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THE TEXTILE INDUSTRY IN GREECE

Submitted by the Government of Greece

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Introduction

Textile industry is one of the main branches of the Greek industry and comprises :

a) Cotton industry, which is the largest and ulitises 50% of the local production of cotton,

b) Wool industry, for which all the raw material is imported from abroad as Greek wool being coarse is mainly used for the manufacture of carpets, and

c) The old silk industry, which has mostly diversified its production after the II world war and is now manufacturing goods mainly from man-made fibres and filaments.

Presently the wool industry is processing also imported synthetic fibres besides pure wool to a considerable extent, while the cotton industry is only experimenting with the production of goods made from cotton and synthetic blends. The local production of man-made fibres is restricted to filament rayon and nylon.

The textile industry in Greece, has progressed considerably during the recent years. Thus, the per capita consumption of all kinds of textile fibres has nearly doubled during the last fifteen years, and has reached according to 1963 statistics a value of about 8 Kgs. (See table 1 - Appendix).

Though considerably increased, this per capita consumption is still low when compared to that of the U.S.A., which amounts to 16 Kgs. and that of the U.K. and West Germany, which is 12 and 13 Kgs. respectively. It is comparable however to the consumptions of other Mediteranean countries, such

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I. Present Situation of the cotton Industry in Greece.

a. Structure of markets and actual trends.

In General, Greek Cotton Industry covers aproximately 75% of the domestic demand and exports a substantial percentage of the yarn production :

In particular, as regards yarn, the following remarks result from data supplied by the Hellenic Cotton Board (givenin Appendix 2) namely :

i. That production of cotton yarn has increased by 44.17% since 1960.

ii. That while in 1960, combed production represented 17% of the total, in 1966, it increased to 30%.

iii. That there was an increase in percent production of fine counts with a corresponding decrease in coarse ones.

Further, yarn production more than meets the domestic demand wherees yarn exports have doubled during the last three years and have reached a value of $ 12,000,000 in 1966.

As regards fabrics and other finished goods, Greek Cotton fabric production covers to a great extent coarse material and to a considerable extent fine products and high quality styles as well as mt trends show a tendency towards finer products and lighter styles.

Further, production of cotton fabrics has developed from about 20,000 metric tons in 1961 to 25,000 metric tons in 1966. Greece is a small tho difficult market for textiles, when comparing an France (10 Kgs.) and Italy (8,5 Kgs.).

Further, the per capita consumption is expected to increase in the future, to follow the increase of national income.

We shall try to give below a move detailed review of the cotton Industry.-

the total quantity of textile goods sold and the great variety of items which are offered to the customers.

As it happened with many other industrial branches, Greek Textile products have   substituted imported goods.

But the industry cannot work under most favourable conditions for the fact that it has to supply the market with a great number of items in small quantities, whereas the presently existing distribution channels constitute a poor outlet to the production of industrial concerns.

Thus, the ready-made garment industry is divided up into a large number of small household type manufacturing units, which are neither able to promote their own styles and patterns nor to standardize and organize big scale production. There are only a few modern industries working in this line.

This natural tendency of the ready - made garment industry to split up has been intensified because of the structure of the retail trade which is in the hands of an infinite number of small dealers, forming units which in their great majority are neither modern nor organised for the proper promotion of the goods they sell.

Beside this, modern marketing methods which would be of great help in ascertaining the needs of the ultimate consoumer, alongwith the application of merchandising policies have started to be applied only to a very limited extent

Correspondingly, all efforts of the industry to achieve optimum production planning through standardization are being frustrated.

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Neverthless a certain level of standardization has been
effected following the increasing adjustment of the market throughout
the country to the sofisticated trends, which are presently
prevailing in Europe.

b. Raw materials (availability and expectations)

As mentioned before, cotton industry is using local cotton.
Production of cotton in Greece is controlled by the Ministry of
Agriculture in cooperation with the Hellenic Cotton Board.
Production during the last fifteen years is shown in table 3
(See Appendix). From the figures in that table we can see that there
has been a considerable increase in cultivation during this period
and in particular that the productivity of cultivation has nearly
doubled within the last fifteen years (1951-1966).

Crop composition in 1966 was as follows:

Type	Staple Length	% of 1966 crop
Coker 100 Wilt.	27 mm.	21%
4S	27 mm.	70%
Acala 4 - 12	28 mm.	9%

To assure uniformity of production, the Ministry of Agriculture
has divided the country into zones, allowing the cultivation of
only one specific variety in each zone.

Beside this, the Union of the Agricultural Cooperatives is

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responsible for the distribution of the tested seed to cotton growers. The entire cotton crop in classified by the Hellenic Cotton Board in accordance with the universal standards for American cotton.

