THE LEVEL OF INFORMATION OF THE ROMANIAN CONSUMER REGARDING THE ORGANIC PRODUCTS

Narcis Alexandru BOZGA

University of Economic Studies, Bucharest, Romania, 11, Tache Ionescu Street, Mobile: +40788391617, E-mail: narcis_bozga@yahoo.com

Corresponding author: narcis_bozga@yahoo.com

Abstract

Organic agriculture is an area in full process of development and the market for organic products is increasing rapidly in recent years, both worldwide and in Romania. However, there is limited research that are scientifically fundamented with regard to the Romanian market. Starting from this premise, we conducted a study that aims getting an overview about the level of knowledge that the Romanian consumers have about organic products. The study has three main objectives. They refer to the way how the Romanian consumers evaluate their knowledge about organic products and the objective level of information that consumers in Romania have on organic products. In addition, we proposed to find out what is an organic product for the Romanian consumer or, more precisely, how does the Romanian consumer define the organic products. The results of the research are nationally representative for the urban population.

Key words: consumption, organic products, Romania

INTRODUCTION

The organic market is growing rapidly worldwide. In more developed countries in this regard, such as Denmark, the United States and Austria, at least for some categories of products, it has already surpassed the niche stage [8] [9]. The same can be said about the Romanian market [1] [3], especially in the last decade, during which time both the number of registered producers in organic farming and the consumption of organic products increased steadily [10]. However, in present, there is a limited number of studies regarding the Romanian consumer of organic products. Several authors have tried lately to "know" better the Romanian consumer of organic products. At the there is some moment, information concerning the buying behavior and consumption of organic products [3], socio demographic profile of the Romanian buyer of organic products [4] [6], perception upon prices or the level of confidence that the Romanian consumers have organic products [2].

A less considered feature in recent researches is related to the Romanian consumer awareness about organic products. It is known that, at least in Romania, organic agriculture can still be considered a new field. The first certified organic farms are recorded in the late 90s, the number of operators in organic farming at the beginning of the last decade being extremely low [5]. However, the organic sector has grown rapidly, the market seemed being interested in organic products, particularly in response to the "invasion" of unhealthy food and cosmetics. Also, organic products have been widely publicized in the last decade.

In this context, we consider useful and interesting to know which is the level of the Romanian consumer awareness about organic products. The main objectives of this study are to identify the percentage of the population that consider to know what organic products are, identifying the key characteristics of organic products in the Romanian consumer vision and objective testing of their knowledge on organic products.

MATERIALS AND METHODS

The purpose of the study is to assess the awareness of Romanian consumers about organic products. For this, there were used

primary data obtained through a broader quantitative research, conducted in January-June 2014 among Romanian consumers. The research is a type survey and covers a sample of 1,000 people, nationally representative for the urban population.

The sampling is a structured one, ensuring representation by age, sex and type of place of residence.

In order of a more accurate description of the organic products market, there were identified three age categories (corresponding to young people, the middle-aged and elderly) and 3 categories of towns of residence (large cities with over 200,000 inhabitants, towns, Bucharest under 200,000 inhabitants and Bucharest).

The method of data collection is represented by telephone questionnaire.

In terms of data analysis, for closed questions was used the statistical analysis software SPSS. For the open questions was used content analysis method.

RESULTS AND DISCUSSIONS

To get a clear picture over the awareness of Romanian consumers of organic products, we considered two perspectives, corresponding to two distinct approaches:

- i. Knowledge and information self assessment, of the respondents
- ii. Objective assessment of consumer awareness, using two open questions which during the research we considered as "control" ones.

In addition, it can be considered a third approach, namely how the Romanian consumer defines organic products. Specifically, what an organic product means for the Romanian consumers, which are its main attributes.

The level of information regarding the organic products from the respondents perspective

The vast majority of the urban population of Romania considers that it knows what organic products are [1]. Thus, over 83% of respondents say that they know what organic In terms of awareness, most of the

respondents consider themselves being medium-informed about organic products. products are, while only 13% of them say they do not know and about 3% are unsure (Figure 1)

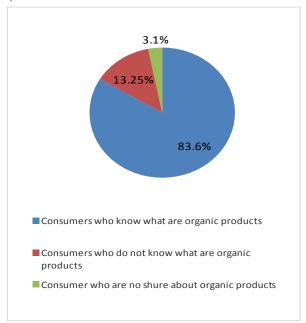


Fig. 1. Responses distribution to the question "Do you know what are organic products?"

