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THE MEXICAN COTTON INDUSTRY AND THE TRANSNATIONAL COTTON MARKETING OLIGOPOLY

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#### INTRODUCTION

In July 1977 an aide-memoire was signed by the Executive Secretaries of the Economic Commission for Latin America (CEPAL) and the Economic and Social Commission for Asia and the Pacific (ESCAP) calling for interregional co-operation between the two Commissions in the field of transnational corporations. In that aide-memoire, the Executive Secretaries agreed to Launch an interregional research project on the impact of transnational corporations on primary commodity exports from developing countries. On the basis of appropriate provisions incorporated into the understanding, the Economic Commission for Africa (ECA) joined the project in early 1978.

It was agreed at that time that the three Regional Commissions, together with the United Nations Centre on Transnational Corporations in New York (UNCTC), would co-operate in the execution of in-depth country case studies on the impact of transnational corporations on the export of primary commodities from selected developing countries. To provide a common focus for the country case studies, a general conceptual framework was written focusing on (i) factors determining the relative bargaining positions of host governments and transnational corporations and (ii) the resulting distribution of gains between the host country and the transnational corporation.1/

The conceptual framework for the case studies has been kept very broad in order to accommodate the many and varied conditions which exist among primary commodity export industries in different countries. It is therefore meant to apply to the various forms of transnational corporation involvement in such industries, from the traditional major direct equity investment by one or more transnational corporations in production, transformation and trade of primary commodities, to

l/ See "Transnational corporations in export-oriented primary commodities:
a study of relative bargaining positions and distribution of gains", CEPAL/CTC
Joint Unit (Santiago, Chile, 30 August 1977) and the modified version "Transnational corporations in export-oriented primary commodities: A general conceptual framework for case studies", Joint ESCAP/CTC Unit on Transnational Corporations, Working Paper
No. 1, New York, September 1978.

the newer forms of licensing agreements, joint ventures, trilateral arrangements, production-sharing agreements and so forth. It is also meant to apply to negotiations and renegotiations associated with the nationalization of a foreign direct investment already operating in a host country.

The ultimate aim of the case studies carried out within this conceptual framework, and indeed of the whole interregional project, is to provide host developing country governments with an input of objectively derived material with which they can evaluate the existing TNCs' involvement and agreements with them and realize their potential for increased bargaining capacity vis-à-vis the TNCS, as well as ascertain the relative advantages and disadvantages of the policy options at their disposal. To this end, an interregional expert group meeting was convened at ESCAP headquarters in Bangkok in October 1979 to review the case studies completed up to that point by the three Regional Commissions. The meeting suggested the most important policy issues and further areas of research in the interregional project and proposed that the case studies from each region should be integrated into global commodity and sectoral studies to be presented at an interregional seminar in New York (November 1982) on transnational corporations and primary commodity exports.2/

In addition, at its last three regular sessions (1975, 1977 and 1979) CEPAL adopted individual resolutions on co-operation among developing countries and regions of different geographical areas.3/

Following the conceptual and institutional framework indicated above, CEPAL has been dealing with this subject over the last few years through its Joint Unit with the United Nations Centre on Transnational Corporations. Case studies on TNC involvement in seven commodities in the different countries of the region

<sup>2/</sup> See "Report of the Interregional Expert Group Meeting on Transnational Corporations in Primary Export Commodities", Bangkok, 8-15 October 1979 (CTC/ESCAP/PEC/2) and UNDP, "Proyecto de los Gobiernos de Bolivia, Brasil, Colombia, Chile, Honduras, Jamaica, México, Panamá y Perú sobre el fortalecimiento del poder de negociación de los Gobiernos Huéspedes en sus tratos con las empresas transnacionales dedicadas a la exportación de productos básicos" (RLA/80/016/A/01/02).

<sup>3/</sup> See CEPAL resolutions 363 (XVII) adopted in Guatemala City and 387 (XVIII) adopted in La Paz.

(bauxite in Jamaica, copper in Chile and Peru, tin in Bolivia, cotton in Mexico, bananas in Honduras and Panama, coffee in Colombia and sugar cane and its use for energy in Brazil), applying the common methodology of the interregional project and taking into account the specific problems and needs of the region and the selected countries.

The results of the studies on copper and tin have been presented to the Seminar on Alternative Approaches to Negotiating with Foreign Investors and Transnational Corporations in the Copper and Tin Industry, organized by CEPAL in Santiago, Chile, 9-12 December 1981, with the participation of high-level officials of the public and private sectors and representatives of foreign enterprises from Bolivia, Brazil, Chile and Peru 4/ and to the Seminar on Policies and Negotiations with Transnational Corporations in the Mining and Metallurgical Industry of Bolivia, organized by the United Nations Centre on Transnational Corporations and CEPAL in co-operation with the Ministry of Mining and Metallurgy of Bolivia in La Paz, 17-22 May 1982, with the participation of high-level officials of the public and private sectors of this industry. Finally, a similar seminar is envisaged for export-oriented tropical products (bananas, coffee, cotton and sugar cane), to take place in Panama in co-operation with the Union of Banana Exporting Countries (UBEC) and the Government of Panama.

In the forthcoming phase of the Interregional Project in CEPAL, commodity and sectoral studies, integrated for the three developing regions, will be carried out for bananas, sugar cane, tin and minerals.

The present study analyses the development of the Mexican cotton industry since the war, together with the degree and form of domination of cotton marketing by the transnational oligopoly operating in this field, both in world terms and in the specific case of Mexico. In the first two chapters of the study a global approach is followed and the subject of cotton is analysed in terms of the world market and its domination by the transnational oligopoly, with consideration of Latin America as a whole. Chapter III gives a summary of the main aspects of the development of the Mexican cotton industry since the war, with special attention

<sup>4/</sup> See Report of the Seminar quoted above (E/CEPAL/R.306, Restricted, February 1982).

to the competition of synthetic fibres with cotton in the 1970s. Chapter IV deals with the participation of TNCs in the domestic and external marketing of Mexican cotton as compared with the participation of the Mexican public and private sectors, and the main enterprises operating in this field are identified. Chapter V concerns the main forms of marketing used by the TNCs, and their advantageous position compared with domestic enterprises is highlighted. Finally, Chapter VI summarizes the main aspects of the capacity for negotiation and distribution of gains as between the Mexican economy and the TNCs and other external agents.

This study was prepared in the CEPAL/CTC Joint Unit on Transnational Corporations on the basis of several prior studies: América Latina en el mercado mundial del algodón, a preliminary version of the study by the CEPAL International Trade and Development Division (sections I.1-4 and II of the present study); Fibres and Textiles: Dimensions of Corporate Marketing Structure, UNCTAD (TD/B/C.1/219), November 1980 (section I.5) and the studies by consultants of the CEPAL Mexico Office, Monografía del algodón en México (P.P.A/21/01, November 1978) and F.J. Ramos, La comercialización del algodón en México, December 1981. The views expressed in this restricted document at this stage of the interregional project are entirely the responsibility of the Unit, however, and may not coincide with those of CEPAL.

#### I. THE WORLD COTTON MARKET AND THE TRANSNATIONAL OLIGOPOLY 1/

#### 1. Nature of the product

The importance of cotton as a natural fibre is clearly shown by the fact that almost half of world output and consumption of textiles is based on it. As early as 1500 BC cotton was in use in the Indus Valley, and it has been proved that its use was widespread in America a relatively short time after that.

Most of the cotton cultivated commercially in the world (approximately 90%, if China's production is excluded) belongs to the American Upland variety, whose fibres have an average length ranging from one inch (average fibres) to 1.5/16 inches (long fibre). Extra long fibres, which are over 1.3/8 inches in length, are known as the Egyptian and Sea Island variety and represent approximately 5% of the total produced in the world.

Cotton is planted annually, in periods of the year that vary according to the region and the atmospheric and rainfall characteristics of each region. In countries with temperate climates planting is carried out in early spring (for example, in September/October in Argentina and March/April in Northern Mexico), while in the tropical countries the period of the year corresponding to the end of the wet season is normally preferred. In Latin America there is both dryland farming and irrigated farming, as in the other cotton areas of the world.

The harvest takes place from five to nine months following planting, either manually or by means of machinery, and "raw cotton", or ginned cotton, is thus obtained.2/ There is a ratio, in terms of weight, of approximately 1 to 2.9 between ginned cotton, or fibre ready for use in the textile industry, and raw cotton. In other words, ginned cotton corresponds, in terms of weight, to 35% of the raw product.

Once separated from the seed by means of the ginning process, the fibre is packed into units weighing 480 pounds (which are referred to as "bales"), after the fibre has been classified. At this point in the process the cotton fibre

<sup>1/</sup> Parts I.1-3 and II of this study were prepared by the CEPAL International Trade and Development Division.

<sup>2</sup>/ The ginning process consists in mechanical separation of the fibre from the seed.

(or ginned cotton) is ready for use in the textile industry, either for yarn production or, subsequently, the manufacture of end products.3/

The quality of the fibre is traditionally determined by two fundamental factors: length and grade. The length of the fibre has a great influence on quality and price. As may be noted from table 1, the price of extra-long Egyptian fibre is almost double the price of short United States fibre. As in the case of other quality components, uniformity as regards the length of a given consignment of fibres is of the utmost importance. Grade is determined by three factors: colour, which ranges from white to yellowish in accordance with classification into the groups "White", "Light Spotted", "Spotted", "Tinged" and "Yellow Stained", in descending order. The colour may change as a result of atmospheric factors, action by parasites and/or micro-organisms and technical defects in harvesting, storage, transport, etc.; presence of foreign matter (waste matter, such as leaves, earth, etc.); preparation or quality of the ginning process, which to a great extent determines the softness of the end-product.

Lastly, new properties that are of great importance in industrial use of cotton fibre such as the uniformity of length already referred to and, in addition, fibre strength, and the fineness and maturity of the fibre, have gradually been identified. The prices set forth in table 1 are therefore also only indicative, since specific consignments may be subject to premiums or penalties owing to their specific qualities. In any event, emphasis should be placed on the importance of classification procedures, particularly where a comparison is being made with other commodities.

Although the economic use of cotton lies basically in exploitation of the fibre, the seed is also of importance, since it may be used for producing vegetable oils that are used in the manufacture of margarine, edible oils, soaps and other commercial products, as well as oilcake for animal feed. This by-product represents approximately 75% of the weight of the seed.

The unit value of the fibre is seven times that of the seed.4/ However, in many cotton-producing countries that product is the chief input in the edible oils

4/ See World Bank, Cotton Handbook, Washington, 1981.

<sup>3/</sup> According to the figures of the United States National Cotton Council, the end-use of approximately half of the cotton consumed in that country is as follows: manufacture of garments; manufacture of household articles (approximately 35%); the remainder is used in the manufacture of industrial products for various purposes (pharmaceutical, etc.).

Table 1

COTTON: AVERAGE MONTHLY PRICES OF VARIOUS QUALITIES OF COTTON, JUNE 1981

(US cents per pound)

Origin	Length	Туре	CIF price, Northern Europe
Egypt	Extra long	Giza 70	159.34
Sudan	Long	Barakat, G 5B	112.00
United States	Medium	Memphis, SM 1-1/16"	97.13
Mexico	Medium	Strict Middling 1-1/16"	88.06
Nicaragua	Medium	Strict Middling 1-1/16"	84.13
United States	Short	Orleans Middling 1"	84.25

Source: UNCTAD, "Monthly commodity price bulletin", Geneva, July 1981.

industry; at the world level, the cotton-seed is the second major source in production of vegetable oils, after the soya bean. The cotton-seed's protein content is relatively high (20% of its weight) and accounts for 5% to 6% of the total world supply of proteins.

## 2. World output and exports at the end of 1970 5/

Cotton is cultivated in approximately 70 countries in all regions of the world, between the latitudes 50 degrees north and 30 degrees south, on a total surface of between 30 million and 35 million hectares, which represents approximately 5% of the total land under cultivation in the world.

In 1980 world production was approximately 65.5 million bales, 6/ of which approximately 30% (or almost 20 million bales) entered world trade (see table 2).

<sup>5/</sup> See: World Cotton Situation, Foreign Agricultural Service, United States Department of Agriculture; World Bank, Cotton Handbook, Washington, February 1981; UNCTAD, Fibres and Textiles; Dimensions of Corporate Marketing Structures, TD/B/C.1/219, Geneva, November 1980, and publications and statistical series of FAO, UNCTAD and the International Cotton Advisory Committee (ICAC).

<sup>6/</sup> Each bale represents 480 pounds, or approximately 218 kilogrammes. Total output for 1980/1981 is therefore equivalent to 14.3 million tons.

Table 2

COTTON: WORLD PRODUCTION AND EXPORTS IN 1980

Countries		ultivated	Yields	Thou	sands c	of ba	ales
	(1 000	hectares)	(kg/hectare)	Prod	uction	Ex	port
Latin America	3	695	448	7	594	3	005
United States	5	348	453	11	122	5	926
Africa	3	338	344	5	274	2	424
Asia and Oceania <u>a</u> /	11	923	254	13	910	4	058
Soviet Union	3	147	988	14	275	4	300
Peoples' Republic of China	14	900	552	12	430		•••
Rest of the World		259	711		845		185
World total	32	610	437	65	450	19	<b>89</b> 8

Source: See preceding page.

Developing countries in Africa, Asia and Latin America account for approximately 40% of world production (26 million bales); the countries with centrally planned economies account for a similar proportion (26.7 million bales), and the developed market-economy countries account for the remaining 20% (12.7 million bales).

The Soviet Union (16.3 million bales), the People's Republic of China (12.4 million bales) and the United States (11.1 million bales) account for almost 58% of world output, and the Soviet Union and United States account for 51% of world exports.

Approximately 45% of world exports are controlled by the developing countries, approximately 33% by the developed market-economy countries, and the remainder by the Soviet Union, which is the only exporting country among the countries with centrally planned economies.

The breakdown of world imports is as follows: 40% in the case of the developed market-economy countries, 29% in the case of the developing countries, and 33% in the case of the countries with centrally planned economies.

a/ Excludes the People's Republic of China and the Soviet Union.

In 1981 Latin America's share of world output was approximately 12% and its share of world exports approximately 16%. In 1980 the region's chief producer countries were Brazil (2.8 million bales) and Mexico (1.6 million bales), followed in descending order by Guatemala, Colombia, Paraguay, Peru, Argentina, Nicaragua and El Salvador. Other countries (Honduras, Ecuador, Costa Rica, Bolivia and Venezuela) also produce cotton, although they do not have significant exportable surpluses (see table 3).

In 1977-1979 the value of cotton exports in Latin America represented (annual average) the not inconsiderable amount of 1.6% of total exports and 3.3% of commodity exports. These figures rise to 2.0% and 5.5%, respectively, if petroleum is excluded.

Cotton is of great importance to the export sector in certain countries of the region, such as Nicaragua, Guatemala and El Salvador, where cotton represents 20%, 13.0% and 9.4%, respectively, of total exports.

Moreover, cotton's share of total employment in estimated at approximately 35% in Nicaragua, 20% in Guatemala and 12% in El Salvador. At the level of all developing countries, the International Institute for Cotton estimated that at the middle of the preceding decade approximately 125 million persons depended on cotton production for their livelihood, in addition to which there were 45 million persons in the textile industry.7/

## 3. Long-term trends and the position of Latin America

## (a) Production

In 1980 world cotton output was over 65 million bales, which represents an increase of 115% in comparison with 1950, when output barely exceeded 30 million bales, and an increase of 47% in comparison with 1961 (44.4 million bales, see table 4). These figures indicate that, despite sharp competition from artificial fibres, cotton production has risen steadily in the post-war period.

A major change has, on the other hand, taken place in the share of the various regions of the world in the total. The share of the United States, which is virtually the sole producer in the industrialized world, dropped sharply from 32% in 1961 to 19% in 1970 and levelled off at approximately 18% in the late 1970s.

<sup>7/</sup> See International Institute for Cotton, Cotton's Importance to the Developing World, Burssels, 1976.

Table 3

LATIN AMERICA: CHIEF COTTON-PRODUCING AND EXPORTING COUNTRIES, 1980

Country	Area cultivated	Yields		Thousand	s of bales
	(1 000 hectares)	(kg/hectare)		Output	Exports
Argentina	310	270		385	160
Bolivia	14	389		25	
Brazil	2 015	305		2. 820	41
Colombia	199	581		531	245
Ecuador	23	606		64	. 8
El Salvador	<b>5</b> 8	777		207	182
Guatemala	102	1 238		580	526
Honduras	9	677		. 28	31
Mexico	360	965		1 595	818
Nicaragua	93	784		335	325
Paraguay	290	360		480	460
Peru	144	661	,	437	189
Latin America a/	3 695	448		7 594	3 005

Source: US Department of Agriculture.

The developing countries' output rose at the same pace as world output, and their share therefore remained at approximately 40% to 45% throughout the post-war period. The same may be said of Latin America and Brazil, in particular, whose share in the world total has not changed significantly over the past two decades, reaching approximately 12% in 1980 in the case of the region as a whole, and 4% in the case of Brazil. On the other hand, in Mexico there was a steady downward trend (from 4.5% in 1961 to 2.4% in 1980).

Lastly, there were major increases in the countries with centrally planned economies, whose output rose 2.1 times between 1961 and 1980 and whose share of the world total rose from 26% to 41% in that same period.

a/ Includes other countries.

Table 4

GROSS WORLD OUTPUT OF COTTON, BY PRINCIPAL COUNTRIES AND REGIONS (Thousands of bales and percentage of total)

	1961		1965		1970		1975		1978		1980	
Region	Thousands of bales	<i>0/0</i>	Thousands of bales	9/0	Thousands of bales	o/ <sub>0</sub>	Thousands of bales	<b>0</b> %	Thousands of bales	0/0	Thousands of bales	9/0
Industrialized market-cconomy countries	14 350	32.3	14 997	27.3	10 327	19.1	8 532	15.1	11 044	18.6	11 865	18.1
United States	14 313	32.2	14 933	27.2	10 190	18.8	8 298	14.7	10 837	18.2	11 122	17.0
Developing countries	18 373	41.4	23 295	42.5	24 834	45.8	24 930	44.2	26 546	9*111	26 681	8.04
Latin America	6 029	13.6	7 716	14.4	7 223	13,3	66 9	12,3	7 724	13.0	7 594	11.6
Brazil	1 942	<b>☆</b>	2 066	3.8	3 090	5.7	2 429	4.3	2 112	3.6	2 820	4.3
Mexico	1 979	4.5	2 604	4.8	1 433	2.6	902	1.6	1 525	2.6	1 595	2.4
Countries with centrally planned economies	11 691	26.3	16 582	30.2	19 038	35.1	22 923	40.7	21 885	36.8	26 797	6.04
Soviet Union	7 017	15.8	8 895	16.2	9 776	18.0	12 164	21.6	12 123	20.4	14 275	21.8
People's Republic of China	դ 675	10.5	7 687	14.0	9 262	17.1	10 759	19.1	9 763	16.4	12 430	19.0
World total	44 414	100.0	54 874	100.0	54 199	100.0	56 385	100.0	59 476	100.0	65 450	100.0

Source: See table 2.

Over the past two decades the area planted with cotton has remained constant at approximately 32 million hectares, which means that production increments have been due to the increase in yields. World output per hectare actually rose by approximately 40% (from 316 kilogrammes to 433 kilogrammes) between 1960 and 1980. A number of Latin American countries such as Mexico, El Salvador and, above all, Guatemala, had some of the highest yields in the world in 1979/1980. Guatemala, in particular, occupies the second position in the world, with 1 238 kilogrammes per hectare, following Israel and preceding Australia and Egypt (see table 5).

In addition to irrigation projects, these high yields may be attributed to an increase in crop rotation, to the introduction of new, more disease-resistant, varieties and, above all, to the intensive, and sometimes indiscriminate, use of fertilizers, pesticides and insecticides.

#### (b) Consumption of, and competition from, synthetic fibres

Over past decades there has been a marked upward trend in consumption of cotton fibre, both in the developing countries and in the countries with centrally planned economies. By the beginning of the current decade these two areas taken together controlled 80% of world consumption, in comparison with 60% in 1961, whereas over the same period the industrialized market-economy countries' share dropped from 40% to a little over one fifth of the total at present (see table 6).

Attention should be drawn to trends in cotton consumption in the People's Republic of China, a country whose share has risen from 12.5%, a level that was lower than the share of Europe or that of the United States in 1961, to almost one quarter of the world total in 1980, a level which is, moreover, higher than that of the share of all the industrialized countries taken together.

