Potato – a world production, a European business

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SUMMARY

Potatoes are grown on all continents, in around 130 countries in the world and under a great variety of climates. Third most important food crop in the world after rice and wheat, over a billion people worldwide eat it. But, as far as trade is concerned, Europe leads the world exchanges of table potatoes and potato seeds.

A WORLD PRODUCTION

According to FAO (Food and Agricultural Organization), potato is currently grown on an estimated 18 million hectares, with a global production of 314 million tons (figures 2008). Asia and Europe are the two major potato growing areas.

1. Asia: 8.5 million ha, 131 million tons. China, the Indian subcontinent (Pakistan, Nepal and Bangladesh) and the countries of central and western Asia (southern CIS countries, Middle East) being the main growing zones.
2. Europe (as a geographical entity): over 6 million ha, 122 million tons. More than 2 million hectares are grown in the European Union, while 4 million hectares are cropped in the north-eastern zone including Russia, Ukraine and Belarus. While the EU represents only 34 % of the area, it represents 51 % of European crops. Respective shares of the Russia/Ukraine/Belarus zone are 62 % of area an only 47 % of crops.
3. Other potato growing zones: North and South America (1.5 million ha, 40 million tons in 2008, mainly industry crops), and Africa (2 million ha, 19 million tons, + 58 % since the beginning of the century, essentially in the sub-Saharan countries).

During the last 50 years, the growth of potato production is largely due to the extension of potato growing in developing countries: whereas developed countries represented 90 % of the world crop in the 60’s, their share is nowadays less than 50 % (figures FAO/CIP). These countries registered a decline in potato consumption (potato is no longer a staple commodity but is included in a diversified diet), as well as a decline in the use for fodder (especially in Eastern Europe countries). On the contrary, in Asia, Africa or Latin America, potato is more and more regarded as an alternative source of food, income and employment: growth of consumption, interest in processed potatoes.
According to the geographical and/or economic context, there are different types of potato growing:

- In Western Europe, North America, Australia, Japan potato crops are intensive and high yielding, thanks to the use of selected seeds (benefit of varietal innovation), quality inputs, advanced crop technology (including irrigation and storage);
- But, there is still a majority of countries, where potato is a traditional crop made by small family farms for subsistence: Eastern Europe, Asia, Andine countries, Africa. It means low yields, poor quality seeds, few phytosanitary treatments if any, no irrigation;
- In some cases, potato is a cash crop developed for export (new potatoes in the Mediterranean Basin) or for the supply of processing units.

**EUROPEAN LEADERSHIP ON INTERNATIONAL TRADE**

As a whole, international trade for table potatoes (imports and exports of ware potatoes + new potatoes) concerned 16 million tons in 2008, worth a sales value of 3.3 billion EUR. Europe is the main trading area, with around 75% in volume and value terms; the European Union making more than 90% of this share.

The strength of the European potato business relies on:

- A controlled production, leading to a regular and constant supply of quality tubers to the markets,
- The supply of products adapted to modern distribution, as well as to the requirements of the processing industry,
- Post-harvest infrastructures and highly efficient logistics which enable the export to a wide range of countries: intra-EU, Eastern Europe, Mediterranean countries, Middle-East, Africa, America, Asia.

Most of non-European trade is regional: supply of the American processing units by Canadian potatoes or exchanges between neighbouring countries in South America, Africa or Asia. But we must also keep in mind, that production is most often self-consumed. Finally, a special mention to the exports of new potatoes from Egypt, Israel or Morocco to the European markets from January to April/May.
International trade

Exports: a total of 8 million tons worth 1.6 billion EUR in 2008. Europe represents 76% of the exports in volume (75% to the sole credit of the European Union) and nearly 70% in value terms. France takes the lead of exporting countries, with 1.8 million tons in 2008, followed by Germany, the Netherlands, Belgium and Canada.

Imports: Belgium and the Netherlands are the main importing countries. For them, import is needed as a complementary supply for their local processing units, but also for their trading companies to re-export. Facing a decline of their own production, Spain and Italy are major European markets.

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Top five importing/exporting countries

POTATO SEEDS
According to FAO figures, the world production of potato seeds is estimated at 31 million tons in 2008. But most farmers still plant next season’s crop using part of last season’s crop, leading to the propagation of pests and diseases and poor yields. To improve the profitability of their crop, the growers need varieties with high yield potential and better resistance to pests and diseases.
European breeders are world leaders for potato selection. In the European Union, the propagation area is estimated at 110 000 hectares, of which 87 % are located in the 15 Western Europe countries. The Netherlands take the lead with 36 000 ha, followed by Germany (16 000 ha), France and Great Britain (15 000 ha each). In Eastern Europe, production of potato seeds is found in the first place in Poland (5 000 ha), the Czech Republic (4 000 ha) and in Romania (2 000 ha).

**Potato seeds production in EU 27**

![Pie chart showing potato seeds production in EU 27]

AMI

In 2008, international trade of potato seeds represented 2 million tons, worth 930 million EUR. Europe takes the lion share with 80%.

**International trade for potato seeds**

![Map showing international trade for potato seeds]

GTA

Exports: 1.2 million tons, 521 million EUR. The Netherlands are absolute leaders (55 % of total volume), exporting to over a hundred countries, with major varieties like Spunta, Agata or Desiree. Its strength is based on an ample supply (production + re-export), an efficient marketing policy and reliable logistics. But intensive cropping and short rotations leads to growing problems of pests and diseases. France takes the 2nd place, exporting a wide range of varieties, bringing quality certification and technical support. Its main exporting zones are the south of Europe (Spain, Portugal, Italy and
Greece), North Africa (Tunisia, Algeria, Egypt, Morocco) and Middle East. The United Kingdom, Germany, Denmark and Belgium are the other major exporting countries in Europe, developing their own varieties on specific strategies and privileged marketing areas.

Imports: major importing countries are located around the Mediterranean Basin: Algeria, Egypt, Spain and Italy. Markets are growing in Eastern Europe, where there is a will to develop a professional sector, but also in North Africa, to come along with the development of a processing industry.

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**CONCLUSION - CHALLENGES FOR TOMORROW**

The future of potato production and trade will depend on the ability of the sector to respond to the following challenges:

- The growth of the world population, which is a challenge of food security,
- The change in consumption patterns, with the growing demand worldwide for processed, ready-to-eat products,
- The climate changes which should bring motivation to adapt the product to new growing conditions (drought resistant varieties), and the need to find treatments filling the new environmental requirements,
- Resistance to pests and diseases, which is a current challenge,
- Developing storage to reduce the waste of production, regulate the marketing of the product and avoid low prices.