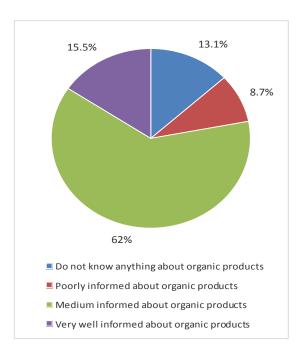


Fig. 2. How much informed do the Romanian consumers consider themselves to be regarding the organic products.

Having recorded the answers on a scale from 1 to 10, where 1 means very poor and 10 very well informed, the medium has a value of

6.75 and the median and modal group have value 7, corresponding to medium information.

15.5% of the total urban population given scores of 9 and 10, corresponding to a very good level of information on organic products, while 13.1% do not know at all what they are. Scores between 5 and 8 may be considered as a medium level of information, these adding up over 62% of all respondents. Scores between 1 and 4, equivalent to a low level of information, scores 8.7 percent (Fig. 2)

The real level of knowledge of Romanian consumers about organic products

To assess in a way as much objective as possible the real degree of Romanian consumer information on organic products, we took into consideration two open questions. One concerns how respondents differentiate organic products of similar conventional products in the moment of buying. The other one offers a richer level of information and refers to how consumers define organic products. More precisely, what exactly does an organic product means for the Romanian consumer.

When asked "How do you differentiate the organic products from the regular one in the moment of buying?".

Table 1. Distribution of answers to the question "How do you differentiate the organic products from the regular one in the moment of buying?"

Answer	Frequency
	(%)
By the label	49.9
By the aspect and other organoleptic	32.1
features	
By the certification/logo/organic label	9.1
By the seller/producer. Confidence in	8.5
the seller/producer.	
I read the information regarding the	8.4
product	
They can be found in special organized	3.1
sections, dedicated to organic	
products/specialized shops	
By the price. Are more expensive.	2.9
By the wrapping	2.7
Don't know. Cannot distinguish them	5.6
In another way	11.4

Following the content analysis, we obtained the following categories of responses as mentioned in Table 1.

About half of the respondents mentioned the label as a way to identify the organic products when buying. This answer does not provide objective information and represents one of the limits of this research. In the absence of relevant researches on the subject, when designing the study has not been taken into account such a possibility. The respondents do not in any way explain how do they differentiate the organic products, those who they mention that read the product information being conceptualized in different category.

It may be noted that organic certification or other similar answers are mentioned by only 9.1% of respondents, most of the Romanian consumers seemed to have significant difficulties in distinguishing organic products by the conventional ones.

For the open question "How do you define organic products? What does an organic product represent for you?", following the analysis of content, we could conceptualize a number of features that, for Romanian consumers, are specific to organic products (Table 2).

According to the results presented in Table 2, we can say that for the Romanian consumer the organic product is a natural one, without added synthetic chemicals and that do not harm human health and the environment.

The organic products' most common features, as mentioned by respondents, are lack of chemical synthesis and naturalness of the product, with an almost equal share (42-44% of the respondents mentioned these features in their definition). About 20% of Romanian consumers believe that one of the most important features is that organic products are healthier or can improve the quality of life. Just 7% of the respondents mentions that organic products are environmentally friendly. An interesting aspect to mention, resulted from a quantitative analysis, is that many consumers identify organic product with a natural product.

PRINT ISSN 2284-7995, E-ISSN 2285-3952

Table 2. The main characteristics of the organic products, in the vision of the Romanian consumer