When the reasons for these trends in cotton consumption over the past two decades are examined it should be stressed that the world cotton economy has closely followed trends in two fundamental variables: world demand for textile products, and competition from synthetic fibres, whether cellulosic (rayon and acetate) or non-cellulosic.

In the 1960s and 1970s world consumption of textile fibres as a whole rose at an annual rate of 3.6% and 3.1%, respectively, in comparison with a population increase of approximately 1.9%, which would appear to be indicative of per capita

Table 5

COTTON-CROP YIELDS IN SELECTED PRODUCER COUNTRIES, 1959/1960 AND 1979/1980

Countries	Area cu. (Thousands o	ltivated f hectares)	Produ (Thousand	ction s of tons)	Yiel (kg per h	
	1959/60	1979/80	1959/60	<b>1</b> 979/80	1959/60	1979/80
Israel	7	5 <b>7</b>	7	<b>7</b> 5	1 047	1 323
Guatemala	18	125	14	149	791	1 185
Australia	16	70	3	83	157	1 185
Egypt	<b>7</b> 39	502	45 <b>7</b>	484	619	953
Soviet Union	2 152	3 090	1 604	2 819	<b>74</b> 5	912
Mexico	754	372	360	<b>32</b> 8	477	882
El Salvador	38	76	30	65	<b>7</b> 86	847
Syria	227	154	97	128	427	831
Spain	225	50	63	41	279	820
Greece	135	136	57	106	423	<b>77</b> 9
Turkey	624	612	195	477	313	7 <b>7</b> 9
Madagascar	• • •	18	• • •	13	• • •	<b>7</b> 06
Peru	253	147	139	96	517	636
United States	6 118	5 187	3 170	3 135	517	614
Colombia	151	217	67	125	445	5 <b>7</b> 5
Nicaragua	67	<b>3</b> 8	28	22	423	5 <b>7</b> 4
Zimbabwe	• • •	127	• • •	65	• • •	513
Ethiopia	18	49	2	25	178	513

Source: International Cotton Advisory Committee.

increments of 1.7% and 1.2%, respectively (see table 7). However, the annual growth rate of cotton consumption was lower than the population growth rate, or 1.5% and 1.7%, respectively, while there were considerable increases of 21% and 9.5% in synthetic fibres. The share of synthetic fibres in total consumption rose from

Table 6

WORLD COTTON CONSUMPTION BY CHIEF COUNTRIES AND REGIOMS, 1961-1980 (Thousands of bales and percentage of world total)

	1961	1	1965	5	1970		1975	5	1978	8	1980	
Region	Thousands of bales	ω %	Thousands of bales	۵/ہ مرہ	Thousands of bales	0/c	Thousands of bales	% %	Thousands of bales	۵% م%	Thousands of bales	0/0
Industrialized												
market-economy countries	18 924	40.7	18 841	37.0	16 798	30.1	13 413	22.8	13 271	21.7	13 354	20.0
United States	8 463	18.2	9 257	18.2	7 843	14.5	0.286	10.7	6 332	10.3		
Europe a/	6 387	13.7	5 648	11.1	5 134	9.5	3 807	6.5	3 628	5.9		0 0
Japan	3 628	7.8	3 361	9 9	3 320	6.1	2 976	5.1	2 971	6 +		, C
Developing countries	13 280	28.5	15 411	30.2	18 487	34.1	22 317	38.0	23 865	39.0		37,3
Latin America	2 893	6.2	3 150	6.2	3 380	6.2	4 179	7.1	4 519	7.4		7.2
Countries with centrally planned economies	14 313	30.8	16 733	32.8	18 910	34.9	22 997	39.2	24 057	, c		. CI
Soviet Union	6 133	13,3	6 975	13.7	7 999	14.8		14.8		2 T		_
People's Republic of China	5 795	12,5	7 205	14.1	8 206	15.1	11 558	19.7	12 440	6 00		- c
World total	46 517	100.0	50 985	100.0	54 195	100.0	- 1	100.0	- 1	100.0	i	100.0

Source: See table 2.

a/ Excluding Spain, Greece, Portugal and Cyprus.

Table 7

WORLD CONSUMPTION OF NATURAL AND SYNTHETIC FIBRES

		0110	3		, , , , , , , , , , , , , , , , , , , ,					reconstruction in the contract of	-0-0	
Years	Cotton	Wool	Rayon	Wool Rayon Polyester	Total synthetics	Total	Cotton	Wool	Rayon	Rayon Polyester	Total synthetics	Total
1960	10 360 1 495	1 495	2 600	122	702	15 157	68	10	17		വ	100
1970	12 043 1 500	1 500	3 436	1 645	η 700	21 689	55	7	16	ω	22	100
1979	14 000 1 499	1 499	3 380	5 134	10 614	29 502	48	ζ.	11	17	36	100
		Annue	Annual growth rate	h rate								
1960-70	1.5	0.0	2.8	30.0	21.0	3.6						
1970-79	1.7	0.0-	-0.2	13.5	9.5	3.1						
1972-79	1.2	-0.7	<b>-0.7</b>	10.7	7.6	2.7						

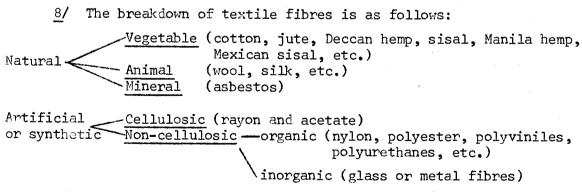
Source: World Bank, "Cotton Handbook", op. cit.

5% in 1960 to 36% in 1979, while cotton's share fell from 68% to 48% over the same period.8/

The basic reason for this structural change in consumption of textile fibres lies in trends in the price ratio between natural fibres and synthetics, which has been particularly favourable to the latter. Table 8 shows trends in this ratio as regards prices of cotton and polyester, the latter being the major synthetic fibre. Trends have in fact been extremely unfavourable to cotton, particularly since 1974 owing to the impact of higher oil prices, which made inputs such as fuels, fertilizers and insecticides more costly. Although the unfavourable trend for cotton became less marked in the late 1970s, one pound of cotton still costs from 15% to 19% more than one pound of polyester, whereas in 1960 the latter was three times more expensive than one pound of cotton.9/

In general terms, it is possible to identify the clear downward trend in the relative position of cotton as regards total consumption of textile fibres, particularly in the developed countries, but also in a number of countries of the periphery, as will be seen in the case of Mexico (part.II.8 of this study).

Taking account of all the factors referred to above and other factors of a more structural nature (population growth rate, trends in the world economy and its sectors, etc.), available projections all indicate a continued gradual drop in the share of cotton in world consumption of fibres from its current level of 48% to approximately 42% to 44% in 1990.10/



<sup>9/</sup> In view of the fact that marketing of textile fibres is dominated by the transnational corporations, and in view of their vertical concentration in the industry (see part 5), it may be assumed that use of transfer pricing in order to maximize, or even to maintain, such enterprises' profit margins could have had a major impact on trends in price/real income ratios.

<sup>10/</sup> See, World Bank, Price Prospects for Major Primary Commodities, Washington, January 1980, and US Department of Agriculture, Foreign Agricultural Service: World Cotton Production and Use: Projections for 1985 and 1990, Washington, June 1979. Also see World Bank, International Cotton Market Prospects, Staff Commodity Paper No. 2, Washington, June 1978.

Table 8

COTTON AND POLYESTER - FIBRE PRICES IN THE UNITED STATES

(1955-1980)

Year	Cotton <u>a/</u> (cents per pound)	Polyester <u>b/</u> (cents per pound)	Cotton Polyester (percentages)
1955	40	160	25
1960	39	126	31
1965	31.	85	36
<b>1</b> 9 <b>7</b> 0	31	41	76
1974	65	46	141
1976	<b>7</b> 6	53	143
1977	54	57	.95
1979	69	60	115
1980	88	74	119

Source: Prepared on the basis of Cotton and Wool:
Outlook and Situation, US Department of
Agriculture.

### (c) Exports and imports

In the import substitution process in the post-war period the developing countries' textile industry, particularly the Latin American textile industry, expanded more rapidly than cotton output. This trend had a direct impact on the distribution of world cotton exports among the various regions.

As may be noted from table 9, the presence of Latin America, whose share of world exports was 27% in 1965, receded in the world cotton market both in absolute and relative terms, until it reached its current level of 3 million bales, which represents only 15% of the world total. This trend was also evident in the developing countries as a whole (whose share dropped from 64% to 46% over the same period).

a/ Strict Middling 1-1/16" delivered to the mill in the United States.

b/ "1.5 denier" FOB in United States factories.

Table 9

WORLD RAW COTTON EXPORTS BY REGION OF ORIGIN, 1961-1980 (Thousands of bales and percentage of world total)

	1961		1965		1970		1975		1978		1980	08
Region	Thousands of bales	%	Thousands of bales	%	Thousands of bales	9/0	Thousands of bales	0/0	Thousands of bales	<b>o</b> /o	Thousands of bales	ls %
Industrialized market-economy countries	5 6 727	39.1	†90 †	23.6	3 297	18.1	4 202	22.9	6 117	30.7	6 401	32.2
United States	6 658	38.7	3 954	22.9	3 109	17.0	000 7	21.8	5 873	4°67	5 926	29.8
Developing countries	8 642	50.2	11 062	64.1	12 431	68.1	10 259	55.9	9 794	149.1	6 197	46.2
Latin America	3 4.72	20.2	4 707	27.3	4 238	23.2	3 701	20.2	4 119	20.6	3 005	15.1
Countries with centrally planned economies	1 851	10.8	2 131	12.3	2 526	13.8	3 880	21.2	T+10 +1	20.3	4 300	21.6
Soviet Union	1 759	10.2	2 103	12.2	2 374	13.0	3 674	20.0	3 940	19.7	14 300	21.6
World total	17 220	100.0	100.0 17 257	100.0	18 253	100.0	18 340	100.0	19 952	100.0	19 898	100.0

Source: See table 2.

On the other hand, there is evidence of a steady increase in the commercial position of the countries with centrally planned economies, in other words, the Soviet Union, whose share rose from 12% to 22% between 1965 and 1980, thus exceeding the Latin American share. Trends in the exports of the United States, which is virtually the sole exporter among the industrialized market-economy countries, have been extremely erratic, with the share of United States exports in the world total fluctuating from 39% in 1961 to 17% in 1970, and 30% in 1980. In any event, at the end of 1970 the Soviet Union and the United States controlled over half of world cotton trade, which is a higher proportion than that under the control of the three developing regions. Naturally, this relationship between geopolitical forces as regards bargaining power, as well as the State or oligopolistic monopolistic, transnational, nature of the industry in the two leading countries in the cotton trade, constitute an obstacle to protection of the interests of producers in the countries of the periphery in international forums and agreements.11/

Fundamental changes have also taken place in world imports over the past two decades. As a result of the redeployment of the textile industry to the periphery the share of the industrialized countries in world imports, particularly that of the European industrialized countries, dropped from 60% in 1961 to 39.5% in 1980 in the case of the total, and from 36% to 22% in the case of Europe. In the course of the period in question their total imports even dropped in absolute terms, by approximately 3 million bales, of which over 2 million may be attributed to Europe (see table 10).

At the same time, the developing countries' share rose considerably (from 19.5% to 29% between 1961 and 1980) and the share of the countries with centrally planned economies rose even more markedly (from 20% to 33%). A number of "new" Asian textile exporters are prominent in the first group, such as Hong Kong and Korea, whose overall share rose from 4% to 11%. In the second group the People's Republic of China is prominent; as already seen, that country is the leading world consumer of cotton, and in spite of being the second largest cotton producer in the world (following the Soviet Union) where imports are concerned, it occupies second place, following Japan (15% in 1980, compared with 16% in the case of Japan).

<sup>11/</sup> See section I.4.

Table 10

WORLD RAW COTTON IMPORTS BY REGION OF DESTINATION, 1961-1980 (Thousands of bales and percentage of world total)

	1961		15	1965	16	1970	1975	2	1978	~	1980	
Region	Thousands of bales	c/o	Thousands of bales	spi ss	Thousands of bales	sp.	Thousands of bales	ω «»	Thousands of bales	0/0	Thousands of bales	0/0
Industrialized												
market-economy countries 10 667	10 667	4.09	9 257	52.8	9 110	0.64	7 655	41.6	7 770	38.3	7 861	39.5
Europe	6 378	36.1	5 345	30.5	.5 207	28.0	4 179	22.7	4 183	20.6	4 327	21.8
Japan	3 655	20.7	3 224	18.4	3 531	19.0	3 178	17.3	3 297	16,3	3 207	16.1
Developing countries	3 439	19,5	3 779	21.6	4 303	23.2	5 382	29.3	6 401	31.6	5 734	28.8
Hong Kong and Korea	762	4.3	918	5.2	1 244	6.7	1 919	10.4	2 475	12.2	2 075	10.4
Countries with centrally planned economies	3 568	20.2	4 491	25.6	5 171	27.8	5 345	29.1	6 107	30.1	6 579	33,1
People's Republic of China	473	2.7	1 070	6.1	687	5.3	1 561	ω Ω	2 723	13.4	3 000a/ 15.1	15.1
World total	17 675	100.0	17 528	100.0	18 584	100.0	18 382	100.0	20 278	100.0	19 881 1	100.0

Source: See table 2.

a/ Estimates.

#### 4. International organization

In 1939 the International Cotton Advisory Committee (ICAC) was established with a view to promoting improved functioning of the cotton market in the context of international co-operation.12/ Its headquarters are located at Washington, and its membership is made up of all countries producing and consuming cotton that are interested in participating in that international organization. Members have access to statistical support regarding prices, stocks, output, etc. collected and analysed by the Committee's expert staff.

The various international agreements on cotton have been ratified by the Committee, as have multilateral agreements, market quotas and stock management. Unfortunately, in the second half of the 1950s the Committee proved incapable of reconciling the United States' interests with those of the other producers, and the United States started to market its surpluses at prices below international prices, which evoked opposition from various regional groups, as in the case of the Inter-American Cotton Federation (FIDAL).

## 5. Dimensions of the transnational marketing pattern 13/

## (a) Oligopoly in cotton marketing

Fifteen large multi-commodity trading companies control 85-90% of globally traded cotton -a share approximated in most primary commodity markets. For cotton, these include 2 giant European companies, 5 Japanese General Trading Companies (Sogo Shoshas) and 8 U.S. public and private firms (see tables 11 and 12). As we shall see in part IV of this study the second and third biggest U.S. cotton traders, Volkart Brothers and Mc Fadden, and the Japanese Sogo Shosha C. Itoh as well, have important shares in the local and foreign trade of cotton in Mexico. Other two additional traders who market the Mexican cotton, Esteve and Anderson Clayton belong to other groups of biggest firms which follow those enumerated in table 12.

<sup>12/</sup> Under the auspices of the United States (at that time the leading cotton producer and exporter), owing to the changing soft-fibres market resulting from the entry of a greater number of producers and consumers.

<sup>13/</sup> This part represents a brief summary of chapters 2 to 7 of the recent UNCTAD document entitled "Fibres and Textiles: Dimensions of Corporate Marketing Structure", TD/B/C.1/219, November 1980. That document emphasizes issues relating to the case of cotton in Mexico.

Table 11 EXPORTS OF DEVELOPING COUNTRIES MARKETED BY TRANSNATIONAL CORPORATIONS, 1976

Commodity	Tota (\$	l exports million)	Percentage marketed by transnationals		
Food					
Cocoa	1	737	85		
Bananas		793	70-75		
Tobacco	1	079	85-90		
Tea		827	85		
Coffee	7	831	85-90		
Sugar	4	881	60		
Rice	1	102	70		
Wheat		449	85-90		
Agricultural raw materials					
Hides and skins		297 <u>a</u> /	25 <u>a</u> /		
Natural rubber	2	202	70-75		
Cotton	2	692	85-90		
Jute		172	85-90		
Forest products	4	169	90		
Ores, minerals and metals					
Crude petroleum	29	149 <u>a</u> /	75 <u>a</u> /		
Copper	3	031 <u>a</u> /	85 <b>-</b> 90 <u>a</u> /		
Iron ore	1	256 a/	90 <b>-</b> 95 <u>a</u> /		
Bauxite		518	90-95		
Tin		604 <u>a</u> /	75-80 <u>a</u> /		
Phosphates		850	50-60		

Source: Estimates by the UNCTAD secretariat (see Marketing and distribution of tobacco (TD/B/C.1/205), United Nations publication, Sales No. E.78.II.D.14, table 1).

<sup>&</sup>lt;u>a</u>/ 1973.

Table 12
MAJOR WORLD COTTON TRADERS

Rank a/	Trader	Country of origin	Remarks
1	Ralli Brothers	UK, Liverpool	Average annual turnover, well over 1 million bales, at times going up to well over 2 million
2	Volkart Brothers <u>b</u> /	Switzerland, Winterthur	Operational offices include New York, Osaka, Bremen and elsewhere
3	McFadden/Valmac <u>b</u> /	USA, Memphis and Brazil, Sao Paulo	Ranks probably equal with Volkart; at times ahead and at times just behind
4	W.B. Dunavant	USA, Memphis	Trades nearly exclusively on the American continent, but otherwise (in turn-over) equal to Ralli
5	Bunge and Born	USA, New York	With major operational headquarters in New York, Latin America, London, Antwerp, Osaka and elsewhere
6	Cargill	USA, Minnesota	
7	Allenberg Cotton Co.	USA, Memphis	
8	Weil Brothers	USA, Memphis	
9	H. Molsen and Co.	USA, Dallas	Owned jointly by interests in the Fed. Rep. of Germany and USA
10	Cotton Import/ Export Co.	USA, Dallas Japan	
1	Toyo Menka Kaisha	Osaka	Deals foremost in American cotton. Average annual turnover: 1 million bales
2	Sumitomo Shoji Kaisha (and Sumitomo Menka)	Osaka	Deals foremost in USSR cotton - turnover as above
3	C.Itoh and Co. b/	Osaka)	
4	Marubeni-Iida Co.	Osaka)	Average annual turnover: over 500 000 bales
5	Nichimen Co.	Osaka)	2.22 232 232

Source: Trade sources.

a/ Ranking can change from year to year, as volume traded by companies vary greatly from one year to another.

b/ Present in the marketing of Mexican cotton.

Crucial to an understanding of commodity markets is that most of these giants are dominant global marketeers in other commodities: Volkart in coffee and cocoa; Cargill and Bunge in grains and soybeans; Ralli Bros. in tropical hardwoods, grain, coffee, tea, rubber and metals; and the Sogo Shosha in all commodities—manufactured and non-manufactured. Indeed, the Sogo Shoshas are the only corporate groupings to rival the seven petroleum sisters in global revenues (see tables 13 and 14).

Table 13

THE SOGO SHOSHAS: GLOBAL SALES, 1979

(In \$ billion)

Corporations	1974	1979	Percentage increase over 1974
Mitsubishi	32.5	52.6	161
Mitsui	27.1	48.8	180
C. Itoh	17.8	38.6	217
Marubeni	19.4	36.5	189
Sumitomo	17.8	33.1	186
Nissho-Iwai	13.7	25.1	184
Toyo Menka	8.3	12.1	146
Kanematsu-Gosho	7.9	12.0	152
Nichimen	7.1	10.0	141
Total	151.6	268.8	177

Source: Annual reports of the companies and trade sources.

Table 14

THE SOGO SHOSHAS: SECTORAL BREAKDOWN

(Percentage of total sales)

Corporation	Meta	als	Machi	inery	Chemic	als	Foo	ods	Texti	les	Fue	el	Pulp timb	
	1974	1978	1974	<b>197</b> 8	1974 1	9 <b>7</b> 8	19 <b>7</b> 4	1978	1974	1978	19 <b>7</b> 4	19 <b>7</b> 8	1974	<b>197</b> 8
Mitsubishi Mitsui	34 35	28 31	14 11	18 19	9 14	9 12	14 14	13 14	8 9	5 6	15	18 7	6 <b>17</b>	9 11
C. Itoh Marubeni Sumitomo Missho-Iwai	18 18 •• 39	17 24 33 36	16 19 •• 20	20 26 25 25	23 <u>a/</u> 13 <u>a/</u>	20 12 19 11	14 •• 13	13 14 9 10	22 •• 8	19 13 4 8	••	6 2 2 3	7 9 •• 7	<b>5</b> 9 9 <b>7</b>
Toyo Menka Kanematsu- Gosho Nichimen	23 <u>b/</u> 23 30 <u>a/</u>	21 19 22	24 <u>b</u> / 13 17	19 12 23	9 <u>a/,b/</u> 10 10	15 13 11	17 <u>b</u> / 22 20	19 15 15	23 <u>b/</u> 22 16	20 28 19	10	2 13 4	4 <u>b</u> / - 7	4 - 6
Total c/	29	27	16	21	13	14	<u>15</u>	13	13	11	14	7	8	8

Source: Computed from data in: Chemical Week, 23 April 1980 and 2 July 1980; company Annual Reports; and trade sources.

