Tomato processing in Italy

Italy is the biggest tomato processor within AMITOM. With an average over the past five years exceeding 5,2 millions tonnes of fresh tomatoes processed, Italy accounts for almost 50 % of AMITOM tonnage. Since the creation of AMITOM in 1978/79, Italian production has more than doubled, the biggest increase in Europe after Spain.

The cultivation of processing tomatoes is possible in many parts of Italy, but three regions account for almost 90% of the production:
* Puglia, with just under 40%;
* Emilia-Romagna, with more than 40%
* Campania, with about 10%.

- **Southern Italy**

The Puglia region now only represent about 40% of the national production. It is an area where few factories have been set up, so tomatoes have to be transported by lorry to processing plants in Campania, 200 to 300 km away. The main production zone in Puglia is around Foggia, but processing tomatoes are also grown further south around Bari and Brindisi.
The Foggia area is a large plain with soils alternating between a predominance of clay and a predominance of sand. North of Foggia, tomatoes are mainly produced for paste, whereas in the south they are grown primarily for canned peeled tomatoes. The climate varies between extremes, with frequent frost in the early Spring, and scorching heat with very little rain in the Summer. Frequent winds often wither the plants and increase water requirements, but they have the advantage of improving the health condition of the plants, reducing the risk of bacterial diseases. Water is plentiful but rather expensive to use, which is why drip irrigation is particularly developed in that zone. Sprinklers are the most common alternative to drip systems.
The size of farms growing processing tomatoes is variable. Some farms grow 2 to 3 hectares of tomatoes on ten hillside hectares, which are then harvested manually. Other farms in the flat plains cover several hundred hectares including a hundred hectares of tomatoes. Growers have set up cooperatives, themselves part of larger Organizations of Producers, whose main task is to make joint offers and sign contracts with processing firms. They also supply seeds, fertilizers and other treatments, and own harvesters. The main varieties for tomato paste are now almost exclusively hybrids : Perfect Peel, Snob, Isola, Alange, Amur. For peeled tomatoes, only hybrids are now being used: Hypeel 244, Italpeel, Calroma, Logan, RedPeel, Inca, Ulisse. In the Campania region, the traditional variety has been awarded the protected origin label: "pomodoro San Marzano dell'agro Sarnese Nocerino".

Direct seeding is rare and only used for the cultivation of paste tomatoes, which are sown with precision sowing machines using coated seeds. For peeling tomatoes, all the acreage is planted with plug seedlings. Tomatoes for paste (less than 30% of the volume) are all machine harvested, but those for the production of canned tomatoes are mostly harvested manually, although machine harvesting is developing rapidly. In the largest farms which use drip irrigation, yields often exceed 100 t/ha with 75 t/ha on average.

- **Northern Italy**

Processing tomatoes are mainly grown around Parma and Piacenza, but also in small areas around Ferrara and north of the Po. Soils near Parma and Piacenza are predominantly clay, with sandy-clay in Ferrara and silt north of the Po. The climate is ideal for tomato cultivation with notably a big difference between day and night-time temperatures, producing a good color in the fruit. There is a risk of late drought and of hail storms. The production of processing tomatoes in this region is completely mechanized and controlled by experts. The use of hybrids is almost complete with Perfectpeel, Guadalete, Pavia, Falcorosso, Isola, Trayan, H9478, etc. UC82 is the only open pollinated variety still used, but with less and less quantities. Plug-seeding transplants are becoming generalized (90%), but direct seeding is still used (10%), using precision seeders.
Irrigation is still partly applied by sprinklers, with coiled hose water guns, but drip irrigation, but drip irrigation becomes widespread. The harvest is totally mechanized with selfpropelled Italian harvesters. Farm yields are 65 t/ha on average. In northern Italy, the farm price in 2006 has dropped to 39 euros/tonne. Since 2001, the production in northern Italy exceeds the southern one and in 2005, the production in northern Italy (including Toscany and Umbria) amounted to more than 3 million tonnes of raw tomatoes. 40 % of raw tomatoes are processed by co-operative factories, which are members of ConfCooperative and 60 % by private companies which are members of AIIPA.

