

GLOBAL RABBIT MEAT PRODUCTION WITH A SPECIAL FOCUS ON THE ROLE OF CHINA

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***Abstract:** The aim of this study was to draw a global view about rabbit meat production. The production and position in trade (domestic consumption, export, import, etc.) of the European countries were emphasized with a special focus on the Chinese production and its effect on the European market. From the range of market measures, the paper deals with the possibilities of geographical origin protection and the use of quality certification with labelling and trademarks.*

Key words: rabbit, meat production, production level, labelling, Chinese rabbit

INTRODUCTION

Rabbit meat is a healthy product with high nutritional value. Due to its dietary and nutritional properties (e.g. tender white meat, almost free of cholesterol) it can replace chicken in most of the cases. The frequent consumption of rabbit meat is highly recommended for pregnant women, children, and elderly people [4].

Rabbit can become a favourite because it could be produced very easy, environmentally-friendly on farms and also as backyard production. The problem of commercial rabbit and/or rabbit meat producers that the production costs are often very close to the income and little profit could be generated [12]. There are very big differences in rabbit production and consumption of rabbit meat in the countries of the world.

The main objective of this study was to depict a general overview of the rabbit meat production and trade with a special emphasis on the role of China and the use of trade marks.

MATERIALS AND METHODS

The work was based on interviews with Robert Jurasko, the president of the Hungarian Rabbit Product Council, discussion with Hungarian rabbit producers and on the international scientific literature of rabbit meat production, especially on the papers of Chinese authors of the World Rabbit Congresses. Data were obtained from the Rabbit Product Council and from FAOSTAT.

RESEARCH RESULTS

Rabbit production worldwide

The collection of proper production data of worldwide rabbit production and consumption is not easy, because the official data and the real situation in most of the countries far from each other. Lebas [9] made an estimation on the production of rabbit carcasses in the countries of the world (Figure 1). The main producers in 2009 were China, Italy, Spain and France. Data presented by FAO statistics also seem to have uncertainty.

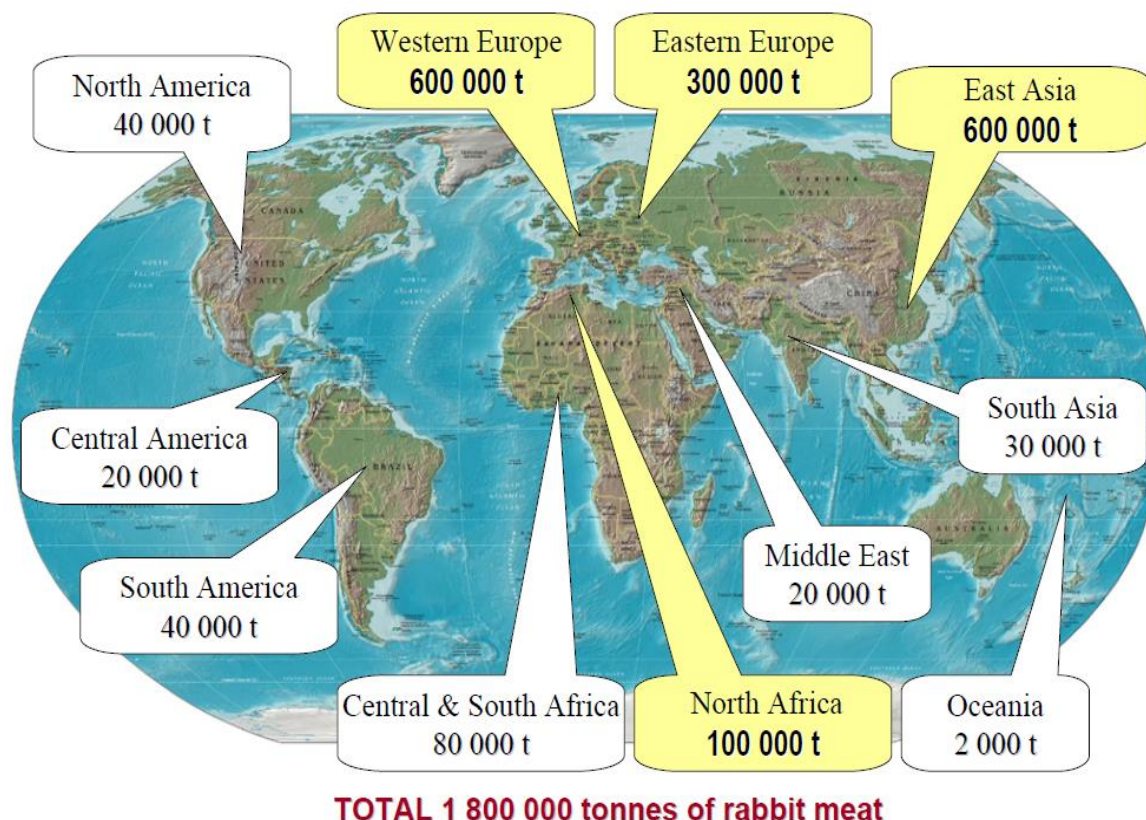


Figure 1: Rabbit meat production in the great regions of the World [9]

