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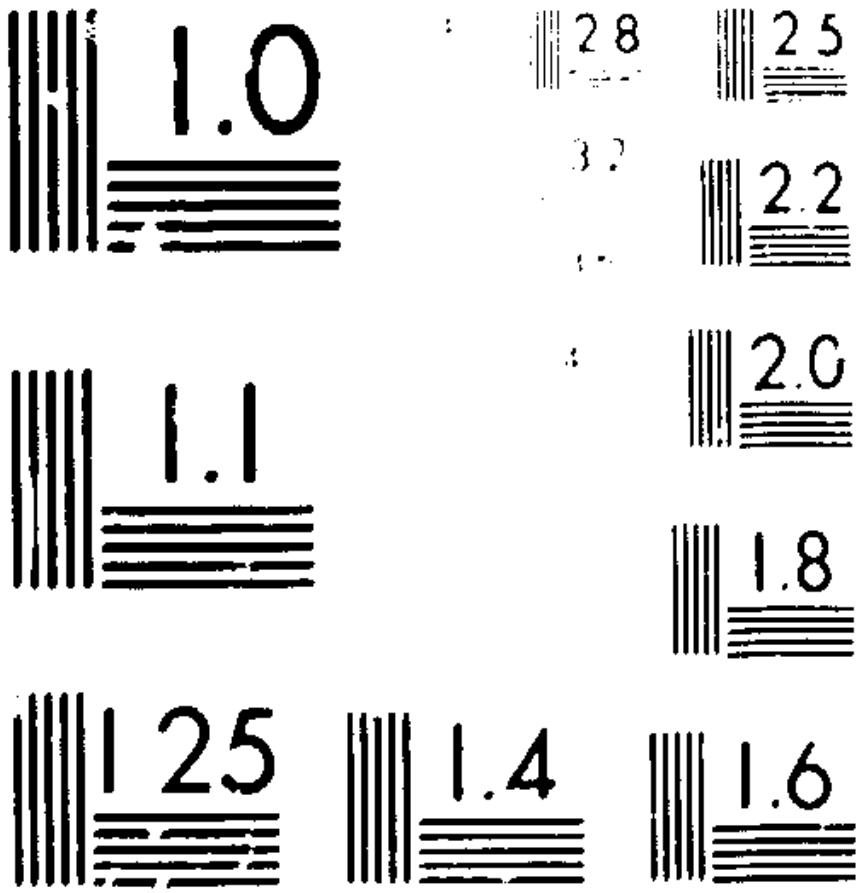
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THE SITUATION OF THE SYNTHETIC FIBRE INDUSTRY IN COLOMBIA*

by

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CONTENTS

1.- INTRODUCTION.-

This paper has been written to present the situation of the synthetic fibre in my Country in accordance with the expected participation in the International Conference on Man-Made Fibres sponsored by Unido and Sasmira.

I have summarized some information which should give the participants a clear idea of how this business is going on within my Country. It is also given as a basis for exchanging experience in the field.

I want to thank the Unido for the opportunity given me to attend this Seminar and represent my Country, Colombia.

2.- THE CONSUMPTION IN COLOMBIA.-

Historically, cotton has been the predominant textile fibre for the textile production in the country, although the growth of synthetics has tended to reduce the cotton share. For example, in 1953 the overall raw material consumption was 40.000 tons of which 72% was cotton. In 1960 the share reached 77%. Since 1968, though, the growth of synthetic fibres, mainly polyester, has followed the same general trend exhibited by other Latin American Countries similar to Colombia, like Mexico and Brazil. This has been at the expense of cotton. However, the forecast for 1983 shows that cotton will takeup 40% of the total fibre consumption.

The attachment 1 shows the Colombia fibre market for the 1978-1983 period. With this we can observe how cotton is loosing importance at the expenses of the non cellulosics fibres. We observe also, how the polyester fibre show the best growth in comparison with the other fibres. However, in polyester consumption, the Staple form in our country is still low in comparison with the volume of cotton used at the present in Mexico, a country similar to Colombia. The ratio of cotton to polyester has been reduced from 22.8 tons of cotton per ton of Staple fibre in 1970 to less than 6 tons of cotton per ton of Staple fibre in 1979. The same ocurred in Brazil. See attachment 2.

The major reasons for this disparity in Colombia seem to be:

1. The demand for yarns in export market has tended towards 100% cotton and Colombian mills, particularly Coltejer, are heavily committed to the export market.