products, in the vision of the Roma	
CHARACTERISTIC	PROCENTAGE
	(of respondents)
Natural	35,5%
As natural as possible; closest	6,2%
to his natural state	·
Clean; pure	0,9
Healthy; not bad for the	17,4%
organism	,
Helps the health status; improves	2,6%
the quality and/or the life line	·
Good, of good quality	5,1%
Tasty, flavored	1,2%
Nice product, good aspect	0,9%
Hygienic product, fresh	1,1%
Developed with very little	0,9%
involvement of the human hand	. ,
Developed with minimum	0,6%
technological intervention;	,
handmade	
Tradition product, "how it was	1,1%
done on the old times"	,
Environmentally friendly; not	4,1%
damaging to the environment	,
No pollutant	2,3%
Biodegradable, recyclable	0,9%
No chemicals; no chemical	34,3%
substances (synthetic) added	0 1,0 / 0
No E-s	10,4%
No additives	4,8%
No preservatives	2,1%
No food additives	8,5%
No toxic substances	2,4%
No herbicides, pesticides,	3,8%
-	3,070
insecticides, etc.: No substances	
insecticides, etc.; No substances splashed	
splashed	7.3%
splashed No chemical fertilizers	7,3% 1.7%
Splashed No chemical fertilizers No growth stimulants	1,7%
No chemical fertilizers No growth stimulants Not polluted; safe from pollution	1,7% 2,3%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically	1,7% 2,3% 1,7%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones	1,7% 2,3% 1,7% 0,6%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on	1,7% 2,3% 1,7%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic	1,7% 2,3% 1,7% 0,6%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture	1,7% 2,3% 1,7% 0,6% 2%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture Plants and animals ground	1,7% 2,3% 1,7% 0,6%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture Plants and animals ground raised/in open spaces	1,7% 2,3% 1,7% 0,6% 2%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture Plants and animals ground raised/in open spaces Animals feed with natural	1,7% 2,3% 1,7% 0,6% 2%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture Plants and animals ground raised/in open spaces Animals feed with natural food/organic	1,7% 2,3% 1,7% 0,6% 2% 1,1% 0,5%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture Plants and animals ground raised/in open spaces Animals feed with natural food/organic Produced in ecological	1,7% 2,3% 1,7% 0,6% 2%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture Plants and animals ground raised/in open spaces Animals feed with natural food/organic Produced in ecological conditions/ realized from organic	1,7% 2,3% 1,7% 0,6% 2% 1,1% 0,5%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture Plants and animals ground raised/in open spaces Animals feed with natural food/organic Produced in ecological conditions/ realized from organic materials	1,7% 2,3% 1,7% 0,6% 2% 1,1% 0,5% 2,7%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture Plants and animals ground raised/in open spaces Animals feed with natural food/organic Produced in ecological conditions/ realized from organic materials Products specifically labeled	1,7% 2,3% 1,7% 0,6% 2% 1,1% 0,5% 2,7% 0,8%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture Plants and animals ground raised/in open spaces Animals feed with natural food/organic Produced in ecological conditions/ realized from organic materials Products specifically labeled Product that fulfills the ecological	1,7% 2,3% 1,7% 0,6% 2% 1,1% 0,5% 2,7%
splashed No chemical fertilizers No growth stimulants Not polluted; safe from pollution Not modified genetically No hormones Animals and plants raised on clean fields/converted to organic agriculture Plants and animals ground raised/in open spaces Animals feed with natural food/organic Produced in ecological conditions/ realized from organic materials Products specifically labeled	1,7% 2,3% 1,7% 0,6% 2% 1,1% 0,5% 2,7% 0,8%

Specifically, 17.7% of respondents say that the organic product is a natural product,

without giving further explanations. In a subsequent development of national research intended to clarify the issue, the focus group method, the result that more than half of the participants can not make any difference between natural and organic products. This discussion is not, however, currently under study.

Taking as its starting point the answers given by the respondents and the features organic products, as they are defined in legislation [11] and scientific literature [4], we proposed to group the respondents into several categories, depending on respondents' actual extent of knowledge about organic products. In this regard, we developed an evaluation tool which takes into account four categories of respondents:

- those who are not able to say anything about organic products,
- respondents about we are unable determine to what extent they know what are organic products,
- respondents who know, generally, what are organic products,
- respondents who are well informed about organic products

In order to achieve this objective, we have grouped the main features of organic products into two general categories, as can be seen in Table 3.

By "defining characteristics" we consider properties of organic products, sufficiently specific and broad applicability, organic products can be easily whereby differentiated from conventional ones. After analyzing the content of the answers provided, we have identified five such features. Also, after content analysis, we included in the assessment instrument a number of other 15 characteristics of organic products, specific to them, but with a more limited scope. For example, "products treated with herbicides, pesticides, insecticides, etc." specific feature just for vegetal organic products, which is not relevant for other organic products, such as animal or processed products.

Regarding the 4 levels of information that we have conceptualized, the evaluation criteria of the answers can be found in Table 4.

PRINT ISSN 2284-7995, E-ISSN 2285-3952

Table 3. Knowledge Assessment Tool, depending on the main features of organic products

Defining	Product that fulfills the organic	
characteristics of	certification	
the organic	Produced in ecological conditions/	
products	realized from organic materials	
	Products specifically labeled	
	Without added synthetic chemicals	
	Animals and plants raised on clean	
	fields/converted to organic agriculture	
Other features of	Natural product	
the organic	Clean; pure product	
products	Healthy product; does not harm the	
	organism	
	Environmentally friendly product; not	
	damaging to the environment	
	No pollutant; biodegradable,	
	recyclable product	
	Product developed with very little	
	involvement of the human hand	
	No E-s, No additives, No	
	preservatives	
	No toxic substances	
	No herbicides, pesticides,	
	insecticides, etc.	
	No chemical fertilizers	
	No growth stimulents	
	Not modified genetically	
	Plants and animals ground raised/in	
	open spaces	
	Animals feed with natural	
	food/organic	
	Not poulluted product; safe from	
	pullution	

