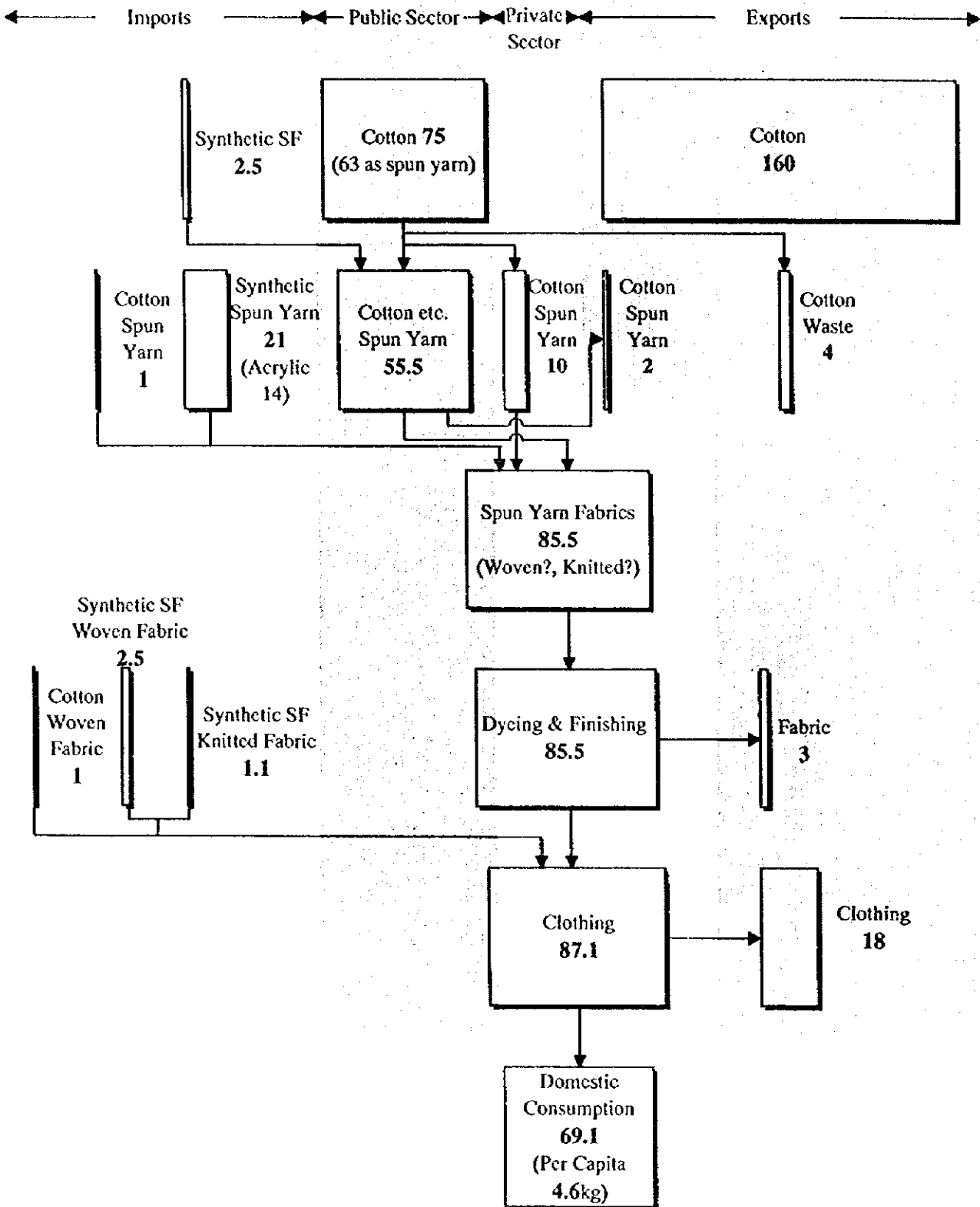
Note : 1) "Synthetic" includes small quantity of rayon.

2) The figures are shown approximately in "Fiber equivalent" not actual weight.

3) The figures are the estimate as of 1996.

Figure S4.1-6 PRODUCTION, IMPORT AND EXPORT OF COTTON AND SYNTHETIC SF (6)

(1,000 ton/y)



Source : Import of textiles to Syria based on exporting countries statistics

Note : 1) "Synthetic" includes small quantity of rayon.

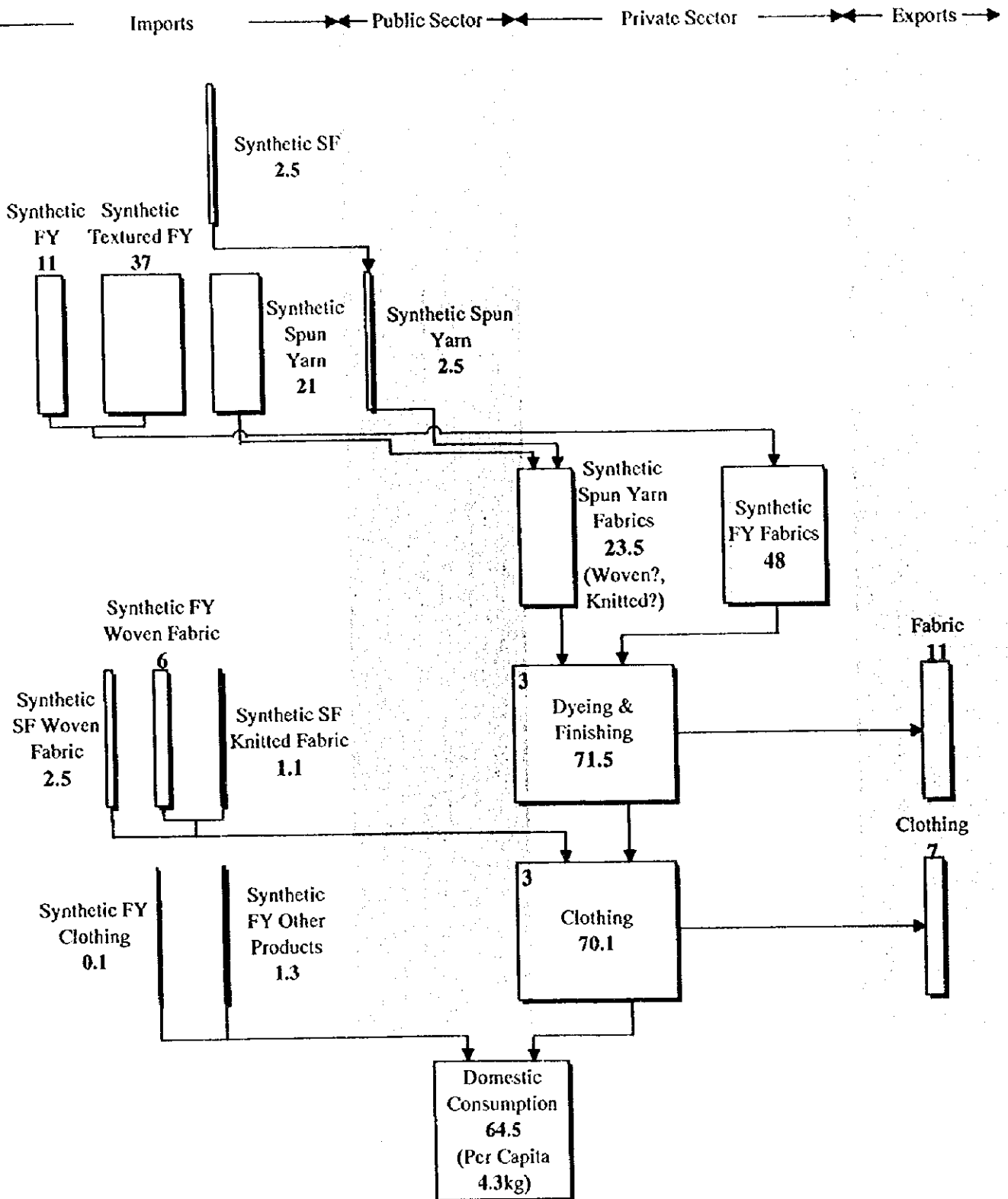
2) The figures are shown approximately in "Fiber equivalent" not actual weight.

3) The figures are the estimate as of 1996.



