CRITICAL POINTS UPON PIGMEAT CHAIN IN ROMANIA

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Abstract: *The analysis of pigmeat sector in Romania has in view a detailed description of the chain, which implies both the identification of relations between the players on this chain and the estimation of the quantities of products - live animals, carcass meat and processed products - that circulate among these. When describing the pork chain in Romania the advantages and disadvantages of the bipolar structure of the livestock sector is presented. The paper tries to identify certain answers to the challenges of increase the competitiveness of pig farming sector and to formulate certain agricultural and food policy recommendation that results in reaching the desideration to ensure raw products from domestic sources.*

***Key words**: pigmeat chain, pig farming, pork self-sufficiency*

INTRODUCTION

The analysis of an agricultural production sub-sector based on the chain concept reveals the linkages between its different levels, from the producers of raw products to the final consumer. The typical organization of a chain for animal products comprises the following stages: feed preparation, stock raising, slaughtering, meat processing, distribution of meat and meat preparations. Chain operation presupposes the existence of formal links between the enterprises that operate along the chain, regardless if these links are materialized into the vertical integration of different units (within firms or units of holding type) or by direct contracts concluded between the players in the chain (or contracts intermediated by other institutions, such as the commodity exchanges).

MATERIALS AND METHODS

The SWOT analysis is a diagnosis tool that can be used in the ex-ante evaluation so as to ensure that an intervention strategy is developed on the basis of a comprehensive, structured and transparent analysis. A SWOT analysis identifies the strengths and weaknesses of a region, sector or organization and evaluates the opportunities and threats involved. This type of analysis is usually based on previous documents (evaluations, studies, etc.), statistical data sources and key-informant interviews. The main goals of the instrument are: to highlight the prevailing and determining factors, both within and outside the territory, susceptible to influence the success of the project / program; to produce the relevant strategic orientations by correlating the project with its environment.

RESEARCH RESULTS

One of the most detailed SWOT analyses of the pork sub-sector in Romania was performed in the year 2003 under an institutional twinning program of the Ministry of Agriculture [1], dedicated to the preparation of the accession to the EU. The analysis was made by different stages of the agri-food chain, i.e. the production of small family farms, the production of large commercial farms, the slaughtering and meat processing sector and the distribution of pork and pork preparations. The main strength at that moment was the existence of a large-sized commercial sector, represented by about 60 integrated enterprises from production to slaughtering and processing. Among the many weaknesses of that period, it is worth mentioning those that have been subsequently solved up: low technical performance, poor feed quality, waste management on the intensive farms, and heterogeneity of carcass quality. The opportunities linked to the improvement of sub-sector competitiveness were identified as being represented by the improvement of genetics, of feeding and by the introduction of carcass classification system, opportunities that were subsequently fructified, with the support provided by the programs with EU funding (Sapard and NRDP 2007-2013) inclusively.

The SWOT analysis of the Romanian agricultural sector from NRDP 2007-2013 [2] also included elements from the pork sub-sector, namely those referring to the programs implementing the animal welfare measures and those referring to the food industry. As regards animal welfare, the weaknesses mentioned in the analysis were the high costs associated to meeting certain higher animal welfare standards, and the threats were the increasing pressures upon the environment following the intensification of pig raising activity. The analysis of food industry mentioned as weaknesses the existence of a large number of small processing enterprises with low technical and economic performance and low conformity with the EU norms (subsequently many of these enterprises stopped their activity), and as threats the risk of not having access to quality raw products and the competition with meat preparations coming from other countries. It seems that through investments with NRDP 2007-2013 support, these threats were dissipated, even though the solution was only partial (namely imports of raw meat for processing) [5]. Under the project NRDP 2014-2020 there are not many references to the pork sub-sector, but the existence of the food safety system is mentioned as a strength, while the diminution of pig herds is mentioned as a weakness.

The situation of the pork sub-sector in Romania, starting from the duality of agricultural production, imposes to take into consideration the production for self-consumption as well, even though this has been under a slow decline following the accession to the EU [4]. However, the analysis of a chain mainly presupposes the identification of commercial players and of the links between them [3]. In the case of pork, we mean the enterprises that form the industrial production system of pork and pork preparations, represented by the Pork Interprofessional Organization, consisting of the Association of Romanian Pork Producers and the Romanian Meat Association.

Feed preparation. In Romania, the combined feed production is estimated at 2.5-3 million tons, which in the year 2013 was obtained on 122 enterprises that produced feed preparations for farm animals, out of which 77 enterprises with 0-9 employees and only one with more than 250 employees. The main 50 players, the production of which amounts to almost half of the national production, are represented by the Association of Combined Feed Manufacturers which includes both the pig feed producers and the poultry feed producers. Most enterprises are integrated into holdings that have livestock farms, estimating that about 70% of production is obtained under an integrated system. A vulnerability of this activity is represented by the share of 85-90 % of the soybean oilcake imports in the necessary quality proteins for producing the combined feeds.