Due to their self-reinforcing backward and forward linkages (e.g., Ralli and Volkart in ginning, Bunge in plantations, spinning and weaving, and massive penetration into warehousing by many), they are strategically advantaged vis-à-vis national marketing institutions and firms in developing countries from which they buy cotton. Likewise, in the field of economic and trading intelligence, the large traders all possess highly sophisticated networks which lend a staggering speed and flexibility to their operations unmatched by national marketing institutions.

Despite competition in certain spheres, there is a high level of collusion between cotton traders, seen most graphically in the demarcation of geographical spheres of influence. The UNCTAD's findings reveal that in all cases except the United States, only 3-5 giant traders dominate the cotton export business.

a/ Including fuels.

 $<sup>\</sup>overline{b}$ / 1975.

c/ Weighted average.

The top five cotton traders include the third largest food enterprise in the world after Unilever and Nestlê -the U.S. multi-commodity trader, Cargill. This world leader in grain merchandizing supports and cross-subsidizes its cotton operations with activities in metals trading, flour processing, chemicals, steel manufacturing, coal merchandizing, poultry processing, salt mining, oilseed processing, meat, coal, sugar, commodity futures trading, etc. Its 1979 sales of over \$12 billion were more than double the value of globally traded cotton during that year alone.

#### (b) Speculations on the New York market

Operations of the giant traders cannot be investigated in isolation, but rather must be seen in relation to their impact on price formation via their dominance on the New York futures market and their penetration into all marketing circuits. Established on 10 September 1870, the New York Cotton Exchange has become one of the crucial determinants of world cotton prices.

Along with cotton farmers, spinners and textile mills, the principal operators on the Exchange are the giant multi-commodity traders, who deal simultaneously in actual cotton and futures contracts in massive trading volumes.

Manipulative practices, however, are endemic in the cotton futures market. Through the practice of "squeezes" or "corners" the futures market has become a trading mechanism whereby large traders, individually or through collusive manipulative practices, acquire substantial gains and in so doing, destabilize prices. A "squeeze" occurs when a trader or group of traders controls a predominant segment of the contracts in a maturing future as well as a sizeable portion of the deliverable cotton supplies, and uses control of these two vantage points to alter futures prices.

Of pivotal importance in the world cotton economy is that these inherently unstable price quotations from the New York Cotton Exchange are immediately disseminated globally, and act as the barometer for cotton prices in producing countries.

In consequence, the centrally planned and developing countries who produce over four-fifths of the world's cotton play a marginal role in cotton price formation at the global level. They are instead relegated to a role of accepting widely oscillating prices with their accompanying deleterious impact, particularly for countries that depend on cotton as a major source of export earnings and development finance.

# (c) The impact of the transnational complex of the petrochemical and textile industry

The post-World War II explosion of the chemical fibre industry and petrochemical industry that is its feeder base, presents a challenge to cotton greater than that faced by most other natural primary commodities. Petrochemicals are produced by the seven petroleum sisters (combined 1979 sales: \$ 349 billion) and chemical corporations or via joint ventures between them. Chemical fibres fall more exclusively under the control of the chemical giants, although certain of the textile majors (e.g., Courtaulds) are significant forces on the market. The meshing of chemical and petroleum oligopolies that are the propellants of the petrochemical industries assumes a myriad of forms, including joint ventures, common purchasing arrangements for raw materials, cross licensing, license-pooling, sharing of marketing facilities, etc.

By 1979, around 13 giant firms produced about three-fifths of the world's chemical fibres, englobing 80-90% of world trade.14/ During the last three decades, all major chemical fibres swelled their shares of fibre end-use markets (apparel, domestic and industrial), despite prices much higher than those of cotton. The mechanisms deployed go far beyond the neo-classical economic formulation of "inter-fibre competition", including research and development; blending techniques; advertising and marketing technology; transfer pricing; inter-corporate patent swaps, and increasingly massive State interventionist measures.

With research and development outlays each topping half a billion dollars yearly for certain of the chemical giants, they have rapidly innovated new fibre lines to equal and surpass the inherent qualities of natural fibres. These include blending techniques to enhance texture, colour, dyeability, tensile strength and durability in fibre mixes which invariably cut back cotton's share in the finished fabric.

Global chemical fibre advertising breakdowns are concealed, although estimates suggest that they climb as high as 1 to 2% of total sales, which surpass \$10 billion annually for several of the chemical majors. In addition to corporate strategies

<sup>14</sup>/ See tables 15 and 16 and, especially, the role of Brazil and Mexico pointed out in table 15.

Table 15 GROWTH OF MAJOR FIBRE CORPORATIONS, 1974-1977

Corporation	Annual capacity (thousands of tons)	nnual capacity (thousands of tons)	Annual growth rate of capacity	Overseas as per total	Overseas capacity as per cent of total capacity	Presence among 500 biggest of Latin America <u>a</u> /
	1974	1977	1974-1977	1974	1977	
Du Pont	1 030	1 876	22.1	28	21	Brazil (306)
ICI	630	968	12.5	49	76	1
Akzo	280	712	36.5	85	82	
Celanese	330	189	27.3	თ	27	Mexico (79)
Monsanto	340	603	21.0	21	17	ı
Hoechst	210	567	39.2	21	643	Brazil(264) Mexico(424)
Rhône-Poulenc	300	562	23.3	57	52	
Toray	270	348	& & &	2	30	1
Courtaulds	150	266	21.0	22	24	l
Teijin	160	240	14.5	10	43	. <b>t</b>
Total	3 700	6 751	22.2			:

See: "Las primeras 500 empresas en América Latina", Revista Progreso, January-February 1981. Computed from data supplied by the Japan Chemical Fibres Association. The Latin American ranking is given in parenthesis. Source ۱a

Table 16
WORLD'S 15 LEADING FIBRE PRODUCERS BY SALES, 1979
(\$ million)

Corporation	Approximate fibre sales	Percentage of total fibre sales of top 15	Total corporate sales	Fibre as per cent of total corporate sales
Du Pont (United States)	4 161	19.0	12 572	33.1
Akzo (Netherlands)	2 121	9.7	6 349	33.4
Celanese (United States)	1 816	8.3	3 146	57.7
Toray (Japan)	1 702	7.8	2 138	79.6
Rhône-Poulenc (France)	1 607	7.4	8 415	19.1
Courtaulds (United Kingdom	) 1 413	6.5	3 924	36.0
Teijin (Japan)	1 310	6.0	1 793	73.1
Hoechst (Federal Republic of Germany)	1 162	5.3	15 704	7.4
Asahi Chemical (Japan)	1 113	5.1	2 409	46.2
ICI (United Kingdom)	1 105	5.0	11 887	9.3
Monsanto (United States)	1 609	4.9	6 195	17.2
American Cyanamid (United States)	960	4.4	3 187	30.1
Allied Chemical (United States)	940	4.3	4 539	20.7
Unitika (Japan)	740	3.4	872	84.9
Kuraray (Japan)	642	2.9	847	75.8

Source: Computed from data in: Chemical Week, 23 April 1980 and 2 July 1980; company Annual Reports; and trade sources.

which serve directly to impinge on cotton's market shares there are other strategies which, by enhancing profitability, diminish in the long run cotton and other natural fibres' competitiveness. A source of profit maximization to the giant oil and chemical corporations (as well as all transnationals) is the widespread technique of 'transfer pricing'. For example, chemical corporations regularly attempt to minimize overall tax payments by manipulating prices of intracorporation transactions to escalate profits in countries with lower tax rates, and reduce them in those where taxes are higher.

The strategic importance of the petrochemical, chemical and chemical fibre industries explains massive State interventionism designed to buttress corporations that comprise these sectors. Just as the Italian State provided substantial aid to restructure the Milan-based conglomerate Montedison in the mid-1970s, the French State is now supplying massive financial outlays to its chemical giants: Rhône-Poulenc, CdF-Chimie and Pechiney Ugine Kuhlmann. State aid has also become a device for enhancing concentration within the chemical oligopoly. This drive is discernible within all major centres of the industry, seen in Japan's Ministry of International Trade and Industry (MITI) overseeing the recent whittling down of Japan's major fibre giants from eight to four.

A final major source of chemical fibre power derives from intimate links with the transnational banking structure and chemical corporations' privileged access to the world's capital markets.

The textile industry represents the crucible where the world's fibres are transformed through processing. It is one industry in the global economy which is a common denominator of all countries, though attaining its highest technological expression in a handful of developed countries. At present, textile processing is comprised of a loose oligopoly, with approximately 35-40 large textile corporations exerting a paramount force on world markets. In general, these are horizontally integrated firms, although vertical integration and conglomeration, as in Courtaulds, Agache Willot, Burlington and Japanese members of the textile oligopoly, will gather momentum in the eighties. This oligopoly continues to be one of the major propellants behind the gigantic shift in textile output and exports from developed to a leading group of developing countries.

Although formally autonomous, these 35-40 textile transnationals largely dominate global textiles through a complex interlocking marketing network with their power base mainly in 5 countries: the United Kingdom, the United States, France, the Federal Republic of Germany and Japan. Corporations from these five countries alone account for 94% of the top 100 firms' turnover.

Global textile exports reached \$60 billion by 1980, approximately 3% of world trade. As one of the leading industries in the changing international division of labour, it is the major battle-ground within and between the developing and developed countries. With growing areas of the global market already staked out by the oligopoly, a scramble for markets amongst different developing countries has intensified, with South Korea, Hong Kong and Taiwan having over 39% of developing country textile exports between them in 1977.

Increasingly, the developing countries are becoming stratified into three major groups: a rapidly industrializing sextet of Hong Kong, Taiwan, South Korea, Brazil, Mexico, India; an intermediate range that have managed to break into a few markets via processing primary commodities; and the vast majority of developing countries that remain dependent on developed country manufacturers. With the first group, realizing annual growth rates of real GNP from 7 to 10% in the 1960s and early 1970s, the gap between them and the third group has grown perceptibly larger and is now far wider than that between the developed and the top group of developing countries.

The unrelenting crisis which has battered the world textile economy since the early 1970s is symptomatic of the pervasiveness of the global economic crisis, with overall productive capacity outpacing demand. The crisis has dovetailed with massive automation and rationalization to curtail employment sharply in most developed country industries. Undoubtedly, this movement will be speeded up in the 1980s. It is generally expected that EEC textile employment will be halved during the first half of the current decade, which would amount to an additional 2 million workers joining the unemployed, now exceeding 6.5 million. In Japan, the textile labour force shrank from 1.1 million to 0.8 million in just 6 years during the mid-1970s.

The pincer movements of economic crisis and developing country imports have provoked large apparel corporations, with massive assistance from the State, to respond with a number of survival strategies. One such strategy, referred to as "outward processing", involves transferring the most labour-intensive production

processes to developing countries. In the United States, such operations have been stimulated by a special tariff exemption whereby outward processing corporations pay duty only on the value added to the garment abroad. Consequently, by the end of the 1970s, over a quarter of a billion dollars of apparel was flowing from the United States annually to Puerto Rico, Costa Rica, Honduras, Mexico, etc. Likewise, West European corporations have sucked into their processing vortex the Mediterranean periphery States, principally Portugal, Spain, Tunisia, Cyprus and Malta. Even some developing countries have adopted this operational strategy, exemplified by Hong Kong which now contracts with Chinese plants to sew large quantities of apparel.

# II. THE ACTIVITY OF THE COTTON SECTOR IN LATIN AMERICA

The organization of activity in the cotton sector varies a great deal from one part of the world to another. There is a wide variety of ways of organizing the ownership of enterprises (small farms and large estates which are privately owned, co-operatives and "ejidos", in the case of Mexico, and State farms in the socialist countries) and of credit facilities and local and external marketing arrangements. There follows a discussion of some aspects of such activities in Latin America.

# Extent and forms of ownership

The rise in the cost of the inputs has apparently been an important reason for concentration in the cotton industry both in the United States and in the majority of the developing countries.1/ In Latin America, a tendency to expand the average cotton producing unit has been observed throughout the past two decades, especially in Mexico and Central America where the decrease in the profitability of marginal land has led to the expulsion of many cotton farmers and to diversification in favour of alternative crops.2/ For example, in Brazil, the low yields of cotton, especially in the southern part of the country, led to the cultivation of other commodities, primarily soybeans.

There are however usually still traditional differences between the different countries in the average size of the cotton producing unit. In Central America, the size varies between a minimum of 24.5 hectares in Costa Rica in 1980 and a maximum of 439 hectares in Guatemala the same year. 3/ Obviously, at the extreme ends of the statistical scale, the averages may cover situations which are very different. For example, in El Salvador although the average cotton farm was only slightly larger than 30 hectares in 1978, 27 farms (out of a total of 3 275) were responsible for one fourth of the total yield. In Guatemala, on the other hand, 40 producers controlled just under half the area cultivated in 1979.

<sup>1/</sup> See Survey of Costs of Production of Raw Cotton, issued by the International Cotton Advisory Committee, Washington, October 1981.

<sup>2/</sup> See Survey of Crops Competing with Cotton, ICAC, Washington, November 1979.

<sup>3/</sup> See Situación Actual y Perspectivas del Algodón y la Semilla de Algodón, issued by the Permanent Secretariat of the General Treaty on the Economic Integration of Central America, Guatemala City, 1980.

With regard to forms of ownership, in Latin America private ownership predominates, the notable exceptions being Nicaragua, where 15% of the land given over to cotton has recently been nationalized and has become part of the Area of Public Ownership (APP),4/ and Mexico, where close to half of the land given over to cotton and its yield is controlled by the ejidal sector.5/

On the other hand, the process of concentration has not been confined to the planning process alone but has also embraced the first phase in the processing of cotton -the ginning or removal of the seed. For example, in the United States, the number of gins dropped from 7 400 in 1952 to 3 300 in 1973,6/ while in both Argentina 7/ and in Mexico and Central America, the process of concentration in ginning has resulted in the closure of many gins or in their under-utilization.

## 2. Local marketing and financing

There are countries in the region where the cotton marketing arrangements are determined by free play of the market. This is true of Guatemala, for example. On the other hand, in Mexico public financing influenced the cotton economy. Finally in Nicaragua the marketing of cotton has become a State monopoly, which operates through the National Cotton Corporation (ENAL). Intermediate cases which may be cited include Peru and Ecuador, where there are systems of minimum support prices set by the public sector.8/ Finally, in Peru and Mexico there are public enterprises -the Public Enterprise on Inputs Marketing (ENCI) and the Mexican Cotton Commercial Company (ALGOCOMEX) which purchase cotton fibre domestically and export it.

Support for the marketing of national products is also provided by the co-operatives established for this purpose in Mexico, Argentina, Brazil and El Salvador.

<sup>4/</sup> See Nicaragua: The Challenge of Reconstruction, issued by the World Bank, Washington, October 1981.

<sup>5/</sup> See part III.3 later on in this study.

<sup>6/</sup> See Review of Cotton Marketing System, Hearings before the Sub-Committee on Cotton, House of Representatives, 93rd Congress, Washington, 1974.

<sup>7/</sup> See La rama vertical algodonera, Joint CFI/CEPAL study, Buenos Aires, 1974. According to this source, only half the existing gins were operating in 1971.

<sup>8/</sup> See Government Regulations on Cotton, issued by the International Cotton Advisory Committee, 1981, Washington, 1981.

With regard to credit systems, situations range from one in which the public sector finances over half of the production, as happens in Mexico through the Bank for Rural Credit, to the opposite situation existing in Guatemala where the national banking sector financed only 13% of the total costs of production in 1979/1980.9/

#### 3. External marketing

The prevailing trend in the region has been towards the diminishing importance of export firms of foreign origin, with the notable exception of Mexico where at the end of 1970 transnational corporations controlled close to 70% of total exports. Transnationals still have some importance in the exports of Paraguay, Guatemala and Argentina. On the other hand, in the majority of producing countries, the leading role seems to be played by external marketing structures related to national private enterprise (Guatemala), co-operatives (Argentina and El Salvador), or public enterprise (Peru and Nicaragua).

In addition to playing a role as exporting agent as such, the public sector influences cotton exports indirectly by establishing the legal framework in which they take place. In table 17 it may be seen that because of the current situation in which prices on the international market are low, export taxes are non-existent or very low. Moreover, because they consist of a raw material which is virtually unprocessed, cotton exports have not been subsidized by the governments of exporting countries either.

Finally, the cotton producing countries also apply protective measures against imports of raw cotton. These measures generally consist in import taxes, licenses or prohibitions. For example, in 1981 Mexico imposed a tariff of 14 pesos per kg of imported cotton, i.e., the same amount as the tax on cotton exports. In addition, there was a total prohibition on the import of cotton fibres shorter than 35 mm, to protect the grade produced in the country.

<sup>9/</sup> See Informe Econômico Nº 27, Banco de Guatemala, Guatemala, January/March

Table 17

LATIN AMERICA: COTTON EXPORT TAXES AND SUBSIDIES

Country	Export taxes or barriers	Export subsidies
Colombia	None	15% of the value
Guatemala	Q. 0.075/1b.	None
Mexico	Mex.\$ 14/kg	None
Nicaragua	None	None
Peru	US\$ 18.48 per quintal 46 kg	None

Source: ICAC, USDA and field surveys.

# III. THE DEVELOPMENT OF THE MEXICAN COTTON INDUSTRY IN THE POST-WAR PERIOD

#### 1. Origin of the industry

Cotton was found in Mexico back in the pre-Columbian era. Its cultivation was developed in the tropical areas, particularly those with Mayan influence. In the Central High Plateau it was used in the manufacture of fabrics for the Court, whose members were the beneficiaries of tributes paid by subjugated peoples, including the Maya.

With the conquest to Mexico, this fibre was extensively cultivated in the Gulf of Mexico area, to meet the demands of an incipient textile industry concentrated in the Valley of Mexico in competition with textiles imported from the metropolies, such as wool, silk, linen and hemp fabrics.

After Independence, the Mexican Government promoted cultivation, basically by establishing tax exemptions on the import of improved seeds from the United States, which was of that time the leading producer due to the fact that in 1973 Eli Whitney had invented the gin, making it possible to produce enough yarn to supply the European textile industry with over one million bales in 1837. By 1825 the commercial exploitations already existed on the coast of the Gulf of Mexico (primarily in the state of Veracruz) and on the Pacific coast (in the state of Navarit). Later, in the second half of the last century, cotton was planted in the Valley of the Conchos (Ojinaga, Chih), and, on a larger scale, in the Comarca Laguna.

Under the impetus of the unprecedented increase in cotton production in the United States -which had risen from 5 million bales in 1868 to 15 million bales in 1911-, cotton began to be produced in the frontier areas of Mexico, where irrigation was available, mainly in Mexicali, N.L., with the help of that technology. In this way, the cultivation of cotton drifted from the tropical areas to the desert and semi-desert regions with irrigation in accordance with the model existing in the United States, so as to meet the needs of the Mexican textile industry.

/The final

The final boom in cotton farming came in the era following the Revolution when agricultural production factors were liberated, the domestic market expanded and there was a need for foreign currency, to prop up industrial development with capital goods. This boom was amply supported by governmental policy relating to irrigation, credit and technical assistance.

#### 2. Development of production

The area devoted to the cultivation of cotton tended to increase between 1929 and the 6 year period 1953-1958, rising from 199 000 to 925 000 hectares harvested (annual average), with an annual accumulated growth rate of 5.4% (see table 18). From the all-time peak of over 1 million hectares reached in the second half of the 1950s, the amount of land given over to cotton is showing a tendency to shrink, dropping from an average of 815 000 hectares in the 6-year period 1959-1964, to 633 000 hectares in the period 1965-1970 and to 408 000 hectares in the period 1971-1976. This decline in the cultivation of cotton continued during the second half of the 1970s when the areas sown fluctuated between 372 000 and 420 000 hectares, or roughly 40% of the maximum reached 20 years ago.

