STUDIES ON THE PREFERENCES FOR ECOLOGICAL VEGETABLE PRODUCT OF THE CONSUMERS FROM IASI COUNTY

STUDII ASUPRA PREFERINȚELOR PENTRU LEGUMELE ECOLOGICE A CONSUMATORILOR DIN JUDEȚUL IAȘI

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Abstract. The study aims at highlighting the consumers' preferences as determining factors in the promotion and development of the ecologic vegetable production in Iasi County. The results obtained show us that consumers' preferences varied depending on the income class and number of family members of the persons interviewed. This study was made on a sample made of 500 persons by using a questionnaire elaborated according to the norms provided in the specialized literature.

Key words: ecological vegetables, preferences, consumers.

Rezumat. Studiul are drept scop evidențierea preferințelor consumatorilor ca factori determinanți în promovarea și dezvoltarea producției legumicole ecologice în județul Iași. Rezultatele obținute ne relevă faptul că preferințele consumatorilor au variat în funcție de grupa de venit și numărul de membri ai familiei persoanelor intervievate. Studiul de față a fost realizat pe baza unui eșantion format din 500 de persoane, utilizându-se un chestionar elaborat după normele prevăzute în literatura de specialitate.

Cuvinte cheie: legume ecologice, preferinte, consumatori.

INTRODUCTION

Iasi county has high possibilities to cultivate vegetables and in time there have appeared several traditional micro areas such as those around Tg. Frumos town or those from Lunca Prutului. In these micro areas, the pedoclimatic conditions and the professional knowledge are favorable factors for the practicing of the ecologic vegetable growing (Munteanu N. et al., 2008). If we take into account a sustainable ecologic vegetable production, then there must a demand from the consumer's part for such products, since they are also the final beneficiaries of such a system (Damhoferlka et al., 2005; Munteanu N., Rominger O., 2001; Teliban G., Munteanu N., 2009).

In this context, the goal of this paper is to highlight the consumers' preferences in terms of yield and consumption of ecologic vegetables, depending on some elements of the social-professional profile of the interviewed people.

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MATERIAL AND METHOD

The carrying out of the study proposed was made through the survey method by using questionnaires specially made for social-professional surveys. Such studies are made at the level of some relatively large samples, so that the answers might represent average values as close as possible to the theoretic average for the entire population participating in the survey.

The interviewing comprised 500 persons by using a questionnaire elaborated according to the norms provided in the specialized literature (Buia Anuţa et al., 2003; Oppenheim A.N., 1997).

For the field investigation we chose the towns of laşi and Tg. Frumos, as well as communes Belceşti, Bosia, Golăieşti and Răducăneni, localities having large surfaces and vegetable yields and a well known tradition.

Respondents' answers were checked, validated and processed by specific methods using the SPSS program (Statistical Package for the Social Sciences), variant 17.

Following the validation of answers, out of the 500 questionnaires only 484 were valid with full answers to all questions, answers considered as acceptable "pertinent answers", with one answer for every question etc. The answers regarding preferences were appreciated on a scale with five levels of answer from "I totally agree to that" up to "I totally disagree to that".

RESULTS AND DISCUSSIONS

A pertinent analysis of consumers' preferences in terms of the ecologic vegetable production must first of all be studies from the economic viewpoint. At the same time, an important factor in determining consumers' preferences is represented by the number of family members.

From the economic viewpoint, the persons who participated to the interview may be grouped as follows: respondents having an income up to 400 lei -23.4%, respondents having an income between 400-800 lei -36.4%, respondents having an income between 1200-2000 lei -15.2%, respondents having an income between 1200-2000 lei -15.2%, respondents having an income over 2000 lei -10.1%.

As for the number of family members, we may notice that: 47.8% is the percentage of persons having a 1-3 member family, 46.2% is the percentage of persons having a 4-6 member family, 4.4% is the percentage of persons having a 7-9 member family, 0.6% is the percentage of persons having a 10-12 member family and 0.9% is the percentage of persons having more than 12 family members.

The preferences of the people, who were asked the question "Would I buy ecologically grown vegetables?", show different groups of answers for the sample under study (table 1).

Thus, out of the 484 interviewed persons, 81.0% said that they would buy ecologically grown vegetables, 15.5% said they were not sure and 3.5% would not buy ecologically grown vegetables. The data obtained for the sample under study shows the respondents' interest and preoccupation first of all or their health.

As for the answers received depending on the income class, the percentage of persons who agreed to the abovementioned issue was the following one: people having an income below $400 \, \text{lei} - 70.7\%$, people having an income between $400-800 \, \text{lei} - 80.6\%$, people having an income between $800-1200 \, \text{lei} - 84.3\%$, people having

an income between 1200-2000 lei -95.1% and people having an income over 2000 lei -92.1%.

As for their distribution in terms of the number of family members, the persons having a 1-3 member family agreed or totally agreed in a percentage of 79.9%, the persons having a 4-6 member family agreed in proportion of 83.5%, the persons having a 7-9 member family – 73.7%, the ones having a 10-12 member family – 33.3% and the ones having more than 12 family members agreed in a percentage of 100%.