2. There have been limitations in terms of equipment capable of handling blended fabrics.

3. There has not been a sustained push by the fiber producers and for mills to develop new polyester fabrics in either blends or 100% form.

These factor have contributed to the fact that Colombian polyester Staple producers have remained significantly below the potencial consumption during the last few years.

3.- PRODUCTION OF SYNTHETIC FIBRES IN COLOMBIA.-

At present, Colombia produces the following synthetic and artificial fibres: Polyester, both filament and staple form, textile and industrial Nylon, Acetate and Polypropylene. The plant of viscose owned by Celanese was shut down four year ago.

The present fibres producers are the following:

Celanese:	Polyester (FY, POY, S.F.)
	Textile Nylon
	Acetate (FY, S.F.)
Enka:	Polyester (POY, S.F.)
	Textile Nylon
	Nylon Tire Cord
Vanylon:	Textile Nylon
Polymer de Colombia:	Polypropylene
Zylette	Polyester (POY)
Polímeros Colombianos:	Polyester (POY, FY, S.F.)

The first synthetic fibre company established in the country was Polimeros Colombianos which started operations in 1964 as a joint venture between Coltejer, the number one textile company in Colombia and United Merchants & Manufacturers from U.S.

Celanese and Enka de Colombia are companies having foreign capital investment. The remaining are 100% owned by Colombian investors. Those have technology support from their main houses. The rest have some special programs through Engineering Companies like Zimmer, Snia, etc.

Polimeros at present does not have any technology support programs. At the end of 1976, United Merchants sold its shares to Polimeros. Polimeros started a survey around the world to get technological assistance and in 1978 signed a contract with the Du Pont Company in the United States. This contract has been executed with good success and currently is being reviewed for possible extension.

Celanese probably will close operations during this year. The economic situation in the country and financial problems affecting Celanese's operation, will be deciding factors to achieve this steps.

The attachment No. 3 shows the actual capacity and production in 1981.

4.- PRESENT TECHNOLOGY STATUS AND PLANS FOR THE FUTURE.-

As we stated before with the exception of Enka and Celanese, the other companies have been established, based mainly in Engineering Companies, which through special assistance programs provide the required technology for the operation.
Enka and Celanese have direct technical support from the head offices.

Since 1975, POC has P.O.Y. operations based on the most up to date equipment available. Enka did the same in 1976 and Celanese in 1977. The equipment used in this operation has been provided by Barmag without exception. Recently a new company, Zylette, obtained through a specialized Italian Company, the technology to produce light deniers in polyester, based on high speed spinning, also using Barmag equipment.

DTY operations have been changed from pin to friction drawtex with good success. However, the normal production speeds are no greater than 540 mts per minute.

Most of the polyester which represents the major production among the synthetics is sold in texturized form, so, the flat yarn commonly called FY, has been decreased substantially.

Summarizing, in polyester filament, the country is at present producing a very good quality to satisfy the market requirements.

In the Staple form however, there have not been any big improvements and the three producers have modest mills. The fiber normally produced belongs to commodity good with a tenacity in the range of 4-8, 5-2 grms/denier.

Some projects for the coming future have been studied by the different companies, but due to the economic cycle we are facing and mainly due to the imports, most of them illegal and in the form of finished goods, these projects seem to be very delayed. The situation of Celanese itself, unclear for the time being, makes a break as far as new investments is concerned.

In polyamides, as we do not have a very big consumption, the mills have normal operations based on conventional spinning systems. We do not foresee trasendental improvements in this field. For example, spinning techniques fall in the range of low speeds and the H.S.S. is not in the minds of any producers for the time being.

In the chips productions, POC, Enka and Celanese have facilities based in batch wise plants. All the sizes are too small to think of conversion to continuous operation. We have the idea that only facilities starting with 20.000 or 30.000 tons a year can be justified for conversion to C.P. operation.

POC has shut down this operation since 1976 and it seems to be difficult to start it up again. The new project to replace most of its old facilities has been frozen and new plans are expected for this year to redesign the basis and the back ground in which the premises were established.

Enka de Colombia has been permanently trying to renovate its old equipment and some improvements shall be done mainly in its Staple fibre facility. In the Filament side, the normal goods now proceed from the POY operation.

5.- MARKET CONDITIONS AND PRICES.-

Effective January the first, the main textile producers announced an increase in all fabric prices. These increases are based in the current cost escalation affecting this business. However, the fiber producers, which during 1981 increased their prices by 27% on the average, will not effectuate an equivalent increase for the first quarter of 1982. An agreement exists between the producers and any increase must be agreed among them. The main problem is the abnormal imports which in spite of the government protection remains very strong.