Very diverse production systems were found. In the developing countries usually low cost or traditional keeping is characterized. The intensive commercial rabbit production (cages and buildings, insemination, etc.) was spread from Europe to other part of the world, however nowadays the intensive methods are often criticized by the consumers of the economically developed countries.

Standardized slaughter weight could be found only in those countries where the fryers are slaughtered in abattoir and the consumers prefer a particular size of the carcass. The estimated slaughter rate is about 58% of the live weight of the animals. The presentation of carcasses differs traditionally country by country (e.g. with or without had and/or feet). More and more countries establish and develop a risk reduction system (initiated by FAO, WHO and of course by the consumers) of the supply chain. The Good Agriculture Practices, Good Manufacturing Practices [13], quality labels, trademarks and traceability are widespread first in Europe and in North-America. Certified quality labels are exist, such as: Label Rouge in France [6], Coniglio nostrale in Italy, Quality Controlled

Product of Hungary. Label Rouge and the other labels are not brands, but official stamps, they mean guarantee of quality, safety and hygiene (Figure 2) [1].

The rabbit meat production and trade shows great diversity. There are countries which produce rabbit meat [10], but due to the high domestic consumption they dependent on import. On the other hand some countries (e.g. Hungary) export almost all its production (Table 1) [14]. The rabbit consumption has a great variation. The French average consumption is cca. 3 kg/capita, while the Chinese or Hungarian inhabitants consume less than 100 g/capita. The highest amount of consumption is in Malta (approx. 9 kg/capita) [2] [8].



Figure 2: The sign of the French Label Rouge (left) and the Hungarian Quality Controlled Product (right)

After several food safety crises the European Union indited the low for feed and food traceability system (Regulation 178/2002/EC) [1], but there is an absence of species-specific legislation for rabbit despite that rabbit was the second most often farmed animal in the EU in 2014 [5].

Table 1

Rabbit and rabbit meat production and trade

	Rabbit meat production tons	Export head	Import head	Consumption g/capita	Price of meat USD/ton
World total	1,510,910	4,361,000	9,449,000		
Europe total	515,122	3,814,000	5,299,000		
China	735,000	2,000	3,909,000	69	951.7
Hungary	6,496	78,000	65,000	67	3,046.1

Source: FAOSTAT [17]

Rabbit production of China

China is the largest rabbit meat producer of the world [5]. 49% of the global production (2014: 499.3 million rabbits were slaughtered) was produced by Chinese farmers (Figure 3).

The Chinese rabbit industry has great achievements with the use of quality breeds, renewal of technologies and not to mention the importance of governmental support [7]. Rabbit industry also has a strategic role: rabbit raising provide enough meat and help to save feed grain in the same time [15].

China is a regular exporter (the yearly quantity is approx. 10-40,000 tons) of rabbit meat. The merchants observed the negative effect on the meat prices of this export on the European market. The price of the rabbit is much higher in Europe than in China (2009: 4,509 USD/ton in Germany vs. 952 USD/ton in China [2]). The exported meat is usually frozen, and the European consumers prefer pre-cooled goods and they have high welfare expectations. But nowadays the rabbit cuts and convenient food [11] also offered by Chinese processors beside the whole carcasses.

The preconditions were setup in China of a competitive and sustainable rabbit production system by the development of scientific research, the improvement of technology, new rabbit breeds and agricultural extension [16].



Figure 3: The share of rabbit production in China:

Estimated quantity 550,000 to 600,000 tonnes/year [9]

CONCLUSIONS

The available data of rabbit meat production is often estimated and not official. The global rabbit meat production is concentrated to Europe and Asia. The domestic rabbit consumption of the Western European countries and the Mediterranean area is higher than their production and they import it from those countries which produce more than their self consumption. Hungary export almost all of its own production. European consumers have high expectations on the quality of the meat, the traceability of the products and the circumstances of animal husbandry. More and more countries setup justificative label system as a guarantee of quality, safety and hygiene.

China has a great influence on the global rabbit meat production. In the last decades the rabbit farming and meat processing underwent on a spectacular development: selection of new breeds, technological improvement, governmental support, education and extension for farmers. The recognition of this progression was the possibility for China to organize the World Rabbit Congress in 2016.

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