Figure S4.1-7 PRODUCTION, IMPORT AND EXPORT OF SYNTHETIC SF AND FY (7)

(1,000 ton/y)



Source : Import of textiles to Syria based on exporting countries statistics

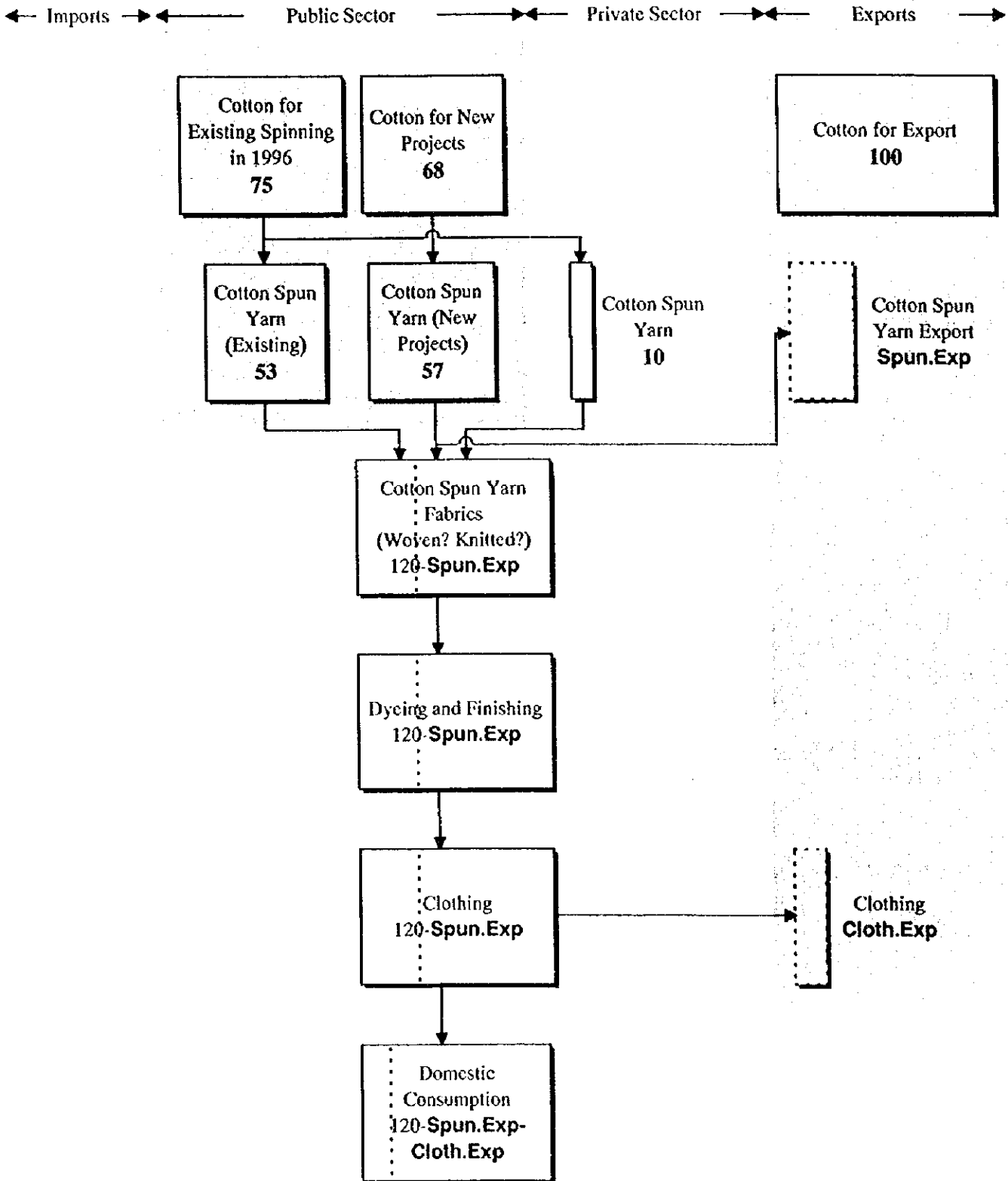
Note : 1) "Synthetic" includes small quantity of rayon.

2) The figures are shown approximately in "Fiber equivalent" not actual weight.

3) The figures are the estimate as of 1996.

Figure S4.1-8 PRODUCTION, IMPORT AND EXPORT OF COTTON in 2000

(1,000 ton/y)



Source : Import of textiles to Syria based on exporting countries statistics

Note : 1) "Synthetic" includes small quantity of rayon.

2) The figures are shown approximately in "Fiber equivalent" not actual weight.

3) The figures are the estimate as of 1996.

## **4.2 Present Situation and Problems of State-Owned Textile Companies**

### **4.2.1 State-Owned Textile Companies, General**

#### **4.2.1.1 Present situation of state-owned textile companies**

The textile fibers produced in Syria are cotton, wool and silk. The main activity of the state-owned textile companies is cotton spinning. Their activity and present situation are described in detail in Chapter 4.1.3.

#### **4.2.1.2 Problems of State-Owned Textile Companies**

The state-owned companies, as a whole, have the following problems:-

- a) Obsolete production machinery and equipment
- b) Low productivity and quality
- c) Weak sales ability (especially for export)
- d) Poorly skilled workforce
- e) Inadequate production and management control

Regarding obsolete machinery, except for Lattakia new Spinning company which was recently commissioned, the other companies require a replacement and/or renewal program of varying magnitude for their machinery, although partial improvements are already in progress.

In the case of obsolete machinery, it is very difficult to acquire the necessary parts which are indispensable for proper operation. In-house fabrication of parts is an alternative solution for this problem but it has its limit in terms of quality and reliability. Using obsolete machinery has the same connotations as applying out-of-date production technology. It leads to a deterioration in productivity and quality. Modern production machinery has the latest production technology built in. In the past, due to the characteristics of Syrian raw cotton, the state-owned textile companies produced textiles of low grade for clothing and bags where quality was not questioned. This situation avoided any recognition of the importance of quality and quality-first mentality.

In addition, the lack of quality awareness is also attributable to the application of quality control techniques, such as SOP, QC, and TQC. The first thing for Syrian companies to do will be to understand and master SOP, QC, and TQC. Moreover,

it will be necessary for Syria to introduce ISO9000 and to establish rules or regulations for quality standards in the country.

Since many transactions of the state-owned companies are carried out more by government organizations than private companies, such policies as import prohibition or limitation favor the sellers. Further more, as exports of products (yarn and textiles) by the state-owned Syrian companies are very few, it is difficult to install a strong will for stable quality, sales promotion and marketing which the textile exporting countries have. In this situation, no claims on products are anticipated by the procedures and this also creates a low quality-mentality. This would become a crucial matter, if they tried to enhance business through exporting of their products in the future.

The state-owned companies can not compete with the private companies in respect of recruitment of competent workers, as they are tied to inflexible wage structures and are up against attractive salaries offered by private companies. This problem is serious in Aleppo where many private textile companies are in operation. In addition, it is said that workers are not available in adequate numbers during the harvesting season in Hassakeh and Deir Ezzor districts. In the garment industry the state-owned garment companies are left far behind by the private sector which is remarkably advanced, and the laborers working in the state-owned companies are discouraged as their sale are low.

On the other hand, Hama Cotton Yarn Company's achievement is noteworthy as it is producing quality yarns with a good management in spite of its old machinery. This may be a useful model from which other state-owned companies can learn from and follow.

#### **4.2.2 State-Owned Cotton Textile Companies**

Main business of the state-owned companies is cotton spinning in the upstream (at best, to the midstream). There are 18 existing companies of cotton and polyester staple spinning. In addition, there are three projects on the way, one in progress and two under study.

The Cotton spinning sector is monopolized by the state-owned companies. The private sector is permitted to enter an integrated factory of spinning/weaving/

knitting/dyeing of cotton and cotton/synthetic blended spinning. Such private companies are found in Aleppo (Sabbagh and Sharabati and Deiry Tex). There are some weaving and dyeing/finishing factories in the state-owned textile companies, but these are mostly in the integrated form. There are 4 state-owned knitting and garment companies but the size of their business is small. Therefore, it is again noted that those textile business owned by the government are mostly in upper streams related to raw cotton. This means that the middle and lower streams of textile business (knitting, weaving, dyeing and sewing) are in the hand of the private companies.

#### **4.2.3 State-Owned Wool Company**

Wool spinning and wool carpet manufacturing are allowed only to the state-owned companies. Carpet manufacturing using non-wool are permitted in the private companies and there are 15 companies now. As for high grade wool textiles, no suitable raw materials are available in Syria, thus, most private companies are making ladies' and gentlemen's suits by using imported raw materials.

#### **4.2.4 State-Owned Silk Company**

Only one company, Draikeesh Natural Silk Company, is dealing with silk production. It imports silkworm eggs from Japan and sublets sericulture of silkworms to farmers nearby. It purchases cocoons from them and makes silk yarn for domestic silk weavers.

According to the laboratory test on silk samples collected by the first study team in March 1997, their average fineness turned out to be 49 denier and its usage is esteemed as for carpet. And quite a few large knots were observed here and there and it will not be possible to export these products.

### **4.3 Present Situation and Problems of Private Textile Companies**

#### **4.3.1 Activity Areas of Private Companies**

As pointed out in 4.1.3.1, private companies play a major role in knitting, weaving, dyeing/finishing, and sewing processes by using imported synthetic fibers and yarns, and cotton yarns, and some of them export clothing to the EU, the U.S., and

neighboring countries. Overall, they are larger than state-owned companies in terms of employment and sales.

#### **4.3.2 Present Situation of Operation**

The study team visited 34 companies and found that many of them were managed under a policy giving priority to quality and had strong vitality. In export business, they thoroughly examine the market requirements and trends, and strive to build up and adjust internal resources to meet customers' demand (quality, price, and delivery). They have staff in charge of exports, who have appropriate language skills and marketing expertise. These efforts and capabilities distinguish the private companies from state-owned companies. A small number of state-owned companies do manufacture exportable products but do not have expert staff.

From the corporate visit, major findings obtained from comparison with state-owned companies are as follows:

- The number of workers is relatively small.
- The "5S" is thoroughly practiced.
- Quality control and facilities management are firmly in place.
- Many factories are clean and well-designed.
- High export ratio
- Long-term relationships with foreign customers
- Large companies operate welfare facilities including cafeteria, medical clinic, mosque, and child care centers.
- Highly computerized
- Many companies have a policy that gives the priority to quality.

