

THE POSITION OF SMALL PRODUCERS IN THE HUNGARIAN RABBIT PRODUCTION

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Abstract

The role of small rabbit producers was studied in this paper. Interviews with farmers and with the president of the Hungarian Rabbit Production Board were carried out in the South Plain Region of Hungary. The number of small rabbit farms and backyard production was reduced dramatically after the EU accession of the country. The rabbit production was decreased with more than 20% in the last year. There was no homogenous rabbit stock and quality; several problems were with the feeding and keeping technologies. The foreign consumers demanded animal welfare standards. Due to the lack of traceability at small scale farms the Hungarian abattoirs stopped accepting rabbits from small producers. New market was found for the living rabbit of small producers in Czech Republic, or they can sell the rabbits on local markets. The size of the recommended stock is over 1000 breeding does. The profitability of small stocks is very low or often negative at the moment. There are two alternatives in front of the small farmers: development of the rabbit farming to an entrepreneurial size on one hand, or preserve the traditional way of rabbit husbandry and help the rise of home sales and local market on the other hand. There is a demand of the slaughterhouses for rabbits from large scale farms, but their number does not increase because of the unpredictable export possibilities and fluctuating prices.

Key words: rabbit production, small producers, heterogeneous technology, traceability, local market

The demand for healthy nutrition and, in turn, the need for healthy foods is showing a steady increase in developed countries in the world. Rabbit meat in many ways meets the requirement for meat to be low-fat, relatively rich in protein, easily digestible, and even targeted, to further enhance nutrient content with nutritionally important ingredients (Dalle Zotte A., Szendrő Zs., 2011). So it can be considered as a functional foodstuff that is important for health preservation. At the same time, the industry faces many problems. Thus, the rise in production was down, the solvency of the Russian market deteriorated, the stock was accumulated, the unleaded frozen rabbit meat increased. For this reason, the two slaughterhouses of the sector decided the reduction of own production. The Olivia Ltd. canceled the purchase from smaller producers from the 30th of June, 2016. Tetrabbit Ltd. has decided to reduce the price of the rabbit and the purchased quantity (Juráskó R., 2017). Both decisions made the situation of producers very difficult, as some of them made a substantial loan or created a breeding ground with young farmers' tender. The situation has forced many farmers of the sector to reduce their production or close down. The current crisis is further aggravated by the increasing "animal

welfare" pressure on the runner-ups, which cannot yet be seen in its solution and its expected challenges.

The present paper seeks to find out what factors pose challenges or decision constraints to supply chain operators in the product range of rabbit meat production.

MATERIAL AND METHOD

The collection of the primary data was carried out in the form of interviews with small-scale rabbit producers (n=18) and the chairman of the Rabbit Production Council. The secondary data are from the domestic and partly international literature and from the Annual Reports of the Rabbit Production Council.

RESULTS AND DISCUSSIONS

According to research by Spanish researchers (Baviera-Puig *et al.*, 2017) there are four main actors in the supply chain of rabbit meat production:

1. input suppliers,
2. producers,
3. slaughterhouses and cutting points,

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4. Distribution (Wholesale and Traditional Producer Sales Channels).

Entrepreneurial inputs

Breeding animals

Perhaps the first question is to be asked when preparing a business plan for the production: choose a rabbit breed or possibly a hybrid. Some of them have official breeding organization (*Table 1*). Both have advantages and disadvantages. Breeding breeds may be cheaper the replacement animals are produced from own breeding stock. Most of small farmers use this less productive way of stock

replacement. A hybrid has an intensive growth rate, excellent feed transformation and high prolificacy. On an intensive entrepreneurial farm, the rate of does'culling reaches 100-120%/year. Hybrids must be purchased from the breeding organization again and again. The latter solution is considerably costlier, but the specific body weight gain and feed transformation capacity of the hybrids are definitely better.

Small primary producers often use less common breeds as Californian, New Zealand White, Flemish Giant, Bouscat White, Chinchilla and mixed breed animals without character.

Table 1

Distribution of breeds and hybrids in the Hungarian farms (%)

Breeds and hybrids	2010	2011	2012	2013	2014	2015	2016
Debrecen White	4.5	4.6	3.9	3.0	3.2	2.8	1.1
Hycole	58.9	54.7	48.2	40.0	40.0	40.1	39.5
Hyla	2.8	2.2	1.9	1.0	0.9	0	0
Hyplus	2.0	1.0	0	0	0	0	0
Pannon White	30.5	36.0	44.4	47.0	46.9	48.1	50.3
Zika	1.3	1.5	1.7	9.0	9.0	9.0	8.5
Castor Rex	0	0	0	0	0	0	0.6
Total	100	100	100	100	100	100	100

Source: Juráskó, 2017

The national indigenous rabbit breed, the Hungarian Giant also became popular for extensive meat production, primarily in the smallholder farms. Their production is low, but they are eligible for support.

Fodder

The year 2016 was considered a relatively balanced and "good" year from rabbit feed. On the one hand, the balance is on a stable, sufficiently high-quality feed base, and on the other hand, from the middle of the year, with a decreasing tendency to feed price, which has slipped slightly to mid-2017. Fodder prices followed a downward trend (4-6%).

Thanks to the rate of decline, the rabbit farming had been able to work with one of the lowest prices on average over a few years! In the feed raw material market, similarly to previous years, the large price differences remained between the western and eastern part of the country. There is no great difference in quality. In the western part of the country, the price-driving effect of European exports remained.