The average yields per hectare rose from 250 to 895 kilogrammes between 1935-1940 and 1971-1976, or at a rate of 3.6% a year, which has made it possible to compensate for the reduction in the area harvested. Actually the increase in the production of cotton between the period 1947-1952 and 1965-1970 was due almost exclusively to higher yields, which shows how important they are for keeping the crop competitive in the face of substitutes and fluctuating prices on the world market.

The increase in yields of cotton has been due to greater recourse to fertilizers, improved seeds, irrigation (77% of the total land sown in 1970), attention to plant health and to a high degree of mechanization -factors characteristic of a highly technical system which is greatly dependent on other sectors of the economy, but subject to such variability in the rising price of imports. Moreover, it is a system which is highly institutionalized in terms of credit and the organization of producers and traders. On the other hand, in the mid-1970s, Mexico was the country with the fifth highest cotton yield in the world (see table 19). Due to this increase in cotton yields in the post-war period,

Table 18

MEXICO: EVOLUTION OF THE CULTIVATION OF COTTON (1929-1981)

Period (annual average)	Area harvested Thousands of hectares	Production Thousands of tons	Yield kg/ha
1929	199	53	268
1940-1946	362	99	274
1947-1952	619	206	328
1953-1958	925	434	465
1959-1964	815	481	591
1965-1970	633	486	<b>77</b> 2
1971-1976	408	360	895
1977	420	418	997
1978	350	366	1 048
1979	377	356	940
1980	372	329	883
1981 <u>a</u> /	375	348	980

Source: CEPAL, Monografía del algodón en México (P.P.A./21/01), Mexico City, 1978. Updated figures.

a/ Preliminary.

Table 19
COTTON YIELDS IN SELECTED COUNTRIES
(1975/1976)

Countries	Area hectares 1975/76 (in thousand	Output metric tons (in thousands) s)	Yield (kg per ha)	Yield (Israel = 100)
Israel	38.0	49	1 289	100.0
Guatemala	83.2	100	1 201	93.2
USSR	2 890.0	2 <b>5</b> 26	874	67.8
Australia	29.2	25	856	6 <b>5.</b> 4
Mexico	232.4	197	848	6 <b>5.</b> 8
Syrian Arab Republic	205.6	158	768	59.6
Nicaragua	142.4	109	765	59.3
Madagascar	16.0	12	750	58.2
Turkey	662.4	480	724	56.2
Egypt	5 <b>5</b> 8.8	382	684	53.1
Peru	95.6	63	659	51.1
Bolivia	30.0	17	<b>5</b> 67	44.0
United States	3 518.4	1 808	514	39.9
China	4 800.0	2 385	497	38.6
Colombia	<b>248.</b> 8	121	486	37.7
Iran	286.8	139	48 <b>5</b>	37.6
Mali	86.4	39	451	35.0
Thailand	60.0	22	367	28.5
Argentina	408.8	133	325	25.2
Sudan	405.2	98	242	18.8
Iraq	52.0	12	231	17.9
Brazil	1 880.0	396	211	16.4
Chad	3 332.4	6 <b>5</b>	196	15.2
Socialist Countries	7 596.0	<b>5 05</b> 3	66 <b>5</b>	51.6
Other Countries	24 519.2	6 974	284	22.0
World	32 115.2	12 027	374	29.0

Source: Computed from data in ICAC, Cotton-World Statistics, 1977.

the volume produced rose from 206 000 to 486 000 tons between the period 1947-1952 and 1965-1970 (in terms of annual averages). In the first half of the 1970s production fell to 360 000 tons owing to the sharp drop in the area given over to cotton, this level remaining the same, although with marked fluctuations from year to year, during the second half of the decade (see table 18).

The reduction in cotton farming together with the increase in the intensity and productivity of the industry has made the agricultural employment problem worse, the demand for labour falling by 63% during the 1970s. This is even more meaningful in view of the fact that these workers are salaried, unlike most of those who farm maize and beans. The importance of cotton for obtaining high levels of employment and its vulnerability to adverse market conditions are responsible for government action related to cotton to relieve the social pressure resulting from massive unemployment in agriculture.

### 3. The co-operative (ejidal) sector

In Mexico, co-operative action has been attempted by the State. Under laws governing land reform, farm credit associations, etc., the farmers of all the various crops are required to set up their own producers' union. Producers' associations established for credit purposes are those which have made the best adjustment to the economic organization.

At national level there is no common denominator of ways of organizing cotton producers. The extensive range of cotton producers' organizations has resulted from various factors, including the fact that the areas given over to cotton are far from the markets, the concentration and specialization of supply which means producers have somewhat similar interests and the farming of cotton as a single crop for over 20 years in many of the producing areas.

The most common objectives in these organizations are first to check price fluctuations through collective measures to control the supply by having crops processed and warehoused by co-operatives, and as the Agricultural Credit Unions of the Northeast and the Uniones de Sociedades Ejidales in the Lake region. Unfortunately, however, many of the associations deal with such short-term and specific problems that their effectiveness is entirely a matter of chance.

/The more

The more market services a co-operative embraces, the more solid it will be and the more effective its negotiating capacity, as is true of the Confederation of Agricultural Associations of the State of Sinaloa (CAADES), the Agricultural Credit Unions of the State of Sonora, the Sociedades de Crédito Ejidales in La Laguna, etc., whose level of institutionalization has a great deal to do with the degree of integration in the production, processing and marketing of cotton and its by-products.

In table 20 it may be seen that in 1970 nearly half (47%) of the area planted in cotton and its output was in the ejidal sector -a share which, where output is concerned, is the same as 30 years ago although it is less in terms of area (54% in 1970), which is an indication of a greater increase in yields on ejidos than on private land-holdings. On the other hand, the latter have also reacted more intensely in terms of production to the reduction in world market prices in the past two decades.

The variable which determines the development of co-operatives is State action in the field of credit, as will be analysed below, while the private sector is affected more directly by the profitability of the crop. The co-operative sector is part of modern agriculture (irrigated and mechanized agriculture) which accounts for nearly 82% of the area cultivated while traditional farmers make up 16% and subsistence farmers are practically non-existent since they form a bare 2% of the total cotton-producing area.

#### 4. The world context

Global changes in the production of cotton in Mexico are explained by the development of world economy as well as by the process of development within the country. We have already seen in the previous part of this study that since the 1970s world cotton production and trade has tended to show an increasingly slower growth rate owing to competition from artificial fibres.

While the level and rate of world cotton production is determined by the big changes occurring in the world market which is controlled by the economic development of the industrialized countries at internal levels, cotton production trends depend on the way in which each individual country fits into the world economy. Nevertheless, the trends at one level or another do not necessarily interrelate owing to the special role played by cotton in the economic development of Mexico. Table 21 shows production and export trends at both world and country levels.

Table 20

MEXICO: COTTOJ OUTPUT AND ACREAGE a/ BY TYPE OF HOLDING (1940-1970)

			Production				Area b/		
	Total (t)	Private ownership (t)	Percentag	ge Ejidos F	Percentage	Total Private (ha) ownership (ha)	Percentage	Ejidos (ha)	Percentage
1940	162 729	86 151	53	76 578	47	202 729 94 106	94	108 623	54
1950	518 850	(1)	62	194 480	38	539 377 312 830	50	226 547	42
1960	-		65	362 597	35	752 562 489 969	65	262 593	35
1970	937		53	909 444	47	463 795 243 629	53	220 166	47

Source: Agricultural, livestock and ejidal censuses.

a/ Refers to unhalled or unseeded cotton.

b/ Area harvested.

Table 21

AVERAGE ANNUAL GROWTH RATES OF COTTON PRODUCTION AND EXPORTS (1950-1970)

(Percentages)

		Production	on		Exports	
	1950/ 1960	1960/ 1970	1970/ 1979	1950/ 1960	1960/ 1970	19 <b>7</b> 0/ 1980
World	4.08	1.37	1.47	3.86	0.23	2.70
Mexico	6.10	-3.36	0.68	6.41	-3.84	-2.84

Source: ICAC, Cotton - World Statistics, various years; CEPAL,

Monografia del algodón en México, Annex 5, and Commodity
Research Bureau, Commodity Yearbook, various years.

With regard to production, Mexican production grew at a rate higher than world production only in the 1950s; during the following two decades, although the growth rates of the world production of cotton were relatively low, in the case of Mexico they were negative in the 1960s and, although the rate achieved in the period 1970-1979 was positive, it was half the growth rate of world production in the same period. World exports, for their part, grew at an average annual rate of 3.9%, 0.2% and 2.7%, respectively, in the last three decades. In the case of Mexico, except for the 1950s when cotton exports grew by 6.5% and this commodity represented as much as a quarter of the total exports of goods of the country, since the 1960s they have been subject to a decline which is accelerating in spite of the increase in world cotton exports. Thus, Mexico's share in world production has shrunk considerably (see table 21).

The foregoing means that in addition to the natural importance of the development of world production and the world market, there are some important aspects of the economic development of Mexico which give cotton its own special characteristics and in some periods make its macroeconomic trends different from the way they behave at world level. Since Mexico is a country which has been

involved in a sustained process of industrialization of the import substitution type since the 1930s and 1940s, a primary product such as cotton should simultaneously fulfil two functions: on the one hand, it must be an important source of foreign currency to support the industrialization process, and, on the other hand, it must meet the domestic needs of a textile industry in constant growth. Below separate consideration is given to both aspects of this two-fold relationship of cotton with the economy as a whole.

#### 5. Cotton in the country's exports

As indicated above, the golden age of cotton in Mexico was the 1950s. The rapid growth of cotton production and exports indicated that it was becoming an agricultural export of the greatest importance in accordance with the accelerated growth of world economy at that time. The share of cotton in the total exports of goods rose from 20% in 1951 to 25% in 1955, and in 1960 it still maintained a high share of 16%. On the other hand, in the 1950s, cotton represented nearly half of the exports of agricultural commodities (see table 22).

The drop in the production of cotton in the 1960s was also accompanied by the loss of the dynamism of cotton exports. During the period 1960-1970 exports declined at an average annual rate of 3.8%, and the share of cotton in the total of goods exported dropped from 16% in 1960 to 6% in 1970, or more steeply than the drop in their share in all agricultural goods (from 39% to 20%). This declining trend in the production and export of cotton continued during the 1970s, when the share of cotton in total goods exports fell to only 5% in 1978, or to one fifth what it had been in 1955.

#### 6. Position in the world market

Towards the end of the 1970s the total volume of cotton exported by Mexico represented only 4% of the world cotton market and 29% of total Latin American exports in comparison with shares of 15% and 53% attained in 1955 (see table 23). This trend is due to the fact that world exports grew between 1950 and 1980 at an annual rate of 22.1% while Mexican exports showed a negative rate of growth.

Table 22

MEXICO: SHARE OF COTTON IN TOTAL EXPORTS OF THE COUNTRY

(1951-1958)

Year		export of	(As a % of	the total)
Tear		goods ns of pesos)	Agricultural goods	Cotton
1951	5	446.91	48.3	20.4
1955	9	484	49.7	24.6
1960	9	247	38.8	16.1
1965	13	610	32.3	14.1
1970	16	025	19.7	6.4
1975	35	763	28.0	6.0
1978	140	533	• •	4.7

Source: Department of Statistics, SIC, Anuario Estadístico de Comercio Exterior, various years and NAFINSA, Statistics on the Mexican Economy, 1977.

Table 23

MEXICO: SHARE IN WORLD AND LATIN AMERICAN EXPORTS OF COTTON (1950-1979)

Davis	Expo	rts (thousands of	tons)	Latin America	Mexico	
Periods (agricultural year)	World	Latin America	Mexico	(% of world)	Latin America	World
1950	2 662.9	474.8	163.2	17.8	34.4	6.1
1955	2 857.8	840.2 444.0		29.4	52.8	15.5
1960	3 703.4	732.7	347.3	19.8	47.4	9.4
1965	3 680.5	1 066.7	459.2	29.0	43.0	12.6
1970	3 827.8	729.9	163.9	19.1	22.4	4.3
1975	4 062.3	708.7	106.7	17.4	15.0	2.6
1979	5 000.0	689.2	198.4	14.0	28.8	4.0

Source: ICAC, Cotton - World Statistics, various years.

The region's exports in respect of the world total also show a declining trend, dropping from 29% in 1955 to 14% in 1979 mainly because of the drastic reduction in Mexican exports. These trends are the result not only of the tendency of cotton production to drop but also of the fact that the ratio of the domestic consumption of cotton to cotton production is rising (see the next section in this chapter).

With regard to destinations, Mexican cotton exports flow in the same geographical direction as world trade although they are in a special economic relationship with the market of the United States (see table 24). The two clearest trends are the decrease in the importance of the United States as a market in that it received 71% of the total exports in the period 1951-1955 and just under 9% in the period 1976-1979, and the increase in exports to Asia in both absolute and relative terms. The share received by Japan rose from 17% to 35% in the said period, reaching, together with the new market in China, 57% of the total in the second half of the 1970s. On the other hand, the share of the main European markets (Germany, France and Italy) remained relatively marginal and, with marked changes from year to year, averaged only 11% in the second half of the 1970s.

In addition, in the case of exports to the United States, cotton is not for the most part destined for consumption in that country but is re-exported to other world markets. In this particular approach to marketing, transnational corporations, by themselves or in association with Mexican capital, transport cotton from the north-eastern part of the country to ports in the United States to be re-exported to other countries, mostly European countries, thereby increasing their participation in the processing of Mexican cotton. It may be supposed that this external marketing arrangement brings fewer benefits to the economy of Mexico than do direct exports to consumer markets.

#### 7. Cotton in the textile industry

Strictly speaking, the textile industry was developed in the nineteenth century in Mexico, following the war of independence, although during the colonial era the manufacture of textiles was widespread as a cottage industry. Until 1840, the first textile mills in Puebla used steam as a source of motor energy;

/Table 24

Table 24

MEXICO: DISTRIBUTION OF COTTON EXPORTS BY MAIN COUNTRIES OF DESTINATION (1951-1979)

### (As a percentage of the total)

Period (annual average)	United States	Federal Republic of German	l'rance ay	Italy	Japan	. China	Others
1951-1955	70.9	2.4	2.6	0.3	17.4	-	6.4
1956-1960	59.3	3.5	1.5	0.6	23.7	-	11.4
1961-1965	34.2	4.2	4.0	3.1	39.9	-	14.6
1966-1970	21.3	3.3	4.0	10.8	43.0	-	17.6
1971-1975	18.6	1.0	1.1	4.7	46.7	7.7	27.9
1976-1979	8.6	1.7	1.4	7.6	34.7	22.6	22.4

Source: Union of Cotton Producers of Mexico, A.C.; Dirección General de Asuntos Algodoneros.

in 1837 there were 8 000 spindles in Puebla, and eight years later this capacity was raised to 113 813 spindles.1/ Their output, however, and that of many other small factories which were still using hand-looms was insufficient to meet the growing demand for textile fibres and material. In 1856, 90% of the total import of goods consisted in consumer goods, two thirds of which were imported textile articles.2/

Recently, in the twentieth century and in particular since the 1940s, import substitution has taken place rapidly. Historically, in the century between 1350 and 1950, imports of consumer goods fell from about 90% to about 15% of the total goods imported. This relative decline in the import of consumer goods was accompanied by a drop in the import of textiles which represented approximately 7-8% of total imports in the 1950s. Although the growth of the textile industry has been less intense than that of the economy as a whole and its importance within the manufacturing sector was on the decline, 3/ its output has brought about a substantial decrease in the demand for inputs, which was high at the end of the last century and the beginning of the present one.

The local processing of cotton fibres has increased substantially in the post-war period as the textile industry has developed. Between 1950 and 1970 the growth in the local processing of cotton was relatively steady, maintaining an annual average growth rate of 4.4% during those 20 years. In the same period, the share of the textile industry in the total demand for cotton rose from 30% in 1951 to 46% in 1970, which brought the export quota down from 70% to 54% (see table 25). In the 1970s, the local processing of cotton stagnated, maintaining a growth rate of only 0.06% a year, the local processing quota in 1979 being equal to that in 1970. This trend towards stagnation is not the result of a drop in the production of textiles but of the rapid increase in the consumption of synthetic fibres in the production of yarns and textiles.

<sup>1/</sup> See D. Keremitsis, La industria textil mexicana en el Siglo XIX, Editorial SEP-Setentas, Mexico City, 1973.

<sup>2/</sup> See I. Herrera, El Comercio Exterior de México, 1821-1875, El Colegio de México, 1977.

<sup>3/</sup> The share of the textile industry in the value added in manufacturing dropped from 21% in 1910 to 12.5% in 1970 (Colegio de México, Estadísticas Econômicas de Porfiriato; Fuerza de Trabajo y Actividad Econômica por Sectores and Las Actividades Econômicas en México, op. cit.).

Table 25

MEXICO: TOTAL DEMAND FOR COTTON (1951-1979)

	Total	Local	processing	Exp	orts
Year	demand <u>a/</u> bales	Bales	Percentage	Bales	Percentage
1951	1 112 759	338 825	30.5	<b>77</b> 3 <b>9</b> 34	69.5
1955	1 952 657	420 335	21.5	1 532 322	78.5
1960	1 883 741	509 365	27.0	1 374 376	73.0
1965	2 389 463	611 106	25.6	1 778 35 <b>7</b>	74.4
1970	1 723 206	793 746	46.1	929 460	53.9
1975	1 484 623	803 062	54.1	681 561	45.9
1979	1 717 337	791 5 <b>37</b>	46.1	925 800	53.9

Source: CEPAL, Monografía del algodón en México (P.P.A/21/01), Mexico City, 1978. Updated figures.

#### 8. Cotton and the competition of synthetic fibres

The use of synthetic fibres in the textile industry of the developed countries began towards the end of the 1950s as was seen in chapter I. In Mexico, the substitution of synthetic fibres for cotton began to gather force towards the end of the 1970s. Thus, while in 1970 the consumption of synthetic fibres as a share of the total consumption of fibres at world level was about 25%, and in the case of some countries like the United States figures higher than 40% were reached, chemical and synthetic fibres represented 17% of the national consumption of soft fibres, with cotton still accounting for 60% (see table 26).

The substantial increase in the use of synthetic fibres took place in the 1970s when the consumption of cotton in the textile industry stagnated and its share in the total consumption of fibres fell from 68% in 1970 to 41% in 1979. In the same period, the consumption of synthetic fibres rose at a rate of 28.6% and their share in the total consumption of fibres rose from 17% to 53%.

The increase in the consumption of synthetic fibres by the textile industry was supported by the accelerated development of the petrochemicals industry of the country, use being taken of the comparative advantage of Mexico's having its own petroleum resources, but also by the rise in imports of synthetic fibres. The national output of synthetic fibres rose between 1970 and 1980 from 46 000 to 261 000 tons, or at an average annual rate of 19%. On the other hand, imports of synthetic fibres during the same period also rose from 1 600 to 8 900 tons, or also by 19% a year. 4/ We shall now look at this important structural change in the consumption of textile fibres in terms of the trade balance and in comparison with other industrialized and peripheral countries.

In table 27 it may be seen that the textile industry was of relatively little importance in the country's total exports and exports of manufactures during the 1970s and that there had also been an abrupt drop in its share at the end of the decade by comparison with the period 1973-1976. Actually, between the years 1974 and 1980, the share of the textile industry in total exports fell from 4% to 0.4% and its share in exports of manufactures from 7.5% to 2.0%. This downturn was caused primarily by the decline in exports of cotton yarn and fabrics, whose value in 1980 was for the first time exceeded by the value of imports of synthetic textiles and, moreover, covered only 82% of the value of imports of textile manufactures.

<sup>4/</sup> See the source line of table 27.

Table 26

# MEXICO: SHARE OF NATURAL AND SYNTHETIC FIBRES IN THE CONSUMPTION OF SOFT FIBRES (1950-1979)

# (Percentage of total demand) a/

	1950	1960	1970	1979
Cotton	78.5	78.5	68.3	40.9
Wool	6.5	5.4	3.6	1.3
Cellulose fibres	14.9	14.1	11.4	4.6
Synthetic fibres	-	2.3	16.6	53.1

Source: CEPAL, Monografía del Algodón en México, op.cit., updated figures.

a/ Including imports.

