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FOOD INDUSTRY - ECONOMIC CATEGORIES AND PROCESSES SPECIFIC TO THE SECONDARY SECTOR

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Abstract:
This paper explores the approach of the agri-food industry sector, in the context of the manufacturing industries within the national economy. At present, four categories of agri-food industries can be distinguished: the industries that transform/process and cure perishable goods, the agri-food industries in the beverage sector (alcohol, tonic or natural drinks), the grain-processing industries and intermediate products industries. The analysis of this sector, which is a complex apparatus in terms of processing, distribution, marketing, etc., reveals the special relationships that structure them, and we can practically observe that the Romanian food industry is characterized by a relatively low productivity, by manufacturing technologies that are not among the most modern ones (obviously, there are companies that make an exception), as well as by a certain incompatibility with the market demand. Certainly, the revival of the food industry is still dependent on the increased competitiveness of products and, on the other hand, by the establishment of new processing units in rural areas.

Key words: agri-food sector, transformation industries, successive processing, the Romanian food industry, favoring factors.

JEL classification: Q1,L00, A1

1. INTRODUCTION

The food industry is one of the most dynamic and important industries in Europe, including over 300 thousand companies. About 4 million people carry on their activities here, and the turnover reaches approx. 1 billion euros (CE, 2011).

Although at the European level the food industry is a massive exporter of competitive finished goods marketed on the global market, it is thought that the need for improvement is felt nowadays. The reasons are related to bureaucratic elements, financing deficit, problematic supply of raw materials, R & D gaps.

It should be added that, at present, the sector in question faces multiple issues stemming from: the need to ensure sustainable development/ growth, the current environmental regulations, health requirements, economic and financial constraints, etc. All of this is meant to influence the consumer - in the end, the demand, in quantitative, qualitative and structural terms. We also highlight this issue, pursuant to a series of papers from the literature (Popescu et al., 2009; Dospinescu, 2018; Todua, 2017; Burciu et al., 2008; Bostan, 2016, 2017; Stanciu et al., 2010; Spatariu et al., 2011).

The issues that should be solved by the European Commission (as the EU's desire is to play a more important part on the world market) need legal solutions to promote access to foreign food industry markets in the EU Member States.

2. INTEGRATING FOOD INDUSTRY AMONG THE PROCESSING INDUSTRY BRANCHES OF THE NATIONAL ECONOMY

Structuring the national economy in branches, sub-sectors, sectors, etc. (Lămătic, 2001) allows us to integrate the food industry as part of the processing industries within a country's economic system, whose social and economic role is to produce food, meeting the population's feeding needs.

Between the producer and the consumer, excluding direct sale, there are many economic agents and a variety of operations that transform/ process the agricultural product and make it available to the consumer (Constantin, 2000). The analysis of this ensemble, which involves the transformation/ processing, distribution and marketing apparatus, reveals the complexity of the relationships that structure them: trust, complementarity, solidarity; however, the tensions that can be explained by competition are not excluded, with the tendency to seize as much of the specific market as possible.

Processing industries have a relative functionality in relation to agriculture: they supply from national markets and from other international markets through imports. The features of agri-food industries result from their connections with agriculture (Gavrilescu & Giurca, 2000):

- agri-food industries process biological products, being thus difficult to automate the production processes;
- they subscribe to the same qualitative and quantitative variations, but there is also the import possibility;
- their supply depends on many exploiters, even when they are grouped;
- there is a clear dependence on the type of agricultural policy: subsidizing, supporting certain products or limiting production, etc.

However, no matter what kind of products the agri-food industries processes, the final product is food. This is a perishable good, its manufacture and conservation requiring special attention. The explanation is related to the fact that the occurrence of errors can have serious implications for the people's health.

3. PROCESSING, DISTRIBUTION AND MARKETING WITHIN AGRI-FOOD CHAINS

Within agri-food chains, the processing, distribution and marketing chain is a whole, an ensemble, dominated by well-founded rules and interactions (Dona, 2000).

