

## Certification of Agri-Food Products for Sale

Cristina M. STERIE

The Bucharest University of Economic Studies, Bucharest, Romania  
steriemaria94@gmail.com

Daniela POPA

The Bucharest University of Economic Studies, Bucharest, Romania  
daniela.popa63@gmail.com

Marian MOTOFEANU

The Bucharest University of Economic Studies, Bucharest, Romania  
marian.motofeanu@gmail.com

Dalila G. STOICA

The Bucharest University of Economic Studies, Bucharest, Romania  
stoicagabriela@yahoo.com

Correspondence should be addressed to: Cristina M. STERIE; steriemaria94@gmail.com

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### Abstract

The certification of agri-food products represents the commitment of the producers to ensure the quality of the product, the process offering a superior character to all the attributes of the product. The main feature of certified products is the quality, which is reflected both by raw materials, the production chain, and by the finished product that aims to meet consumer expectations, providing the maximum guarantee of product safety. The products must be certified to be marketed with the quality marks that consumers trust. Recently, Romania has allocated significant funding for Romanian products to be included in one or more quality schemes to increase their notoriety. The aim of the research is to identify the perception of Romanian consumers regarding these products, but especially if this type of product influences their decision to purchase certified agri-food products, to the detriment of the usual ones. The results obtained from the use of the survey method based on the questionnaire, indicate a degree of confusion regarding food quality schemes, a share of over 44% of respondents consider that these quality schemes are profitable for consumers, in time what 43% of them consider to be beneficial for consumers.

**Keywords:** Certification, Marketing, Agri-Food, Romania.

### Introduction

In a research study by Stanciu (2013), the associated certification of trust between producer and consumer, giving the consumer confirmation on the quality and safety of the product.

According to Radulescu (2013), certification and standardization are two mutually complementary processes, being very important for both producers and consumers.

Chiciudean (2014) mentioned that the quality certification label is the main source of information in the consumer purchasing process and helps them to easily identify and recognize organic products, in order to subsequently contribute to consumer purchasing behavior.

Hanning mentioned that certification of the quality and benefits of non-monetary and qualitative elements resulting from the adequate provision of the quality of products and services, respectively, creating an environment for obtaining safe products.

Quality certification systems give consumers the confidence to consume and repurchase the product, providing the necessary information through labels, ingredients and nutritional values. The differentiation of the products on the market is made both by the certification logo and the "quality" aspect, being an important element of marketing, thus the certification systems contribute to the consumers' attitude regarding the purchasing decision.

Certified mountain products can be marketing strategies that can increase the added value of products, and can improve the product promotion strategy, being similar to Geographic Indication certified products. Mountain products, by their name, include the term quality, which should not disappoint.

Ecologically certified products must contain organic ingredients, in a proportion of 95%, the remaining 5% must meet the conditions imposed by law on the rules established by the European Union.

The challenges encountered in Romania regarding the certification of organic products are the compensatory payments, as well as the method of protection against genetically modified organisms (GMOs).

Drăgoi et al (2018) mentioned that food security requires global understanding, providing sufficient resources to the population in a modern way. The volatile behavior determined by the agri-food production, determines an instability of the prices that is closely related to the quality of the products and the confidence of the consumers.

The aim of the research is to identify the perception of Romanian consumers regarding these products, but especially if this type of product influences their decision to purchase certified agri-food products, to the detriment of the usual ones.

## **Material and Method**

In order to identify the degree of knowledge of quality schemes among consumers, a questionnaire was applied among the inhabitants of Bucharest in the number of 2.3 million, on a sample of 392 people. The questionnaire applied among them consisted of 11 relevant questions and was applied in electronic format between 23.04-22.05.2021.

The time to complete a questionnaire was on average 15 minutes, and was done in such a way that the respondent did not leave to complete the questionnaire before the end (relatively low number of questions). The determination of the intervals related to the respondents' incomes was determined on the basis of the minimum net income per economy (approximately 262.6 euros) and the average net income per economy (approximately 686.86 euros).

### **Working hypotheses:**

- I1 - the price is the basis for the decision to purchase agri-food products,
- I2 - the degree of knowledge of quality schemes, among Romanian consumers, is relatively low
- I3 - Food certification is beneficial for the consumer
- I4 - consumers are not willing to pay more for certified food.

### **Limitations:**

- Being a questionnaire applied online, the respondents of the survey do not reflect the exact situation of the degree of schooling, as those without knowledge of operating a computer, could not answer the questionnaire.
- There is a possibility that respondents may confuse food certification, in the sense that a product bought on the market is not necessarily traditional.

