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Distribution  
LIMTED

10/10/71/11  
14 October 1971

Original: English

**United Nations Industrial Development Organization**

Sixth Training Programme in Plastic  
Technology

Vienna, Austria,  
17 September - 23 November 1971

PRESENT STATE AND PAST PLANS FOR THE  
DEVELOPMENT OF THE PLASTICS INDUSTRY  
IN HUNGARY<sup>1/</sup>

by

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The first steps in plastic application were made in the early twenties, actually in 1920, when the first electric insulators were produced. 1923 was the year when paperboard production had begun.

Production of phenolic resins and moulding powders started in 1931. Little amounts of cast-type moulding materials were also produced before the second world war, but the production of thermoplastics did not start until after 1945. Official statistics data of this period are at our disposal concerning to the total production of moulding powders, but its amount can be estimated to 400 tons in the year 1942.

Application of PVC and polystyrene was again constricted to the field of electric and cable industry.

After the second world war the growth of consumption and of production became faster. This increase is illustrated in Table I.

Table I.

Year	Production of		Consumption of		
	ton	kg/hend	plastics	ton	kg/hend
1950	1.400	0,15		2.000	0,21
1955	4.200	0,42		6.000	0,72
1960	9.900	0,98		22.000	2,25
1965	30.000	3,03		46.000	4,90
1970	56.700	5,65		131.000	12,6
1974	110.000	11,2		204.000	19,5

Hungarian plastic industry makes up more than 90% of all derive partly from home production, partly from importation. The following data are characteristic of their proportion.

Table II.

	1.000 tons	
	1973	1974
plastic production	123,7	133
importation /for national purposes/ 13,5	100,7	
exportation /from national produc-		
tion/	15,0	15,1
national use	178,7	203,6

The most important plastic varieties made in Hungary in 1973-1974.

Table III.

	1.000 tons	
	1973	1974
Po /LD/	26,3	23,3
PVC	36,5	40,5
PS	-	-
Phenolics	4,4	5,0
Aminoplasts	16,5	13,4
Polyurethane	5,6	6,8
Polyester	0,1	0,0
Other plastics	21,3	20,9
	111,0	115,5

The Hungarian situation is also favorable. Industry is inclined to develop quickly before 1980; a new PVC factory of small capacity is under construction at 6,000 tons/year. A PP factory of 40,000 tons/year will also be put into service. The capacity of the PE-HD factory will also increase to 40,000 tons/year. At the same time, the capacity of the polyethylene plant will be increased to 100,000 tons/year. In the future, when the economy just starts to move at the end of the year, thermal within the scope of the petroleum chemistry, EG and PE- HD production is not planned in Hungary until 1980. In the field of the production of other plastics no considerable change can be expected.

So, according to the above, while we shall have a surplus from PVC and PP till 1980, we shall continue to need importation from PS, PE- HD, and the special plastic materials of small volume.

The following table shows the quantity of consumption of the present and as planned by 1980.

Table IV.

Type of plastic	1974	1980	1,000 ton
Vinyl resins	50	110	
Polyethylene	64	150	
Polypropylene	20	40	
Phenolics	7	15	
Aminoplasts	20	30	
Polyester	4	10	
Others	20	50	
Total amount	200	400	

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Table V illustrates the development of various conversion processes:

Type of conversion process	Total %		
	1968	1970	1975
Moulding	5,4	6	40-50
Injection-moulding	1	4	
Blow-moulding	0	4	10
Films and sheets	4	20	45-50
Flooring	2	10	15-20
Foamed plastics /except polyurethanes/	0	3	15
Pipes, rods and profiles	2	3	20
Leather-replacement	3	11	15
Cable-insulation	7	15	15
Chips-board	6	17	20
Reinforced plastics	1	4	5

The greatest problem of the development of the Hungarian plastics industry derive from the fact that in certain fields of both the basic material production and of the processing the potential having opportunity to expand the market is limited. In fact, the population of Hungary is only 10 million.

The surplus occurring at the basic material production have already been mentioned.

In certain fields of the processing industry the extension can only be realized in case of foreign cooperation: e.g. the production of PP film, PVC tubes, batwings or products large bodies made by injection moulding; of hard PVC film and of plates.

Our second great problem is that we have no considerable national processing machine production, so the planned extension in processing demands a large-scale machine importation, which means a demand for enormous sums of foreign currencies.

Cooperations would be useful for us in the frame of which we should execute plant and unitary or also the finished products for processing machines. Besides, we should welcome cooperations in processing machine production, too.