Before the restructuring of the Italian tomato processing industry which led to the current situation, nearly 70% of the production of tomatoes for processing was localised in the regions of the south of Italy (Campania, Puglia,...), the North only representing 30% of the volumes processed in the country. Over the last 20 years, the distribution of the surfaces has been profoundly modified and now the North has overtaken the South.
Several reasons explain this reversal : in a first instance, because of the lack of crop rotation, as it has been the case in Campania over many years . A second reason is the gradual shift of the production of industrial tomato paste from the south to the north. The companies in the South of the country have carried on or specialised in the production of tomato products in small packaging, directly intended for retail sales and more profitable.

Moreover, the industry in the North of the country seems to have achieved the necessary concentration which has led to the rise of ten or so major companies : the cooperatives C.I.O. (COPADOR, ARP, Consorzio Casalasco) and Conserve Italia, Solana, Columbus, Steriltom, F.lli Boschi (Parmalat), Rodolfi, STAR, I.A. Greci, Emiliana Conserve, etc. These firms are relatively specialised on some products (passata, diced tomatoes, sauces, etc.), on some types of services (co-packing, etc) or “tailored” production, depending less on the market variations (niche products, contracted production with given volumes and strict specifications,...).

ANNEE	Production de tomates transformées (1000 tonnes)	Evolution du volume transformé (index 100 en 78)	Evolution du volume transformé (en % AMITON)	Evolution du prix des tomates fraîches (US $/100kg bord champ)
1978/79	2 220	100%	40,00%	6,61
1979/80	3477	157%	50,60%	6,41
1980/81	2962	133%	44,10%	6,18
1981/82	3007	135%	45,60%	9,21
1982/83	3038	137%	45,70%	9,29
1983/84	4183	188%	51,10%	9,0
1984/85	5765	260%	54,10%	7,86
1985/86	3899	176%	44,60%	7,73
1986/87	2917	131%	48,20%	9,09
1987/88	2928	132%	46,60%	10,14
1988/89	3131	141%	44,90%	10,16
1989/90	3857	174%	42,50%	9,35
1990/91	3560	160%	40,40%	11,72
1991/92	3426	154%	41,90%	10,81
1992/93	3222	145%	44,20%	12,25
1993/94	3505	152%	46,40%	9,36
1994/95	3683	166%	41,40%	10,04
1995/96	3535	159%	37,60%	12,84
1996/97	4198	189%	37,90%	12,4
1997/98	3665	165%	42,90%	10,4
1998/99	4352	196%	39,60%	10,23
99/2000	4932	222%	40,10%	9,16
2000/01	4835	218%	44,18%	8,4
2001/02	4806	216%	46,78%	7,8
2002/03	4300	194%	55,08%	4,1
2003/04	4900	221%	56,10%	4,8
2004/05	6300	284%	55,08%	5,8
2005/06	5300	239%	60,70%	5,2
YEAR	Processing tomato production (1000 tonnes)	Evolution of the processed volume (index 100 in 1978)	Evolution of the processed volume (in % Amiton)	Evolution of price of fresh tomatoes (US $/100 kg)

Globally, the volumes processed in the South have remained stable over the last 10 years and the current distribution of the volumes results mainly from the increase of the volume processed in the North. As an example, one can mention the expansion of the volumes harvested in the Parma-Piacenza region which went from 700 000 tonnes in the 1990s to a peak of 3 million tonnes in 2004.

The total number of companies involved in tomato processing is around 200. The volumes of tomatoes processed in Italy remained stable throughout the 1990s at between 3.7 and 4 million tonnes. The 1999 processing season, with its historically high level, marked the turning point for the Italian industry, with a figure of 5 million tonnes reached for the first time. Since then, apart from the poor 2002 season, the average production has always remained around 5 million tonnes, with a peak production of 6.3 million tonnes in 2004 when an average yield of 72.7 MT. per hectare was reached for a total surface of 88 000 hectares.. The processing threshold allocated by EU remains 4.35 millions tonnes of fresh tomatoes and Italy is starting to get penalised by lower subsidies.