The collected data were processed using the Excel 2019 program, with the help of which the Pearson and Cramer correlation coefficients were determined.

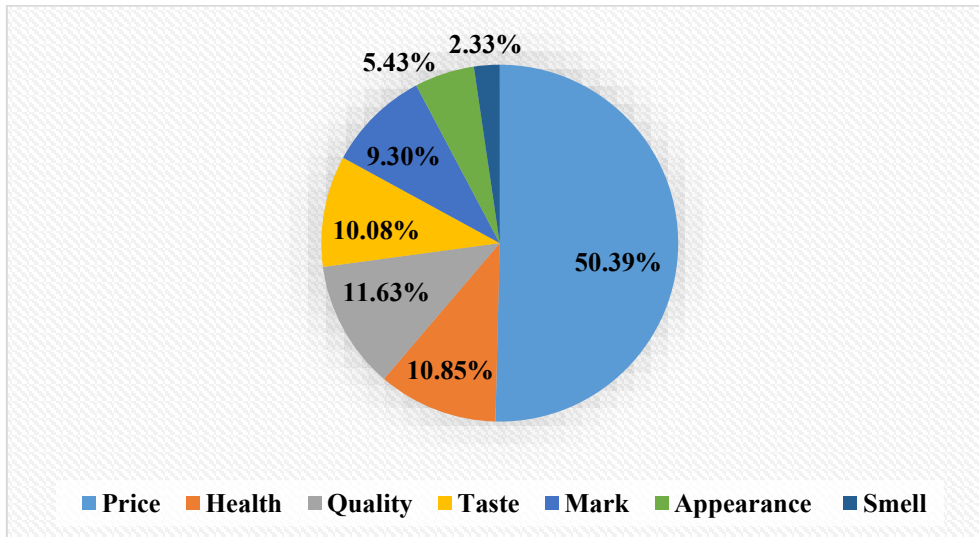
According to author Keith McCormick, in the book entitled "SPSS Statistics", the absolute size of the Pearson coefficient indicates the strength of the link that appears between the variables, as follows:

- $R < 0.3$  – poor bond
- $R$  between  $0.3 - 0.5$  – average connection
- $R > 0.5$  – strong connection

## Results and Discussions

This paper will address the most relevant questions and answers in the questionnaire.

Analyzing the structure of respondents according to the main criterion influencing the decision to purchase food, over 50% of the sell price is a decisive criterion in the decision to purchase food, 11.63% of respondents consider quality as the next criterion of acquisition, and the taste ranks third with a share of 10.08% (Fig 1).



**Fig. 1. Structure of respondents according to the main criterion influencing their decision to purchase a food**

Source: Results processed according to own questionnaire.

At the opposite pole are the respondents who consider health (10.85%) a criterion for purchasing food, those who buy according to taste have a share of 10.18%, those who buy according to brand (9.3%) and those who purchase according to appearance (5.43%) (Figure 1).

Analyzing the structure of respondents on the purchase of certified organic food, we note that 41.86% of them rarely buy, 21.71% buy frequently, 17.83% buy very frequently, and 18.6% say they did not buy never such products.

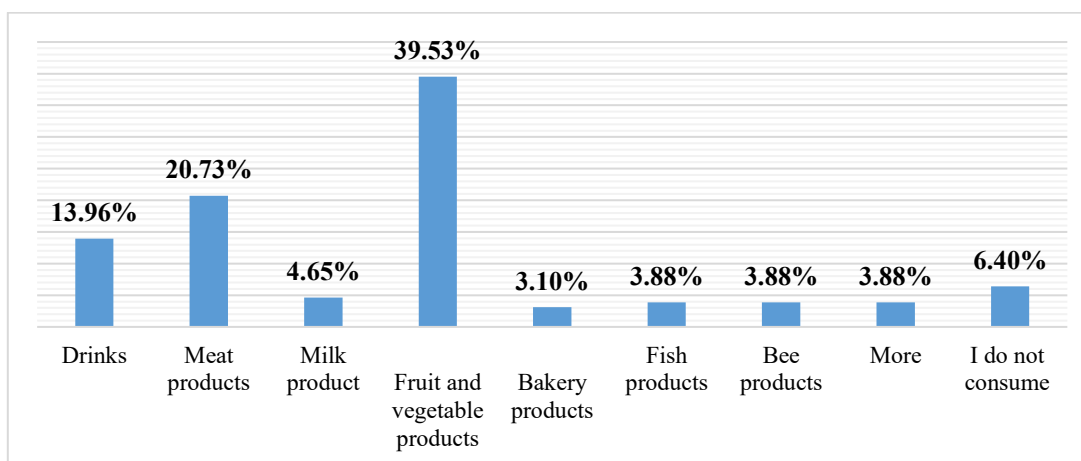
Regarding consumers who buy traditional food, 31.01% state that they buy frequently, in the same proportion of 31.01% of people state that they have never purchased such products, while 24.03% buy rarely such certified products (Table no 1.).