#### **4.3.3 Present Situation of Textile and Clothing Companies**

##### **(1) Companies exporting clothing which is made from Syrian cotton**

These companies make a variety of products such as knit products, jeans and terry towel by using Syrian cotton and export these to the EU, the U.S., and neighboring countries.

##### **1) Cotton knit products**

Bawadekji, Habi Tex, Chebib, Industry and Commerce Tissue, and Syrian Cotton Development export knit products made of Syrian cotton.

Export destinations are the EU and the U.S. Most of these companies export more than 90% of their products.

They do not sell products in the domestic market, because the market is very small and each transaction is relatively small while selling expenses including collection costs are high.

## 2) Jeans

Jeans make up a sizable market in the country, which also supports exports. Kouefati exports around 10,000 jeans made of Syrian cotton to neighboring countries, including Jordan, Lebanon, and Kuwait.

## 3) Cotton towel

Adel Abou Shaar & Son a terry towel manufacturer exports 80% of its products to Germany, France, and Saudi Arabia.

## (2) Exports of clothing made by using imported materials

Exports of clothing made by sewing imported fabrics and accessories are rapidly growing in the country, and many companies have been expanding their capacities.

The Study Team visited a number of companies including Riad Seif Majed Zayed & Sons ("adidas"), Seif Bros. (SEIF 400), Assia, Asseel Co. for Industry and Trade, Amal Samha Co. ("Benetton"), Abdel Ahad Bros., and Hamwi & Kalai Co. ("Load").

Product types are very diverse for "adidas" and "Benetton," while other brands are concentrated on men's clothing, including suits, trousers, shirts, and sweaters. Some export children's clothing.

One exception is Asseel which specializes in production of women's underwear including brassieres, girdles, and body suits, and exports approximately 40% of its products to the EU.

(3) Integrated manufacturers having spinning, weaving, and dyeing processes

Sabbagh & Sharabati is an integrated manufacturer of fabrics for jeans by operating spinning, weaving, and dyeing processes. Its factory, which came on stream in 1995, has the latest and most automated line of its type.

(4) Textured yarn

"Modern Industry and Commercial" imports polyester POY from Turkey, Taiwan, and Italy and produces approximately 7,000 tons of DTY annually.

(5) Woven fabrics of polyester FY

In the Klaseh Weaving Industry Zone, Aleppo, there are around 200 weaving shops, which operate Jacquard machines for synthetic fabrics (2-8 units each) 24 hours per day, mainly by family members.

(6) Dyeing

There are many dyeing companies in Aleppo and Damascus, which provide service on a commission basis. Most of them have high temperature/pressure dyeing machines for synthetic fabrics and yarns.

Processing capacities of the dyeing companies range between 2-15 tons per year, with employment ranging between 40 and 160 persons.

They handle all types of synthetic fibers (polyester, nylon, acrylic, and blended yarn) and fabrics (woven fabrics, knit, brushed fabrics, and wide fabrics). Polyester/cotton blended yarns are imported from China and Indonesia, polyester FY from Taiwan and Hong Kong, and the U.S., and acrylic fibers from Korea.

Dyed fabrics are used for curtains, furniture, interior decoration, scarves, towels, and sweaters, in addition to clothing. In particular, surprisingly large volumes are used for furniture and interior decoration, which seem to come from the wide use of traditional ornaments and embroideries.

Dyed fabrics or textile products are exported to the EU and neighboring countries including Lebanon and Saudi Arabia.

It should be noted that many factories do not treat effluent properly, Many have the view that effluent treatment cannot be handled by an individual company and



collective treatment is required under the assistance of the government, as done in the industrial estate. Bahra has a full-scale treatment plant of the coagulating sedimentation type

**(7) Blanket and velvet**

Sabbagh imports dyed acrylic staples and produces 1,300 sheets of blanket per day at a modern factory, 40% of which are exported. It is now building a new factory, jointly with Saudi Arabia and Korea, to produce blankets for export to Saudi Arabia.

Sabbagh also produces velvet from polyester and cotton at a rate of 1,500m/day, 40% of which is exported.

**(8) Non-woven fabrics**

Rankoushi & Dankkak operates the largest factory of non-woven fabrics which produces 2,000-3,000 tons annually, mainly polyester SF-based non-woven fabrics. They are used for mattress and lining for interior decorations and are exported to the EU, Saudi Arabia, Lebanon, and Jordan.

#### **4.3.4 Major Problems Related to Private Textile Companies**

##### **4.3.4.1 General**

General problems commonly observed among private companies in Syria are as follows.

**(1) Dominance of family management limits growth pace**

Private companies in Syria are basically family concerns, rather than joint stock companies owned by a large number of investors. Most of the companies are managed by their founders and relatives. Together with the undeveloped financial system, they can only grow within their own financial resources.

They can become unstable if any conflict or trouble occurs between the members. Generally, it is difficult to develop a family concern to a large organization with global presence.

## **(2) Lack of foreign investment**

Rapid development is difficult unless foreign companies with established markets invest in the country. In Asia which offers a strong advantage in low labor cost, foreign capital and local enterprises have been joining hands to drive rapid growth of various industries including the clothing and apparel industry. However, Syria lacks such dynamism and development potential is limited.

### **4.3.4.2 Major problems facing private sewing/exporting companies**

Exports of clothing and apparel products require mutual trust between the producer (seller) and the marketing company (buyer) as apparel sales are often affected by time-related factors. If the producer supplies out-of-date (mediocre quality) products or fails to deliver products within a specific period, considerable loss will occur on both sides. Generally, the foreign company (buyer) which intends to purchase apparel products in a country tries to avoid the risk by investing in a local company or sending its engineers to the company in the form of technical assistance. However, in Syria where there is no equity participation by foreign partners, the producer must assume the entire responsibility. Under these circumstances, it takes some time to build a trusting relationship between the manufacturer and the buyer.

Successful apparel exporters in the country have presumably established their reputations for quality, firstly in the domestic market, then among foreign buyers who have gradually increased orders. Without foreign direct investment, the apparel industry in the country must repeat this slow process of finding customers, which results in slow growth of the entire industry and places it in an unfavorable position to compete with other countries.

### **4.3.4.3 Major problems related to exports of clothing made of Syrian cotton**

#### **(1) Unstable supply of high-grade spun yarns**

Cotton spinning is almost exclusively carried out by state-owned companies. They tend to export high grade spun yarns as it offers advantages in volume sales and receipts of foreign currency, rather than selling to the domestic market where a majority of transactions is made in small lots which take time and costs money to collect payment.

This happened in 1997, when Lattakia's combed yarns (high grade spun yarns) were all exported despite strong demand among domestic private companies. Moreover, imports of cotton spun yarns are banned.

These circumstances strongly discourage private companies to expand their apparel export business by using Syrian cotton. Foreign buyers are equally facing the risk of unfulfilled orders. So far as the government has chosen to monopolize the spinning sector, it must assume responsibility to assure supply to private companies. Unless stable supply is warranted, there is little prospect for expanding exports of apparel products by using Syrian cotton.

**(2) The quality of cotton spun yarns is left in the hands of state-owned companies**

As spinning is virtually monopolized by state-owned companies and there is no competition among spinning mills in terms of quality and price, private companies exporting cotton clothing are forced to rely on state-owned companies for quality of spun yarns, the principal material. This again discourages private companies to expand their business significantly.

In fact, state-owned spinning mills often fail to deliver spun yarns to companies on schedule, or spun yarns from different mills are delivered causing variations in dyeing results.

At present, spinning licenses are granted to manufacturers having integrated processes from spinning to dyeing. For apparel exporters, the spinning business is not feasible due to large investment and high risk.

**(3) Issues related to international cotton price**

Cotton prices in Syria are determined on the basis of production cost, regardless of international market price. As a result, when the international market price rises, cotton clothing exports from Syria can enjoy benefits. On the other hand, Syrian products lose competitiveness when the international market price drops. This is a very risky situation which private and foreign companies want to avoid.

#### **4.3.4.4 Issues related to government import control on clothing materials**

In late July 1997, the government suddenly banned imports of fabrics for jeans, including those used for exports of sewn products. This will seriously affect apparel exporters as well as their customers, and abrupt import or export controls should be avoided to ensure steady development of the industry.

#### **4.3.4.5 Issues related to dyeing operations**

Effluent treatment is a heavy financial burden on a single company, and collective treatment needs to be promoted under joint efforts between the government and the private sector.

## 5. Supporting Services for Textile Industry

Supporting services for the industry usually includes standardization, testing, quality control, productivity improvement, human resources development, technical guidance, technical information, etc. Technically, there are institutions to provide those services in Syria, however, institutional backing, budget and staffing are insufficient and need to be improved. The Team discussed the matter with the Syrian authority, and chose priority projects as mentioned in Chapter 11.

The status of the Syrian industry requires in addition, institutional infrastructure such as measures for export promotion; tax exemption on export earnings, export finance, export credit insurance, export marketing and improvement of competitiveness by upgrading quality. An important point is the establishment of a general direction and policy, and all subsequent policies and measures are to be in coordination with the basic policy. For instance, in the present situation in Syria, the export promotion policy and export taxation seem to be contradicting each other. To realize an important aim such as the conversion into a market economy system, export promotion or promotion of industry, the establishment of an organization higher than ministerial level is adopted in some countries to avoid ministry level conflicts, and to expedite the execution of actions and projects.

