# STUDY REGARDING THE INTEREST OF ROMANIAN CONSUMERS FOR ORGANIC AGRICULTURE

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#### Abstract

Organic farming is developing as a sustainable alternative to intensive, conventional farming practice based on increasing yields, by maximizing the use of production factors to continuously increase agricultural production. Organic farming is, now, appreciated because it eliminates chemicals and produces health food with a positive impact on the environment. Sustainable development requires a healthy life due to responsible food production and consumption. These goals can be achieved in a food system where producers contribute through moral behaviours and where consumers are informed. All these aspects are gaining increasing importance at European and global level in the context of sustainable development. Considering these aspects, we carried out this research with reference to the interest of the inhabitants of the Western Romania for ecological products. The analysis of the data, obtained from the field application of a questionnaire and their interpretation, shows that, in Romania, although the area cultivated in the organic system is still small, there is an increased interest in the organic farming system both on the part of farmers and on the part of consumers.

Key words: consumers, interest, organic agriculture, questionnaire

## INTRODUCTION

The practice of this type of agriculture has become a viable alternative to conventional agriculture because it allows the optimal correlation between the quantity and quality of the food and the health of people [1, 2, 6, 10]. The products made in the organic farming system, in addition to being healthy products for food, are in correlation with the environment and contribute to the process of sustainable development [5, 7, 8, 9, 13, 14].

In this context, the role of ecological agriculture in ensuring the food security of the population becomes obvious.

Currently, food security, the population's access to basic agri-food products and appropriate quality are major problems and concerns of the states of the world, but mainly of developing or underdeveloped countries.

In recent years, the COVID-19 pandemic has had a significant impact on people around the

world. It was noticed that buying and consumption habits have changed substantially [12]. We can affirm the fact that, in response to environmental changes, people are able to change their consumption behavior, take more care of their own health and move towards the consumption of ecological products. This new consumer attitude is beneficial for the market of these products and this opportunity must be exploited.

Also, various international bodies are concerned about organic agriculture and its effects on the environment and health of individuals [4, 3, 11].

Through reports and positioning on the production – trade chain, these bodies obtain the guarantee that, every time organic products are bought, there is a certainty that they are healthy for the people, and that the agricultural practices do not harm the environment.

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In this context, the purpose of the paper was to analyze the interest of the inhabitants of the Western Romania for ecological products using a field survey based on a structured questionnaire.

## **MATERIALS AND METHODS**

In order to find out about the interest of the Romanian consumers for the organic products, the measure in which the population in Romania prefers and consumes organic products, a field survey was initiated, directed to the western part of the country (the counties of Arad and Timis).

The sample was established by applying the questionnaire to a heterogeneous group of 610 respondents from different age categories, professional training, training level, and social categories.

The data included in the questionnaires were processed with the help of the SPSS program. Based on the processing of primary information, we obtained a database that was analysed and interpreted.

The questionnaire was filled in only once by each person and contained 20 questions, of which five were demographics. The research had a level of probability of 95% and an error of  $\pm 5\%$  and was carried out between March 1 and June 1, 2022.

The questions referred to:

- Q1.Gender of the respondent;
- Q2. Age of the respondent;
- Q3.Social status of the respondent; Q4.Education of the respondent;
- Q5.Profession of the respondent;
- Q6.Level of knowledge about organic products;
- Q7. Way of obtaining information about organic products;
- Q8. Other names the respondent associated to organic products.
- Q9. Characterisation of organic products;
- Q10. Advantages of organic product;
- Q11. Disadvantages of organic products;
- Q12. Consumption of ecological products;
- Q13.Consumer concern for ecological products;
- Q14. The kind of ecological products that consumers would prefer;

Q15. The habit of buying ecological products. Q16. Knowing the price of organic products; Q17. Price affordability for ecological buyers; Q18. Possibilities of consuming ecological products in the area of the people surveyed; Q19. The possibilities of expanding the consumption of ecological products; Q20. The importance of the export of ecological products for the growth of the farmers' economy.

## RESULTS AND DISCUSSIONS

When we started the construction and application of the questionnaires, we took into account the figures that indicate import/export value of organic products as well as the volume of sales and consumption of organic products in Romania. According to [4, 3, 11], the volume of organic retail sales increased in the period 2015-2021 from 24.84 million euros to 40.65 million euros. The import of organic products amounts to 35 million euros for each of the years included in the period 2015-2021 and the export to 200 million euros. The consumption of organic products per capita increased from 1.25 euros/person in 2015 to 2.06 euros/person in 2021 [4, 3, 11]. These digits, let us to consider that the organic products market is on an upward trend.

