

STUDY REGARDING CONSUMPTION OF ORGANIC PRODUCTS IN ROMANIA

Toma Adrian DINU¹, Elena STOIAN¹, Marius Mihai MICU¹, Reta CONDEI¹, Ioana NICULAE¹

¹ University of Agricultural Sciences and Veterinary Medicine Bucharest, 59 Marasti, District 1, 11464, Bucharest, Romania, Phone/Fax: 00 40 744 6474 10;

Corresponding author: micumariusmihai@yahoo.com

Abstract

The recent statistical data and market studies have shown that the organic products market is on a continuously upward trend in Europe and globally. For Romania, organic agriculture represents a market niche that is still insufficiently exploited, with a definite and real development potential of the agricultural sector. The role of the consumer is decisive for the evolution trends and future prospects of any market. A questionnaire based quantitative research was done to find out the Romanian consumers' behaviour related to organic products, which allowed the establishment of the weight of organic products consumers within the population interviewed, the extent to which the characteristics of organic products, brands and categories known and consumed are acknowledged. The study also pursued the evaluation of motivational factors which determine the purchase, market appraisal between the alleged favourable attitude towards organic products and product consumption, the evaluation of the way in which the Romanian organic products' quality is perceived in relation with their price.

The study shows an increase in consumer interest for "healthy" products, so that the change according to their behaviour shall generate an increase in the organic products market in Romania.

Key words: consumption, organic products, Romania

INTRODUCTION

The interest for such studies is explained as organic production, in contrast to other segments of the agricultural activity, is growing. The annual growth rate is estimated at 20-30% while the organic products market is constantly expanding [3].

Organic farming is currently practiced in more than 100 countries, over a total estimated area of about 23 million hectares, the largest areas being held by Australia, with 10.5 million hectares and Argentina, with 3.2 million hectares [1].

The European Union organic farming has faced a very rapid growth in the 90^s. During this period the share of agricultural land intended for organic farming in the EU countries increased from 0.6% to 3.3% (4.4 million hectares). Seven of the EU-15 were positioned above average in terms of areas intended for organic farming: Austria (8.5% of the usable arable land), Italy (8%), Denmark, Finland and Sweden (6.5%), the United Kingdom of Great Britain (4%) and Germany (3.5%) [1].

In Romania, a first systematic assessment of consumer preferences for organic products aimed for consumers' availability to purchase organic bread [7]. The study was followed by an assessment of resources, opportunities and constraints of fresh organic vegetables production and sale within the producer-distributor-consumer chain developed in vegetable farms from pre-urban areas (especially individual producers) and fresh vegetable markets from Bucharest [5].

The need to develop this work is related to the elaboration of certain conclusions and recommendations consistent with the reality on the consumption of organic products for various interest groups (local administrative authorities, farmers, distributors, processors, consumers, etc.).

The explorations on the consumption of organic products are a relatively new topic and the number of studies is increasingly growing as the market demand increases together with the rapid social and economic transformations in Central and Eastern Europe. Researches were reported on organic products and the consumer; product demand; dietary, perception

and consumer attitudes changes; consumer concern regarding the ethics of production and marketing; the environment; welfare; public health, etc.

Within these monitoring systems, testing consumer opinion and reaction on the quality of food is one of the most effective tools. Researches in this field have an interdisciplinary character and involve a wide variety of approaches, and quantitative and qualitative techniques for data collection and analysis.

Compared to the aspects above mentioned, the paper aims to analyse the consumption of organic products in Romania, as well as the perception and the attitude of the consumer.

MATERIALS AND METHODS

The purpose of this marketing research is to identify the consumption of organic products in Romania, specifically consumer attitudes towards organic food. For this purpose quantitative research was used to describe the behaviour of a population related to the studied matter, using quantification methods and statistical analysis in interpreting the results. The quantitative research may also be described as “a findings research, based on representative samples, on a numerical rating of variables and statistical analysis methods, and the findings obtained may be used to recommend a final course of action.” [5].

The survey is the most used method in socio-economic research, being the most popular and sometimes identified with the sociological research itself.

As a method of data collection, the survey may provide information on the socio-economic characteristics, concerning attitudes, opinions background, intentions and behaviours, so it may be used in quantitative research as well as in qualitative research. Conducting a survey implies asking questions to a certain number of people, representing either the entire population or a sample drawn from this population [2].