Another important measure for the development of the industry is the enticement of foreign investment. Along with the setting up of a legal background to entice foreign capital investments in Syria, which should be as attractive as those of neighboring countries, should be the establishment of free trade zones/export processing zones with single-window services is a popular measure. If free trade zones/export processing zones are established with incentives such as lower utility cost, better communication and free import-export arrangements, they could also be utilized as industrial estates to develop domestic industry in Syria, even if foreign investors do not come as originally planned. This matter covers not only the textile industry, but also all Syrian industry. The team will not elaborate on this subject in this report.

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## **6. Supply and Demand Forecast**

*This chapter analyzes the current worldwide supply and demand situation concerning textiles and clothing followed by forecasts, and presents the result of analysis of current textile and clothing consumption trends in Syria, together with textile supply and demand forecasts.*

*World textile and clothing demand is expected to grow at an annual 2.4% rate of until 2000. Production of synthetic fiber, particularly in Asia, has been steadily growing to more or less the same level as cotton production in 1995 and is expected to surpass this after this time.*

### **6.1 Worldwide Textile and Clothing Supply and Demand Analysis and Forecast**

Supply/demand forecasts are conducted by various organizations. These results are referred to in this report. The names of the organizations are described in the Tables and Figures.

#### **6.1.1 World Supply and Demand Analysis and Forecast by Region and Material**

##### **6.1.1.1 By region**

World demand for textiles and clothing is expected to reach 48.5 million tons in 2000, with an annual average growth rate of 2.4%. Regional breakdown (Figure S6.1-1) shows that Asia holds the highest share. In fact, demand in Asia (except for Japan and West Asia) will grow at the highest rate of 4.5%. Within the region, China (including Taiwan) dominates (Figure S6.1-2). Strong growth of demand in Asia reflects high population growth and the surge in textile and clothing consumption per capita in Southeast Asia, the fastest growing region.

##### **6.1.1.2 World demand analysis and forecast by material and region**

World textile and clothing demand forecast by material indicates that synthetic fiber demand would exceed cotton in 1995-1996 and gain the largest share. The trend is expected to continue in future as synthetic fiber demand will grow with increased production, especially in Asia.

### **6.1.1.3 Textile and clothing consumption per capita**

Per capita consumption of textiles and clothing is approximately 7kg on world average. The largest consuming country is the U.S. (28-29kg) due to high demand for non-clothing applications. Per-capita consumption in Syria is at more or less the same level as the world average.

### **6.1.1.4 Synthetic fiber ratio**

The share of synthetic fiber as a percentage of total textile and clothing consumption (synthetic fiber ratio) has been on the rise worldwide, from 22% in 1970 to 36% in 1980 and 39% in 1990, and is forecast to reach 42% in 2000. The rapid growth of synthetic fiber demand mainly comes from price competitiveness created by volume production, high functional performance, and notable growth of demand for non-clothing use. Strong demand spurs increased production, particularly in Asia.

## **6.1.2 World Textile Fiber Production**

In world textile and clothing production, output of synthetic fiber has steadily been growing. It reached the same level as cotton production in 1995 and is expected to outpace the latter thereafter.

## **6.1.3 World Textile and Clothing Trade Analysis and Forecast**

### **6.1.3.1 World mill consumption**

Measured by the volume of fiber processing - mill consumption (production of filament and fibers + import volume - export volume, i.e., input of filament and fibers to spinning, weaving, and knitting), Asia accounts for one half of the world total, and in particular, China represents one fourth. In other regions, mill consumption in the U.S. grows, while remaining unchanged in the EU, declining in Japan, and plummeting in the former USSR and Eastern Europe. In the U.S. and the EU, mill consumption is slightly decreasing or maintaining the status quo and future mill consumption, however, is likely to decline as new investment in fiber processing equipment, a key indicator of future production activity, decreases.



### **6.1.3.2 World textile and clothing exports and Imports**

The present situation and future forecast of world exports and imports of textiles and clothing by major exporting and importing countries (Figure S6.1-3) reveals that clothing accounts for an extremely high percentage of textile and clothing trade, dwarfing fibers and fabrics. Clothing is mainly exported from Asian countries to the U.S., the EU, and Japan.

Clothing exports are expected to grow at an annual 5.5% and will account for two-thirds of textile and clothing imports by industrialized countries in 2005.

### **6.1.3.3 Major textile and clothing exporting and importing countries**

Instead of analyzing exports and imports in absolute number, net exports/imports ("input of textile and clothing" to the country's textile industry - "domestic consumption" help understand the current situation of a particular country's textile industry more clearly.

#### **(1) Major exporting countries**

Most countries with large net exports (Figure S6.1-4) are found in Asia, with China being on top. Outside Asia, Turkey is a major exporter. The top seven net export ranking countries have a combined share of 90% and they clearly dominate world textile and clothing exports.

Compared to the figures in 1990, while Korea's exports have remained relatively flat, China, Pakistan, India, Thailand, Indonesia, and Turkey have boosted net exports, thus establishing firm positions as major textile and clothing exporters.

#### **(2) Importing countries**

Countries showing large net imports (Figure S6.1-5) include the EU, the U.S., Japan, the former USSR, Mexico, and Saudi Arabia. The large figures of Saudi Arabia come from the absence of local production and sizable amounts of textiles and clothing bought and brought out by travelers. Japan, a net exporter as of 1980, turned into a net importer in 1990, and imports have been increasing since then.

#### **6.1.3.4 Comparison of labor costs in world textile industries**

Hourly labor costs of world spinning and weaving industries were compared (Figures S6-6, 7). Measured by a ratio to that of China which is the largest clothing exporter, Japan is 66, Germany 57, the U.S. 32, Taiwan 16, and Turkey 12. Clearly, the figures reflect the fact that the clothing industry which has high labor content tends to concentrate in countries where labor cost is relatively cheap. (Labor costs account for 35-50% of total production costs in clothing and 15-20% in textiles.)

#### **6.1.3.5 World trade organization (WTO) issues**

Since 1974, world textile and clothing trade has been managed under the Multi Fiber Arrangement (MFA). In the wake of rapid growth of imports, however, major importing countries began to control imports by means of bilateral arrangements with exporting countries and import quotas.

The Uruguay Round, started in September 1986, ended in December 1993 and gave birth to the WTO in 1995. At the same time, the Agreement on Textiles and Clothing came into effect to replace MFA.

The new agreement is designed to serve as the international rules for the next ten years (up to January 2005) until the textile and clothing sector is integrated into GATT and liberalized. It sets forth transition to GATT in three steps (started in January 1995, continuing in 1998, and ending in 2002), including the percentage of GATT incorporation under retained MFA regulations.

Note that the EU grant Syria a special license "Europe-1" for textile trade, which enables Syria to export textiles to the EU without quotas restrictions and import duties.

#### **6.1.3.6 Current situation and future outlook for textile and clothing trade of major exporting and importing countries**

Together with the analysis of current situation of textile and clothing trade, current situation and future outlook for major exporting and importing countries are reviewed and summarized as the basis of projecting future trade patterns.

(1) U.S. (See 6.3.4 (4))

In the textile industry, the percentage of the material cost decreases while that of the labor cost increases as one moves downstream (clothing). The distribution cost also increases in the downstream segment. As a result, industrialized countries with relatively high labor costs are unable to show competitiveness in clothing production.

The U.S., the world's largest cotton producer, imports cotton products (spun yarn, fabric, and clothing) and exports cotton.

As the labor costs are high in the U.S., cost competitiveness alone is not enough to compete against international competitors

In this recognition, the industry makes intensive investment in quick response (QR) where it can have strength by setting the following objectives:

- a) To collect customer information accurately and quickly; and
- b) To supply products tailored to customer requirements within a short period of time.

(2) The EU (See 6.3.4 (1))

- a) Procurement of raw materials from neighboring countries (Turkey, former East European countries, and Mediterranean countries)
- b) Strengthening of competitiveness with China and other competitors by using an Outward Processing Trade (OPT) approach under the formation of the Wider European Trading Area
- c) Building of QR and just-in-time shipping systems (development of the QR system for customers within the EU region to leverage geographical proximity)

It should be noted that the EU is still under expansion. In January 1996, Turkey joined the EU's Customs Union and has been expanding textile and clothing trade with the EU. In future, the EU intends to promote trade liberalization with other neighboring countries.

The EU expects the expansion to increase imports of textiles and clothing from new member countries, while increasing exports of other products to those countries, thereby leading to the expansion of trade within the region. These newly joined countries have a competitive edge over Asian countries on account of their proximity to the major single market, so that they will thrive as OPT operators relying on geographical advantage and can, therefore, effectively compete with low cost Asian countries.

### (3) Japan

Since 1986, due to the hike in the yen, imports of clothing has been increasing rapidly. As a result, Japan's trade balance in textiles has been in deficit since 1987 and reached a massive 18.3 billion US\$ in 1996. Adaptation efforts in Japan are being progressed on two fronts; the domestic industry and overseas production bases.