The responses the questionnaire were as follows:

Q1. The first question referred to the gender of the respondents. Among the people questioned, 61.96% were women and 38.04% were men. We noticed the greater concern of women for shopping (62%).

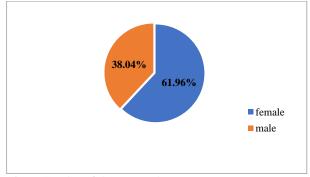


Fig.1. Gender of the respondents Source: own calculations based on the information from the questionnaire.

Women are also the ones that decide, to the greatest extent, on the structure and size of the products purchased (Fig.1).

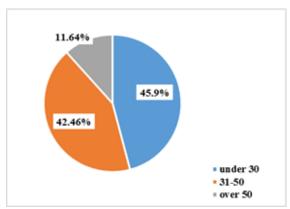


Fig. 2. Framing by age groups of respondents Source: own calculations based on the information from the questionnaire.

Q3. Regarding the social status of the respondents (according to their own assessments), 11.80% considered that they have a good social status (294 people), 48.20% an average social status, and 244 people (40.00%) a modest social status (Fig.3).

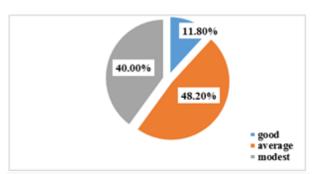


Fig. 3. The social status of the persons questioned. Sourc: results based on questionnaires.

Q4. Regarding the education of the 610 respondents, most of them, 484 people, were university graduates or undergraduates (79.34%), high school graduates (11.96%) and post-secondary school graduates (2.90%). Only 2.45% were secondary-school graduates, 1.96% primary-school graduates and 1.39% professional school graduates, Fig.4.

Q5. As for the profession of the respondents, we found that 228 people (37.37%) were teachers, doctors and engineers, 167 people (27.37%) were students, 3.93% were pensioners and the difference of 31.33% had other occupations (Fig. 5).

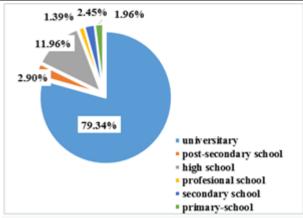


Fig. 4. The level of education of the people questioned. Source: results based on questionnaires.

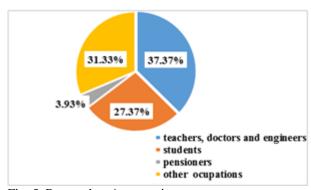


Fig. 5. Respondents' occupation Source: results based on questionnaires.

Q6. To the question, what do I know about organic products? 567 people respectively 92.95%, answered "yes" and 7.05% (43 people) answered "no" (Fig. 6).

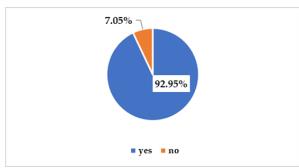


Fig. 6. Knowledge about organic products. Source: own calculations based on the information from the questionnaire.

Q7. As for the source of information about organic products, the responses were 4.91% from the press, 049% from the radio, 25.40% from TV, 29.50% from word of mouth and 39.70% from other sources (Fig. 7).

Q8. As to other names associated with organic products, the highest share of respondents, 39.01% (238 persons), said they associate it

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with natural products, 30.98% (189 persons) with products obtained without chemicals, 21.96% (134 persons) with organic products, 6.05% (140 persons) with unpolluted products and 2% gave other answers (Fig. 8).

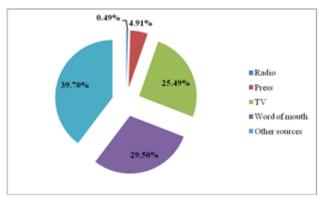


Fig. 7. Sources of information about organic products. Source: own calculations based on the information from the questionnaire.

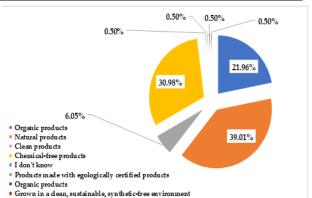


Fig. 8. Names associated with organic prodcts. Source: own calculations based on the information from the questionnaire.