Classification of the 1966 crop according to grade and staple length is shown in appendix (Table 4).

In appendix (table 5) will be found tables showing imports and exports of cotton since 1960, as well as mill consumption for both domestic and imported cotton during the same period since 1955.

c. Structure and productive capacity of the industry.

The cotton industry has the following mill capacity:

- spinning capacity : 400.000 spindles
- weaving capacity : 6.000 looms

Except a few cases most of this capacity is distributed among many companies of small and medium size, with 5.000 - 20.000 spindles and 10 - 100 looms each. There are also some commercial finishers.

There are a few large companies, with vertically integrated mills which include spinning, weaving and finishing.

One of these vertically integrated mills has further extended its production line to the manufacturing of garments.

There is also a large group of small artisans, running 1 - 10 looms each, and producing specialty goods.

d. State of quipment, machinery and buildings

There has been considerable purchase of machinery and moderniza-

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tion of equipment during the last 15 years and the average spin-
ning and weaving equipment compares favorably with that of the
average cotton manufacturing companies of the developed western
european countries as far as age of their equipment is concerned,
the larger plants having the most modern equipment

According to 1966 statistics 50% of active looms are fully
automatic and 70% of spindles are of modern design. To facilitate
comparison, we are giving below, the percentages of total active
capacity of automatic looms for larger continental areas, as
follows :

World average	50%
Europe	55%
North America	95%
South America	50%
Africa	75%

Finishing equipment in most of the larger integrated mills is
quite modern. In the case of smaller units the installation of modern
finishing equipment is limited to batch operation processes so that
no full advantage is taken from continuous operation.

Thus, it can be said that although a major progress was accomplished
since 1950, a substantial effort is still required for the completion
of plant modernisation, which will result in further cost reduction.

It is not however only obsolete productive machinery that has yet
to be substituted. Considerable improvements will have to be effected
in buildings and auxiliaries. Faulty layouts, which are the inherent
short comings of older buildings, add to production cost due to

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excessive materials handling.

Material handling equipment should also be redesigned and
added, so as to take best advantage of improved plant layouts

Modern air contitioning has not been fully adopted and primi
tive humidifying equipment is still used in many of the smaller
mills. Only a few enterprises have realised the importance of
air conditioning and its contribution in reducing operating costs
and improving production quality.
Also, improved lighting for efficient three shift operation and
for better inspection is not available in most of the older mills.

e. Management orientation

There is in general a limited understanding of modern management
principles and tecniques in the textile industry.

The fact that, until very recently, basic management principles
were not adequately covered in professional schools in Greece, had
a definite bearing on the adoption of certain essential management
concepts such as definition of responsibility, the establishment of
line and staff authorities and the application of adequate management
controls.

Operation research techniques are practically ron existent and
the data processing machines for purposes of accounting, book
keaping, sales statistics, inventory control, etc. have only recently
been adopted by some of the larger companies.

f. Know-How, personnel status and training

The presently existing textile technical know-how is quite
adequate. However it should be noted that all textile engineers in

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Greece have foreign education since textile technology is locally covered only by professional secondary schools.

Productivity is quite high in some of the larger modern Mills. However, the avarage productivity of the Cotton Industry as a whole is relatively low compared to European standards. Working methods of operators have not been studied and organized sufficiently and in most cases job assignements are low.

Labor productivity could be improved substantially with proper training of operators, the use of more efficient working methods and the introduction of modern industrial engineering techiques. There hava actually been adopted, to a limited extent, in some of the larger plants.

It should be also mentioned that the State is assisting labour training by organizing in-plant training courses for the unskilled labour and special training programs for improving the skills of the trained operators.

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g   Capital availability and the <u>financial structure of the Industry</u>

The financial structure of the textile industry is quite weak
This constitutes perhaps the major handicap of Greek Industry today

The figures below give a picture of the financial structure
of Cotton Textile Industry as deducted from the 1965 Balance Sheets
of 25 active Cotton Manufacturing enterprises

Equities	: 25,5 %
Long term loans	: 24,0 %
Short and medium term loans:	50,5 %
	100,0 %
Fixed Assets	: 40,5 %
Liquid Assets	: 59,5 %
	100,0 %

Because of the very limited capital market, a large part of
the machinery has been purchased through high interest and medium
term commercial credits provided by machinery suppliers, while
major long-term Industrial credit facilities for new industrial
installations have been made available only to a limited extent
and for major expansions or new large plants only; Whereas, there
has been no substantial contribution as yet by any of the Industrial
Development and Financial Insitutions of the country for the
modernization of existing plants in operation

Facilities for working capital requirements are made available

to the Industry from Commercial Banks at interest rates which, together with other charges, usually exceed 10%.

Again, as gathered from the above mentioned Balance Sheets, interest charges constitute roughly 31% the Gross Profit of the respective Industries.