The purpose of the survey of consumer attitudes toward organic products is that of making estimates, based on the results from the processing of obtained data and using the

principles of the probability theory, the appropriate parameters of the total population, elements that are included in the name of the *statistic survey*. The questionnaire has been chosen as tool for gathering the information necessary for the research, for the purpose of reaching the goals and performing the study, as well as for economic reasons.

Using the survey shows that the representativeness of a sample primarily depends on the proper choice of methods and selection types. There are opinion polls, SWOT surveys, surveys on the quality of products and services, surveys on product sales and information, etc. [4].

RESULTS AND DISCUSSIONS

The questionnaires on organic products consumption have been applied to a number of 488 respondents. Given their distribution within the country it may be noted that these have been applied over 25 counties and in Bucharest, with the proviso that of the total number of questionnaires applied - 488, 57 respondents did not specify the county of origin.

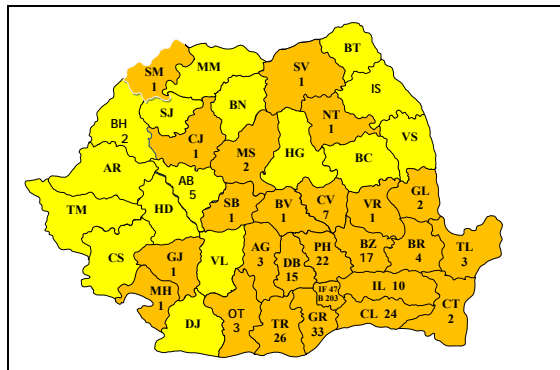


Fig. 1. Distribution of respondents by counties of Romania

Consequently most questionnaires were applied in Bucharest (203) followed by the counties: Ilfov (47), Giurgiu (33) Teleorman (26), Călărași (24), Prahova (22), Buzău (17), Dâmbovița (1), Ialomița (10) and Covasna (7). For other counties where the questionnaires were applied, 17 in number, the respondents per county were between the range of 1-4 questionnaires (Fig. 1).

Analysing the data obtained using questionnaires, by gender of the respondents, it can be observed that these were applied to 62.7% males, and to 37.3% females. Depending on the age of the respondents it was found that most of them were between the ages of 18-25 years (55.8%), followed by those between the ages of 26-35 years (26%), afterwards by the respondents between the ages of 36-45 years, 13.1%, finding at the opposite pole the respondents with ages under 18 (0.4%) and those with ages over 46 years (1.1 %) (Table 1).

Table 1. Distribution of respondents by age depending on gender

	under 18 years	18-25 years	26-35 Years	36-45 years	46-55 years	56-65 years	Total
Female	0.2%	22.2%	7.3%	4.9%	2.2%	0.4%	37.3%
Male	0.2%	33.6%	18.7%	8.2%	1.8%	0.2%	62.7%
Total	0.4%	55.8%	26.0%	13.1%	4%	0.7%	100.0%

As the educational level of the respondents is concerned it was found that the majority of those with secondary education (high school) with a ratio of 71.4%, followed by those with graduate studies (college / university) with a ratio of 22.8 %, finding at the opposite pole respondents having postgraduate studies, 4.9%, as well as those with primary education (middle school) with 0.8% (Table 2).

Table 2. Distribution of respondents by age depending on educational level

	Middle school	High School	College / University	Postgraduate studies	Total
under 18 years	0.2%	0.0%	0.0%	0.0%	0.2%
18-25 years	0.4%	45.9%	8.4%	1.1%	55.9%
26-35 years	0.2%	16.6%	8.2%	0.9%	25.9%
36-45 years	0.0%	6.7%	5.1%	1.6%	13.3%
46-55 years	0.0%	2.2%	0.9%	0.9%	4.0%
56-65 years	0.0%	0.0%	0.2%	0.4%	0.7%
Total	0.8%	71.4%	22.8%	4.9%	100.0%

Regarding the occupation of the respondents it was observed that 61.9% are represented by employed / self-employed individuals, followed at a great distance by students, with a ratio of 27.3%. At the opposite pole there were people who have other professions, with a ratio of 9.3%, followed by the unemployed, with 1.6% (Table 3).