As for regular products, Japanese companies are moving to transfer their know-how on production management and quality control to their overseas production bases, particularly Asia. On the other hand, network organizations are being developed by incorporating production, distribution, and design functions to encourage production differentiation which entails QR and small lot production. At the same time, the reinforcement of the QR system and rationalization of distribution systems are under way.

### (4) China

China is the world's second largest cotton producer, but it experiences shortages of both cotton and synthetic fiber due to strong domestic and export demand. This situation is expected to continue for some time. Filament and fibers imported to the country are made into fabric and clothing. While fabric exports are on the rise, clothing exports are halted by quotas restrictions of importing countries. Nevertheless, it will maintain its current status as the major producer and exporter of textiles and clothing.

#### (5) Taiwan and Korea

Both countries have rapidly expanded textile and clothing exports rapidly. Economic development, however, has resulted in higher labor costs and weaker competitiveness, creating structural changes in the textile industry.

In Taiwan, while synthetic fiber and fabric production and exports are still thriving as the second largest synthetic fiber producing country, exports of cotton products are on the decline. Clothing production has lost much of its international competitiveness for various reasons, including the rise in labor cost, pollution control measures required for dyeing and other processes, and increasing difficulty in land acquisition. Now, Taiwanese companies are rushing to move their production facilities to China, Malaysia, the Philippines, and Vietnam.

Korea's exports of filament and fibers grew considerably to become the fourth largest producer in the world. On the other hand, cotton spinning and weaving operations have lost competitiveness, and production capacities are moving to China, Vietnam, and India. Fabric exports are leveling off to countries setting import quotas, so that companies are focusing on exports to China. Clothing production capacities are also transferred to overseas at a fast pace, accompanied by rapid growth of clothing imports. The increase in the transfer of plants is said to have caused textile employment to drop from 561,000 in 1990 to 424,000.

#### (6) ASEAN

Among ASEAN countries, Thailand, still enjoy robust exports of textiles and clothing, while clothing production is being transferred to neighboring countries with low labor costs, including Bangladesh, Laos, Myanmar, Cambodia, and Vietnam. In Indonesia, which enjoyed an export boom, high increases in minimum wage (46% in 1994 and 21% in 1995) have eroded international competitiveness to give a halt to export growth. The government has taken steps to revitalize exports, such as the attraction of foreign capital and the reduction of import tariff on raw materials used for export goods.

#### (7) Pakistan

As the fifth largest cotton producing country, Pakistan boosted exports of cotton spun yarns and fabrics quickly. However, it failed to invest in midstream sectors such as dyeing and finishing and make quality control efforts, while it continued exports of cotton spun yarns and fabrics at low prices. Today, it is facing flattening exports.

Clearly, Pakistan is required to reinforce downstream sectors and shift its export focus to value added products.

#### (8) Vietnam and Bangladesh

In both countries, the clothing industries are based on all imported fabrics and accessories for exports is emerging and exports have soared accordingly. In 1995, Vietnam exported \$800 million worth of garments, and Bangladesh \$2 billion.

The major reason for high growth is that both countries attracted manufacturers from neighboring countries which face import quotas limitations, not to mention cheap labor costs.

#### (9) Turkey

In 1995, Turkey surpassed China in clothing exports to the EU (on a value basis) to become No.1 in the world. On a volume basis, it was second to China. In other words, Turkey exports products with higher unit prices than China does. Turkey joined the EU Customs Union in 1996, under which the EU has lifted quota restrictions on textile and clothing imports from the country.

#### (10) Former Eastern Europe

Romania and Poland are expanding exports swiftly as the EU's OPT operators and are replacing the Asian countries, Morocco and Tunisia. Many products manufactured at the EU's OPT bases are relatively high in unit cost. Further growth is expected in future.

Of the EU's imports of textiles, average prices of the imported textiles to the EU are comparatively higher than those of other exporting countries. In

future, the Former Eastern Europe will increase exports to the EU, based on the advantages of close proximity to the EU, and the affinity and political stability of these countries.

#### (11) Morocco and Tunisia

The two countries export large amounts of apparel products to the EU. Textile Intelligence has recently estimated their combined share of the EU's OPT imports at around 45%. This is more or less the same level as Eastern Europe which has rapidly emerged as a major OPT base. In fact, although apparel exports from Tunisia and Morocco continued to show steady growth in recent years, Eastern Europe has recently outpaced them in growth rate.

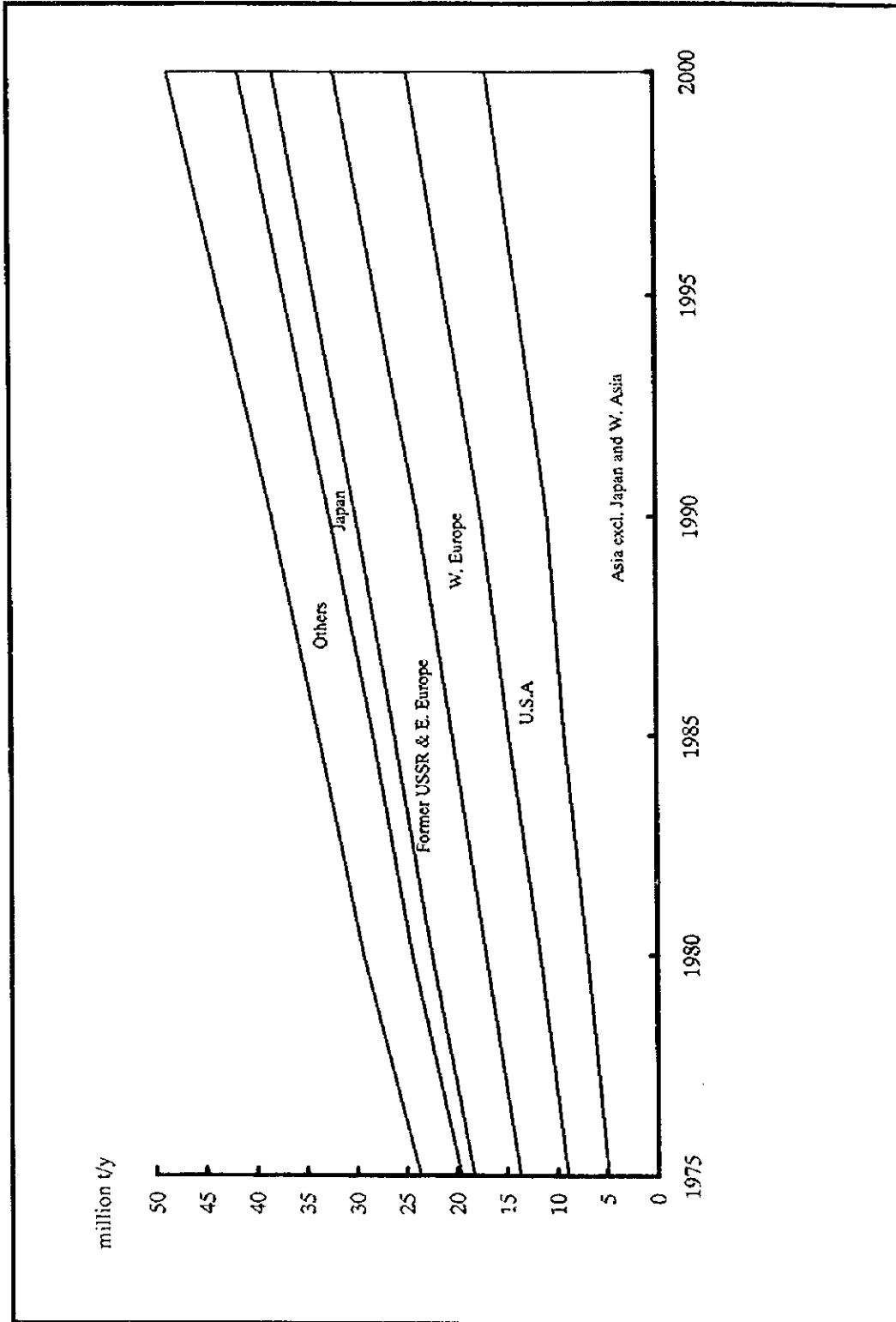
According to textile and clothing production data on Tunisia, apparel products reached 182 million units in 1996, an increase of 170% over the past decade. On the other hand, spun yarns, woven fabrics, and knitted products have grown at a much slower rate, indicating the country has focused on clothing exports.

#### (12) The United Arab Emirates (UAE)

In Dubai, UAE, there is a Free Trade Zone where exports of clothing are carried out on a large scale. Exports were 23,000 tons/year with a value of 200 million US\$/year.

The reasons for growth are no strikes, low wages, many advantages when setting up a clothing manufacturing company, and a modern infrastructure.