Q9. As far as the characterization of organic products was concerned, the respondents characterized them in positive terms, only a small part had negative comments on organic products (Table 1).

Table 1. Characterization of organic products (selection)

	Beneficial Naturally obtained Natural, unchanged			
Healthy	High-quality	products	products	
Natural Controlled, healthier. Safe products	Products that do not endanger human health. High-quality products, good for health	Products that are less processed	High-quality products, good for health	
An utopia! A useless trend, I would prefer higher standards for the rest of foods	Expensive and rare Organic products are recommended to be consumed, but what is happening today is not exactly a loyal practice from traders	Very high price, quite doubtful as source, few laboratories for certification	Products obtained from crops where no fertilizers, pesticides, chemically treated seeds are used	
Tasty, good for Health Healthy products	Products respondent to a control, obtained in a certified-quality system	Products complying with specific technology and protected area	Reducing the risk of various diseases with the taste of old	
Products that give you mental comfort because you can consume them without worrying that there are traces of pesticides	Products in whose technology no synthetic chemicals are used.	Better than non- ecological but also more expensive	Products obtained by the normal culture cycle without using synthesis (chemical) products	
Healthy and tasty	Products with a low content of pesticide residues	Better life quality	Healthy, non-cancerous	
Healthy life Traceability from seed to plate Beneficial for the body	Healthier products obtained in more environmental-friendly conditions.  Absolutely necessary for daily consumption	Products with no GMOs, synthetic chemicals, fertilizers, or pesticides; limited amounts of additives	Natural products without added substances. Good but expensive	
A healthier alternative to classic products	Healthier products than ordinary ones	Products that will grow more and more in the future	Products as natural as possible, within the limits of possibilities	
Products obtained in accordance with the legislation in force on organic farming	Theoretically healthier, without a way of accelerated development or additives	Closer to the nature	Long-term beneficial effects Fitting a healthy diet	

Source: Own results.

Q10. Regarding the advantages of organic products, it was a nice surprise to see that 73.20% of the respondents (446 people) knew the benefits of these organic products, while the remaining 26.80% did not (Fig. 9).

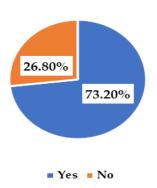


Fig. 9. Knowing the advantages of ecological products. Source: results based on questionnaires.

- Q11. Regarding the information about the disadvantages of ecological products, 79.20% of the people questioned "no" (because they did not know these products have disadvantages) and 20.80% said "yes" (Fig. 10).
- Q12. Regarding the consumption of ecological products, 87.70% (535 persons) of the respondents said "yes", at least occasionally, and 12.30% (75 persons) said "no" (Fig. 11).
- Q13. As for the interest in consuming environmentally friendly products, 83.60% of respondents were interested (510 persons), almost 11.40% were undecided (70 people), and the difference of 5% (30 persons) were not interested in such products (Fig. 12).

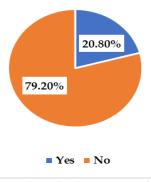


Fig.10. Knowing the disadvantages of ecological products.

Source: results based on questionnaires.

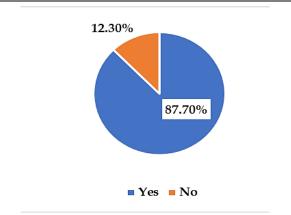


Fig.11. Ecological products consumed. Source: results based on questionnaires.

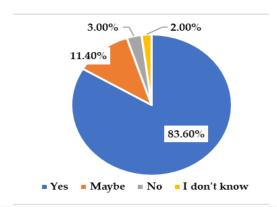


Fig.12. Consumption of ecological products. Source: results based on questionnaires.

Q14. Regarding the type of organic-certified products preferred, most respondents said they preferred fruits, vegetables, meat, and milk. The conclusion is that the farmers in the organic farming system should go to the production of this type of ecological agri-food products (Table 2).

Table 2. Top organic products preferred by respondents.

Vegetables and fruit	Dairy products	Meat and cold cuts
Olive oil	All categories	Eggs
Cosmetics	Honey	Jam

Source: Own results.

Q15. As far as the frequency of buying organic products is concerned, 45.20% of the respondents (276 persons) consume them weekly, 23.60% (144 persons) consume them occasionally, 13.44% (82 persons) consume them several times per week, 6.72% consume them daily (41 persons) and 2.62% (16 persons) consume them on a monthly basis (Fig. 13).