By *processing,* we understand all the operations that contribute to the substantial change of an initial product. The simplest example is represented by turning wheat into flour and then into various products: bread, biscuits, other pastries, etc.

Once carried out by the farmers themselves, these processing operations have become more complex, on the one hand, because of their increasing quantities, and on the other hand, due to the technological advancement that explains the presence of specialists. Although several processing operations have been known since the beginning of the 20th century, i.e. distillation, drying, grinding, we can really speak about agri-food industries only after the 1960s.

From now on, the increasing mechanization, automation and continuity of production processes have required supply regularization, so as not to interrupt the manufacturing process. This regularization takes first the form of deliveries and then continues through the selection of agricultural raw materials adapted to large-scale production processes.

At present, four categories of agri-food industries can be distinguished: industries that process/transform and cure perishable products, beverage agri-food industries, such as alcohol, tonic or natural beverage industries, grain processing industries and intermediate products industries.

Classification of agri-food industries (UNIGRAIS, 2011)

● ***Group 1****. Basic food industries: animal and poultry butcheries, dairy industry, animal feed industry, oil and raw fats. These industries are characterized by the fact that they use a lot of employees and, at the same time, they add little value.*

● ***Group 2****. Highly industrialized basic food industries: malt, semolina, sugar factories. These are characterized by important investments that have allowed them to purchase highly sophisticated equipment. They add more value than Group 1 products, but they also produce intermediate products.*

● ***Group 3****. Food industries of elaborated products: preserving, freezing, pastry, industrial sweets etc. They ensure the production of agri-food goods for consumers. Their added value is important, but it varies in terms of specialties.*

● ***Group 4****. Auxiliary food industries: spices and sauces, condiments, fruit and vegetable juices. They develop because of strong publicity and innovation, with a good profitability level.*

Source: http://www.unigrains.fr/

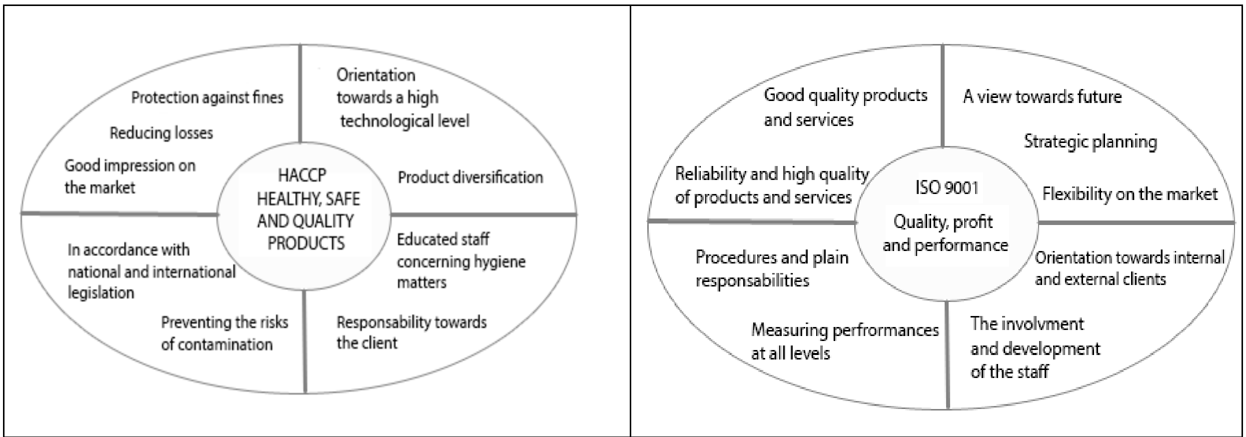
Looking ahead, the evolution of processing operations is strongly related to technology and biotechnology. It is not difficult to notice that agri-food industries have stretched their activities along three axes (Dona, 2000):

✓ Diversification of consumption products: foods containing more and more additives: iron, magnesium, selenium, lysine, intended to enrich the taste or to make it better; others are destined to reduction, i.e. less sugar and fewer fatty substances.