MEXICO: THE TEXTILE INDUSTRY AS A GENERATOR OF FOREIGN CURRENCY (1970-1980) (Millions of pesos) Table 27

1972 1973 1974 19 20 926 25 881 35 261 35 7 992 11 276 18 842 14 371 997 1 406 304 874 1 269 88 181 450 723 972 634 1.8 3.9 4.0	1970 1971 1972 1973 1974 1975 19 17 162 17 069 20 926 25 881 35 261 35 763 51 6 098 6 384 7 992 11 276 18 842 14 920 20 156 239 371 997 1 406 922 1 125 173 304 874 1 269 834 1 63 68 88 181 450 150 465 576 723 972 634 632 2.6 2.6 3.7 4.6 2.6 2.6	1970 1971 1972 1973 1974 1975 1976 1971 1970 1970 1970 1970 1970 1970 1970	1970 1971 1972 1973 1974 1975 1976 1977 1971 1972 1970 1971 1972 1971 1972 1972 1972 1972 1972	1970 1971 1972 1973 1974 1975 1976 1977 1978 1971 1978 1971 1972 1978 1971 1972 1973 1974 1975 1975 1975 1975 1975 1975 1975 1974 1974 1975 1975 1975 1975 1975 1975 1975 1975	1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1988 17 162 17 069 20 926 25 881 35 261 35 763 51 905 91 849 118 694 194 209 319
1971 1972 1973 1974 19 17 069 20 926 25 881 35 261 35 17 069 20 926 25 881 35 261 35 239 371 997 1 406 173 304 874 1 269 68 88 181 450 576 723 972 634 1.4 1.8 3.9 4.0 3.7 4.6 8.8 7.5	1971 1972 1973 1974 1975 1971 1975 1971 1971 1975 1971 1972 1971 1972 1972 1972 1972 1973 1974 1976 1975 1972 1972 1973 1974 1976 1975 1972 1973 1974 1975 1972 1972 1972 1972 1972 1972 1972 1972	1971 1972 1973 1974 1975 1976 18  17 069 20 926 25 881 35 261 35 763 51 905 91  6 364 7 992 11 276 18 842 14 920 20 138 34  173 304 874 1 269 834 1 134 1  68 88 181 450 150 133  576 723 972 634 632 861  576 723 972 634 632 861  1.4 1.8 3.9 4.0 2.6 2.4 5.3  1.4 1.8 3.9 4.0 2.6 2.4 5.3	1971     1972     1973     1974     1975     1976     1977       17 069     20 926     25 881     35 261     35 763     51 905     91 849       17 069     20 926     25 881     35 261     35 763     51 905     91 849       239     371     997     1 406     922     1 261     1 597       173     304     874     1 269     834     1 134     1 357       68     88     181     450     150     133     117       576     723     972     634     632     861     506       1.4     1.8     3.9     4.0     2.6     2.4     1.7       3.7     4.6     8.8     7.5     6.2     6.2     6.3     4.6	1971 1972 1973 1974 1975 1976 1977 1978 1971 1971 1971 1972 1971 1972 1972 1972	1971 1972 1973 1974 1975 1976 1977 1978 1979 1980ad/  17 069 20 926 25 881 35 261 35 763 51 905 91 849 118 694 194 209 319 263  6 384 7 992 11 276 18 842 14 920 20 138 34 417 41 434 52 048 56 442  239 371 997 1 406 922 1 261 1 597 1 334 1 362 1 154  173 304 874 1 269 834 1 134 1 357 1 037 1 025 769  58 88 181 450 150 133 117 220 689 898  576 723 972 634 632 861 506 403 507 632  1.4 1.8 3.9 4.0 2.6 2.4 1.7 1.2 0.7 0.4  3.7 4.6 8.8 7.5 6.2 6.3 4.6 3.3 2.6 2.0
1972 1973 1974 19 20 926 25 881 35 261 35 7 992 11 276 18 842 14 371 997 1 406 304 874 1 269 88 181 450 723 972 634 1.8 3.9 4.0 4.6 8.8 7.5	1972     1973     1974     1975     19       20 926     25 881     35 261     35 763     51       7 992     11 276     18 842     14 920     20       371     997     1 406     922     1       304     874     1 269     834     1       88     181     450     150       723     972     634     632       1.8     3.9     4.0     2.6       4.6     8.8     7.5     6.2	1972       1973       1974       1975       1976       19         20       926       25       881       35       261       35       763       51       905       91         7       992       11       276       18       842       14       920       20       138       34         371       997       1       406       922       1       261       1         384       1       150       133       1       1         88       181       450       150       133         723       972       634       632       861         1.88       3.9       4.0       2.6       2.4         4.6       2.6       2.4       6.3       6.2	1972     1973     1974     1975     1976     1977       20     926     25     881     35     261     35     763     51     905     91     849       7     992     11     276     18     842     14     920     20     138     34     417       371     997     1     406     922     1     261     1     597       304     874     1     269     834     1     134     1     357       88     181     450     150     133     117       723     972     634     632     861     506       1.8     3.9     4.0     2.6     2.4     1.7       4.6     8.8     7.5     6.2     6.3     6.2     6.3     4.6	1972     1973     1974     1975     1976     1977     1978     19       20 926     25 881     35 261     35 763     51 905     91 849     118 694     194       7 992     11 276     18 842     14 920     20 138     34 417     41 434     52       371     997     1 406     922     1 261     1 597     1 334     1       304     874     1 269     834     1 134     1 357     1 037     1       88     181     450     150     133     117     220       723     972     634     632     861     506     403       4.6     8.8     7.5     6.2     1.7     1.7     1.2	1972 1973 1974 1975 1976 1977 1978 1979 1980 <u>a</u> /  20 926 25 881 35 261 35 763 51 905 91 849 118 694 194 209 319 263  7 992 11 276 18 842 14 920 20 138 34 417 41 434 52 048 56 442  371 997 1 406 922 1 261 1 597 1 334 1 362 1 154  304 874 1 269 834 1 134 1 357 1 037 1 025 769  88 181 450 150 133 117 220 689 898  723 972 634 632 861 506 403 507 632  1.8 3.9 4.0 2.6 2.4 1.7 1.2 0.7 0.4  4.6 8.8 7.5 6.2 6.3 4.6 3.3 4.6
1973 1974 19 25 881 35 261 35 11 276 18 842 14 997 1 406 874 1 269 181 450 972 634 3.9 4.0 8.8 7.5	1973     1974     1975     19       25 881     35 261     35 763     51       11 276     18 842     14 920     20       997     1 406     922     1       874     1 269     834     1       181     450     150       972     634     632       3.9     4.0     2.6       8.8     7.5     6.2	1973       1974       1975       1976       19         25       881       35       261       35       763       51       905       91         11       276       18       842       14       920       20       138       34         997       1       406       922       1       261       1         181       450       150       133       133         182       634       632       861         3.9       4.0       2.6       2.4         8.8       7.5       6.2       6.3	1973     1974     1975     1976     1977       25 881     35 261     35 763     51 905     91 849       11 276     18 842     14 920     20 138     34 417       997     1 406     922     1 261     1 597       874     1 269     834     1 134     1 357       181     450     150     133     117       972     634     632     861     506       3.9     4.0     2.6     2.4     1.7       8.8     7.5     6.3     4.6     3.4	1973     1974     1975     1976     1977     1978     19       25     881     35     261     35     763     51     905     91     849     118     694     194       11     276     18     842     14     920     20     138     34     417     41     434     52       997     1     406     922     1     261     1     597     1     334     1       181     450     834     1     134     1     357     1     037     1       181     450     150     133     117     220       972     634     632     861     506     403       8,8     7,5     6,2     6,3     4,6     3,3	1973     1974     1975     1976     1977     1978     1980a/       25     881     35     261     35     763     51     905     91     849     118     694     194     209     319     263       11     276     18     842     14     920     20     138     34     417     41     434     52     048     56     442       997     1     406     922     1     261     1     597     1     334     1     326     1     154       874     1     269     834     1     134     1     357     1     037     1     220     689     898       972     634     632     861     506     403     507     632       3.9     4.0     2.6     2.4     1.7     1.7     1.2     0.4       8.8     7.5     6.2     6.3     4.6     3.3     2.6     2.0
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	0) 1	976 19 905 91 138 34 261 1 134 1 133 133 2,4 6,3	976 1977 905 91 849 138 34 417 261 1 597 134 1 357 133 117 861 506 2.4 1.7 6.3 4.6	976 1977 1978 19 905 91 849 118 694 194 138 34 417 41 434 52 261 1 597 1 334 1 134 1 357 1 037 1 133 117 220 861 506 403 2.4 1.7 1.2 6.3 4.6 3.3	976     1977     1978     1979     1980a/       905     91 849     118 694     194 209     319 263       138     34 417     41 434     52 048     56 442       261     1 597     1 334     1 362     1 154       134     1 357     1 037     1 025     769       133     117     220     689     898       861     506     403     507     632       2.4     1.7     1.2     0.4       6.3     4.6     3.3     2.6     2.0

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Source: National Board of the Textile Industry, Memoria Estadística 1981, based on data from the CANAINTEX Economic Research Department with information supplied by the Statistical Department.

Figures estimated by CAMAINTEX on the basis of real data for the period January-October. Not including hard fibres. िहि

In 1974, exports of cotton yarns and fabrics amounted to nearly three times the value of imports of synthetic textiles and to twice the value of imports of textile goods. The foregoing comparison shows that the stagnation of the cotton industry and the sudden increase in the consumption of synthetic fibres in the second half of the 1970s was concurrent with the drop in the net contribution of the textile industry to the country's trade balance.5/

Finally, it is interesting to compare the role of cotton and synthetic fibres in the per capita consumption of Mexico and some selected countries, both industrialized and developing. In table 28 it may be seen that at the end of the 1970s the annual per capita consumption of textile fibres in Mexico was 5.9 kilograms, with cotton representing 2.1 kilograms and synthetic fibres 3.4 kilograms.6/ Comparing this consumption first with that in six major industrialized countries (United States, Canada, Federal Republic of Germany, Australia, Japan and France), we may observe that their average levels of textile consumption were between two and a half times (France) and four and a half (United States) as high as that of Mexico. This relative gap between Mexican consumption and that of the rich countries is seen more distinctly in respect of cotton than of the synthetic fibres: during the 1970s, Mexico made considerable progress towards the average levels achieved by France, Japan and Australia, narrowing the negative difference from 325%, 538% and 488% in 1970 to 38%, 35% and 68% in 1979. On the other hand, in 1979 the three countries in the comparison surpassed the average of Mexican consumption of cotton by 167%, 310% and 290%, respectively. Similarly, in the same year, the difference in favour of the Federal Republic of Germany, Canada and the United States was 210%, 323% and 229%, respectively. However, in 1979 the share of synthetic fibres in the total per capita consumption of Mexico was nearly the same as that of the United States (58% and 59%, respectively), while in the other industrialized countries this share ranged between 29% and 39%, or similar to that of Mexico in the 1970 indexes.

The differences in the pattern of textile consumption were even more notable in comparison with six developing countries -Argentina, Venezuela, Brazil, Egypt, Colombia and Peru. At the end of the 1970s, these countries, with the exception

<sup>5/</sup> Obviously, this may be attributed to the problems related to the competitiveness of Mexican textile products on the world market, including, for example, the relatively high level of wages in comparison with those paid in connexion with exports from Hong Kong, Taiwan, etc.

<sup>6/</sup> The remaining kilograms consumed related to artificial cellulose fibres (0.3 kg) and wool (0.1 kg).

MEXICO AND SELECTED COUNTRIES: COTTON AND SYNTHETIC FIBRES IN PER CAPITA CONSUMPTION (1970-1979)

Table 28

		Kil	Kilograms per	1 .	capita			Inde	Indexes (Mexico=100)	exico=	100)		Percentage the to	ntage the to	ge share total	ın
Country a/	Tc 1970	Total 1970 1979	Cot 1970	Cotton 70 1979	S. fi 1970	fibres 1979	To 1970	Total 0 1979	Cotton 1970 19	ton 1979	S. fil 1970	fibres 0 1979	Cotton 1970 197	6	S. fib 1970	fibres 0 1979
Mexico	4.8	5.9	3.1	2.1	9.0	3.4	100	100	100	100	100	100	65	36	17	28
Industrialized countries	_	Ç			7	 		7.00	787	900	975	# 7.3	e #	26		59
United States Canada	16.0	21.3		ກ ຫ ວ ຜ	5.7	8	333	361	206	423	712	244	9	45	36	39
Federal Republic of							,									
Germany	16,3	20.0	5.4		5.8	7.6	340	338	174	310	725	224	33	33	36	38
Australia	17.8	19.8	8.1	8.2	4.7	5.7	371	336	261	390	588	163	94	<b>4</b> 1	56	29
Japan	15.1	16.4	6.0		5.1	4.6	316	278	193	410	638	132	40	54	34	29
France	11.4	14.6	4.5		3.4	4.7	238	247	145	267	425	138	6 6	38	30	32
Developing	٠.															
Argentina	6.5	7.4	4.2	4.3	1.0	1.4	135	125	135	205	125	41	65	28	15	19
Venezuela	5.2	5.8	2.3	_	1.3	1.9	108	86	74	138	163	26	<b>††</b>	20	25	33
Brazil	4.2	5.6	3.0	3.2	9.0	1.8	88	92	64	152	75	. 53	7.1	27	14	32
Egypt	3°E	6.4	3.0		0.1	6°0	75	83	64	186	12	26	83	80	က ၊	87
Colombia	4.1	4.9	3.0	_	0.3	1.1	82	83	64	157	38	32	73	67	7	22
Peru	2.9	3.8	2.1		<b>†</b> •0	1.1	9	ħ9	68	105	20	32	72	28	14	58

Source: National Board of the Textile Industry of Mexico, Memoria Estadística 1981.

of Argentina, had a lower total per capita consumption of textiles than the 5.9 kg consumption of Mexico (Venezuela, 5.8 kg; Brazil, 5.6 kg; Egypt and Colombia, 4.9 kg and Peru 3.8 kg). In terms of averages however, all these countries consumed a much higher volume of cotton than the 2.9 kg consumed in Mexico (Venezuela, 2.9 kg; Brazil, 3.2 kg; Egypt, 3.9 kg; Colombia, 3.3 kg and Peru 2.2 kg). On the other hand, the share of synthetic fibres in the total consumption in these countries amounted to between 18% for Egypt and 33% for Venezuela, in comparison with 58% for Mexico.

The obvious conclusion to be drawn from these comparisons is that in the 1970s Mexico began to imitate the pattern of textile consumption in the United States, attaching greater relative importance to synthetic fibres than to cotton. In this way, the pattern of consumption in Mexico was different from those prevailing in other countries, whether developing or industrialized.

A more thorough analysis would seem to be needed to ascertain the social advantage of the accelerated development of the consumption of synthetic fibres, rather than cotton in Mexico, comparing the respective natural advantages in petroleur resources for the development of the petrochemical industry with those of the cotton industry (taking into account, in the latter case, the social aspects of Mexican agriculture). The natural assumption seems to be that it suits the transnational corporations which to a large extent dominate the production of synthetic fibres in Latin America (see table 29) to be much more assertive about imitating the style of development and textile consumption of the United States in Mexico than in the other Latin American countries.

Table 29

LATIN AMERICA: TRANSNATIONAL OWNERSHIP OF MAN-MADE FIBRE PRODUCTION CAPACITY AROUND 1975

(Per cent of total capacity)

Country	Viscose	Acetates	Nylon 6	Nylon 66	Acrylic	Polyester
Brazil	58	50	54	100	66	84
Argentina	75	100	38	-	100	80
Colombia	100	100	50	-	100	75
Venezuela	-	100	40	_	***	75
Peru	100	100	33	_	100	100
Mexico	100	100	33	-	<b>7</b> 5	44

Source: B. Bolton, "The MNCs in the Textile, Garment and Leather Industries" (mimeo), Sussex, March 1976.

# IV. THE TRANSNATIONAL CORPORATIONS IN THE MARKETING OF MEXICAN COTTON

In the previous chapter it was seen that the production of cotton in Mexico is in the hands of national producers, whether individuals or producers grouped in agricultural co-operatives in the <a href="ejidal">ejidal</a> sector. The situation is different for the marketing of cotton in that international traders (mostly large transnational corporations in the textile sector) control a large share of the marketing of Mexican cotton, particularly where exports are concerned. In this chapter consideration will be given to the changes which have occurred in past decades in the entrepreneurial structure of the marketing of cotton, analysing them in global terms and by leading enterprises so that attention can then be drawn to their marketing facilities and to the special functions of the public sector in this connexion.

# 1. Changes in the position of the transnational corporations, national enterprises in the private sector and State enterprises during the period 1960-1980

Table 30 shows the available data on the participation of the three types of enterprise in the local supply of the textile industry during the period 1960-1980 but only for 1977-1980 where exports are concerned. The figures given for this latter period make it possible to reconstruct in approximate terms the global pattern of the entrepreneurial distribution of sales. 1/

In the local supply of the textile industry, the TNCs had a 49% share in the five-year period 1966-1970 in comparison with a 37% share for the private national enterprises and only 14% for the State sector. 2/

In the 1970s, the TNCs gradually gave up local marketing to concentrate their activities on exports. Their share in local marketing dropped from an average of 49% during the period 1966-1970 to 31% in the first half of the 1970s and 26% in the second half. On the other hand, between 1977 and 1980, the only period for which this kind of information is available on exports, the transnationals

<sup>1/</sup> The data on local and external sales are not strictly comparable since they do not all agree with official statistics (see the note on table 30).

<sup>2/</sup> The State corporation Algodonera Comercial Mexicana was established only in 1969. In the period before that, small amounts were marketed by the State Bank.

Table 30

PARTICIPATION OF THE THREE TYPES OF ENTERPRISE IN THE LARKETING OF COTTON おりは

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gradually increased their control over the external sector, their share in this type of activity rising from 59% to 70% (see table 30). In terms of total sales of TNCs (for supplying the local textile industry and for export) in 1980, it may be noted that the foreign-owned firms controlled slightly more than half (52%) of the marketing of cotton in Mexico.

The position of the national marketing firms in the private and State sectors changed significantly and for the most part erratically in the 1970s. In the first half of this decade, the State enterprise Algodonera Comercial Mexicana, succeeded in filling the gap created when the TNCs abandoned local marketing. Its share in total local sales rose from 14% in the period 1966-1970 to 30% in the period 1971-1975 (still in terms of annual averages), while that of the private sector rose only from 37% to 39%. On the other hand, in the second five-year period in the 1970s, the share of the latter sector rose to 52%, with that of the State sector falling to only 23%. This last figure was however, affected by the sharp drop in the share of the State in 1977 (to 13%), which was followed by increases -to 25% in 1978, 23% in 1979 and 29% in 1980 (which at the same time lowered the share of the private sector).

In exports, the State enterprise increased its share of 6% in 1977 to 24% in 1979 and reduced it to 18% in 1980. On the other hand, the other exporters, most of them national private firms, steadily abandoned this activity, reducing their share in it from 35% in 1977 to 13% in 1980.

Finally, in terms of approximate global sales, at the end of the 1970s, the share of the State was nearly one fourth (24% in 1979 and 23% in 1980) in comparison with the share of the transnationals, which as stated above, was 52% in 1980.

As everyone knows, the global changes in the role of firms in the marketing of Mexican cotton were determined by the behaviour of the larger firms engaged in this market. This is the topic of the next part of this chapter.

# 2. The role of the TNCs and other large enterprises in marketing

# (a) Concentration in marketing in general and exports in particular

At the end of the 1970s, the marketing of cotton in Mexico was characterized by a higher and higher degree of concentration in a small number of private corporations, particularly transnationals, and by an increase in the capacity of /the public

the public enterprise ALGOCOMEX, which gives preference to purchases of cotton from the ejidal sector. Thus, in table 31 it may be seen that in 1980, seven TNCs controlled 52% of the total sales of Mexican cotton, in comparison with 42% in 1977. In the same period, the largest three of these firms -Esteve, Volkart and Hoenberg- increased their combined domination of the cotton market from 29% to 34%, for outweighing the share of ALGOCOMEX and the State Bank (25% in 1980). On the other hand, in 1977 the two largest national private firms -Longoria and Algodones del Pacífico- controlled 19% of the cotton market, occupying positions comparable to those of the Japanese TNC, C. Itoh, and the Swiss firm, Volkart, respectively. In 1980, Algodones del Pacífico virtually abandoned the market (1%) and Longoria maintained its share of 7% of total sales. In summary, in spite of frequent swings from year to year, it may be concluded that at the end of the 1970s, some 10 large enterprises, including State enterprises, controlled close to 86% of the total sales of Mexican cotton.