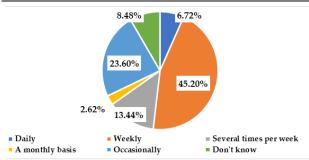


Fig. 13. Frequency of buying organic products Source: results based on questionnaires.

Q16. Regarding knowing the price of ecological products, 185 persons (30.33%) replied "yes", 50.33% responded "somehow", and 19.34% said "no".

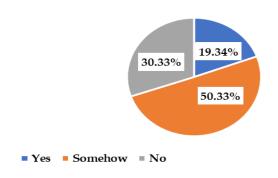


Fig. 14. Information on the price of organic products Source: results based on questionnaires.

Q17. To the question about an acceptable price level for organic products, 56.00% (342 persons) answered "25% more expensive", and 29.50% (180 people) said "the same as the other products" (Fig. 15).

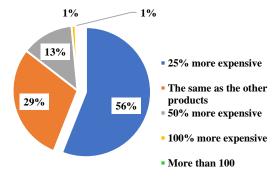


Fig. 15. Price level accepted for organic products. Source: own calculations based on the information from the questionnaire.

Q18. Regarding the prospects about the consumption of organic products in the area where the questionnaire was applied, 11.40%

(70 persons) replied that such products have an immediate perspective, 21.96% (134 persons) replied that such products will have perspectives in the next 2-3 years, 18.36% (112 people) said they will have a perspective over five years, and 39.84% have not expressed any opinion ("I do not know"), and 8.44% (51 people) replied that organic products have no perspective (Fig.16).

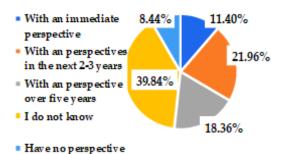


Fig.16. Perspectives of organic products consumption in Timiş County.

Source: own calculations based on the information

Source: own calculations based on the information from the questionnaire

Q19. Regarding expanding the possibilities of expanding the consumption of organic products, the people surveyed proposed detailed solutions shown in Table 3.

Q20. Referring to the importance of the export of ecological products for the growth of the farmers' economy

, 53.77% (328 persons) replied "yes", 12.95% (79 people) said "to a large extent", 12.45% (76 persons) "to a small extent", and the rest of respondents replied "no" (9.01%) and "I do not know" (11.82%) (Fig. 17).

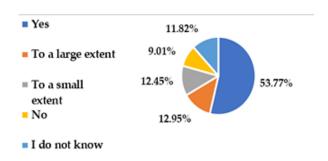


Fig. 17. Chance of the export of organic products for the Romanian economy.

Source: own calculations based on the information from the questionnaire.

Table 3. Selection of answers regarding the extension of the consumption of organic products

More promotion	Promoting them on the market, in the online environment	Promotion of local producers Elimination of intermediaries
Development of Ecological Agricultural Products Processing Companies	Subsidizing and educating, increasing awareness of the population on its benefits	Government facilities Help for the farmers
Cultivation on as higher areas as possible	Enforcing appropriate cultivation technologies	Public purchases of local bio products
Tax, VAT, and charge reduction to favor a more affordable price for buyers	There should be no fake "ecological" products. Thus, consumers would trust to consume more of this product category and facilitating the sale of producers (p through associations)!	

Source: Own results.

## **CONCLUSIONS**

Following the analysis of the data obtained with the help of the questionnaire, we obtained interesting information that could be considered by the decision-makers of agricultural policies in Romania.

The field investigation carried out based on a questionnaire applied to the 610 respondents allowed us to know how the inhabitants of western Romania prefer and consume organic products and, at the same time, helps farmers who practice organic farming to understand all the economic advantages of this farming system.

Of the total of the people questioned, 83.60% said they were interested in the consumption of organic products and only 5% stated that they were not interested in such products. Consumers believe that by consuming these products they protect their health, a statement that is confirmed by the answer to question O9 (Table 1) where respondents characterized them in positive terms, only a small part had negative comments on organic products. Rerelated to the quality/price ratio in terms of ecological products we found that 30.33% of the respondents believed that they had sufficient information about the price of organic products, while 50.33% had partial information. Regarding the level of the price accepted by the respondents, we found that 56.00% were willing to offer a 25% higher price for organic products compared to conventional ones, a situation that leads us to the conclusion that such products will be successful on the market.

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