Pig raising. The share of pig herds on the individual household farms decreased from 78% in the year 2008 to 67.5% in 2013 (out of 5.18 million heads) remaining at quite a high level compared to other EU member states, mainly due to the peasant household farms with 1-2 heads, the production of which goes to self-consumption. The share of meat obtained on the individual household farms in total meat production was 51.3% (out of 546 thousand liveweight tons) in the year 2013. The number of pig raising companies amounted to 426 in the year 2013, 357 falling in the category 0-9 employees and only one with more than 250 employees. The Association of Romanian Pork Producers is the main professional organization that represents the interests of industrial pig farmers, with more than 100 members, and their contribution to pork production was estimated at about 45% of the national production. In order to cover the need of live pigs, (mainly fattening piglets but also pigs for slaughtering), the imports reached 98.6 million euro (while the exports of live pigs reached only 1.2 million euro). The piglet deficit, resulting from the undersized reproduction farms, is mainly covered by the imports from Hungary, Netherlands and Germany (in 2013 the imports totalled 878 thousand piglet heads, worth 61.1 million euro).

Pig slaughtering. The total production of slaughtered pigs in Romania was estimated at 421 thousand tons carcass meat in the year 2013, out of which 26.8% was obtained from animals slaughtered outside the slaughtering units. The pork production obtained in the specialized units steadily increased in the period 2009-2013, from 222 thousand tons to 308 thousand tons carcass weight. The number of enterprises specialized in meat production and preservation (poultry meat excluded) totaled 427 in 2013, with 244 small units (class 0-9 employees) and 19 very large units (class over 250 employees). The pigs slaughtered outside the slaughtering units are directly consumed on the population's households, and the largest part of meat production from slaughterhouses is also consumed by the population under the form of fresh meat. Thus, in order to cover the processing needs, pork imports are used (worth 277 million euro in 2013, versus exports worth only 33.4 million euro), which represent, according to estimations, about 70 % of the necessary pork meat of the processing industry.

Pork processing. The production of meat preparations was obtained on 317 enterprises in the year 2013 (these mainly used pork and poultry meat), out of which 153 small-sized (with 0-9 employees) and 22 very large-sized (more than 250 employees). According to the estimates of the Romanian Meat Association, the professional organization that brings together the most important meat producers, about 95 % of the cold cuts that are sold on the Romanian market are domestic products. The situation of foreign trade for this commodity group (sausages and salami) reveals a surplus for the year 2013 (imports worth 26.78 million euro and exports worth 36.0 million euro). The share of the members of the Romanian Meat Association in the meat processing industry amounts to about 50% of production. The Association's directions of action are narrowing the technological gap between the Romanian producers and those from the other EU member states and introduction of a performant management system on the processing units. At the same time, more and more processors tend to develop their own chain store networks (the Association's members estimate that they sell 16.7% of pork and pork preparations).

Distribution of meat and meat preparations. The meat and meat preparations are sold through specialized meat stores (44210 retail units) or by retail sales through stands, kiosks and markets (1404 units in 2012). On the other hand, there is an expansion of international retail chains to the detriment of the small food shops. In these international retail chains, pork represents 35% of the value of refrigerated meat sales.

Human pork consumption. The yearly average consumption of pork and pork preparations per capita reached a maximum value in the year 2008 (33 kg in fresh meat equivalent), and a gradual decrease followed until 2012 (27.9 kg in fresh meat equivalent). While in the year 2008 the self-sufficiency in pork (the extent to which the domestic production covers the domestic consumption needs) was 62.6%, in 2012 this was up to 71.6%. However, it is not expected that this indicator will rise fast in the next period, considering the difficulties that the pork sub-sector is facing, including the international conjuncture (the embargo imposed by Russia, which makes the competition inside the European Single Market grow stronger).

CONCLUSIONS

Based on the above description of critical points of pigmeat chain in Romania a current situation of the strengths and weaknesses, as of the opportunities and threats, is presented in Figure 1.

Strengths	**Weaknesses**
• Availability of agricultural land areas for obtaining raw products at low costs • Limited pressures from the perspective of environment protection • Many large-sized enterprises are vertically integrated having their own distribution channels • A traditional pork-consumer national market	• A certain frailty of the sanitary-veterinary situation • Low labour productivity • Quasi-absence of an advisory structure addressed to small producers
Opportunities	**Threats**
• Utilization of EU funds (rural development program) for the modernization of farms and meat processing enterprises • Access to Western livestock genetics • Perspective of meat consumption increase with resuming economic growth	• Meat imports that hinder the development of pig farms • Competition increase on the European Single Market • Volatility of agricultural prices

Figure 1. SWOT analysis of pigmeat chain in Romania

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