The lack of national processing machine production has a bearing upon the fact that even our own technicians are not guaranteed; in the years to come we shall be obliged to buy a considerable number of licences.

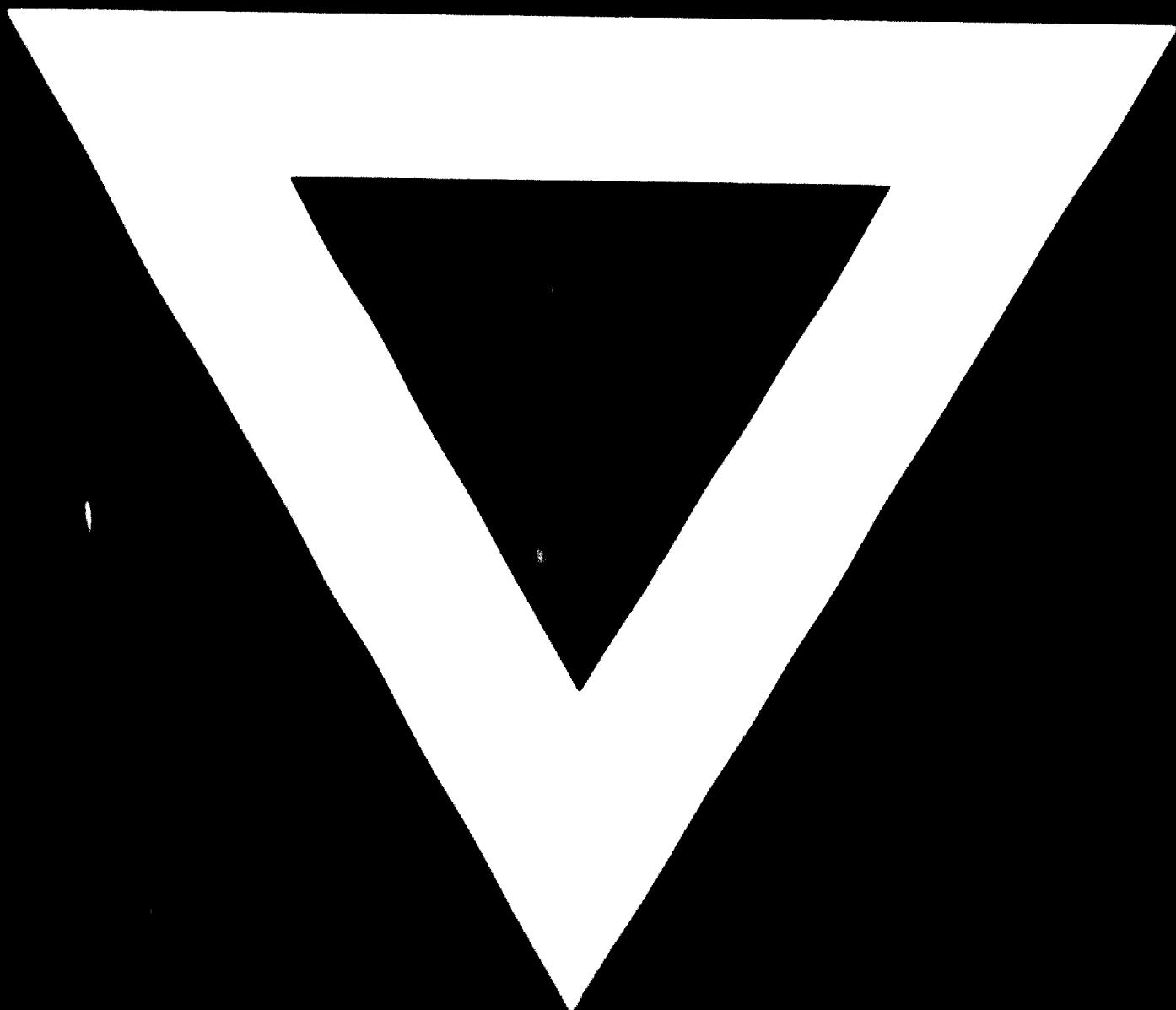
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In the field of the application of the plastics the most difficult situation is in the sphere of the increase of the building; trade applications. Here the problems are technology of application, the tests about the durability of plastic, and the economic questions, as regards to the quality and cost of plastic.

In connection with all these questions information and advice obtained by UNIDO could be useful for us.

Hungarian processing industry is directed in the trade by the Hungarian Ministry of Heavy Industries, which coordinates the development as a great number of firms, in this work my office, the Union of the Hungarian Chemical Industry, which co-ordinates the greatest national enterprises of chemical and plastics industry also takes part.

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