✓ Market segmentation with the creation of children's food, regimes for diabetics or athletes.

✓ Developments in industrial processing. Examples: aromatic and medicinal herbs, products obtained by separating the constituents of the agricultural product: starch, casein, cellulose, glucose, ethanol.

In economically developed countries, the concentration of agri-food industries has allowed the practice of scale economies, cost reductions, widening markets and reducing competition. In this case, at the level of companies, modern managerial and control systems were introduced. (Figure 1).



a) Food industry – HACCP	*b) Quality - ISO 9001*

Figure 1. Managerial systems customized to support the performance of agri-food companies

Source: http://www.tqs.ro/index.php?module

After Romania's accession to the European Union, these systems have also gained some scope among the Romanian processors working in the analyzed sector.

4. ECONOMIC FEATURES OF THE ROMANIAN FOOD INDUSTRY

At the national level, the volume of processed agricultural goods has been declining since 1990 (the food industry represents 27% of its value - Nitulescu, 2016), especially in the dairy sector, which is explained by the decrease in the domestic demand, the decrease in the competitiveness of Romanian products, as well as by the decrease in the supply of the agricultural products destined to processing.

Throughout the transition period from the centralized economy to the market economy, we dealt with the decapitalization of units, the technological deterioration and the misunderstanding of the importance of privatization, which was carried out with a long delay.

Nowadays, the Romanian food industry is characterized by low productivity, obsolete manufacturing technologies as well as by incompatibility with the market demand. This has happened despite the fact that the official statistical data reveal that the food industry represents an important traditional branch of the Romanian processing industry, covering a significant segment of the GDP (MADR, 2010, Tudor, 2010), being among the largest manufacturing sectors in Romania – with a turnover of 9.7 billion euros; it is the most important employer – with 186 thousand employees (MADR, 2015). There are 50 domineering large companies, accounting for less than 1% of approx. 8,400 companies that are active in this field. These 50 companies achieve over 40% of the Romanian food production and get a profit of over 4 billion euros (Nitulescu, 2016).

The sector in question still faces several shortcomings in terms of compliance with the EU requirements/ standards, regarding food safety and quality throughout chain linking/ agri-food entities.

We recall that "modern chains of agri-food products have developed rapidly over the past decade due to the major investments facilitated by pre-accession programs and by NRDP 2007-2013, but also by foreign investors. In addition, large investments made by foreign retailers in supermarkets (...) have provided more market opportunities" (MADR, 2015).

In this respect, there is also an unwanted but expected consequence: small-scale processing entities did not meet the new requirements (the high prices of raw materials, demanding European standards, high investment requirements, etc.), being forced to terminate their activity.

However, if we only refer to the processing industry for animal products, it has been functioning for a relatively long period, under its capacity (**Table 1**).

Table 1. Capacity and degree of using processing units for animal products

Type of processing units	*No*	*Total capacity (t/year)*	*% use*
milk and dairy products	253	4244040	50
beef, pig and poultry abattoirs	183	1538842	43,1
processing units for meat and meat products	731	944327	47
processing units for canned meat and mixed canned meat and vegetables	16	63373	25,3

Source: http://www.madr.ro/docs/agricultura/strategia-agroalimentara-2020-2030.pdf

The modernization tendency must be maintained in the future, so that in 2030, the entities will have the modern technologies found in the most advanced European states. The revitalization of the food industry is dependent on increasing the competitiveness of these products and on the other hand, on the creation of new processing units in rural areas.

5. FACTORS INFLUENCING THE ROMANIAN FOOD INDUSTRY

To a large extent, the difficulties faced by the food industry come from the competition – which presents disloyalty aspects – on the Romanian market, with imported products. The latter, among others, are strongly subsidized by their home states.

The factors acting on the Romanian food industry are divided into two categories: those that favor development and others that hinder the development of this sector (Constantin, 2000 Dona, 2000 Gavrilescu & Giurcă, 2000). It is well-known that Romania has got good experience in the export of agri-food products, noticed since the first half of the last century, and which continued during the socialism years.