Table 3. Distribution of respondents by age depending on occupation

	Employee / Self-employed	Student	Unemployed	Other	Total
under 18 years	0.0%	0.0%	0.0%	0.2%	0.2%
18-25 years	28.4%	23.5%	0.9%	3.1%	55.9%
26-35 years	19.3%	2.2%	0.2%	4.2%	25.9%
36-45 years	10.4%	0.9%	0.4%	1.6%	13.3%
46-55 years	3.3%	0.4%	0.0%	0.2%	4.0%
56-65 years	0.4%	0.2%	0.0%	0.0%	0.7%
Total	61.9%	27.3%	1.6%	9.3%	100.0%

In terms of declared income of the respondents it was found that 41.97% of them have an income in the range of LEI 1,000-2,000, followed by those with income below LEI 1,000 in the share of 22.71%, and those with income in the range of LEI 2,001-3,000 in the share of 11.89%, while at the opposite pole there are those with income exceeding LEI 4,000 in the share of 10.78%, as well as those with income in the range of LEI 3,001-4,000 in the share of 6.65% (Table 4).

Table 4. Distribution of respondents by age depending on income

	< LEI 1,000	LEI 1,000-2,000	LEI 2,001-3,000	LEI 3,001-4,000	> LEI 4,000	Total
under 18 years	0.00%	0.23%	0.23%	0.00%	0.23%	0.69%
18-25 years	16.28%	24.31%	7.80%	1.61%	5.28%	55.28%
26-35 years	3.67%	10.55%	5.50%	3.67%	2.52%	25.92%
36-45 years	2.06%	4.36%	3.21%	1.15%	2.52%	13.30%
46-55 years	0.46%	2.52%	0.92%	0.23%	0.00%	4.13%
56-65 years	0.23%	0.00%	0.23%	0.00%	0.23%	0.69%
Total	22.71%	41.97%	11.89%	6.65%	10.78%	100.0%

Analysing the distribution on income categories by age it was observed that in the age range of 18-25 years 24.31% of the respondents have an income between LEI 1,000-2,000 and 16.28% have an income below LEI 1,000. Whereas in the age range of 26-35 years, 10.55% have an income between LEI 1,000-2,000 and only 3.67% have an income below LEI 1,000. A constant income level was recorded for the other age groups subject to the survey. (Table 4).

However, considering the origin of those interviewed it was observed that 69.1% come from urban areas, while only 30.8% come from rural areas (Table 5).

Table 5. Distribution of respondents by age depending on origin

	Rural	Urban	Total
under 18 years	0.2%	0.0%	0.2%
18-25 years	21.1%	34.8%	55.9%
26-35 years	4.7%	21.3%	25.9%
36-45 years	3.1%	10.2%	13.3%
46-55 years	1.6%	2.4%	4.0%
56-65 years	0.2%	0.4%	0.7%
Total	30.8%	69.1%	100.0%

On the question regarding the information respondents know about the organic products, 45% of those surveyed replied that they have little information about this type of products, 34.4% responding that they have enough information, while only 12% admitted to have insufficient information, 6.2% have a lot of information and 2.4% said they know nothing about this type of products. It is noted that the proportion of those who know nothing or have little information about the organic products reaches nearly 60%, compared to 40% who have such information (Table 6).

Table 6. Distribution of respondents' opinion on the information held about organic products depending on age

	A lot	Many	Few	Very few	Nothing	Total
under 18 years	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%
18-25 years	2.4%	19.3%	25.5%	6.9%	1.8%	55.9%
26-35 years	2.2%	7.8%	12.0%	3.5%	0.4%	25.9%
36-45 years	0.4%	5.8%	6.4%	0.7%	0.0%	13.3%
46-55 years	1.1%	0.9%	1.1%	0.9%	0.0%	4.0%
56-65 years	0.0%	0.4%	0.0%	0.0%	0.2%	0.7%
Total	6.2%	34.4%	45.0%	12.0%	2.4%	100.0%

Analysing the distribution of information held by gender of the respondents it is noted that 20.44% of all males have enough information, while of the total number of females only 14% have enough information about this type of products. Consequently, 30.22% of the total males have little information about such products, while of the total number of females; only 14.67% have little information about the organic products (Fig. 2).

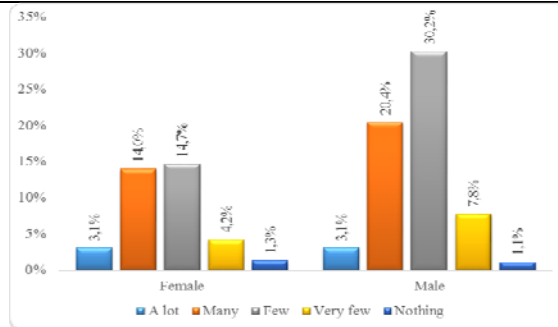


Fig. 2. Distribution of respondents' opinion on the information held about organic products depending on gender

Depending on the availability of information about organic products, it is observed that 56.3% of the total population interviewed believe that this type of information is accessible, while 16.4% believe that this is hardly accessible and similarly 16.2% believe that this information is easily accessible. On the opposite pole there are those who believe that this type of information is very accessible, in a proportion of 9.2%, as well as those who believe that the information is not accessible, in a proportion of 2% (Table 7).