The cotton industry, through the government has announced an increase of 28% for 1982 in the domestic prices. Last year the cotton spinners bought raw cotton at $1.54 per kilo. For this year and based in the exchange rate of Col. $ 60 per US$, the announced price would be $1.83 per kilo when polyester in the Staple form remains at $2.65.
The ratio is now based on this, 1.45 times more, when five years ago it was 3.0. This trend shows that we are reaching the levels prospected for the 80's in which the ratio will be between 1 and 1.5, thus more and more polyester will be consumed at the expense of cotton.

As a prediction, Staple prices in Latin America will remain above prices of raw cotton, carrying a premium of 25-40%, depending on the raw material costs. These premiums are based on raw cotton prices. When waste

factor, financing costs and so forth are taken into account, the premium for polyester staple at the mill level is reduced to approximately 10-20%. The attached is an example of these relationships in some countries. See attachment 4.

In the long run, it is expected that the polyester price premium will remain at this 10-20% level.

As fas as filament is concerned, producers are awaiting more favorable conditions to increase its prices. If some facts remain unchanged, it will be difficult to reach an agreement to increase prices. However, based on the negociations going on between cotton spinners and producers of this raw material, the government has announced a close on imports of textile to protect the domestic industry and also to bite the smuggligng of finished goods. This action could help, the synthetic industry which in 1981 was running below their installed capacity.

Domestic polyester filament prices for 150 denier for texturing are 3.18 per kilogram and for 75 denier 4.53 per kilogram.

On this we can observe how the ratio 75/150 is 1.42 when in normal international markets this ratio is 1.18. The low profitability of 150 denier is the main reason for forcing the decision for the increase of price.

With the other synthetics, like polyamides, the status is more in accordance with the economics of the industry and a recent increase in all the titles has been accepted by the market without too much disturbance. See attachment 5.

Colombian prices at 30 January 1982:

		Col $/Kilo	US$/Kilo
Polyester	150 POY	190	3.18
	75 POY	271	4.53
	150 DTY	217	3.63
	75 DTY	327	5.47
	75 FY	279	4.66
	150 FY	210	3.51
Nylon	40/8	408	6.82
(Flat)	50/10	400	6.69
	70/24	333	5.57
	100/24	322	5.38

Current one dollar equivalent to peso 59.81.

6.- CONCLUSION.-

Making a comparison between the total Colombian Fiber Market and the Production of 1981, we observe that there is an abnormal behavior of the business. The main reason obviously is smuggling of materials which are coming into the country in both forms, as finished goods and raw materials. This situation is affecting greatly the entire industry, mainly the textile business which in the last two years has been reducing its working force trying to balance the overcapacity resulting with this competitor.

As a final result, the fiber business would be affected in the same way. This means that the problem of low profitability, working at low levels will tend to reduce man power and most importantly plans for expansion and new investments seems to be unclear and too risky.