This concentration was at the same time much greater with regard to exports of cotton than to supplies to the local textile industry. This difference is related to the greater activity of TMCs in external sales than in local sales, as was indicated above. Actually, in 1980 the same seven TMCs controlled about 69% (59% in 1977) of the total exports in comparison with their much lower share (31%) in local supply. The combined share of the three largest TMCs (Esteve, Volkart and Hoenberg) increased between 1977 and 1980 from 37% to 41%, which was much greater than the share of the public enterprise ALGOCOMEX (although during the same period the latter firm increased its share from 6% to 18%).

Another reason for the oligopoly exercised by the TNCs over external marketing is their great involvement in exportation: at the end of the 1980s some transnationals, such as Hoenberg, Allenberg and Toyoshima, were engaged exclusively in exportation and did not supply the local textile industry at all; the remaining firms (with the sole exception of Volkart) always transacted a larger number of external sales than local sales, their export coefficients in 1980 ranging between 64% (Hoenberg) and 79% (C. Itoh) (see the last two columns in table 31).

Table 31

EXICO: THE TRANSNATIONAL CORPORATIONS AND OTHER LARGE FIRMS IN THE MARKETING OF COTTON (1977-1980) a/

		•	(Sale	·	(Sales in	bales and	percentages	of the total)	otai)	<b>8</b> -	: 5 # 5,	air s	i da Saggar	* .		
			Local supply	pply	-		Exports		ge ec		Total s	sales	, , , , , , , , , , , , , , , , , , ,	Exports	83	
Sactor/En	Sactor/Enterprises b/		3a) es	95		Bales	Sí	38		Bales		%		As a per	a percentage total sales	
	•	635		3661	1980	1977	1930	1977	1980	1977	1980	: 226)	1930	. 2251	926	
'		1 - 1 J	3	8	ŧ.	310 100	517 037	53.8	69.2		717.965	42.0	١0		72.0	
(C)	Tatave Tatave		2017年2017年2017年2017年2017年2017年2017年2017年	) e.	101	76 366		÷,	12.55		203 656;	ر ار	\O.		ار ار ار	
i : -	;,	00 100 100 100	) (55 (C)	, c		64 523		11.9"	14.0	170 027	163 654	4. €	~ (		63.7 0.00	
	ţo	ti y	1	1		60 599		ر ا ا	14.7		569 863	, v v	<i>v</i> _		5 € 5 ≪	
	() () () () () ()	1000	*	ς) Φ.	o m	55 757		 X	0, 00		7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	· 1	× 100		0.00	
es p nive	the state of the s	(S) (S) (C)	17.322	, r	φ, 	28 65.	36 869 36 869	. w.	, d	12.5	16, 84	3.5	W. W.	8.8	76.5	
		ŧ	1		1			<b>4.</b> 6	٠. ال	24 882	33 696		4.		0.0°	
9. Stat	State-owned total	75 25	185 741	12.3	28.7	32 700	132 162	9.	17.7	107 951	517 303	9.3	25.3	30.3	7.7	
	From Constant Constant	7. 23.	358 917	์ เก	23.7	32 700	132 162	0.9	17.7	107 951	317 303	٠		30.3	1.7	o 8 €
* 79.	State Dank	1			•	्र <sub>क</sub> ्रि	Ι,	1	•	J.		i		•	ı	-
ر <b>م.</b> حدده	r enterprises		42	. *								0	<u>u</u> (	0	ָר כ	
	nce mational) total	37.1 449	258 663 101 292	8.4.5 2.4.5	3. v.	./G 256 061 -	7e 203 e/ - -	35.2	) ) )	962 296	101 292	7.5	3.00	ν. γ. γ.	7.75	
i ci	Algoropes del		{	ά	(r	1	, 1	•	. 1			1. T.	7.		,	
o o	Pacifico Unidentified	55 35 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	157 232	74.7	, <u>12</u> ,	190 837 2/	12 €07 9€	35.2	13.0	342 207	233 985	9.62	16.8	33.9	-t  	
10 10 10 10 10	න ල සා සා	512 944	644 682	0.00	0.007	542 727	745 952	100.00	100.00	155 171	1 390 634	100.0	100 °C	47.0	53.6	
					•			<i>3.1</i>								

Agricultural years.
By order of largest sales in 1980.
Instituting THOS with smaller export volumes (Ralli, Toyo, Cook and Molsen, for example). Source: Dee table 30. a/ Agricultural years. b/ Sycribs of largest o/ Including INCO with

On the other hand, the concentration of the TNCs on exports of Mexican cotton resulted from a gradual abandonment of the local market throughout the 1960s and 1970s. This phenomenon and its possible causes will be considered below.

#### (b) The TNCs in the local supply of the textile industry

The local marketing of cotton began to show a greater degree of concentration in the mid-1960s. As may be seen in table 32, in 1965, seven TNCs controlled 53% of the sales to local industry. Three of them -Mc Fadden, C. Itoh and Volkartwere among the 15 principal cotton traders in the world.3/ The substantial increase in this share over 1960 (41%) was caused by the entry into the Mexican market of the TNC Esteve, which from that time on remained active in both local and external marketing.

In the same period, however, the enterprise which led the local cotton market was none of the seven TNCs but the national private enterprise Longoria with a share of 25% -higher than the combined share in 1965 of Anderson Clayton and Mc Fadden, the two leading TNCs (15% and 9%, respectively). If consideration is given to the degree of concentration with no distinction made as to the origin of an enterprise (i.e., including the national private enterprise Longoria), it may be said that eight enterprises in combination controlled 78% of the local market and that nearly half (49%) of local sales could be ascribed to only three of them (Longoria, Anderson Clayton and Mc Fadden). Moreover, in the period under review, the oligopoly exercised by the big private enterprises was not at all offset by competition from the State sector in the market.

In the second half of the 1960s and throughout the 1970s, the oligopoly exercised in the local market changed substantially. For one thing, the sector controlled by the TNCs reduced its share by more than half (53% to 23%) during the decade 1965-1975, although in 1980 this trend was interrupted by a recovery in the share of the transnationals (31% -expressed in absolute terms, this represents a drop of 267 100 to 183 800 bales and a recovery to 2 900 bales).

<sup>3</sup>/ See section I.5 above, and especially table 12. In addition, the Hoenberg multinational corporation was linked to Cargill, a leader in the world cotton trade.

Table 32

MEXICO: TRANSNATIONAL AND OTHER LARGE CORPORATIONS IN THE LOCAL SUPPLY OF COTTON (1960-1980) a/

(Sales in bales and percentage of the total)

Sex	Sector/Enterprises b/			Bales					Percentage		
		1960	1965	1970	1975	1980	1960	1965	1970	1975	1980
A.	Total TNCs (USA)	186 169	267 132		183 835	200 878	1,0,7	53.2	32.7	23,1	91.0
	1. Anderson Claycon /	9.55 15.50 1	76 250	5, 22			14.1	10,00	0,7	, , ,	1 .
	2. Mc Fadden (USA)	52 550	43.203		7 850	11 322	11.5	00	2 1	- 0	00
	3,000 • M	29 477	30 756				6.4	6.1	1	0.3	) 1
	4. C.Ison (Japón)	5 <del>4</del> 38	28 968		1		5.3	5.8	, ,		0.5
	5. Volkart(Suiza)	70 559	5 898	57, 578	102 858	59 405	. č.	1.2	8	12.9	, N
	6. Hoenberg (时的 UU)	3 765	43		430		°.	1	0.0	` 1	<u> </u>
	7. Esteve	4 .	75 323		868 69	110 544	1	15.0	14.6	8	17.1
(									***		61
m	State-owned	34 162	ı	140 839	232 685	185 141	7.5	1	21.9	29.5	
	1. Algodonera Comer-	ı	ı.			-	1	1	21.9	29.5	23.2
	2. State Bank	34 162	ı	ı	1	35 285	7.5	t		1	5.5
ບໍ	Total other firms			-	<u>.</u>			•	_		
	(private ownership)	196 925	225 025	292 484	379 884	258 663	43.1	44.8	45.4	47.7	10-1
	1. Longaria	32 965				101 292	7.2	54.9	18.4	5.3	15.7
	Algomes der Pacifico	5 653	1	1	131 990	20 089	1.2	1 .	1	16.6	3.1
ត់	Total sales	457 278 5/502	1/502 0510/	0510/ 643 638	796 858	644 682	100.001	100.001	100.001	100.0	100.00

Source: See table 30.

a/ Agricultural years.

b/ By order of magnitude of sales in 1960.

c/ The difference between the total and the combined sales of the three sectors (8.7% and 2% in 1960 and 1965)

probably relates to direct sales by producers to the textile industry.

On the other hand, the State sector (ALGOCONEX and occasionally the State Bank) had a share of 22% in 1970 and 29% in 1975 which covered a large part of that sector of the market previously controlled by the TNCs and also accounted for a large part of the increase in the local supply of the textile industry. Finally, the share of the national private sector remained between 45% and 48% during the decade 1965-1975, dropping to 40% in 1980. In any case during the peak period of local sales (1965-1975), the volume of its deliveries to the textile industry rose from 225 000 to 379 900 bales. This increase represents over half the total expansion of the local market (295 000 bales) in that decade. As has been seen, the remainder of the expansion was met by the State sector while the TNCs reduced their local sales by 83 000 bales during the same period (see table 32).

Within this general pattern of abandonment of the local market by the TNCs, the behaviour of individual firms differed. First, there were TNCs, such as Anderson Clayton and Cook, which virtually abandoned the cotton market in Mexico. The case of Anderson Clayton, which was the leading enterprise in the industry with interests in the production of cotton, is characteristic of this. The growing diversification in its activities, especially in the food industry, and the declining profitability of the cotton business led this firm to abandon the cotton industry in Mexico altogether.

A second group is made up of Mc Fadden, C. Itoh and Volkart, which belong to the largest world cotton marketing corporations. Of course their activities in the Mexican market, which are concentrated on exports, are subordinate to their sourcing strategies and global transactions ranging from 500 000 (Itoh) to 2 000 000 (Volkart) bales a year. Mexico represents only a fraction of the world market representing, for example in 1980, a source of 93 000 bales for Itoh's marketing operations, 204 000 bales for Volkart's, etc. For these big firms, the Mexican local market with sales under 100 000 bales is obviously marginal and only complements their world transactions.

Finally, the two "smaller" TNCs, in world terms -Hoenberg 4/ and Esteve-obviously followed the general trend of TNCs to concentrate more and more on exports, except that Esteve and Volkart retained a large share in the local market (17% and 9%, respectively, of total local sales in 1980). This was of course due to the smaller degree of commercial diversification of these two firms.

The national private enterprises (with the exception of the biggest ones -Longoria and Algodones del Pacífico) have a common denominator in that they export little or nothing and use the domestic cotton market as their main theater of activity. Together they represented nearly one fifth of the domestic market at the end of the 1970s. According to the Confederation of Cotton Associations of Mexico, some 17 national private enterprises and an unknown number of other merchants (15-20 small commercial firms) are registered. The average number of bales marketed by them is less than 5 000, and they obviously have insignificant competitive capacity compared to the big enterprises, both transnational and national. On the other hand, they can probably acquire greater importance in certain local conditions wherein access to markets is difficult and the larger enterprises do not show as much interest.

# (c) Causes of the concentration of transnational corporations in exports

To conclude the analysis of the principal trends in the social structure of the cotton market in Mexico a number of hypotheses may be put forward regarding the reasons for its high level of concentration and for abandonment by the transnational corporations of local markets in favour of exports.

More than anything it seems obvious that increasing competition and the drop in the world price of cotton have reduced rates of return in the business in question, which has in turn led to an increasing oligopolization of markets, with the low rate of return being compensated by the increase in sales. By definition, there are fewer constraints in the world market than in the local markets as regards this

<sup>4/</sup> With interests tied to Cargill of the United States, the largest TNC dealing in cotton (see part V. 1. (b) below).

latter factor. Furthermore, the concentration of transnational corporations in external sales is usually attributed to the fact that such corporations prefer operations with cash payment, which are normal in international marketing, whereas maturities of 32 to 90 days with interest are customary in Mexico; this concentration is also attributed to the instability of the Mexican peso since 1976, which increases the risk associated with local sales covered by credits that the transnational corporations receive in dollars. The importance of this factor is demonstrated by the fact that the transnational corporations often obtain cover in the Chicago exchange futures market when they conduct sales operations in pesos. Lastly, the public sector's increasing interference in domestic marketing is not restricted merely to direct marketing of cotton (ALGOCOMEX) but, rather, also involves other forms of support to producers that increase their bargaining power vis-à-vis the transnational corporations and major national companies. This aspect of government policy, which is of the utmost importance for the industry's development, will be taken up below.

#### 3. The role of the State

State participation in the cotton economy takes many forms and intervenes at virtually all phases of the cotton process, from seed sales and crop credits to the stage of marketing proper. At the same time, State intervention in the cotton economy merely represents a special case of the State's relationship with the agricultural sector as a whole. The historical context of the nature of this relationship is the co-operative form of ejidal production resulting from the Agrarian Reform of the Lázaro Cárdenas Government.5/

It may be noted from table 33 that the increase in the <u>ejidal</u> sector's share of the total area under cotton cultivation, from 35% in 1960 to 47% in 1970, meant that at the end of the 1970s the State was financing half of production with credits and marketing over one quarter of local sales through the public enterprise Algodonera Comercial ALGOCOPEX.6/ Furthermore, in 1980 the share of the semi-public Productora Nacional de Semillas in cotton-seed sales to producers reached approximately 25% of the total volume of seeds sold.

<sup>5/</sup> See part III.3.

 $<sup>\</sup>frac{6}{6}$  In that same year the share of ALGOCOMEX in cotton exports was 18% (see Table 30).

Table 33 MEXICO: PUBLIC FINANCING AND MARKETING IN THE COTTON INDUSTRY (Percentages)

Year		ed surface wned	Fina	ncing	Marke	ting a/
	Ej <b>i</b> dal	Private	Public	Private	Public	Private
1950	42	58	21.4	78.6	• • •	• • •
1960	35	65	22.0	78.0	7.6	92.5
1970	47	53	43.5 <u>b</u> /	56.5	21.9	78.1
1980	• • •	• • •	50.0	50.0	28.7	71.3

Source: CEPAL, Monografia del Algodón, op.cit., annexes 6 and 14, BANRURAL, General Commercial Deputy Director's Office.

a/ Domestic marketing.  $\overline{b}$ / 1971.

The government intervenes through different bodies in each of the principal aspects of the cotton process (production, financing and marketing); the Ministry of Agriculture and Water Resources (SARH) intervenes in production, the National Bank for Rural Credit (BANRURAL) in financing, and ALGOCOMEX in marketing.

#### (a) Ministry of Agriculture and Water Resources

The General Cotton Affairs Board (DGAA), which reports to the Office for Agriculture of the relevant Ministry, is the government office responsible for co-ordinating the activities relating to the production and marketing of cotton and its by-products arising from government agricultural plans. Its role is to: formulate, in co-operation with other offices in the field in question, and assist in implementing cotton programmes at the national and regional levels; to provide advisory assistance to Ministry authorities in the field of cotton in their relations with other public or private institutions and with commercial cotton producers and enterprises; and to prepare technical studies required in order to give an opinion on the opening up of new cultivation areas, to prepare market studies, and to collect, organize and systematize statistical data related to cotton.

Policy is focused on a level of output that fully meets domestic demand for cotton-seed and cotton fibre and, at the same time, at obtaining fibre surpluses for export. DGAA, in co-ordination with the Union of Cotton Producers of the Republic of Mexico, is programming cotton cultivation areas for each season, both at the national and regional level taking account of producers' preferences, the price situation and price forecasts, world demand and cotton stocks, as well as the general economic situation.

#### (b) National Bank for Rural Credit (BANRURAL)

BANRURAL is a government national credit institution whose purpose is to channel financial resources towards agricultural output and complementary activities, in accordance with article 6 of the General Rural Credit Act. Moreover, under articles 54 and 69 of that Act, those eligible for BANRURAL credit are chiefly ejidos and rural communities and, in general, all unions of ejidatarios, holders of common land and minifundistas operating under the collective production régime.

/Bank credits

Bank credits strengthen the bargaining position of producers vis-à-vis commercial intermediaries through participation by the Bank in sales agreements (as a "pledge creditor") and advisory assistance to ejidales and co-operative societies with regard to international quotations, penalties resulting from classification, etc.

As a result of the considerable increase in <a href="ejidal">ejidal</a> cotton output and official financing of such output (see table 33) the number of ginning plants owned by <a href="ejidal">ejidal</a> societies and BANRURAL has risen rapidly, to the extent that in 1980 there were over 50, representing over 35% of plants throughout the country. <a href="Ejidal">Ejidal</a> production is thus almost entirely integrated into the process of drying and cleaning cotton and separating the seed from the raw cotton. This integration between production and the first stage of cotton processing has resulted in an unusual form of marketing, in which BANRURAL plays an important role. Unlike in the 1950s and 1960s, when the private commercial enterprises themselves purchased cotton (containing the seed or in the form of raw cotton) direct from the <a href="ejidatarios">ejidatarios</a>, marketing of <a href="ejidal">ejidal</a> output is currently channelled almost entirely through BANRURAL, which strengthens <a href="ejidal">ejidal</a> bargaining power <a href="vis-a-vis">vis-a-vis</a> the transnational corporations and other private marketing enterprises and supposedly leads to improved sales terms for the <a href="ejidales">ejidales</a>. Table 34 summarizes <a href="ejidales">ejidal</a> cotton sales to the country's major marketing enterprises.

Most ejidal sales through BANRURAL are made to the public enterprise ALGODOMEX, whose share of total sales in the ejidal sector increased from 37% in 1978 to 47% in 1980. In 1980 the five transnational corporations acquired 36% of ejidal sales, and the rest was sold to Mexican private enterprises. Eighty-three per cent of the ejidales' cotton channelled through BANRURAL was sold to six major marketing enterprises.

## (c) Algodonera Comercial Mexicana, S.A.

ALGOCOMEX has been a public enterprise since 1969, when it was acquired by the Government from private groups associated with the national bank. According to the amendments to the statutes of this enterprise, its new social goal is:

Table 34

MEXICO: <u>EJIDAL</u> SALES TO COMMERCIAL ENTERPRISES THROUGH BANRURAL (1978-1980) <u>a/</u>

(<u>Bales</u>)

Enterprise	1978	Percentage	1979	Percentage	1980	Percentage
Total	681 463	100.0	638 632	100.0	611 962	100.0
ALGOCOMEX	253 980	37.3	272 339	42.6	289 402	47.3
Algodones del Pac <b>í</b> fico	160 243	23.5	96 <b>72</b> 7	15.1	_	
Esteve	110 453	16.2	81 955	12.8	76 570	12.5
Volkart	36 90 <b>7</b>	5.4	44 137	6.9	42 855	7.0
Hoenberg	40 000	5.9	50 076	7.8	59 566	9.7
Mc Fadden	479	_	4 920	0.8	23 610	3.9
C. Itoh	21 617	3.2	20 716	3.2	18 362	3.0
Others	57 749	8.5	62 911	9.9	97 439	15.9

Source: BANRURAL, General Commercial Deputy Director's Office.

a/ Agricultural years.

to meet fully the most urgent needs of Mexico's cotton planters in view of the fact that, since the income of the planters in question is subject to fluctuating cotton prices as a result of an international market governed by supply and demand, there are also upward and downward trends in that income. 7/ Moreover, clause 3 of the amended statutes indicates that the Society's goal shall be to "act as an instrument for marketing cotton and, where appropriate, cotton-seed, produced chiefly with Federal Government financing or with financing from institutions with State participation, in that it shall act as a social service society in the interest of the Mexican cotton planters.8/

ALGOCOMEX differs from all the private enterprises owing to the purpose of its activities, since, whereas the activities of private commercial firms are focused on making profits, the chief purpose of ALGOCOMEX is to function as a marketing instrument of the cotton planters (chiefly ejidal planters), in the context of a market with unstable prices. In fact, approximately 85% of total purchases made by ALGOCOMEX from cotton producers is from BANRURAL, as may be noted from table 35.

In the preceding section the share of ALGOCOMEX in the domestic and export markets was considered in detail, and it was noted that it is the enterprise maintaining the greatest segment in both markets. With sales of approximately 300 000 bales annually over recent years, ALGOCOMEX exports almost half of the cotton it markets.9/ Its export sales are chiefly destined for the markets of Asia: it has agents in Japan, South Korea, Taiwan, the People's Republic of China, Malaysia and other South-East Asian countries. At the national level, Algodonera Comercial has offices in all the producer regions of the country.