**Table 1: Evolution of the resident population from the rural area in the South-Muntenia region, classified according to the counties in the composition**

Category	Frequency %			
	Very frequently	Frequently	Rarely	Never
Ecologically certified product	17.83%	21.71%	41.86%	18.6%
Mountain product	5.43%	15.5%	20.93%	58.14%
Taditional product	13.95%	31.01%	24.03%	31.01%
Product from country	17.05%	39.53%	20.16%	23.26%
Local product	15.5%	37.98%	21.71%	24.81%
Product obtained on an established recipe	16.28%	12.4%	24.03%	47.29%
Manufactured in Romania	20.18%	28.44%	31.19%	20.18%

Source: Results processed according to own questionnaire

With a share of 28,44%, respondents say they purchase products from the Romanian category frequently, and 20,18% say they buy such products very frequently Also, a 20,18% share of respondents says they never purchased such products it should be noted that these responses are largely influenced by their age, so young people avoid purchasing these products (under 18 years of age), preferring to buy the imported products (Table no 1.)



**Fig. 2. The structure of the respondents according to the certified food products they consume mainly**

Source: Results processed according to own questionnaire.

Analyzing the structure of respondents according to the certified foods they consume mainly, it is highlighted that 39.53% of respondents consume vegetables, fruits, a proportion of 20.73% consume meat products and 13.96% consume certified beverages. On the other hand, it is found that 4.65% of respondents consume dairy products, and the same proportion of 3.88% consume certified fish, bee and other categories, while 3.10% consume bakery products (Fig. 2.).

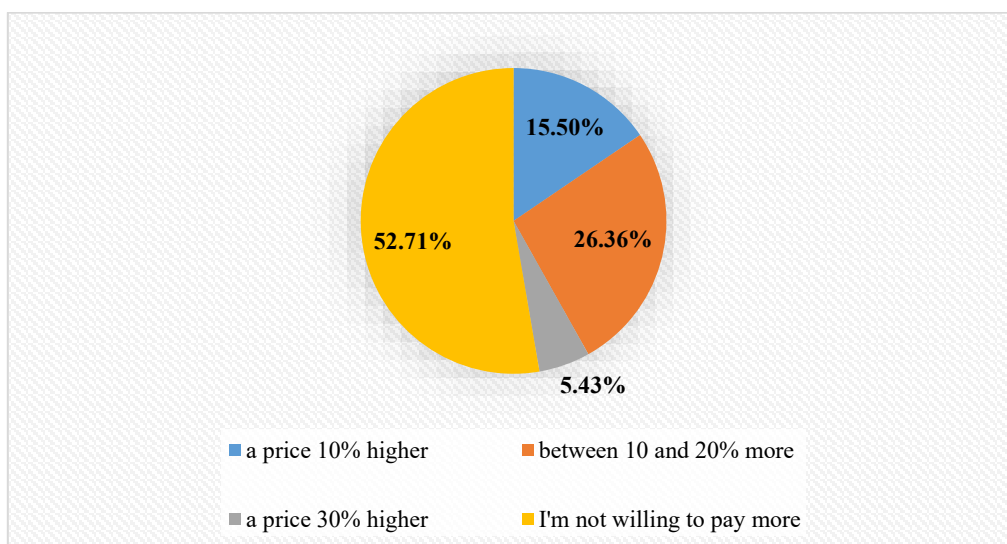
**Table 2. Structure of respondents by degree of information on food quality schemes**

Category	Frequency %				
	Largely	Somewhat	Not really	Not at all	I do not know
Beneficial for the consumer	43.41%	12.40%	10.08%	1.55%	32.56%
Feasible for as many product categories as possible	24.03%	18.60%	6.98%	3.10%	47.29%
Profitable for producers	44.19%	11.63%	7.75%	3.88%	32.56%
With an impact on increasing confidence in food	40.31%	13.18%	6.98%	7.75%	31.78%
A marketing strategy	24.81%	24.81%	7.75%	7.75%	34.88%

Source: Results processed according to own questionnaire.