Table 4. Appropriate evaluation criteria of respondents awareness about organic products

awareness about orga	•	
Information level	Includes respondents who:	
1.Respondents who	Can not answer at all	
are not able to say	Provides answers that have no	
anything about	connection with organic products	
organic products		
2.Respondents about	Provides unclear or confusing	
we are unable	answers	
determine to what	It merely defines natural products as	
extent they know	organic products	
what are organic	It provides answers that include real	
products	features of organic products and	
	also features that have nothing to do	
	with this kind of products	
	Merely indicate one single feature	
	of organic products, insufficient to	
	define such products	
3.Respondents who	Provides at least two real	
know, generally,	characteristics of organic products	
what are organic	Present at least one of the defining	
products	characteristics of organic products,	
	as they were established in this	
	study	
4.Respondents who	Mention three characteristics of	
are well informed	organic products, of which at least	
about organic	one defining	
products	Mention sufficiently clear the legal	
=	standards in certification and	
	ecolabelling	

The results of the evaluation model application can be found in Fig. 3. It should be noted that only the respondents who, at the beginning of the questionnaire, said they know what they are organic products, were asked those filter questions. Consequently, the 13 percent of respondents who said they do not know what are the organic products do not appear in the results below.

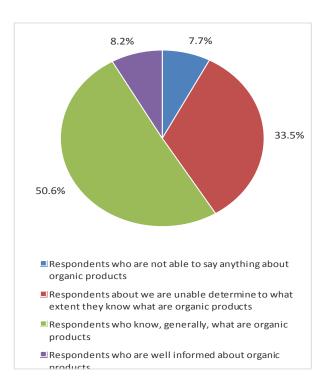


Fig. 3. The real level of information regarding organic products, among Romanian consumers

CONCLUSIONS

Through this study, we have decided to get an overview about the level of information of the Romanian consumer awareness about organic products. The sample used is representative nationwide, for urban environment, which allows the extension of the results in a relevant way, upon the entire urban population of Romania. The consumers from rural areas were not considered in this study due to low purchasing power and the phenomenon of consumption from their own production. Because of this, it is very unlikely for the rural population to buy organic products.

The overwhelming majority of consumers in Romania say that they know what organic

products are. Only 13% of them say they have not heard or know nothing about such products.

There is a significant difference between the way how respondents self-assess their knowledge about organic products and the objective aim of information.

The vast majority of respondents are selfassessing as being average informed about organic products (giving scores between 5 and 8 to their knowledge on a scale with 10 steps). After evaluating the responses of the open questions, it results that approximately 50% of the respondents can define in a satisfactory way the organic products, while 8.4% of them seem well or very well informed. There is a very high percentage, about one third of respondents, which can not be objectively, following the responses offered, to what extent they are informed about organic products. We believe that this state actually has two main causes. One of them is the confusion that many consumers make between the natural products and organic ones, and the other is a limitation of the research caused by the instrument used for data collection (questionnaire by phone, where the recording of the responses to the open questions is difficult and their clarity is sometimes desirable).

Although, from a percentage point of view the results are quite close, it is very interesting that the respondents who consider themselves very well informed, cannot explain convincingly what an organic product is, while some consumers that declare themselves averagely or poorly informed manage to give a convincing definition for organic products.

Another important conclusion of the study relates to the Romanian consumer perception upon organic products. For this one, the organic product is a natural product without added synthetic chemicals that do not harm human health and the environment. The attributes mentioned most frequently by the Romanian consumers are the lack of synthetic chemicals and the fact that the products are natural (with shares of around 45% of responses each). The environmental issues are mentioned by a much smaller number of

respondents, approximately 7% of them. Organic products are perceived as being healthy, which is in fact the main reason of buying among the Romanian consumers.

The main limitations of the research are the lack of previous studies on the subject, well-grounded scientifically and data collection tool. Regarding the instrument for data collection (questionnaire by phone), it is possible that because of the faulty registration of some responses and inherent barriers of communication (hereinafter referred in specialized literature, in the sphere of communication, noise), the share of those who are objectively well informed about organic products, to be higher than in the graphs presented above.

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Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 15, Issue 3, 2015 PRINT ISSN 2284-7995, E-ISSN 2285-3952

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