Lastly, at the beginning of the 1980s in the oils industry it was sponsoring the construction of an oil press for planters and, moreover, co-operating with the public enterprise CONSA (CONASUPO), whose oil production capacity represents over 30% of national capacity.

<sup>7/</sup> ALGOCOMEX, Acta de la Asamblea General Extraordinaria de Accionistas, 13 September 1974.

<sup>8/</sup> Ibid.

<sup>9/</sup> See table 31.

Table 35

MEXICO: PURCHASES BY ALGOCOMEX FROM BANRURAL
(Bales)

Agricultural year	Total	BANRURAL	Percentage
1978	296 519	253 980	85.6
1979	321 734	272 339	84.6
1980	282 018	289 402	102.0 <u>a</u> /
1980	282 018	289 402	102.0

Source: See table 34.

The covernment protects cotton-seed production in order to meet food requirements. Every year it sets a guaranteed minimum price, which provides the planter with a starting point for negotiating with the enterprises, including enterprises associated with foreign capital. For example, owing to the initiatives taken by the Cotton Producers Union, the guaranteed price rose from 3 900 pesos per ton in 1979 to 5 000 pesos in 1980 and 6 750 pesos in 1981.

a/ The reason for this percentage is that part of the cotton purchased in the 1980 season has not been sold.

#### V. MARKETING METHODS

#### 1. Transnational corporations

## (a) Geographic and sectoral dimension

As pointed out earlier 1/ the characteristic common to transnational corporations marketing cotton is that they function on a world-wide scale. All of these corporations have subsidiaries in the major cotton regions of the world, as well as liaison offices in the major textile centres of the world. It is true that there is a more or less established, although changing, geographic division of the world market among the transnational corporations. For example, until it acquired Ralli, Cargill was basically active in the North American cotton market and, through Hoenberg, in Mexican cotton and that of other Latin American countries. When it acquired Ralli, Cargill started to enter the Asian market, and it now purchases a major proportion of the cotton of Oceania.

Moreover, the Japanese companies purchase in the various producer regions of the world, some chiefly in the United States and Latin America, others in the Soviet Union, or other countries in Asia and Oceania, but their sales are always destined for the markets of Japan, China, Taiwan, Hong Kong and South Korea. Volkart is a company with an extensive network of subsidiaries and offices in over 40 countries in the world distributed throughout every continent, except Africa.

Another characteristic shared by the transnational corporations is the fact that their operations in the cotton trade represent only a partial aspect of the global capital operations. All the enterprises dominating the world cotton market are active in other commodity markets, or even in other sectors of the economy. The most pronounced case is that of Cargill, which, in addition to occupying a leading position with regard to sales of wheat, cotton, and soybeans, has investments in the chemical and steel industries. Other companies, such as Volkart, concentrate all their investment on marketing a number of agricultural products, such as cotton, coffee and cocoa. At the same time, unlike other

<sup>1</sup>/ See part I.5. (a) of this study.

transnational corporations that process primary products, the major cotton marketing enterprises at the world level do not have significant links with the stages of yarn, fabric and garment manufacturing. Specific examples of marketing methods of two transnational corporations active in Mexico, Cargill (through Hoenberg) and Volkart, which taken together controlled almost 80% of Mexican cotton exports in 1980, will be considered below.

#### (b) The examples of Cargill and Volkart

Until the end of the 1960s most of Cargill's operations were concentrated in the area of trade in grains, and Cargill is still the largest seller of grains, controlling approximately one-fourth of the wheat traded in the world. Since the 1960s Cargill has rapidly increased its investment in other economic activities, integrating its original trade operations so that they cover the food industry (agro-industry, livestock production and meat packing) and diversifying its capital to cover the steel, chemical and services industries.

In the cotton business Cargill has attained the leading position in the world with the recent purchase of Ralli Brothers of the United Kingdom.

Until 1979 Ralli was a subsidiary of Bowater United Kingdom Limited, whose chief activity is centred on the forestry industry and the manufacture of paper, timber products and furniture. In 1976 the cotton purchasing operations of Ralli covered 32 different countries. Prior to the purchase of Ralli, Cargill's cotton commercial operations were chiefly concentrated in the United States and Latin American markets, through two subsidiaries, Cargill Cotton and Hoenberg. When it acquired Ralli, Cargill's commercial operations were extended to the major cotton producing regions of the world. Taking as an estimated basis the hypothesis of 2.0 million bales sold annually by Cargill/Hoenberg/Ralli at 1980 cotton prices, it would appear that the sales in question represent a little under 7% of the annual sales of all Cargill subsidiaries in 1978.

The transnational corporation Volkart, whose capital is Swiss, was founded in 1951 in Winterthur (Switzerland) and Bombay (India). Its activities were strictly commercial and covered the route between Europe and India (in both directions and involved the purchase of cotton, cotton-seed oil, coconut oil, copper and spices in India, which were sold in Europe, and, on the other hand,

/the sale

the sale of European consumer goods in India. Its business is still chiefly centred on trade in primary products, particularly cotton, coffee and cocoa. Its global annual sales are around US\$ 2 600 million.

In addition to its trade in cotton, coffee and cocoa, it owns a coconut-fibre processing plant in Sri Lanka and is associated with a Scandinavian firm in the maritime transport business. It owns 10% to 30% of the shares of various companies in India that manufacture chemicals, machinery, electrical equipment and textiles. However, Volkart's growth strategy has been based more on expansion of its trade in cotton, coffee and cocoa than on diversification and/or integration of its capital in other economic sectors. Approximately one-third of its subsidiaries' and affiliates' total annual sales result from the marketing of cotton, approximately half from the marketing of coffee and less than 17% of total sales result from the marketing of cocoa.2/

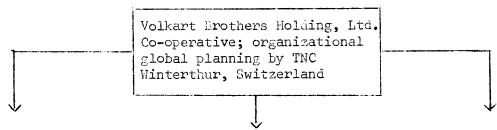
As pointed out earlier, the trade in cotton carried on by Volkart is closely linked to world trade. Its trade in the product in question, as well as that in coffee and cocoa, links the output of one country with the consumption of another country. Where marketing is concerned, the company is organized in such a way that the control centre is at its headquarters (Volkart Brothers Holding Limited) at Winterthur, which owns and controls all its subsidiaries throughout the world, and co-ordinates and establishes general marketing policies for each of those subsidiaries.

The subsidiaries may be classified as follows: those that operate from the production centres, those that operate in the consumer regions and those providing financial and exchange support to marketing operations (see table 36).

Within the context of its world strategy, the transnational corporation sets global sales targets in keeping with the scale of production in the various regions of the world and other international market criteria. Furthermore, it provides liaison among the subsidiaries in the producer regions and the subsidiaries

<sup>2/</sup> The sales data by product are estimates obtained on the basis of average international prices in 1977/1979 for each product and Volkart's information on sales volume in the case of cotton (one million bales), coffee (3 million sacks) and cocoa (50 000 tons).

Table 36 WORLD ORGANIZATION OF VOLKART



#### Subsidiaries in the producer regions

- United States Volkart Taylor and Cooper, Inc. Trade in cotton
- Mexico, Central America and Colombia Volkart Hermanos de México, S.A. de C.V. Trade in cotton and coffee Ginning plants in Northeastern Mexico
- Brazil Volkart Irmaos, Ltda. Trade in coffee
- India Consolidated Coffee, Ltd. (partial ownership) Gokak Patel Volkart, Ltd. (partial ownership) Production of, and trade in coffee Trade in cotton maritime transport and textile manufacturing
- Pakistan Volkart (Pakistan) Limited (partial ownership) Trade in cotton, ginners and customs agents
- New Guinea PNG Coffee Exports, Ltd. (partial ownership) Coffee export

## Support subsidiares

- Volkart Brothers, Inc. (New York) Financial centre for the operations of all subsidiaries and affiliates
- Volkart Brokerage, Inc. (New York) Marshall, French and Lucas, Sale of coffee, cocoa and Inc. (New York) Support centre for the sub- United States sidiaries' coverage and stock market operations Stock market agent
- Magnolia Compress, Co. (Galveston) Storage centre
- Marshall, French and Lucas, Ltd. (London) Stock market agency and the commodity market

#### Subsidiaries in the consumer regions

- Switzerland Volkart Brothers, Ltd. Cotton, coffee and cocoa sales in European countries
- United States Volkart Brothers, Inc. other products in the
- Japan Volkart Japan Ltd. Coffee and cotton sales and other activities in Japan
- Germany Volkart GmbH Herman Hälssen GmbH Gollücke & Rothfos GmbH Cotton sales and trade in coffee in the German and Austrian markets
- Volkart Brothers (U.K.), Ltd. Sales of coffee, and cocoa, coconut fibre and essential oils

that market the products sold by Volkart in the major importing regions. Every month each of the subsidiaries receives a report from the corporate staff on the state of the world economy, production, exports and consumption of the products that it markets, price forecasts, climatic conditions, etc.

The subsidiaries located in the producer regions conduct sales operations and generally cover the export market, although they often also maintain segments of domestic markets. For example, in the case of the subsidiaries in the United States and Mexico, a certain percentage of their global sales represents domestic sales. In Mexico, out of a total of 164 000 bales of cotton marketed by Volkart in the 1980/1981 season, 36% was sold to the Mexican textile industry (see table 31). In the case of coffee, the Brazilian subsidiary also sells on the Brazilian domestic market, although its exports are substantial.

While some subsidiaries enter markets in the producer centres, other subsidiaries located in the consumer regions are responsible for entering markets in order to market the products purchased in the producer regions. Seen as a whole, the operation consists in building a bridge between the producer in one region of the world and the consumer in another region. In the case of cotton, Volkart has subsidiaries in Switzerland, the Federal Republic of Germany and Japan, whose purpose is to obtain clients for the cotton they purchase through other subsidiaries in the United States, Mexico, Central America, India and Pakistan. Sometimes sales are made direct by the subsidiary in the producer region to the textile company in Europe or Asia; in other instances sales are made by subsidiary to subsidiary, in which case there is a possibility of engaging in price transfer practices. 3/

All subsidiaries have two chief roles: maintaining credit lines for the marketing subsidiaries and, at the same time, carrying out exchange operations to cover such credit lines.4/ Volkart Brothers, Inc., which is based in New York,

<sup>3</sup>/ It is merely suggested that practices whereby invoices are undervalued and overvalued are possible, since there is not adequate information to prove that this is so.

<sup>4/</sup> See part I. 5 (b).

maintains credit lines for all subsidiaries. In the case of cotton, for example, 85% of the volume sold is marketed on the basis of credits received by the subsidiaries from New York. This enables a subsidiary such as that in Mexico, which has capital of under US\$ 4 million, to market a volume of bales of cotton equivalent to over US\$ 55 million, without taking into account the marketing of Central American cotton, or the marketing of Mexican, Central American and Colombian coffee. The credit line is always opened in dollars at the rate of interest prevailing in the money market.

The world exchange carries out the coverage operations requested by the subsidiaries. The coverage operations in question are conducted on behalf of the relevant subsidiary, although the working capital required for such exchange operations forms part of the capital of the support subsidiary at the exchange (New York and London). In the case of the Mexican subsidiary this at least does not effect speculative operations on the New York Exchange.

# 2. Marketing in Mexico

# (a) Organization of enterprises

In the preceding section attention was drawn to a dual characteristic of transnational corporations, namely: extensive diversification (greater in some cases than in others) of their capital to cover other types of commercial and industrial activities and, on the other hand, the international character of a commercial organization in the field of cotton, which provides the backbone of the principal trade routes between the producer regions and the importing regions. The integration of a commercial network of transnational corporations at the international level obviously gives them major advantages over national companies. Unlike the latter, transnational corporations maintain offices not only in the producer regions but also in the non-cotton producing consumer regions themselves. As a result of this, firstly, sales between companies are possible, which permits them to increase their global sales margins through transfer-pricing practices. Secondly, since they maintain offices in the major cotton-importing centres, the transnational corporations are always in an advantageous position as regards obtaining clients and expanding their sales markets in comparison with the position of national companies, which enter into agreements solely from their offices in Mexico. Lastly, the fact that the transnational corporations operate

in the major producing regions of the world, unlike the companies that operate within a single country, enables them to make sales to one single country on the basis of a combination of a series of producing regions, which results in greater ease in making deliveries in the event that there is a drop in production in one or another cotton region, or, on the other hand, to increase the range of fibre on offer to their clients.

At the national level the organizational structure of the transnational corporations' subsidiaries is extremely similar to that of the major national companies, and the latter differ from small national companies both as regards the geographic scope of their operations and as regards the level of diversification of their activities. The major companies are active in all, or virtually all, cotton centres and have offices and agents in each centre and general offices at Mexico City.5/

The major companies thus cover virtually all the producer regions of the country and maintain permanent commercial links with the planters.

Moreover, at the national level a number of major companies are integrated with the ginning industries to a certain extent; to a much lesser extent, there is horizontal integration with the oils industry, through the hydrogenation and processing of cotton-seed (see table 37).

From the point of view of cotton marketing, the major companies possessing ginning plants have increased opportunities to make purchases from the planters; since, although legally the ginning enterprise only processes the producer's cotton and the processer therefore is not obliged to sell this unginned cotton to the ginning company, in practice it is common for commercial companies integrated into the ginning industry actually to purchase a portion of the cotton of the producer hiring their processing services.

However, integration of commercial capital into the ginning industry also opens up possibilities to companies as regards the establishment of horizontal links with the oils industry. Considering the oils industry in general

<sup>5</sup>/ With the exception of Allenberg, whose general offices are at Ciudad Obregon, Sonora, which markets its cotton abroad.

Table 37 MEXICO: GINNING PLANTS OF THE MAJOR COTTON MARKETING ENTERPRISES

Enterprises	Number of plants
Anderson Clayton	7
Longoria	20
Esteve <u>a</u> /	8
Mc Fadden	6
Volkart	3
Hoenberg	3
Algodones del Pacífico	1
<u>Total</u>	48

Source: SARH, DGEA, Establecimientos que procesan productos de origen agropecuario; Directorio 1979-1980, Mexico, 1980.

a/ Esteve Hermanos and Industrias Unidas Agropecuarias.

(edible oils and industrial oils), two of the companies considered in this study have interests in the industry in question: in the early 1970s Longoria 6/controlled 23% and Anderson Clayton 9% of installed capacity in the oils industry.7/

The small commercial companies operate on the basis of a more elementary organization, firstly, their business is mainly confined to trade in cotton and that business is confined to one or two producer regions. They generally do not have commercial agents who cover other producer regions, and in any event the owner-manager of the company assumes the responsibility of making purchases direct, either in his own region and/or by "combing" neighbouring producer regions.

## (b) Operation of the companies

The general role of the cotton-marketing enterprises is to act as an intermediary between the producer and the textile factories. This role involves the variables space and time. The first variable involves the transport, freight and insurance costs that are normally applicable in the case of any type of company. The second variable is the one that largely determines the extent to which the company is successful, since it involves decisions as to when, and how much, to purchase and sell in a market as erratic as the cotton market. Furthermore the variable of time takes on even greater importance because of the current high interest rates, owing to the high levels of financing with which the commercial enterprises normally function.8/

Various aspects of the way in which companies operate will be considered below and an endeavour will be made to identify those enterprises' specific characteristics in each case.

(i) The role of agent and/or intermediary. Cotton-marketing enterprises may play the role of either agent or intermediary. Playing the role of an agent consists in acting on behalf of the textile industrialist, at the industrialist's request, on the basis of an established agreement. For the commercial enterprise, playing the role of an intermediary consists in acting on the enterprise's behalf

<sup>6/</sup> Subsequently CONASUPO acquired Longoria's four oil plants.
7/ See SARH, DGEA, El mercado de Oleaginosas, Mexico City, 1973.

<sup>8/</sup> A small-scale cotton merchant in La Laguna said that keeping cotton was like having a hot potato in one's hands.

as an independent purchaser and seller. In this latter case, the enterprise operates on the basis of its own capital and credit agreements and assumes market risks direct, whereas in the former case the factory finances all supply operations and bears responsibility for them, paying the enterprise a commission for its services relating to acquisition, freight and transport, which are costs that are borne by the textile factory. The commercial enterprises normally charge 1% as a commission, whether in the domestic market or in the export market. As intermediaries they earn from 2% to 3% in the export trade and from 4% to 6% in domestic trade. Options in favour of the one or the other type of marketing depend on a variety of circumstances and on company policy.

The major companies have more of a tendency to do business as intermediaries in the domestic market, and the transnationals are active at the domestic level and the international level, while the small companies have recently been operating more on a commission basis. Acting as an intermediary or an agent depends to a great extent on the availability of capital and credit lines. The average proportion of financing is greater in the case of the major companies than in the case of the small companies. It is estimated that approximately 85% of the value of the major companies' trade is financed by private banks (national or transnational banks, according to the destination of the goods), which thus expands their opportunities to act as intermediaries. As long as interest rates are high and cotton prices are both high and unstable small companies tend to act as agents.

In the export trade Mexican private companies operate more on a commission basis, chiefly owing to the fact that sales volume is greater and that there is a means of association with foreign capital, which is considered below.

- (ii) Association with Mexican and foreign capital. Part of the export trade of Mexican private companies is carried out in association with foreign commercial companies. The known cases in which this marketing practice is followed are:
  - Algodones del Pacífico in association with Ralli (British capital) until 1980;
  - Algodones de la Costa del Pacífico in association with Toyo Menka (Japanese capital);

- Fibras del Valle in association with Molsen (United States capital);
- Humphrey Hermanos in association with Schwabach (United States capital);
- Algodonera Nacional sometimes in association with Weil Brothers (United States capital).

In all these cases Mexican companies act as the agents of foreign companies, receiving financing and purchase orders from the latter. Mexican private companies that operate on the basis of this type of association with foreign capital are major companies, such as Algodones del Pacífico, or medium-scale companies (with a sales volume of 15 000 to 20 000 bales), such as Humphrey, Algodones de la Costa del Pacífico and Algodonera Nacional. In acting as the agents of foreign companies these companies have the advantage of increasing their sales volume and their returns without involving a proportion of their capital, by receiving direct financing from their foreign associates.

The common denominator among the foreign companies associated with Mexican capital in the marketing of cotton is that their commercial interests in the country are relatively minor and that they are not among the eight leading companies dominating Mexican cotton trade.9/ Each of the four examples of association between Mexican and foreign enterprises referred to above have different characteristics. For example, Schwabach International, Dallas, Texas (which is associated with Humphrey Hermanos, Torreon, Coahuila), is a company that chiefly does business in and from the United States. Its annual sales volume is from 300 000 to 400 000 bales, and it has extensive interests in exchange speculation. Its association with Humphrey, which makes purchases chiefly in La Laguna and Tamaulipas, is connected with Schwabach's export trade through the ports of either Galveston or Tampico.

The examples of association between Algodones de la Costa del Pacífico and Toyo Menka and between Algodones del Pacífico and Ralli are completely different from the preceding cases. Firstly, Schwabach is a relatively small transnational corporation when compared with Ralli or Toyo Menka. Moreover,

<sup>9/</sup> These eight companies were considered in part IV.2.

Toyo Menka chiefly conducts its business in Far Eastern markets from subsidiaries that it maintains in Asia and Oceania, and its trade in cotton from Mexico does not represent a significant proportion of its sales. In addition to large-scale marketing from the United States (as a result of its merger with Cargill/Hoenberg) Ralli dominates the Australian market and has a high volume of trade in Asia and Europe. Both Ralli and Toyo Menka purchase cotton (Ralli since 1980) through their association with Algodones del Pacífico and Algodones de la Costa del Pacífico, in the north-eastern region of Mexico.

A characteristic common to all these transnational corporations associated with Mexican capital, despite the individual features of each case, is that they are only active in the Mexican cotton export market and that their sales volume is not significant in that export market. Their Mexico-based trade, in association with Mexican companies, which saves them fixed or indirect costs, is a typical example of the ability of transnational corporations to penetrate cotton centres in any region of the world.

(iii) Coverage and speculation 10/ Firstly, only large Mexican and foreign private companies conduct coverage operations in the New York market. Companies have to act through brokers or private brokerage firms in order to do business on the stock exchange. Large transnational corporations such as Volkart, Cargill/Hoenberg/Ralli and others have their own exchange houses in New York, which operate in a manner that is integrated with the conglomerate's global operations. Other large transnational corporations or Mexican companies, such as Esteve, Longoria and Algodones del Pacífico, hire the private services of other exchanges. The latter maintain portfolios with a capital of over a US\$ 100 000 for the commercial enterprises in order to handle their coverage and speculative operations. Small Mexican companies do not carry out coverage or speculative operations. The chief reason for this is the relative unavailability of capital for conducting such operations, as well as the costs involved in relation to the low level of their turnover.