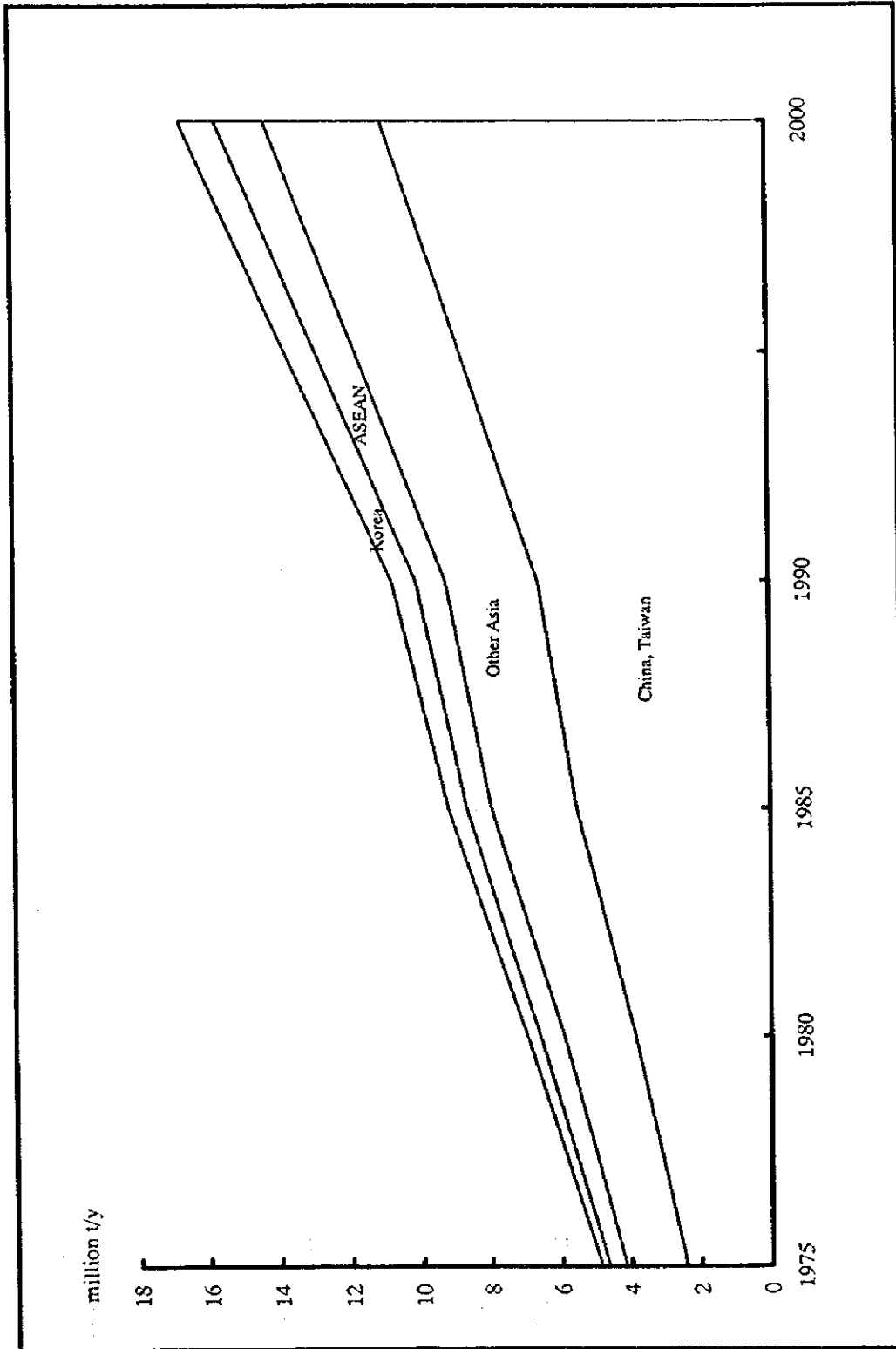
Figure S6.1-1 TOTAL FIBER DEMAND IN THE WORLD BY REGION (1980-2000)



Source: Japan Chemical Fibers Association



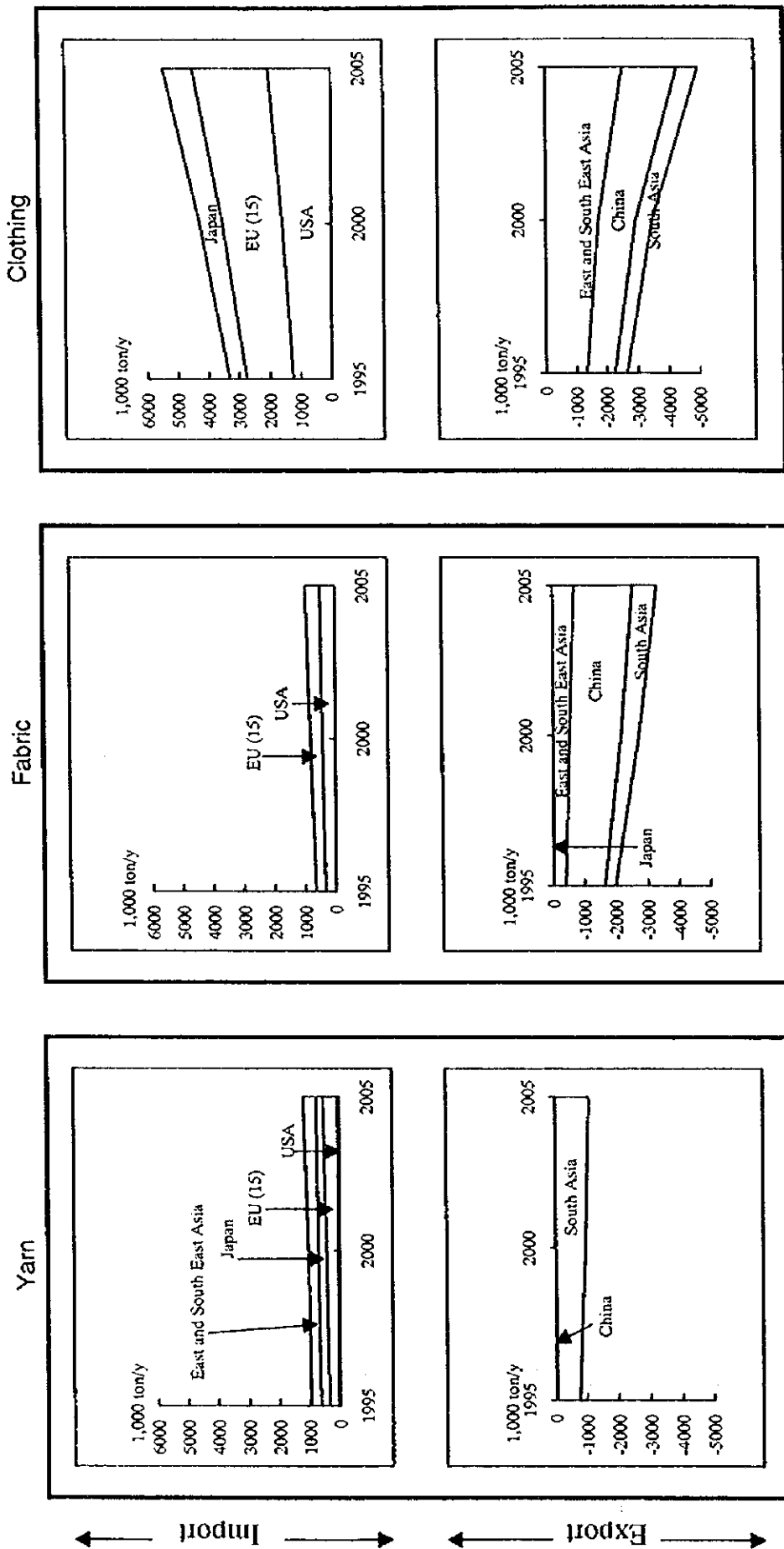
Figure S6.1-2 TOTAL FIBER DEMAND IN ASIA (Excl. Japan and W. Asia)