Is should also be noted in the same connection that due to the limitations in financing, put by the monetary authorities, cotton industries are compelled to finance their customers from their own sources in cases of sales, by granting, extended credit terms.

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II. Comments on the problems related to the cotton industry in Greece

    a. Marketing and sales promotion

        As already implied, it is expected that consumption of cotton textiles will increase in the future to follow the increase of national income, which in the past ten years has grown at a rate varying between 6 and 8%. In order to keep its share of the market, the industry will have to be competitive as far as price and quality is concerned. These, alongwith a proper orientation of the products according to the customer needs and an attractive presentation of the goods will promote sales. Further proper advertising will orient favourably the consumers towards Greek products. The institution of marketing policies including market research will be of great help in ascertaining the needs of the ultimate consumer. Modern marketing methods have already started to be applied in Greece by the leading textiles industries, but these are limited in scope. A considerable effort will have to be made in the future in this direction.

        As was already mentioned, the most critical of the present market difficulties is the very limited development of distribution channels. The development of a well organized ready-made garment industry, may serve as a good medium for the promotion of cotton textile sales in addition to retail stores which, in view of their present limitations are not in a strong position to promote the goods the sell.

        Exports of cotton textiles have been growing steadily during

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the last few years. Cotton textile products, due to the local
raw material and the relatively low labour cost, could be
competitive in the European market as long as they will be of
the same quality standards.

It must be pointed out however, that promotion of textile exports
is linked with government policy in many ways one of which and
not the least, is relief from a number of financial and other
charges which make textile products less competitive in an
international market. As the cost of establishing and maintaining
an export market is high, special encouraging measures should be
taken for the exporting enterprises by the State.

b. Organization and management

As was mentioned before, increased competition will call for
reorganization and use of advanced managerial skills and techiques.
Thus, the smaller textile units have to merge into larger companies
in order to survive in a competitive and growing market.
It is only in this way that rationalised programmes of production
could be applied.

This condition, however, is not applicable to the local house-
hold industry. Its survival is in some way guaranteed on account
of the type of fabrics they produce.

Again, it is only the large companies which can   afford to have
progressive finishing plants and get full benefit of the reduced
production costs that they can achieve with these highly
productive machines.

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Favourable financing and other incentive schemes should be studied by the State in an effort to assist the desired reorganisation of the textile enterprises in particular as regards the merging of companies.

Further, during the past few years, some progress was noted in the institution of modern management principles. Seminars and lectures have been organised by the National Productivity Centre and the Business Administration Association so that a new generation oriented towards management is steadily rising.

The efforts already made, should continue until modern management is universally accepted.

Nevertheless, enterprises will have to advance the establishment of the particular aspects of their reorganization as follows :

- Setting of standards over the various activities, that is manufacturing, marketing and administration.
- Introducing effective operational control systems.
- Application of incentive schemes related to the overall increase of mill productivity and work efficiency in general
- Establishing of proper authorities and delegation channels in all aspects of operation.

c   Technological development

The industry must of course be prepared to make all the changes that become necessary on account of technological progress and

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product development such as simplification of manufacturing
methods, improvement and development of processing machinery,
introduction of new raw materials and new products and styles,
(that is weaves, patterns, colours, finishes, blends, etc.).

As an example, we would mention that an advanced technology
is now rendering synthetics more and more attractive. The industry
which is actually experimenting with it, should further develop
this field.

It is important for textile industry to examine the various
technological developments and evaluate them in the light of
their possible applicability for two main reasons:

i. To reduce production cost;

ii. To stimulate customer demands by new products.

This will help the industry to keep its position in the home
and export markets and to offer competitive and attractive products.

d. Plant modernisation

Other good reasons for which plant modernisation and replacement
of existing equipment will have to be seriously considered, are the
constant rise of wages and demand for higher quality standards in a
growing economy. A greater degree of mechanization and automated
processes, requiring less labour in the plant, makes the product
less dependent on labour costs.
However the replacement of the existing machinery with highly
automatic and improved equipment, imposes various problems such as

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allocation of favourable equity and loan funds and advanced
training.

e. Training

Adequate training in all ranks of the personnel is an
essential requirement for the advancement of the industry.
Well trained overseers and foremen are essential to handle modern
equipment and improve productivity.

Seminars could be organised within the mill to explain the
functions and responsibilities of the aforementioned personnel.
Beside this, management attitude towards supervision must change,
and thesupervisory staff must be made to feel that their decisions
play an important role in the success of the company.
Training should also cover both the direct and indirect labour. Higher
productivities could be achieved when the worker knows what is
expected of him.

As already mentioned, training is actually supplied in the
textile branch in a more or less satisfactory way by the organisa-
tion of special in-plant training programs which are assisted by the
State and this effort should continue.