Secondly, speculative activities in the futures market also become a normal activity for enterprises conducting coverage operations on the exchange. The only difference between coverage operations and speculation is the fact that each

<sup>10/</sup> See part I.5. (b).

transaction conducted does not have a physical counterpart as in the case of coverage operations, with the result that the speculative gain is confined to purchasing at a low price and selling at a higher price in a non-existent cotton market. In any event, in addition to the considerable volume of commercial gains that the large commercial enterprises derive from their physical sales operations, the speculative gains of such enterprises are a further boost to their capacity to accumulate capital and to expand in the national market.

# VI. CONCLUSIONS: MEGOTIATING CAPACITY AND DISTRIBUTION OF BENEFITS

## 1. Ne otiating capacity

Mexico's negotiating capacity vis-à-vis the TMC oligopoly that dominates the world cotton market is related, first of all, to the size of the Mexican cotton industry. As the analysis in this study has shown, after the rise of the industry during the 1950s, cotton production and exports dropped considerably over the last two decades and in 1979, Mexico only exported 4% of the world total (compared with 16% in 1955). Because of this crisis in the cotton industry, the increase in local processing and the diversification of the Mexican economy, the share of cotton in the country's total exports dropped at an even faster rate, from 25% in 1955 to 5% in 1978. In addition, cotton processing by the textile industry rose between 1951 and 1975 from 30% to 54% of total demand and subsequently came to a standstill because of the competition of synthetic fibres.

To the abrupt decline of Mexican cotton on the world market has been added the growing concentration of the industry and, particularly, of cotton exports controlled by the TMCs. In the late 1970s, cotton production and primary processing in cotton gins was in the hands of national producers, organized to a large extent in ejido-type co-operatives, whereas over half the marketing of cotton was controlled by the TMCs (52% in 1980 as compared with 42% in 1977).1/In 1980, the TMC share (52%) was controlled by seven enterprises, four of which (Esteve, Volkart, Hoenberg and C. Itoh) held 36% of total trade.

The TMCs held greater power in cotton exports than in local sales to the textile industry. In 1980, the seven TMCs handled almost 70% of exports and 30% of total domestic sales. The TMCs gradually abandoned the local market (with their share declining from 53% in 1965 to 31% in 1980) and concentrated on exports, mainly because, with a larger volume of sales, better terms of payment and less government interference, the export business is more profitable.

<sup>1/</sup> The share of the TNCs was even greater because several of them participated in sales by enterprises that were "not identified" (17% in 1980).

In 1980, the public sector controlled 29% of local sales and 18% of external sales through the State enterprise, Algodonera Comercial Mexicana. In addition, the State provided technical assistance and loans for private domestic producers and, in particular, for associates of ejido-type arrangements, who accounted for approximately half the total production of cotton. The Banco de Crédito Rural (BANRURAL) played an important role in financing the production of ejidos and strengthened their negotiating capacity on the cotton market by participating directly in sales contracts with private enterprises, both domestic and foreign. In 1980, for example, sales of 612 thousand bales of ejido-produced cotton were channelled through BAHRURAL as follows: 47% to the public enterprise ALGOCOMEX, 36% to the TNCs and 16% to domestic private enterprises. The intervention of the public sector in the marketing of cotton made it possible for the ejido sector to sell cotton on better terms than individual farmers. The State did not intervene, at least systematically, in cotton prices set by the oligopoly on the world market.

To summarize the main aspects of the negotiating capacity of Mexican cotton producers, it may be said that they depended to a large extent on the major TNCs belonging to the world oligopoly that controls the marketing and processing of cotton. This was reflected mainly in relatively low prices for cotton, competition from synthetic fibres, and the resulting crisis of the industry the importance of which was declining both on the world market and with regard to the development of the country. The State confined itself to supporting the ejido sector, as part of its overall agricultural policy, but did not design a policy for the cotton industry. Obviously, this situation was reflected in the distribution of benefits between the transnationals and the producer country.

## 2. Distribution of benefits

In the absence of direct data on the economic position of the Mexican cotton industry, our appraisal of the distribution of benefits of this activity is based mainly on data of a general nature that have been compiled and processed by UNCTAD, 2/ which are also valid for Mexico.

<sup>2/</sup> See UNCTAD, op.cit. (T.D/B/C.1/219).

With cotton production and processing in the hands of Mexican producers, the benefits the industry brought to the economy of the country depended mainly on the unit prices obtained for exports and the level of local processing in the textile industry, which determines the value added.

# (a) Prices of cotton

When the Mexican cotton industry entered the world market for this commodity, the effects of international prices and price fluctuations, both conjunctural and those resulting from speculation on the world stock exchanges, were immediately felt in the economy of the country. The considerable and increasing fluctuations in nominal prices of cotton are illustrated in table 38. It will be noted that cotton appears midway among the 18 basic export commodities and has suffered even greater price fluctuations than eight of the commodities included in the table.

The impact of international prices on domestic prices in the Mexican cotton market in the 1970s is shown in tables 39 and 40 and figures 1 and 2. The latter show that both the increases in international prices (1974, 1976 and 1980) and the decrease (1975 and 1978) were fully transferred to the Mexican market. The data in the tables also show that monthly prices were frequently different from the average annual price on both markets.

Naturally, the average market quotations are different from the prices actually agreed upon and obtained by cotton traders and producers. The aforementioned high share (70%) of the TMCs in Mexican cotton exports leads one to believe that the different marketing methods (different types of discounts and bonuses, transfer prices, etc.) actually tended to bring the agreed prices down by comparison with those quoted on the markets.

Table 41 shows how the competitiveness of cotton with regard to alternative crops is affected by sharp drop in cotton prices, such as that which occurred in 1975. In that year, as will be noted in this table, the net return per acre of cotton, in the Laguna region of Mexico, was only 88 dollars, as compared with 180 dollars for beans, 107 dollars for wheat and 93 dollars for sorghum. Naturally, the low profitability of cotton led many peasants to stop growing it, as they preferred to turn to more profitable crops.

Table 38

FLUCTUATIONS IN NOMINAL PRICES OF SELECTED PRIMARY COMMODITIES, 1960-1977

(In per cent)

		Averag	e de <b>viatio</b> n	from trend			
	Mon	thly prices		Ann	ual prices		
	1960-1965	1966-1971	1972-1977	1960-1965	1966-1971	1972-1977	
Sugar	48.36	15.24	54.52	45.01	8.34	51.86	
Sisal	19.95	7.03	43.04	18.02	6.41	36.66	
Phosphate rock	2.03	3.62	<b>35.7</b> 3	1.89	3.43	35.51	
Vegetable oilseeds and oils	7.38	5.67	30.14	6.23	4.08	24.96	
Copper	16.26	16.43	22.19	13.14	11.99	19.07	
Cocoa	11.89	16.66	20.68	10.83	15.54	18.55	
Rubber	7.37	11.34	20.13	6.38	10.51	18.44	
Coffee	7.94	8.23	20.02	7.39	7.06	17.71	
Cotton	1.41	5.42	18.27	0.89	4.91	15.27	
Tea	7.56	7.25	14.24	1.70	6.50	12.32	
Tin	8.43	4.71	14.01	7.14	4.08	11.57	
Jute	22.19	7.18	13.18	18.32	4.10	9.46	
Tropical timber	1.15	2.36	13.03	1.22	1.93	11.22	
Manganese ore	-	9.43	12.19	4.69	9.35	10.95	
Meat	6.07	4.09	11.97	2.16	2.29	9.53	
Iron ore	-	5.71	10.14	-	5.44	9.74	
Bananas	12.93	9.88	8.73	2.13	3.12	7.00	
Aluminium	2.26	1.60	8.01	2.33	1.48	5.29	

Source: Computations of the UNCTAD secretariat based on data in UNCTAD, Monthly Commodity Price Bulletin, 1960-1978, Special Supplement (Revised).

Table 39

TRENDS IN AVERAGE INTERNATIONAL PRICES OF 1-1/16" STRICT-MIDDLING MEXICAN COTTON DURING 1970-1980 CIF HORTHERN EUROPEAN PORTS

(Cents per pound - U.S. currency)

iónth	1970 197	1971	1972	1973	1974	1975	1976	1977	1978	1979	1930
Average	30,67	35.48	37.49	49.40	66.17	55.85	79.41	72.75	73.10	77.39	93,95
Maximum	32.50	38,35	40.58	66.00	90.20	60.12	89.00	86.95	77.67	82.22	101.00
Minimum	29.25	32.91	33.25	40.81	49.50	47.80	66.90	57.97	66.25	74.50	84.14
January	29.25	33.00	40.03	40.81	90.20	47.80	96.99	79.45	66.25	76.00	88.72
February	29.56	33,58	40.58	41.13	33,63	48.00	68,80	84.50	69.56	76,19	97.05
March	29,80	33.00	39.50	43.45	76.88	th.64	70.00	86.95	71.85	75.82	93.54
April	30.02	32,91	39,25	46.75	73.00	52,59	70,60	83.26	72.38	74.50	90.56
i(ay	30.14	34.19	39.00	52.13	66.60	55,45	73.20	96.08	73.94	76.20	04.88
June	30.21	35.94	37.73	55,50	63,38	90.09	81.70	72,37	72.60	77.00	84.14
July	30.49	36,13	35.45	00.99	00.09	58.40	89.00	71.30	72,12	77.25	88,99
August	30.96	37.06	33,63	ı	60.55	59.56	84.81	68,31	72,10	77.65	96.94
September	31,38	37.50	33,25	í	59.75	60.12	88.85	64.80	73.62	77.94	101.00
October	31,65	37.13	35,38	t	57.25	00.09	87.10	63,25	76.50	77.81	99,15
November	32,16	37.00	36.94	í	53.25	59.00	86.77	57.97	78.55	80.05	98.50
December	32,50	38.35	39.10	1	49.50	59.75	85,15	59.86	77.67	82.22	100.50

Source: Prepared by the Department of Economic Studies of CANAINTEX, from data provided by the Confederación de Asociaciones Algodoneras de la República Mexicana, A.C. Quoted from Câmara Nacional de la Industria Textil, Memoria Estadística, 1981, Mexico City, 1981.

Table 40

DYNAMICS OF AVERAGE DOMESTIC PRICES OF 1-1/16" STRICT-MIDDLING MEXICAN COTTON DURING 1970-1980 (Pesos per cwt.)

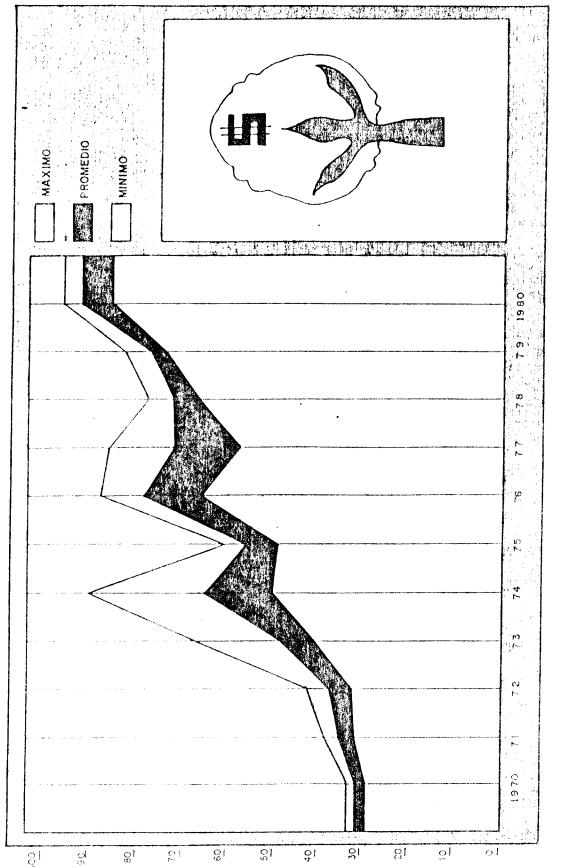
Month	0201		020	0.00	100	L		i	i i	i	
FOILCII	7310	T/6T	7315	C/6T	T3/4	C/6T	13/p	1311	1978	1979	1980
Average	339	403	423	669	738	588	1 163	1 496	1 457	1 627	2 003
Maximum	372	425	454	910	910	705	1 970	1 780	1 630	1 750	2 230
Minimum	316	380	390	474	515	461	765	1 190	1 325	1 585	1 840
January	316	380	430	474	910	194	765	1 600	1 325	1 610	1 860
February	322	385	044	480	006	462	790	1 640	1 425	1 600	1 960
March	319	386	044	208	870	476	800	1 750	1 400	1 620	1 960
April	322	390	435	550	830	520	810	1 780	1 370	1 600	1 940
May	332	392	428	595	800	591	860	1 750	1 410	1 605	1 900
June	338	405	422	049	780	615	046	1 550	1 400	1 600	1 840
July	336	410	410	775	710	595	366	1 525	1 390	1 590	1 940
August	340	412	395	850	069	609	1 020	1 450	1 470	1 585	1 980
September	348	415	390	910	675	099	1 650	1 300	1 500	1 600	2 000
October	354	415	415	870	615	672	1 800	1 200	1 560	1 660	2 220
November	368	422	422	870	260	687	1 970	1 190	1 610	1 700	2 230
December	372	425	454	870	515	705	1 560	1 220	1 630	1 750	2 210
					,			•			

Source: See table 39.

TRENDS IN AVERAGE INTERNATIONAL PRICES OF 1-1/16" STRICT-MIDDLING MEXICAN COTTON DURING 1970-1980 CIF NORTHERN EUROPEAN PORTS

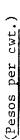
Figure 1

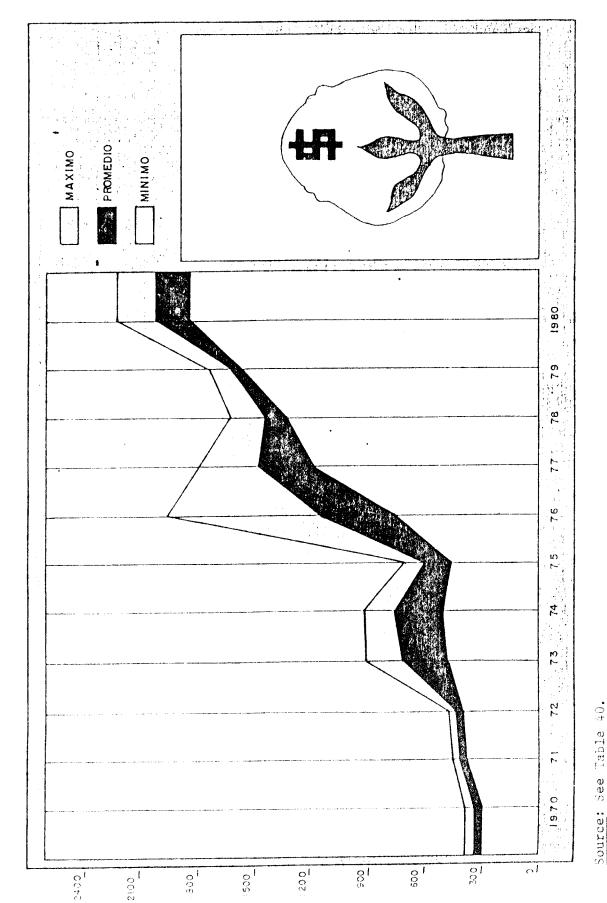
(Cents per pound - US currency)



Source: See Table 39

DYNAMICS OF AVERAGE DONESTIC PRICES OF 1-1/16" STRICT-MIDDLING MEXICAN COTTON DURING 1970-1980 Figure 2





/Table 41

Table 41

MEXICO: (LAGUNA) COSTS AND RETURNS FOR COTTON AND SOME ALTERNATIVE CROPS, 1975

			Total costs	costs	Total returns	turns	Net return	ırn
Crop	Yield	Price to producer	Pesos pe <b>r</b> hectare	Dollars I per acre	Pesos per hectare	Dollars per acre	Pesos per hectare	Dollars per acre
Cotton a/	<pre>4 bales per hectare or 1.6 bales per acre</pre>	640 pesos per quintal or 50 U.S.cents per pound net weight	11 850	384	14 580	472	2 725	88
Dry beans b/ 1.5 metric tons per hectare or 1.339 pound per acre	1.5 metric tons per hectare or 1.339 pounds per acre	5 500 pesos per metric ton, \$400 per m.t. or \$20 per cwt.	3 450	112	000 6	292	5 555	180
Corn c/	<pre># metric tons per hectare or 90 bu. per acre</pre>	1 750 pesos per metric ton, \$140 per m.t. or \$3.56 per bu.	3 700	120	7 000	227	3 300	107
Sorghun <u>d/</u>	4 metric tons per hectare or 00 bu. per acre	1 650 pesos per metric ton, \$132 per m.t. or \$3.35 per bu.	3 725	121	6 600	214	2 875	86

Source: Aseguradora Nacional Agricola y Ganadera S.A., 1975, in: The Mexican Cotton Industry, Foreign Agricultural Service, U.S. Department of Agriculture, July 1976.

Based on 45 000 hectares for Ejido farmers and 3 000 for private landowner farmers using reservoir water only. Based on 20 000 hectares for Ejido farmers and 7 000 for small landowner farmers using reservoir water only. Based on 300 hectares for Ejido farmers and 50 for small landowner farmers using reservoir water only. Based on 300 hectares for Ejido farmers and 150 for small landowner farmers using reservoir water only. লিতি ত্রিজ (b) Producer participation in final price and value added in the textile industry

The distribution of benefits among the country that produces the raw material exported and the consumer countries that process and market the final products may also be illustrated by the retail price margins for manufactured goods. As is the case with other basic export commodities, the cotton-producing country receives only a marginal share of the price of the final product. Table 42, prepared from UNCTAD estimates, shows that in the mid-1970s, the cotton-producing countries received approximately 8% of the retail price of two selected denim products and approximately 3-4% of the retail price of 35%-cotton shirts. The fact that their share in the price of shirts is much lower than their share in the price of denims obviously shows that polyester prices are lower than cotton prices.

On the other hand, the estimate shown in table 42 also illustrates the importance of processing and marketing cotton domestically. In these terms, and bearing in mind the considerable differences between countries, it may be said that the estimate shown indicates that the value added for the manufacture and marketing of pure cotton products (denim) doubled the cost of the raw material.

Even if the aforementioned correlation is viewed with caution, the importance of processing cotton domestically is evident. Domestic processing rose from less than one-third of total demand in the early 1950s to over half, approximately, during the early 1970s. The subsequent drop in local consumption of cotton that has occurred even in absolute terms, was due to the adoption in Mexico, during the 1970s, of the United States consumption pattern, where synthetic fibres had the same snare in per capita consumption of textiles (58-59% for both countries in 1979),3/ to the detriment of cotton. This percentage was much higher than those of the major industrialized countries (outside the United States), where the corresponding share of synthetic fibres ranged between 29% and 39%, and of the developing countries (18%-33%).4/ The aforementioned differences are obviously related to the fact that Mexico has a natural advantage in that it has considerable oil reserves which allow for the expansion of the petro-chemical and synthetic fibre industry. Nevertheless, there is reason for concern because a better utilization of Mexico's cotton-growing potential could help improve supplies for the population and increase textile exports, particularly in interregional trade.

<sup>3/</sup> There was, of course, a large difference in volume: USA - 15.4 kg and Mexico - 3.4 kg.

<sup>4/</sup> See table 28.

Table 42

APPROXIMATE RETAIL BREAKDOWN OF COTTON PRODUCTS

(Percentages)

Cost items	Denim Dungarees U.S.A., 1974	Denim Jeans U.Kingdom, September 1975	Shirt (35% cotton) F.R. Germany,1976
Raw material producer	8.4	8.4	3.5
Textile manufacturer	19.6	48.6	18.7
Apparel manufacturer	30.0	40.0	29.8
Wholesales/Retailer	42.0	43.0	48.0
Retail price	100.0	100.0	100.0

Source: UNCTAD from data of U.S.D.A., Cotton and Wool Situation, March
1976 (Denim Dungarees); Price Commission, Raw Material Movements and
Retail Prices, London: HMSO, 1976 (Denim Jeans) and F. Egbers,
"La Production Textile Européenne", Industrie Textile, March, 1978.

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