In a proportion of 43.41% of the respondents consider that the certification of food products is beneficial for the consumer, while 32.56% of them cannot form an opinion. And in the case of the statement that food certification is feasible for as many product categories as possible, most of them could not provide an answer (47.29%). It is noted that 44.19% of the total respondents consider that this certification is profitable for producers, while only 11.63% consider that to some extent it is profitable for consumers.

We note that 40.31% of respondents believe that food certification has an impact on increasing confidence in these products. Regarding the fact that product certification is a marketing strategy of manufacturers, opinions are divided, so that 24.81% consider that this is largely valid, while 7.75% consider that this is not the case at all. It can be seen that there is a certain degree of confusion regarding food quality schemes, with a share of over 44% of respondents considering these quality schemes to be profitable for consumers, while 43% of them consider them to be beneficial for consumers. We find that there is a certain degree of confusion about quality schemes, so the level of information about them is quite low (Table no 2.).



**Fig. 3. Structure of respondents according to the purchase price of certified products to the detriment of conventional products**

Source: Results processed according to own questionnaire.

Taking into account the fact that, in Romania, the main criterion according to which the consumer buys food products is the price, we find that 52.71% of respondents do not agree to pay more for certified products, while only 26.36% of these, they are willing to pay between 10 and 20% more, and 15.50% are willing to pay 10% more than conventional products. It should be noted that only 5.43% of respondents are willing to pay a price 30% higher than conventional products, especially in the case of products certified as organic (Fig. 3.).

Since lately, the tendency of people is to buy products considered healthy, in the following table was presented the level of connections that were determined according to the income of the respondents and the frequency of purchasing ecologically certified products.

**Table 3: Analysis of the structure of respondents classified according to their income and frequency of purchase of ecologically certified products**

Specification	U.M.	Very frequently	Frequent	Rarely	Never	Total	
		Nr.				Nr.	%
Under 1300 lei	Nr.	2	4	22	17	45	35%
1300 – 3400 lei		2	19	23	5	49	38%
3400 - 5000 lei		10	4	9	2	25	19%
Over 5000 lei		9	1	0	0	10	8%
Total	Nr.	23	28	54	24	129	100%
	%	18%	22%	42%	19%	100%	
Critical value =	16,92	Degrees of freedom (df) =	9	Cramer's V =	0,44		
Probability level =		0,05		Pearson's P =	0,61		

Source: SPSS questionnaire results processing.

Regarding the analysis of the structure of the respondents classified according to their income and the frequency of purchase of ecologically certified products, a value of Pearson coefficient of 0.61 and Cramer 0.44 was determined, which indicates a strong link between the two variable. The connection between the variables is a direct one, varying in the same direction. We can state that there is a significant link between respondents with incomes between 1300 and 3400 lei and those who rarely purchase ecologically certified products (Table no. 3.)

## Conclusions

The results of the questionnaire show that there is a certain degree of confusion regarding food quality schemes, with more than 44% of respondents considering these quality schemes to be profitable for consumers, while 43% of them considered them to be beneficial. for consumers.

Based on the answers to the questionnaire, analyzing a series of statements, it is found that quality schemes for food, are profitable for producers in proportion of over 44%, while a proportion of 43% consider it beneficial for consumers. In the case of the statement, certified products have an impact on increasing confidence in food, 40.36% of respondents consider it largely true, while about 8% do not.

The statements of the certified products represent a marketing strategy and are achievable for as many product categories as possible, they are considered true by more than 24% of the respondents, while 34% and 47% respectively could not provide a concrete answer.

Considered the main criterion for purchasing food, respondents were asked if they were willing to pay more for certified products, to the detriment of conventional products. Thus, it was found that more than 50% of respondents are not willing to pay more for a certified product. It is observed that over 26% of respondents are willing to pay extra between 10 and 20% for these products and only 15.5% would buy products more expensive by 10%. In a proportion of more than 5%, respondents replied that they would pay a 30% higher price for certified products.

Thus, the main problem for which consumers do not buy certified products was identified, namely the much higher price of certified products compared to conventional products.

Coming to the aid of producers, sub - measure 3.1. Support for participation for the first time in quality schemes, the sub-measure provides non-reimbursable financial aid of EUR 3000 for one holding per year, contributing to market integration. The strategy for the development of the agri-food system 2020-2030 also comes to the aid of producers, supporting certified products, providing support to promote product certification and training farmers to be able to meet environmental challenges.

Associations promoting these quality schemes, such as APAR (Association for the Promotion of Agricultural Products) must support certified producers in order to present the advantages of these products among consumers, compared to other types of products, requiring consumer understanding. of the higher price of these certified products than usual.

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