Beside this, the additional requirements of advanced know-how
involved in the continuous technological development of textile
machinery, should constitute a separate aspect of training, in the
form of partly in-plant programs and partly in school by correspond-
ing reorganisation of technical education according to present day
requirements.-

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We finish this paper with the hope that we have given a short but realistic account of the actual situation of the cotton industry in Greece, of its conditions and its main problems.

No doubt, this industry which is based on local raw material while absorbs a considerable percentage of the total labour force and is leading all other branches of the industry in exports, represents one of the principal sectors of the Greek economy.

The major part of the cotton industry has achieved a satisfactory degree of technological development and its various products are of good quality and produced at competitive cost. Every effort must therefore be made for further development of this industrial sector.

Thus, private enterprises should take all actions in this connection for the reorganization of their business and the institution of modern management methods. On the other hand, the State will have to overcome its past organizational weaknesses in an effort to decrease overheads imposed on business by an overexpanded bureaucracy.

This will place the Greek Industry on the same level with industries of the other countries of the European Common Market.

Finally new foundations will have to be laid for the creation of a solid infrastructure in public utilities and education, the establishment of a strong capital market and the development of favourable long term financing to the viable enterprises.-

T a b l e   1

Year	Per capita consumption of all fibres
1953	4.6 Kgs.
1959	5.4 "
1961	6.4 "
1963	8.0 "

T a b l e 2

Production of combed and carded yarns

	Combed			Karded		Total	
Year	Tons	% inc.	Tons	%inc.	Tons	% inc.
1960	9.178	100.0	20.915	100.0	24.593	100.0
1961	4.730	113.2	21.662	103.6	26.392	107.3
1962	6.051	44.8	21.996	105.2	28.047	114.1
1963	6.929	165.8	22.493	107.6	29.422	119.7
1964	7.020	168.0	23.921	114.4	30.941	125.8
1965	8.947	214.1	24.775	118.5	33.722	137.2
1966	10.009	234.5	25.447	121.7	35.456	144.6

Production by count range

Ne range	1960	1961	1962	1963	1964	1965	1966
!- 9	10.64	11.66	11.08	11.38	11.04	9.82	9.75
10-15	42.00	40.83	39.88	39.75	38.75	36.14	34.50
16-20	20.00	19.12	18.42	18.07	18.06	19.45	17.44
21-26	7.46	7.50	8.20	8.97	8.77	9.56	9.83
27-40	18.62	19.48	21.15	2..47	22.07	23.84	26.98
41-120	1.12	1.41	1.27	1.09	1.31	1.19	1.50
Average	18.34	18.58	18.91	19.88	19.10	19.62	20.44

Table 3

Table showing the cultivated area in hectares and the corresponding
production of unginned cotton in metric tons.

Year	Cultivated area (hectares)	Production in metric tons	Kgs. per hectare
1951	87.064	28.300	325
1952	82.181	24.200	294
1953	88.934	30.360	341
1954	109.227	41.270	378
1955	165.952	60.700	366
(Average)	(106.672)	(36.966)	(347)
1956	160.053	51.000	319
1957	155.955	63.200	405
1958	162.727	62.300	383
1959	131.480	57.000	434
1960	165.344	62.800	380
(Average)	(155.112)	(59.260)	(382)
1961	208.360	97.500	468
1962	205.700	89.300	434
1963	231.200	93.200	403
1964	140.300	67.800	483
1965	135.554	74.600	550
(Average)	(184.223)	(84.460)	(458)
1966	140.312	87.850	626

T a b l e 4

Grade	%	Staple length (mm)	%
3 or Good middling	3,2	24	0,17
4 or Strict "	69,2	25	0,58
5 or middling	24,2	26	6,60
6 or strict low middling	2,5	27	71,98
7 or low middling	0,9	28	20,58
8 or strict good ordinary	-	29	0,09
	100,0		100,00

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Exports and imports of ginned cotton in metric tons

Year commencing August 1	Exports	Imports
1959-50	33400	1667
1960-61	32667	1534
1961-62	65661	809
1962-63	51910	2037
1963-64	57096	2135
1964-65	36291	9977
1965-66	41868	9600
1966-67		

Mill consumption of cotton in metric tons

Year commencing August 1	Domestic cotton usage	Imported cotton usage	Total mill consumption
1955-56	21535	548	22083
1956-57	22507	3490	25997
1957-58	23194	4896	28090
1958-59	26975	583	27558
1959-60	24658	1060	25718
1960-61	27435	1870	29305
1961-62	29933	1102	31035
1962-63	31492	1656	33148
1963-64	33242	1504	34746
1964-65	28903	8874	37777
1965-66	32481	10845	43326
1966-67	-	-	-

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