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PRESENT STATUS AND FUTURE PLANS OF THE
DEVELOPMENT OF THE SYNTHETIC FIBRE INDUSTRY
IN ARGENTINA

by

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We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.

Argentina's synthetic fibre industry dates back to 1947. At the beginning its growth was slow, producing only 120 tons in 1948 and 500 tons in 1950. Now Argentina meets 99 % of her internal requirements producing over 45,000 tons.

Argentina's population numbers 25 million inhabitants with an annual rate of growth of 1,5 %. The gross national product per capita amounts ^{to} 1,200 dollars, and has an annual growth rate of 4 %.

The local consumption of natural and synthetic fibres is comparatively high or than in countries with higher standards of living. Also the demand is very susceptible to changes in fashion.

Argentina's production of wool is such that she's able to export up to 76 % of her total, after taking care of her local requirements. With regard to cotton, she's self sufficient in short staple cotton but must import all her needs for long staple cotton. All bast fibres must be imported, whereas cellulosic fibres (i.e. viscose and high tenacity rayon and secondary cellulosic acetate) can all be obtained locally.

Among the synthetic fibres, Argentina is currently manufacturing polyamide 6 and 6.6, polyester and polyacrylic. The production of polypropylene was discontinued in 1972. A new plant for the production of lycra is being built, capable of producing 200 tons a year by 1976.

Argentina's fibre production growth

Year	Cellulosic fibres		Cotton		Scoured wool		Synthetic		Total	
	Ton	%	(as yarn)	Ton %	Ton	%	Ton	%	Ton	%
1962	11.300	12	70.860	73	12.610	12	2.240	3	97.030	100
1963	10.490	10	68.300	78	7.420	7	4.560	5	90.770	100
1964	17.850	14	80.460	65	14.530	12	10.120	9	122.960	100
1965	19.610	15	82.610	63	16.190	12	13.000	10	131.410	100
1966	15.690	12	52.010	65	14.150	11	14.680	12	126.530	100
1967	12.580	10	78.610	64	14.150	11	17.560	15	122.900	100
1968	11.440	10	71.940	61	15.020	13	14.460	16	116.860	100
1969	11.000	8	76.550	60	16.430	13	23.350	19	127.330	100
1970	9.800	7	82.480	60	18.510	14	24.510	19	135.300	100
1971	13.810	4	87.180	54	22.490	14	32.480	21	155.960	100
1972	15.150	4	81.300	51	25.820	16	38.641	23	166.921	100

- Data from CEFIM

The above table shows a general trend of growth in all fibres. Synthetic fibres have become proportionally more important over the last ten years.

There is no official production data available for 1973, but a rough estimate would be 45,000 tons of synthetic fibres produced.

The size of the synthetic fibres industry in Argentina

Over the last ten years the investments in fixed assets reached 120 million dollars. The amount paid in wages and corresponding burdens during 1972 totaled 10 million dollars. An equal amount was paid in taxes over the same period, and raw materials worth 17.5 million dollars were imported.

This last figure shows how Argentina can be affected by a world crisis like the present shortage of petroleum. Argentina has a plant which produces 15,000 tons a year of DMF which meets her requirements for the production of polyester.

There are plans for the construction of a caprolactam plant, to be built during 1975, and an acrylonitrile plant by 1980, which should lessen our dependence on imported raw materials.

The total production of synthetic fibres can be accounted for in the following manner:

Polyamide 6 and 6.6 (textile uses)	37 %
Polyamide 6.6 (industrial uses)	15 %
Polyester	35 %
Polyacrylic	13 %

Polyamides

Polyamide 6.6 represents 52 % of all polyamides produced in the country. This is undertaken by a single firm which manufactures 82 % for industrial uses and 18 % for textile uses.

The industrial polyamide 6.6 is used mostly for the manufacture of tyre cord (840 and 1,260 deniers), and carpets (1,300 and 2,600 deniers), ropes, fishing nets, etc.

The polyamide for textile uses is produced as brilliant, wet and semiset filament yarn with deniers ranging from 15 to 520 deniers.

On the other hand, there are ten firms producing polyamide 6. One firm accounts for 50 % of the total production. Another 35 % can be divided among two other firms; all three sell 70 % as filament yarn and 30 % as staple.

While the remaining 15 % of polyamide is produced by seven small plants who consume all their own production.

Almost 60 % of the polyamide filament yarn produced is consumed by the texturing industry.

Polyester

Argentina has 4 plants producing polyester. The two larger ones produce 80 % of the total between them. The other two accounts for 15 % and 5 % respectively.

70 % of the production is sold as tow or converted to staple for wool or cotton spinning system. The remaining 30 % of the production is sold as filament yarn, of which 70 % is texturized. The filaments produced are ranging between 40 and 250 deniers.

Polyacrylate

There is a single plant producing acrylic fibres in Argentina. It produces a copolymer composed of 85 % polyacrylonitrile and 15 % methylacrylate and sodium methylallylsulphonate. It is produced by a wet-spinning process in which the copolymer is dissolved in nitric acid and later coagulated in dilute nitric acid.