Source: Japan Chemical Fibers Association

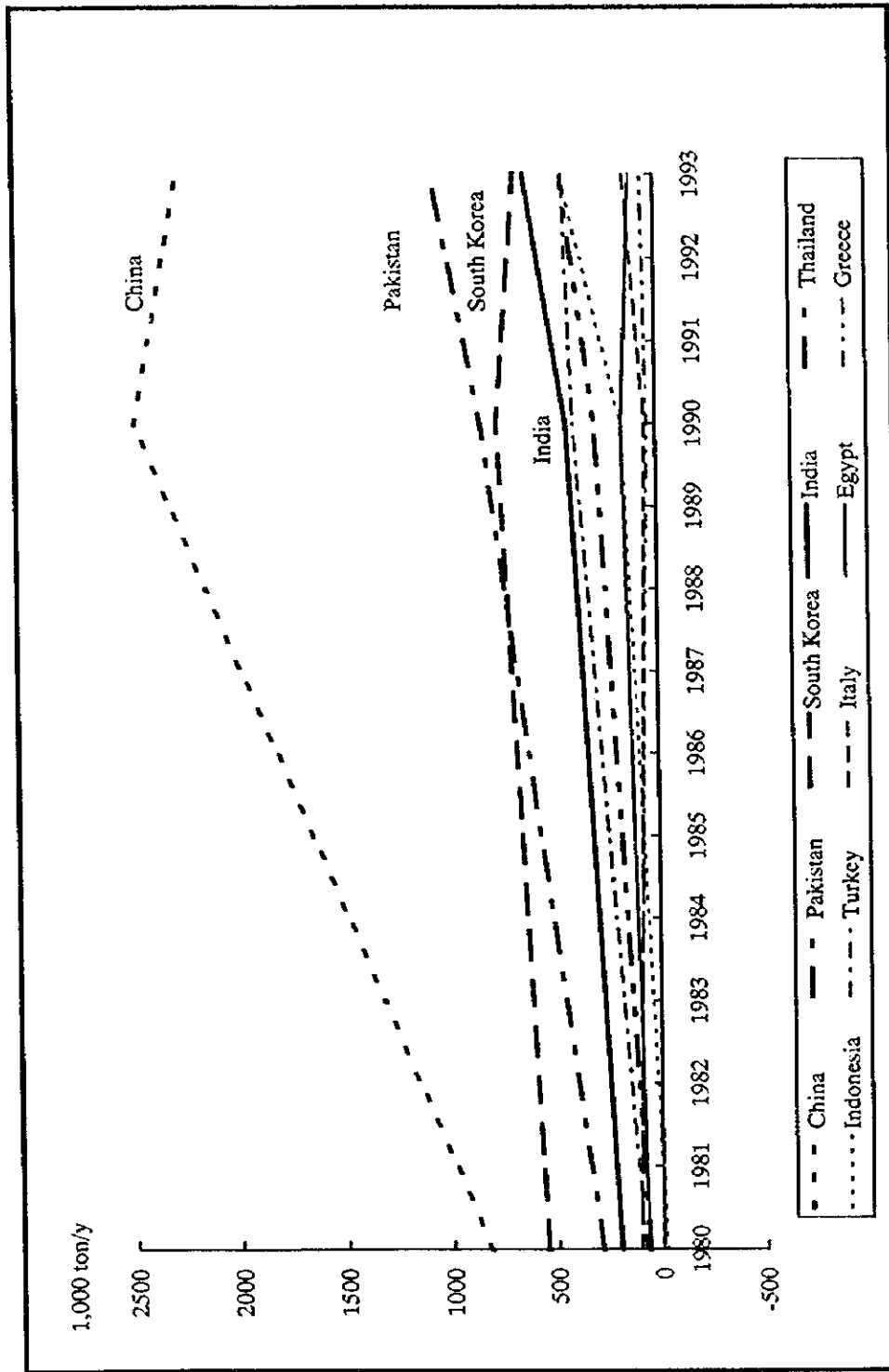
\* Other Asia = India, Pakistan, Viet Nam, Cambodia, Laos, etc.

**Figure S6.1-3 IMPORTS AND EXPORTS OF YARN, FABRIC AND CLOTHING FOR MAIN TRADING COUNTRIES AND REGIONS (1995-2005)**



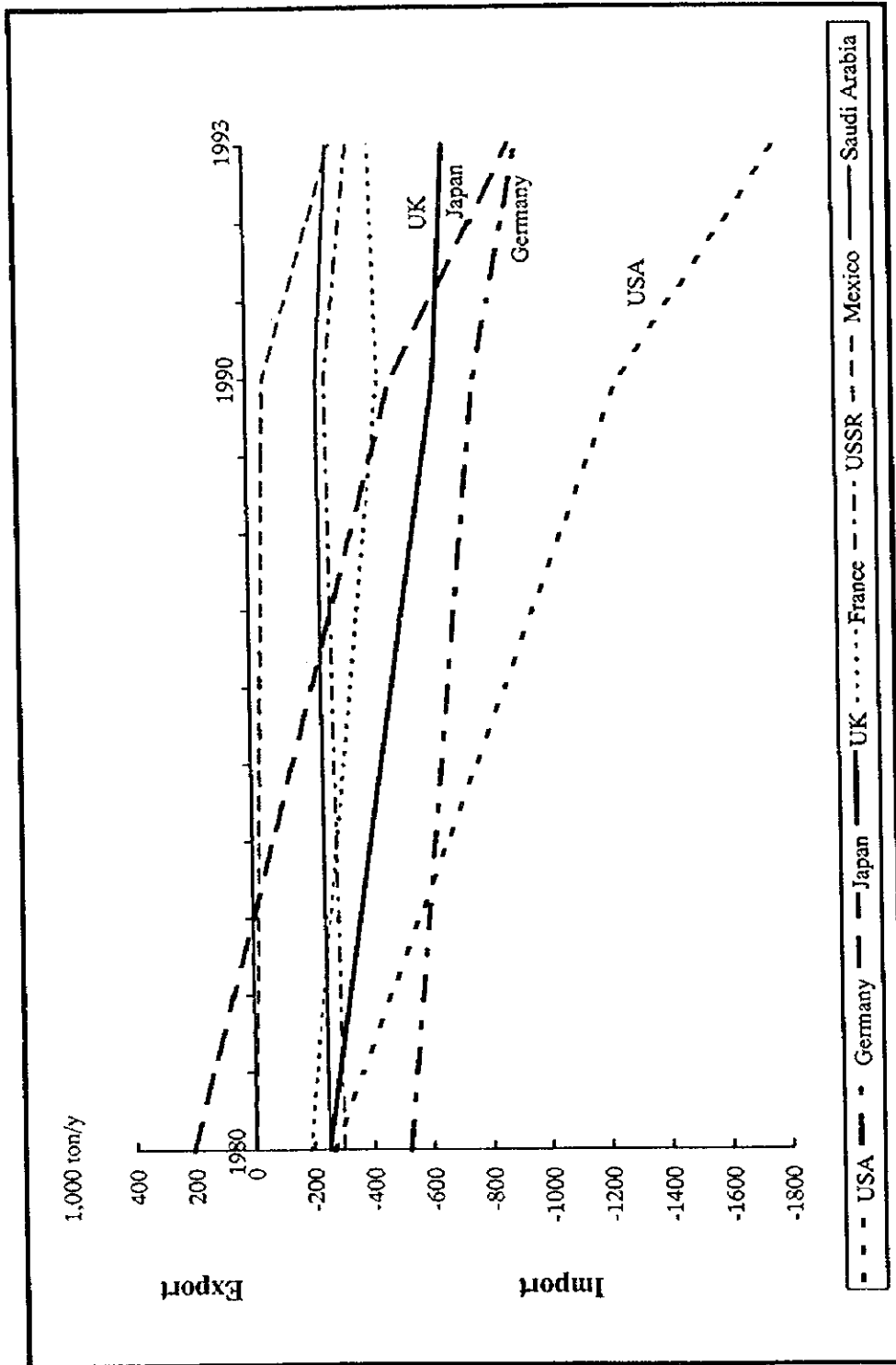
Source : Textile Outlook International, March 1997

Figure S6.1-4 NET EXPORTS OF MAIN EXPORTING COUNTRIES OF TEXTILES AND CLOTHING



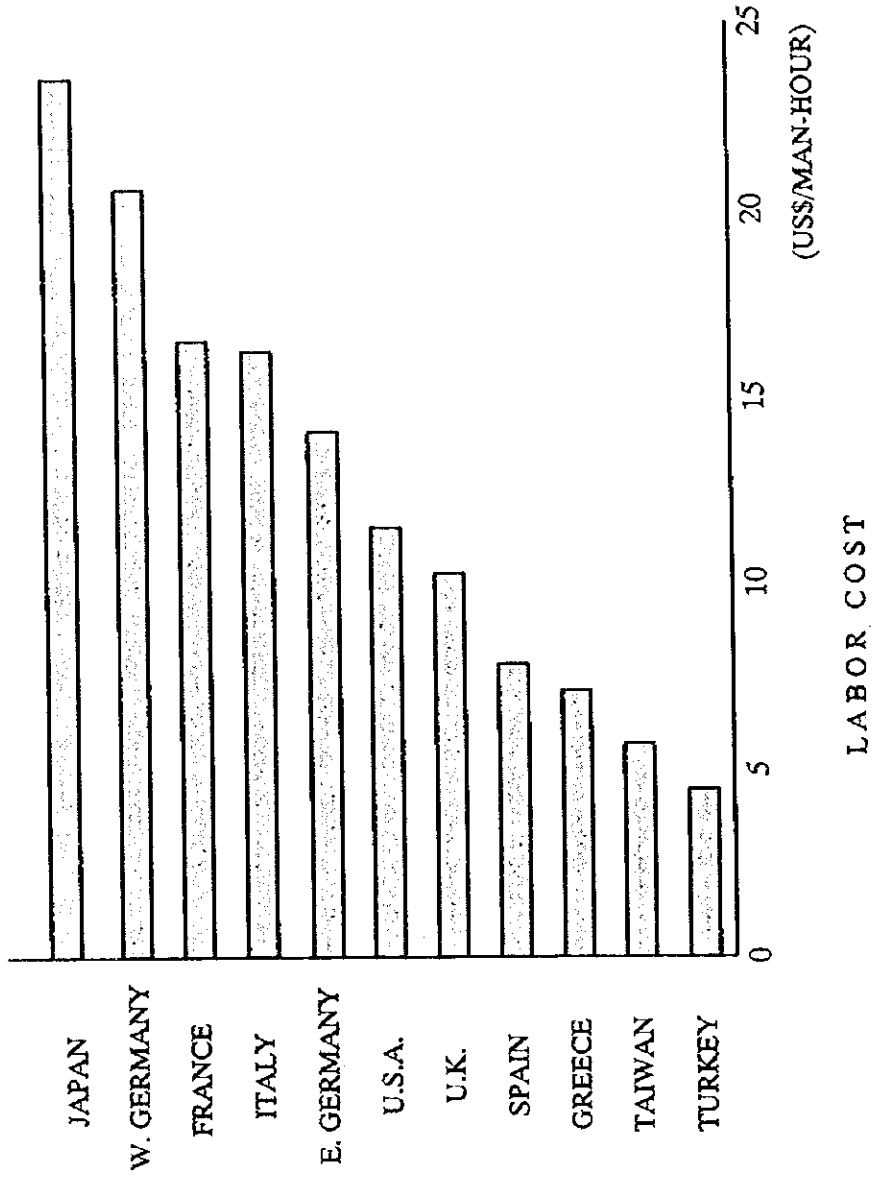
Source : Textile Outlook International March 1997.