ATTACHMENT 1

COLOMBIAN FIBRES MARKET

1978-1983

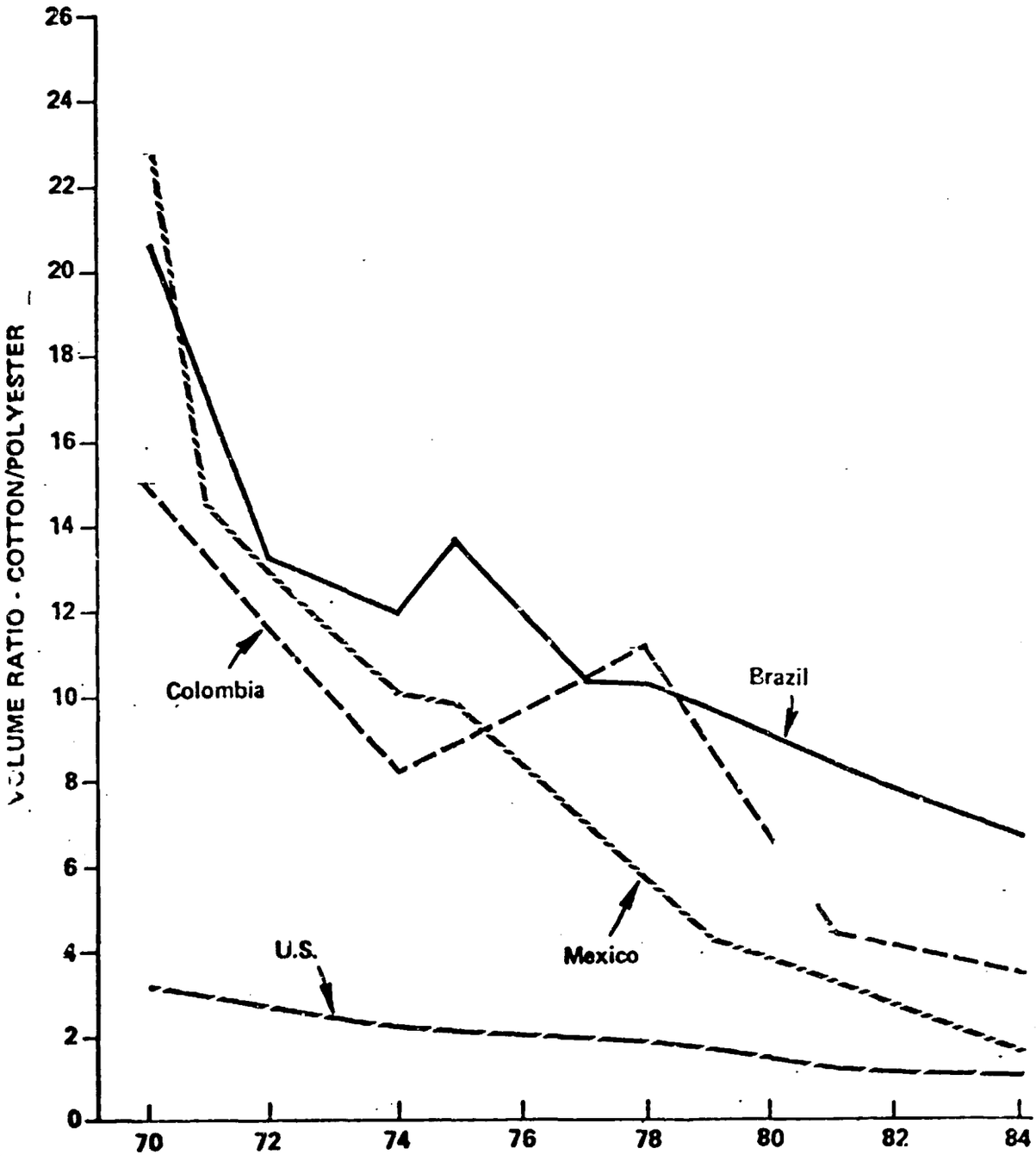
TONS/YEAR

YEAR	COTTON	POLYESTER FILAMENT	POLYESTER S.F.	NYLON	CELLULOSICS	WOOL	ACRYLICS	TOTAL
1978	61.000	20.650	6.968	6.300	7.000	3.300	8.400	113.618
1979	61.400	25.300	7.700	6.600	7.000	3.300	9.200	120.500
1980	59.800	29.700	8.900	6.800	6.500	3.000	10.000	124.700
1981	58.200	34.000	10.200	7.100	6.000	2.800	10.800	129.100
1982	56.600	38.200	11.700	7.400	5.500	2.600	11.600	133.600
1983	54.800	42.400	13.500	7.700	5.000	2.400	12.400	138.200
% of total in 1983	39.7	30.7	9.8	5.6	3.5	1.7	9.0	100.0
Annual Growth	-2.9	13.8	15.1	3.2	-8.8	-8.3	7.7	3.5