Table 7. Distribution of respondents' opinion on organic products information accessibility depending on age

	Not accessible	Hardly accessible	Accessible	Easily accessible	Very accessible	Total
< 18 years	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%
18-25 years	1.1%	6.0%	32.6%	11.8%	4.4%	55.9%
26-35 years	0.2%	5.3%	15.7%	2.2%	2.4%	25.9%
36-45 years	0.7%	3.8%	6.0%	1.3%	1.6%	13.3%
46-55 years	0.0%	1.1%	1.6%	0.7%	0.7%	4.0%
56-65 years	0.0%	0.2%	0.2%	0.0%	0.0%	0.7%
Total	2.0%	16.4%	56.3%	16.2%	9.1%	100.0%

Analysing the distribution of accessibility to information about organic products by age it was noted that in the age group between 18-25 years, 32.6% respondents believe that the information is accessible, while 11.1% believe that the information is easily accessible. Regarding the age group between 26-35 years it was observed that 15.7% believe the information is accessible, while 2.2% say that the information is easily accessible (Table 7). When asked about the consumption of organic products it was noted that 93.3% said they had consumed this range of products, while only

6.6% said they had not consumed such products before (Table 8).

Analysing the distribution of organic products consumption by age it was found that in the age group between 18-25 years 51% of the respondents consumed these products, while only 4.4% said that they have not consumed this type products. Simultaneously in the age range between 26-35 years 25.1% of the respondents answered that they consumed this type of products and only 0.9% have so far never consumed such products (Table 8).

Table 8. Distribution of respondents' opinion on the consumption of organic products depending on age

	Yes	No	Total
under 18 years	0.2%	0.0%	0.2%
18-25 years	51.0%	4.8%	55.9%
26-35 years	25.1%	0.9%	25.9%
36-45 years	13.1%	0.2%	13.3%
46-55 years	3.5%	0.4%	4.0%
56-65 years	0.4%	0.2%	0.7%
Total	93.3%	6.6%	100.0%

Analysing the distribution of organic products consumption, taking into account the respondents' gender, it was identified that 35.3% of the females said they had consumed this type products, while only 1.8% said they had not. Among males it was observed that 58.2% consumed organic products and only 4.2% have so far never consumed this type of products (Fig. 3).

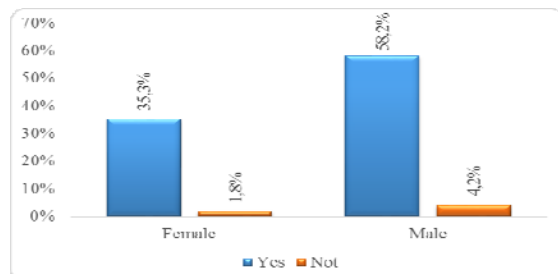


Fig. 3. Distribution of respondents' opinion on the consumption of organic products depending on gender

Depending on the frequency of consumption of organic products it is observed that 38.6% of the respondents occasionally consume this type of products, 30.4% consume these products weekly and 19.9% consume these products daily, while on the opposite pole

there are those who consume this product range on a monthly basis, with 6.7%, and those who have never consumed such products, with 4.4% (Table 9).

Table 9. Distribution of respondents' opinion on the frequency of organic products consumption depending on age

	Daily	Weekly	Monthly	Occasionally	Never	Total
under 18 years	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%
18-25 years	10.0%	14.9%	4.0%	23.7%	3.3%	55.9%
26-35 years	4.4%	10.4%	1.8%	8.6%	0.7%	25.9%
36-45 years	4.2%	4.0%	0.7%	4.4%	0.0%	13.3%
46-55 years	0.9%	0.9%	0.2%	1.6%	0.4%	4.0%
56-65 years	0.2%	0.2%	0.0%	0.2%	0.0%	0.7%
Total	19.9%	30.4%	6.7%	38.6%	4.4%	100.0%

Analysing the distribution frequency of organic products consumption by age it was found that in the age range between 18-25 years 23.7% of the respondents are occasional consumers, 14.9% are weekly consumers and 9.8% are daily consumers of organic products. In the age range between 26-35 years 10.4% of the respondents are weekly consumers, 8.6% occasional consumers and 4.4% daily consumers of this type of products (Table 9).