Conclusions and future prospects

As previously mentioned, the Argentine market for synthetic fibres is favoured by the high consumption of fibres in general. But the demand for synthetic fibres is affected by the following:

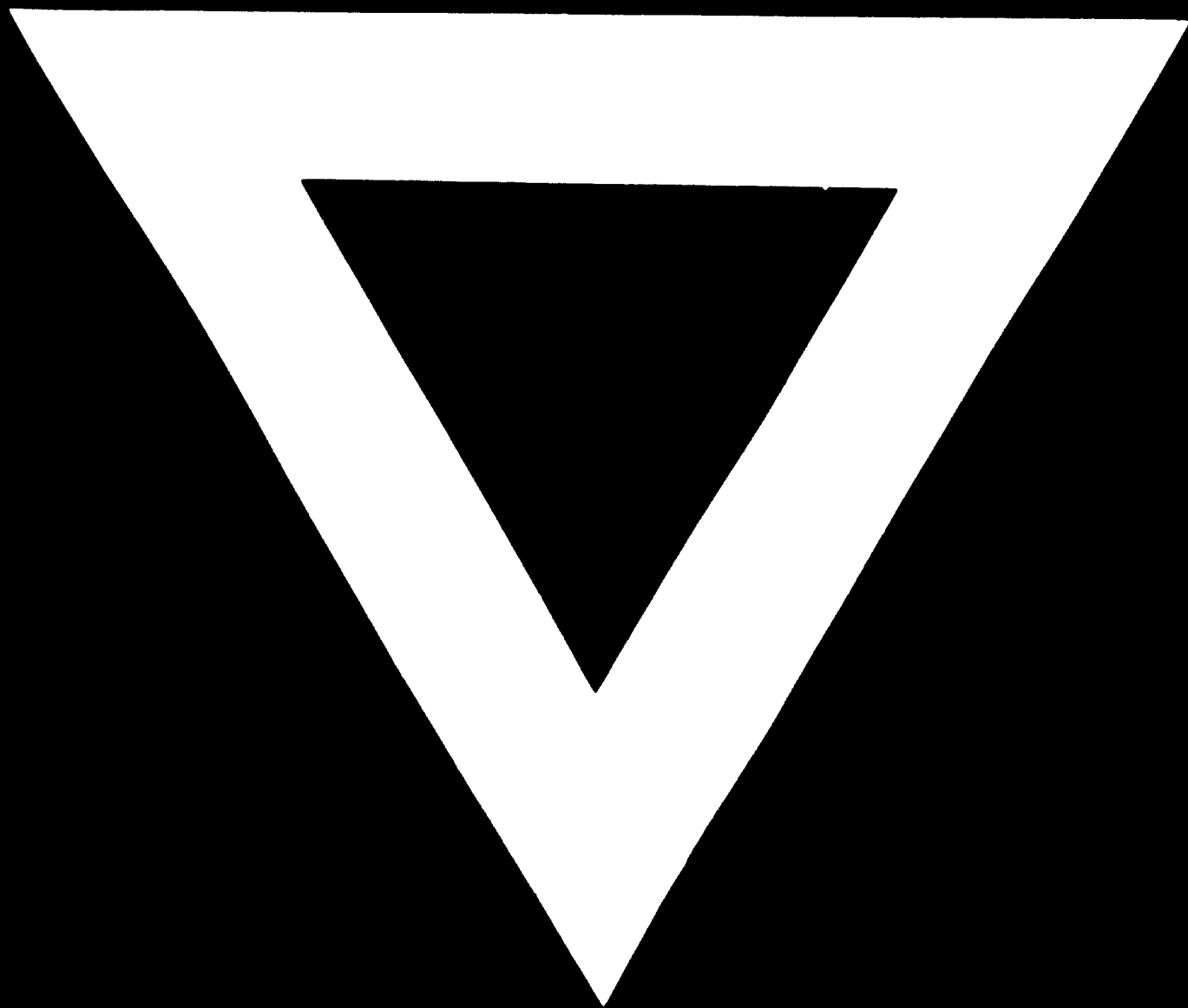
1. As Argentina is a producer of natural fibres there is less of a demand for synthetic fibres.
2. Prices of fibres in Argentina still tend to favour the natural fibres.
3. Because the production of natural fibres depends on uncontrollable factors, the synthetic fibres manufacturers cannot predict the market accurately.

This industry as a whole does not have a definite plan for future expansion. Individually, most private enterprises have their own expansion programs which depend largely on foreign technology.

The I.N.T.I. (National Institute for Industrial Technology) has a Textile Research Center which gives advice to most of the Textile Industries in the country. The INTI would greatly appreciate any aid the UNIDO could offer on the following subjects.

1. X-ray fibre structure determinations.
2. Biocomponents technology.
3. Efficient industrial methods of control of the percentage of copolymers in acrylies.
4. Efficient industrial methods of control of crystallinity and orientation degree of polyester.





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