Figure S6.1-5 NET IMPORTS OF MAIN IMPORTING COUNTRIES OF TEXTILES AND CLOTHING



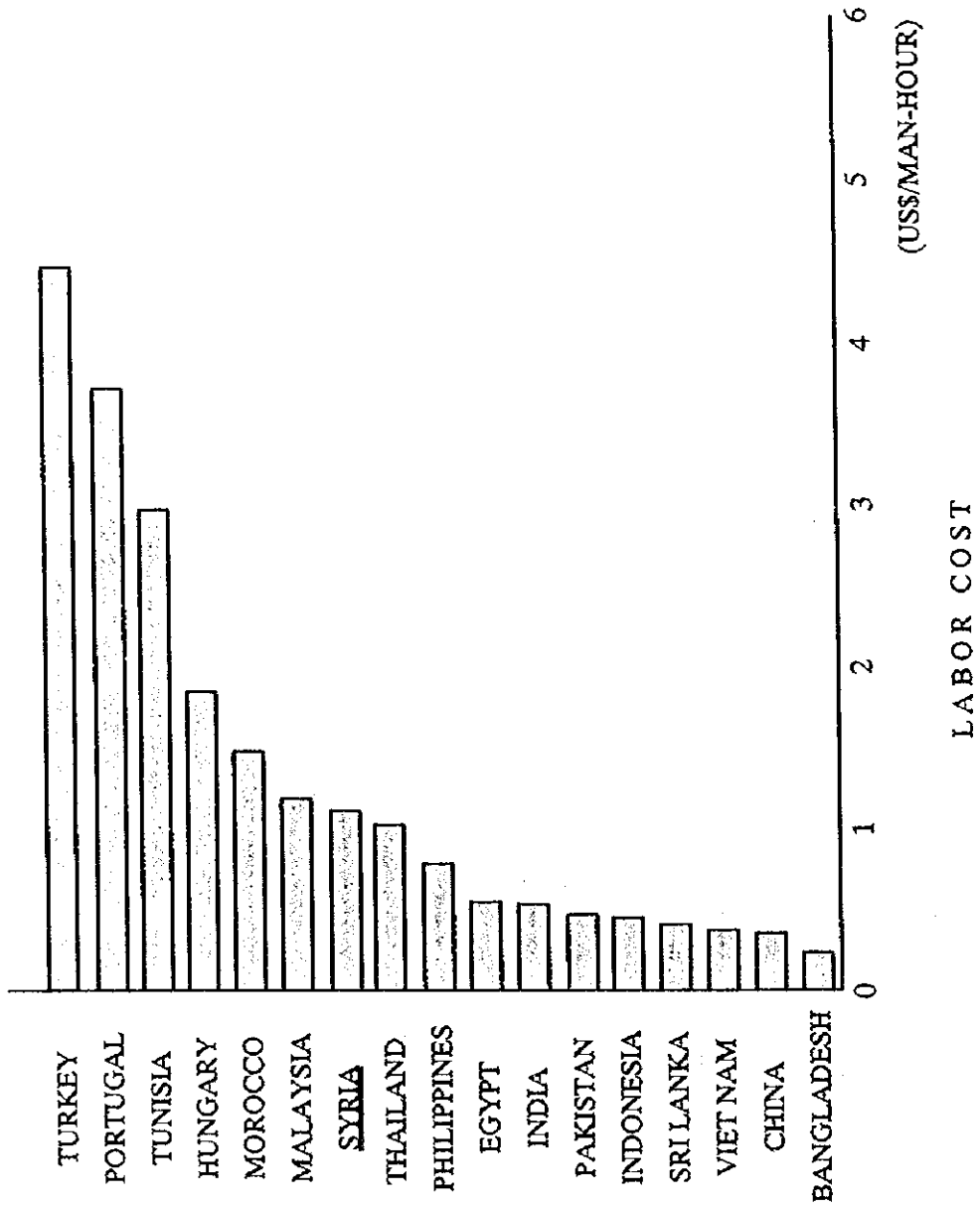
Source : Textile Outlook International March 1997

Figure S6.1-6 LABOR COST PER MAN-HOUR IN SPINNING AND WEAVING IN THE WORLD -1- (1993)



Source: Werner International

Figure S6.1-7 LABOR COST PER MAN-HOUR IN SPINNING AND WEAVING IN THE WORLD -2- (1993)



Source: Werner International

## **6.2 Current Analysis of Textile and Clothing Consumption in Syria**

### **6.2.1 Statistics in Syria**

#### **(1) Production statistics**

Relevant statistical data of textile and clothing production in Syria as a whole are available as well as production statistics showing a breakdown of state and private companies.

#### **(2) Import statistics**

According to Statistics of Imports into Syria, 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.

#### **(3) Export statistics**

According to official export statistics, 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. The Team classified the exports as cotton spun yarn 2,000, cotton textile products 17,000, synthetic textile products 18,000, carpet 1,000, total 38,000 tons/year referring to each of the items of the textile export.

#### **(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)**

According to FAO's statistics, 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.

### 6.2.3 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 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.

#### (2) Result of data compilation

The result 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 S6.2-1, 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 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).

#### 6.2.4 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)

The total export volume is estimated at 38,000 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.

## 6.2.5 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 S6.2-2 and Table S6.2-3. 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 S 6.2-3, is polyesters 22%, nylon 13%, acrylics 11%.

**Table S6.2-1 IMPORT OF TEXTILES TO SYRIA BASED ON EXPORTING COUNTRIES STATISTICS**

(1)

|                              | '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, 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.

**Table S6.2-2 DOMESTIC CONSUMPTION OF TEXTILES BY FIBER**

(1,000 tons/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 S 6.2-3 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

## **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.

- (3) Quality improvement will become visible

### **6.3.2 Factors Affecting Domestic Demand**

- (1) Projected population growth

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

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%, is estimated.

### **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. 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 Figure S6.3-1:

- 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 inbetween
  - 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 S6.1-6, 7)

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.

The top ten clothing exporting countries to the EU are shown in Table S6.3-1. As to clothing, China, India, Turkey, Morocco, Tunisia etc. are Syria's competitors.

#### (2) 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.

### (3) 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.

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 S6.3-2. 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

#### (1) 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.

#### (2) 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.

#### (3) 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.

#### (4) Domestic production of synthetic fibers

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

#### (5) 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:

| Year | Cotton | Wool | (thousand tons) |       |
|------|--------|------|-----------------|-------|
|      |        |      | 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.

#### (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 S6.3-2 and Table S6.3-3. All of these indices show that the current level of textile and clothing consumption is fairly accurately estimated.

#### (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 S6.3-2. 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 S6.3-4.

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 S6.3-4)

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

##### 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 estimated by the study team on the basis of statistical data of exporting countries is 52-54%, as shown in Table S6.2-3.

The synthetic fiber ratio of neighboring countries ranges between 30% and 40%, as shown in Table S6.3-5. 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 S6.3-6. 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.

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 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.

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 S6.3-1). 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 S6.3-1 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 S6.3-2 USA : TOP TEN SUPPLIERS OF  
MFA TEXTILES AND CLOTHING, 1995**

| Rank<br>1995 | Country            | Value<br>(US\$ million) | Share 1995<br>(%) | Change 1995/94<br>(%) |
|--------------|--------------------|-------------------------|-------------------|-----------------------|
| 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 S6.3-3 PER CAPITA FIBER CONSUMPTION OF THE COUNTRIES,  
GDP PER CAPITA IS THE SAME LEVEL AS SYRIA (1992)**

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

Source : FAO, UN

**Table S6.3-4 FORECAST OF FIBER CONSUMPTION IN SYRIA  
(~2010)**

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

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



**Table S6.3-5 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 S6.3-6 FORECAST OF DOMESTIC CONSUMPTION OF COTTON (SHARE OF SYNTHETIC FIBER CONSUMPTION : 50%)**

|                | (1,000 ton)     |               |                |                 |
|----------------|-----------------|---------------|----------------|-----------------|
| GDP Growth (%) | (1996)          | 2000          | 2005           | 2010            |
| 3              | (57)<br>(45-68) | 62<br>(50-74) | 72<br>(58-86)  | 84<br>(67-100)  |
| 5              | (57)<br>(45-68) | 65<br>(52-78) | 81<br>(64-97)  | 99<br>(79-119)  |
| 7              | (57)<br>(45-68) | 69<br>(55-82) | 90<br>(72-108) | 118<br>(94-141) |

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

Figure S6.3-1 EXPORTS OF COTTON TEXTILE PRODUCTS AND LABOR COST OF THE COTTON PRODUCING COUNTRIES



Source: Werner International  
FAO

Figure S6.3-2 PER CAPITA FIBER CONSUMPTION OF NEIGHBORING COUNTRIES (1992)