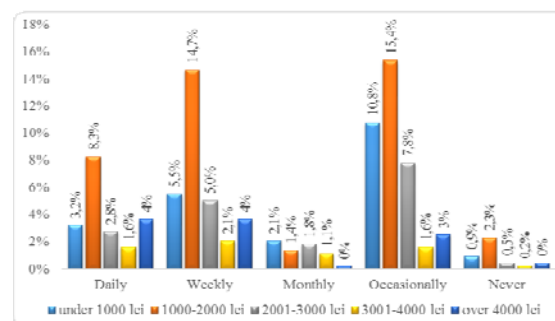


Fig. 4. Distribution of respondents' opinion on the frequency of organic products consumption depending on their income

Analysing the distribution of frequency of organic food products consumption by income levels it was noted that those with incomes ranging between LEI 1,000-2,000 are occasional consumers, in a proportion of 15.37%, while 14.68% are weekly consumers and 8.28% are daily consumers. Those with incomes below LEI 1,000 have responded that they are occasional consumers, in a proportion of 10.78%, while 5.5% are weekly consumers and 3.21% are daily consumers. Nonetheless,

those with incomes ranging between LEI 2,001-3,000 are occasional consumers in a percentage of 7.8%, while 5.5% are weekly consumers and 2.75% consume these products daily (Fig. 4).

CONCLUSIONS

Analysing the distribution of the sample depending on gender, age and origin we observed that most of the respondents have been males, the majority of respondents were included in the age interval of 18 and 25 years, taking into consideration the origin of the population interviewed it was observed that the majority came from the urban area.

Following the questionnaire data interpretation it was observed that the majority of respondents have secondary education level, and as their occupation is concerned it was observed that the majority of the respondents are employed.

In terms of income declared by the population interviewed it was found that the majority has an income ranging between LEI 1,000 and LEI 2,000 and their age interval is of 18-25 years.

Referring to the information held by the population interviewed about organic products it is underlined that of the total interviewed population most of the respondents have little information about this type of products. Corroborating this aspect with those who say they have insufficient information and with those who know nothing about organic products, we have found that over half of all respondents have limited information about these products.

Although it is noted that the majority of respondents have little information about organic products, these consider in fact, that the information about these products could be accessible. Therefore, we find that there is a reluctance or disinterest of the consumers to be more informed about these products.

Corroborating the previously mentioned aspects with the respondents' consumption of organic products we note that approximately all respondents have used such products, even though they have little information about these. Given the distribution of the organic

products consumption by age categories it was observed that most of the people who have consumed such products range between the age interval of 18 and 25 years.

Depending on the frequency of organic food consumption, cumulating the answers about the daily and weekly consumption, it was observed that the vast majority of respondents frequently consume this type of products.

Given the above it is emphasised that the Romanian market for organic products is an unconsolidated market in terms of customers, although there is a high frequency of consumption, customers do not have much awareness about these products, hence about the advantages they may benefit from the use of such products; also they consider that the information about these products is accessible, making a clear point for the need to continue studying the buying behaviour of organic products and of the factors that determine purchase of these products.

REFERENCES

- [1] Bucătă, I.V., Diaconescu Șt., Gieraths, J, Weiller, W, 2003, *Agricultura ecologică*, Alma Mater Press, Bucharest
- [2] Constantin, M.V., 2010, *Eficiența acțiunilor antropice asupra dezvoltării rurale durabile în centrul și nord-vestul Transilvaniei*, Doctoral Thesis, UASVM Cluj-Napoca
- [3] Florian Violeta, Rusu Marioara, Stefanescu Sorin Liviu,, Dumitrascu Monica, Panait Radu, 2005, *Comportamentul consumatorului de produse ecologice: determinanți socio-economici*, Arvin Press, Bucharest.
- [4] Micu, M.M., 2012, *Researches on the Association of Agricultural Producers with a view to Increase Production and Rentability. Case study Arges County*, Doctoral Thesis, Unpublished
- [5] Nedița Gabriela, Nițu, A., Martinoff Ioana, Stoian Mirela, 2003, *Studiu de piață privind cererea și oferta de produse agroalimentare ecologice românești*, *Fermierul Magazine* no. 122, February, 11-13
- [6] Plăiaș, I., 2005, *Comportamentul consumatorului*, Risoprint Press, Cluj-Napoca
- [7] Ștefănescu, S.L., Unteșu Fineta, 2004, *Resurse, oportunități și constrângeri în producerea și desfacerea legumelor ecologice proaspete pe piața municipală*, Estfalia Press, Bucharest