Fodder costs currently share for 73-78% of total costs. The prices of bulk feed raw materials were on average around 76-85 HUF/kg, depending on the medication and the nutritional content. The cost of "medicines" (coccidiostats) depends on the combination of 8 to 15% of the price of the feed. In Hungary there are currently five feed companies

that produce large quantities of rabbit feed. The monthly cca. more than 95% of 2800-3200 tons of feed is produced by three companies. All of their production within the production is shown in *Table 2*.

Table 2

Distribution of pellet production for rabbits

Feed mill	%
Olivia Kft	42
Cargill Takarmány Zrt	35
Vaskút Feed Kft	19
Bonafarm Zrt	3
Agroszász Kft	1

source: Juráskó 2017

The smallest rabbitries often neglect the use of pelleted concentrates, because of their relatively high price. These producers use grains and hay and sometimes vegetable byproducts. This kind of rabbits were excluded from the buy up of abattoirs earlier.

Production and farm size

Today, about 50-60 large-scale rabbit farm exist in our country, producing 95% of the Hungarian rabbit population, while the remaining, and less than 5%, is represented by hundreds of small farmers. The estimated number of breeding does can be 100-110 thousand. The quantity

produced by them is processed by a total of two slaughterhouses and plants, one of which is located in Baja and the other in Lajosmizse. The European Union imposes strict requirements on food safety, one of its key issues being ensuring traceability (Cavani C., Petracchi M., 2004) - and the technology and hygiene standards of domestic processing plants are also high. The meat produced from the highest quality and ideal animal welfare conditions is also sought by the most delicate domestic and foreign markets.

The future is for larger entrepreneurial farms. Today a family can work successfully with 500 female animals, but the entrepreneurial size begins with 1500-2000 rabbit does. At the Baja company, which deals with both breeding and slaughter, livestock keepers - if they are willing to work with larger stock - can also get professional help. In their integration, they provide to the partners feed, genetics and housing technology. The chairman of the rabbit product council would like to see about 7 million slaughter animals produced by the domestic small and large producers against the current 4-4.5 million slaughter animals by 2020.

According to domestic legislation, a small-scale producer is a natural person who produces and sells small quantities of food directly to final customers and retail, catering and public catering establishments. "A small-scale producer may cut off poultry and rabbits that are raised and owned in his holding at the holding site." Pre-slaughter and post-mortem inspection are carried out by the official veterinarian or authorized veterinarian and issued by the veterinarian for placing meat on the market. Producer can slaughter and sell up to 50 rabbits a week (Géher, D.J., Kasza, Gy., 2013).

Slaughterhouse and processing

Domestic rabbits are processed in two slaughterhouses, Lajosmizse and Baja, at 50-50 percent, but the capacity utilization of slaughterhouses is only 50-60 percent. 65-70% of the rabbits are produced in large-scale farms, mainly in the area of the two slaughterhouses, but in Borsod-Abaúj-Zemplén, Szabolcs-Szatmár-Bereg, Hajdú-Bihar and Békés counties are also a few major rabbit farm. Some of the small producers sell their living animals to a Czech slaughterhouse. Due to the shrinking supply of slaughtering rabbits, the slaughterhouse at Lajosmizse is interested again in the small-scale rabbit, but the loss of production and confidence is difficult to reestablish.

Sales

In Hungary, the purchase of rabbit meat started in the 1960s and reached a peak of 20,000 tonnes of rabbit meat in 1991, which fell to 10,000 tonnes in 1994. Over the past decade, stagnation has slowed with slight fluctuations, but production has been increasing in recent years. In 2012 Hungary ranked 14th in the world rankings (6500 tons), 0.5% of the world's total production. As domestic consumption is extremely low, 3-4% of the rabbit meat is sold in the domestic market and 96-97% on foreign markets. In exports, only China, France and Belgium were ahead of Hungary in 2011. The trade balance of Hungarian rabbit meat is unique: there is no import; the second net exporter in the world. In 2011, Hungarian rabbit meat was mainly exported to Germany (25%), Italy (24%) and Switzerland (21%), while exports to Russia increased (11%).

In these areas, half or two-thirds of the total meat quantity was processed, cut, boned, packaged. More than 50% of Switzerland imports rabbit meat from Hungary. In addition to encouraging domestic consumption through community marketing, Hungarian rabbit meat production and export could be boosted by the retention and expansion of existing markets and the acquisition of new markets. From the point of view of the Swiss market, the most important is the housing technology that is in line with animal welfare standards (Szendró K., 2015).

Domestic consumption

The annual rabbit consumption per person is only 200 grams in Hungary, which we would like to increase to at least half a kilogram. Minimal growth is experienced because more and more multi supermarket chains offer rabbit meat, and the product is also appearing in smaller stores in more and more places. The real level of consumption is probably higher than the official statistic data, because a lot of consumers buy rabbit or rabbit carcass directly from the small producers. A consumer incentive and awareness raising campaign on rabbit meat consumption launched by the Rabbit Product Council in cooperation with the Agrarian Marketing Center and the Ministry of Agriculture in June 2017. The main forms of the consumption promotion campaign were food tasting, show cooking and published books of recipes.

The pre-packaged rabbit meat sales increased by 6% during the promotional period although this type of meat is less common in the Hungarian cuisine.

CONCLUSIONS

The sector has been hampered by a number of obstacles to increase the current volume of rabbit meat production. Small producers are facing with two possibilities in the future:

1. develop the production to an entrepreneurial level (farms with more than 1000 rabbit does), or
2. remaining small farmers, operating traditional/extensive rabbitries, and produce living rabbit and/or rabbit meat to a local market as “small producers” by the legal regulation.

Entrepreneurial activity has to produce with thousands of rabbit does, which under the current circumstances (uncertainties in exports) are very risky in spite of the support system of the rabbit production. On the other hand, the small producer status ensures an income which means only part time job.

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