As far as the first category of factors that influence the sector are concerned, we mainly take into consideration the agricultural potential based on soil fertility and climatic conditions; we should also mention that it is still far from being capitalized. Then, it is necessary to take into account the industrial transformations and regressions, which – even since the transition period of the Romanian economy – made a considerable number of people to return to rural areas. Against this background, the macro-decision factor had to concentrate the resources on the stimulation of agriculture.

As far as the second category of factors is concerned – which affect the development of the food industry – we should mention the relatively modest purchasing power of the population. It is difficult to improve this factor in the short term; its action is particularly evident when it comes to decreasing food consumption, including meat and meat products. For example, in Romania, the average monthly consumption of fresh meat per person was 3.4 kg in 2016 and only together with meat products it amounted to 4.5 kg per month. This results in an average annual consumption of 54 kg per person, but it is well below the standards in developed countries (Andrei et al., 2017).

It is also worth highlighting the subcategory of factors related to financial, tax and credit issues. Thus, during certain periods, taxation was quite high; some improvement in this respect occurred after 2015, being connected to the emergence of the New Fiscal Code (PR, 2015). On the other hand, the lack of credit limits the development and retechnologization possibilities of the sector in question.

We should also add to all these the constant amendment of the legislation, given that new regulations emerge frequently, increasing the entrepreneurs' uncertainty in the Romanian food industry.

It is noteworthy that when the macro-decision makers have determined that in about 10 years "Romania will have a sustainable and competitive agri-food sector centered on the export of products with high added value, resistant to global challenges, ensuring well-being and living conditions in rural areas close to those in the urban area", some strengths of the sector were considered (MADR, 2015).

These include the following (Agrointel, 2014):

- ✓ Significantly large agricultural areas with a high share of arable land;
- ✓ High potential for the diversification of crops;
- ✓ Extensive areas favorable to agricultural production (favorable climatic conditions and fertile soil);
- ✓ Satisfactory water resources;
- ✓ Available local workforce;
- ✓ Diversity of natural resources and local products;
- ✓ A wide range of traditional products, etc.

Concerning the set of opportunities in the field (MADR, 2015), we mention those related to the increase in the demand for agri-food products, the fact that the bio-organic production has favorable development prospects and the growing demand for qualitative local and regional products. In the same context, it is worth highlighting the intensification of agritourism and the emergence of young agricultural entrepreneurs.

6. CONCLUSION

Included among the processing industries of the national economy and producing goods to meet the population's feeding needs, the food industry is of particular importance to researchers.

A sector of this type (transformation/ processing industries) has a relative function in relation to agriculture, supplying itself on national markets and on other international markets through imports. An analysis of the food industry, which is a huge and complex apparatus for transformation/ processing, distribution, marketing, etc., reveals its relationships that involve trust, complementarity, solidarity. At the same time, the sector under discussion implies tensions, explained by the continuous competition, the entities aiming at the domination of an increasingly larger part of the market.

Nowadays, the Romanian food industry is still characterized by relatively low productivity, manufacturing technologies that are not among the most modern ones (obviously, there are also companies that make an exception), as well as by a certain incompatibility with the market demand.

The explanation implies the knowledge of what happened after the abandonment of the centralized economic system. Since 1990, the volume of processed agricultural products has been characterized by a downward trend, especially in the dairy sector, with a fall in domestic demand, diminishing the competitiveness of Romanian products, and decreasing the supply of agricultural products destined for processing. Thus, this triggered the decapitalization of units, the technological deterioration and the misunderstanding of the importance of privatization, which took place with a lot of delay in some branches.

In our opinion, the revival of the food industry is dependent on increasing the competitiveness of specific products and, on the other hand, on the creation of new processing units in rural areas. Among the measures that need to be applied to counteract the observed trend, we can highlight, in addition to improving the mechanism at the purchase price of the products underlying the food industry, the use of tools that do not necessarily involve budget allocations, such as associations, better organization, processors' integration etc.

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