Data Source: Coltejer

ATTACHMENT 2

COTTON/POLYESTER STAPLE VOLUME RATIOS



Data Source: Coltejér-Celanese

ATTACHMENT 3

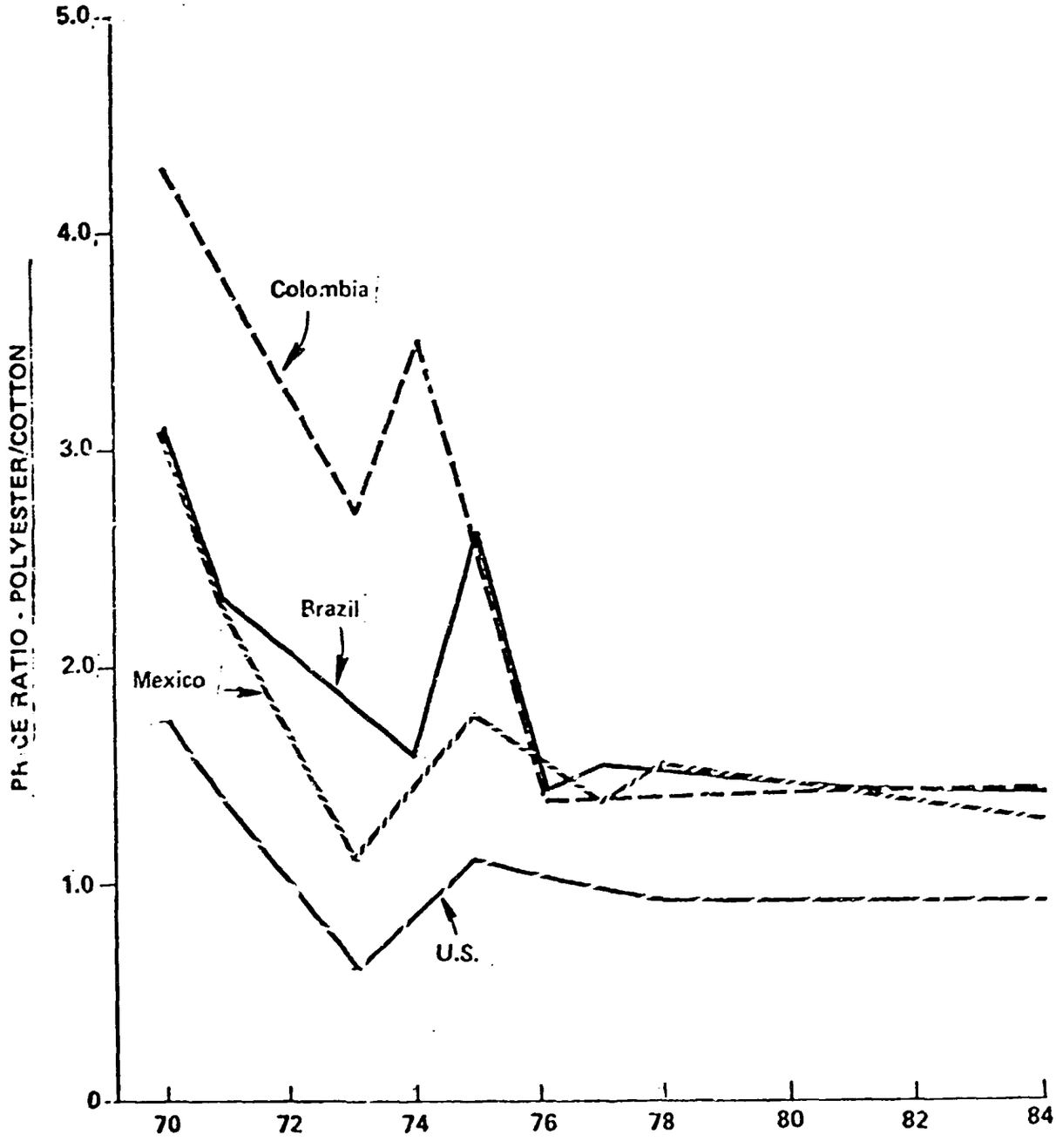
POLYESTER FIBER CAPACITIES - COLOMBIA

(TONS PER YEAR)

COMPANY	LOCATION	FEEDSTOCK	1981 CAPACITY			1981 PRODUCTION			%
			F	S	TOTAL	F	S	TOTAL	
Celanese Colombiana Celanese 49%	Cali	TPA & Imp. chip	7.200	2.600	9.800	5.400	1.200	6.600	22.5
Enka de Colombia AKZO 49%	Medellín	DMT	10.500	5.000	15.500	10.500	4.700	14.700	50.0
Polímeros Colombianos	Medellín	Imp. chips	6.700	3.000	10.000	4.300	2.600	6.900	23.5
Zylette	Bogotá	Imp. chips	1.500	-	1.500	1.100	-	1.100	4.0
TOTAL POLYESTER			25.900	10.600	36.300	20.800	8.500	29.300	100.0

ATTACHMENT 4

POLYESTER STAPLE/COTTON PRICE RATIOS



Data Source: Coltejer-Celanese

ATTACHMENT 5

OTHER SYNTHETIC FIBER CAPACITIES - COLOMBIA 1981

	VANYLON	CELANESE		ENKA	
	NYLON	NYLON	ACETATE	NYLON	TIRE CORD
Capacity	8.400	2.600	5.400	2.200	6.500
Production	4.300	2.000	3.500	1.200	5.700

TOTAL CAPACITY NYLON: 13.200
TOTAL PRODUCTION 7.500