CEPI Brief N° 10

Strategic positioning study of the plastics branch

FOREWORD

Plastic material is present in almost all current consumption products and services and throughout almost all sectors of industry. Intensive research is increasingly undertaken by research centers and major groups to furthermore develop the polymer and elastomer industries.

NATIONAL SITUATION

In 1986, in Tunisia there were 179 enterprises in the plastics transformation branch. At present there are 315 production units, of which:

- 15 are wholly exporting and more recently created;
- 21 were created or developed under partnership (joint- venture) with foreign investors;
- 16 are non resident.

Branch employment has increased 50%, increasing from 7,000 to 10,450 persons, while close to 80% of the enterprises have less than 50 employees.
Investment in the branch between 1993 and 1997, has grown constantly, around 8% per year. Production as well has grown constantly, registering average annual growth of more than 9% over the period 1993-1998.
Average annual national consumption of plastics will be 180,000 tons, equivalent to close to 18 kg per inhabitant and has risen 5 % per year over the past 14 years. At this rhythm , consumption for the next decade is projected to be 25 kg/inhabitants in 2005, and 32 kg/inhabit in 2010.
In terms of foreign trade, the coverage rate is low, varying between 12% and 14% during the period 1993-1998. The branch is principally oriented toward the local market as exports represented just 16% of production in 1998. The principal export markets are Germany (24%), Algeria (22%) and Libya (20%).
The quality program initiated by the Ministry of Industry and INNORPI, in partnership with the European Union, resulted in the certification of 10 plastics industry enterprises as of May 1999.

INTERNATIONAL SITUATION

In most of the developed countries, consumption is superior to 50 kg/inhabitant. Consumption is inferior to 10 kg/inhabitant in the less advanced countries.
In the European Union countries over 9 million tons of plastic is exported and 7 million tons are imported annually. The imports and exports are essentially raw materials, respectively 68% and 64%.
The plastics industry in Europe over the last few years has undergone important evolution:

- regrouping, acquisitions and mergers motivated by the search to control costs;
- reduction in the number of suppliers in the secondary transformation industry.

In France there are over a thousand standards, of which almost half are European Norms (EN).

INTERNATIONAL COMPARISON

An analysis of numerous benchmarks of the industry was realized. The countries studied were France, Spain, Poland, Hungary, Morocco and Tunisia. The results of the Benchmarking study are summarized in the following points:
The managerial level in Tunisia is 14%. This level is low compared with that in the industrialized countries or countries that have a strong plastics industry tradition such as France (35%), Spain (26%), Poland and Hungary (25%).
The qualifications currently available in plastics manufacturing place Tunisia at a competitive disadvantage relative to Poland, Czech Republic, and to a lesser degree, to Turkey and to Hungary.
The more developed countries such as France and Spain are more open. The customs policy in Morocco is comparable to that of Tunisia. Most of the products are subject to customs fees of 35% and a tax surcharge of 15% is added systematically to the customs fee.
Imports and exports in the two more developed countries are in balance. Tunisia does not produce plastic raw material. Morocco produces just PVC, and exports some of its production. The other plastics raw materials inputs are imported, as it is the case in Tunisia, to feed the activity of the plastics industry.

The level of enterprises certified ISO in Tunisia has reached 4%. This level is in keeping with the levels in other countries of the reference group: France 6%, Spain 5%, and Poland 2%. In Morocco, only one enterprise in the plastic sector is certified ISO 9002.
The quality level of plastics industry products can be rated as follows:

- excellent and good, for France and Spain;
- acceptable, for the countries of Central Europe;
- inadequate, in the Mediterranean countries ; but Tunisia is more advanced than Morocco.

Average productivity in the plastics industries in the diverse countries is high, with 30000 USD in turnover per employee, the average productivity level in plastics manufacturing in Tunisia is four to five times less than in France (154000 USD) or in Spain (136000 USD), while the level is comparable to that in Poland (37000 USD) and Hungary (42000 USD), and is higher than that in Morocco (21000 USD).

OBJECTIVES 2005-2010

The principal quantitative objectives for the next decade are:

- a production level reaching 340 thousand tons in 2010 ;
- growth rate of 15% for exports and 3% for imports;
- an equipment renewal rate of 70% in 2005 and 100% in 2010 ;
- a utilization level of current capacity of 70% in 2005 and 80% in 2010 ;
- a level of managerial staffing of 18% in 2005 and 25 % in 2010 ;
- the modernization and upgrading of 150 enterprises in 2005 and 200 in 2010 and the certification of 60 enterprises in 2005 and 100 in 2010.

LUCRATIVE NICHES AND MARKETS

- Exports of plastic products is mainly to neighboring countries, while exporting to Europe will remain marginal;
- Packaging, a transversal sector, represents an automatic channel with important growth potential for secondary exporting and opens the opportunity for the development of basic semi-products (leaves, films, complexes) and containers (cases and hollow bodies) ;
- sub-contracting should also be looked into for high performance factories with quality output, for the export of large rigid pieces, or small light-weight elements. This sub-contracting concerns in particular the following domains: automobile, home appliances, electro-technique, electronics, telephony, computers, hygiene, etc…

ACTIONS TO UNDERTAKE

Acquiring and maintaining a permanent competitive advantage can be achieved through:

- optimizing the exploitation of available resources;
- access to a higher level of technology, leading to differentiated products that are technically more elaborate;
- the introduction of efficient management methods;
- the modernization of production equipment.

Actions within the enterprises

- creation of Services « methods » for the preparation of product lines and manufacturing production management;
- increase the utilization level of equipment stocks capacity to 80% for injection and 90% for extrusion;
- set up of a rational organization and a training program for technicians in plastics manufacturing.

Institutional Measures

The role of the institutions is to adapt technological progress to the needs of the enterprises. This role is all the more important given that the plastics industry is composed almost entirely of SMEs.

- training, studies and research;
- information and the development of markets and partnerships;
- technological surveillance and the transfer of technology;
- standardization.

Promotional Actions

- Prospect the European countries to create awareness of Tunisian plastic industry;
- identify, throughout the industrialized countries, the major order givers;
- develop and consolidate in priority the position of the plastic industries on the local domestic market.

Enterprise Creation and Partnership

The study has as well resulted in the identification of :

- 17 project files to promote;

a list of European order givers to prospect.