Table 1
Consumers' preference to buy ecologically grown vegetables depending on the income class and the number of family members

| Incomeclass (lei) | Number of members | I would buy ecologically grown vegetables | | | | | |
|----------------------|-------------------|---|--------|----------|-----------|----------|-----|
| | | I totally I agree | I am | | I totally | Total | |
| | | agree | ragree | not sure | disagree | disagree | |
| upto 400 | 1 – 3 | 22 | 30 | 17 | 4 | 0 | 73 |
| | 4 – 6 | 18 | 22 | 12 | 2 | 0 | 54 |
| | 7 – 9 | 4 | 2 | 4 | 0 | 0 | 10 |
| | 10 – 12 | 0 | 0 | 1 | 1 | 0 | 2 |
| | >12 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | | 45 | 54 | 34 | 7 | 0 | 140 |
| | 1 – 3 | 27 | 50 | 21 | 3 | 0 | 101 |
| | 4 – 6 | 24 | 38 | 7 | 3 | 0 | 72 |
| 400 – 800 | 7 – 9 | 3 | 2 | 0 | 1 | 0 | 6 |
| | 10 – 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| | > 12 | 0 | 1 | 0 | 0 | 0 | 1 |
| Total | | 54 | 91 | 28 | 7 | 0 | 180 |
| | 1 – 3 | 10 | 16 | 1 | 3 | 0 | 30 |
| | 4 – 6 | 13 | 13 | 6 | 0 | 0 | 32 |
| 800 – 1200 | 7 – 9 | 0 | 2 | 0 | 0 | 0 | 2 |
| | 10 – 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| | > 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | 23 | 31 | 7 | 3 | 0 | 64 |
| | 1 – 3 | 16 | 15 | 2 | 0 | 0 | 33 |
| | 4 – 6 | 15 | 11 | 1 | 0 | 0 | 27 |
| 1200 – 2000 | 7 – 9 | 1 | 0 | 0 | 0 | 0 | 1 |
| | 10 – 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| | > 12 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | | 33 | 26 | 3 | 0 | 0 | 62 |
| over 2000 | 1 – 3 | 8 | 13 | 1 | 0 | 0 | 22 |
| | 4 – 6 | 7 | 6 | 2 | 0 | 0 | 15 |
| | 7 – 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10 – 12 | 1 | 0 | 0 | 0 | 0 | 1 |
| | > 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | 16 | 19 | 3 | 0 | 0 | 38 |
| TOTAL | | 171 | 221 | 75 | 17 | 0 | 484 |

Question: "Would you buy ecologic vegetables even if they are more expensive?" shows a certain classification of answers (table 2). Thus, 64.8% of respondents agreed or totally agreed to this question, 25.2% were not sure and 9.9% would not buy ecologic vegetables because they are more expensive.

 ${\it Table~2}$ Consumers' preferences to buy ecologic vegetables even if they are more expensive, by income class and number of family members

| Incompolate | No b a se a f | Would you buy ecologic vegetables even if they are more expensive? | | | | | |
|----------------------|-------------------|--|-------------------|-----|------------------|-------|-----|
| Incomeclass (lei) | Number of members | Ltotally | are more expensiv | | e ? I totally | Total | |
| | momboro | agree | I agree | _ | disagree | _ | |
| upto 400 | 1 – 3 | 9 | 31 | 19 | 13 | 1 | 73 |
| | 4 – 6 | 12 | 19 | 17 | 3 | 3 | 54 |
| | 7 – 9 | 3 | 2 | 4 | 1 | 0 | 10 |
| | 10 – 12 | 0 | 0 | 1 | 1 | 0 | 2 |
| | > 12 | 0 | 1 | 0 | 0 | 0 | 1 |
| Total | | 24 | 53 | 41 | 18 | 4 | 140 |
| | 1 – 3 | 10 | 44 | 36 | 9 | 2 | 101 |
| | 4 – 6 | 9 | 36 | 20 | 5 | 2 | 72 |
| 400 – 800 | 7 – 9 | 3 | 3 | 0 | 0 | 0 | 6 |
| | 10 – 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| | > 12 | 0 | 1 | 0 | 0 | 0 | 1 |
| Total | | 22 | 84 | 56 | 14 | 4 | 180 |
| | 1 – 3 | 8 | 14 | 4 | 1 | 3 | 30 |
| | 4 – 6 | 10 | 14 | 6 | 2 | 0 | 32 |
| 800 – 1200 | 7 – 9 | 0 | 1 | 0 | 1 | 0 | 2 |
| | 10 – 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| | > 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | 18 | 29 | 10 | 4 | 3 | 64 |
| | 1 – 3 | 9 | 15 | 9 | 0 | 0 | 33 |
| 1200 – 2000 | 4 – 6 | 10 | 14 | 3 | | 0 | 27 |
| | 7 – 9 | 1 | 0 | 0 | 0 | 0 | 1 |
| | 10 – 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| | > 12 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | | 21 | 29 | 12 | 0 | 0 | 62 |
| over 2000 | 1 – 3 | 8 | 11 | 3 | 0 | 0 | 22 |
| | 4 – 6 | 4 | 10 | 0 | 0 | 1 | 15 |
| | 7 – 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10 – 12 | 1 | 0 | 0 | 0 | 0 | 1 |
| | > 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | 13 | 21 | 3 | 0 | 1 | 38 |
| TOTAL | | 98 | 216 | 122 | 36 | 12 | 484 |

As for the distribution of answers by income, we may notice that the persons having higher income (1200-2000 lei and over 2000 lei) gave the most affirmative answers -80.7% and 89.5%, respectively.

The persona having the lowest income up to 400 lei gave the least affirmative answers, namely 55.0%.

As for the distribution of answers by the number of family members, the persons having a 1-3 member family agreed or totally agreed in a percentage of 61.4%, the persons having a4-6member family agreed in a percentage of 69.0%, the persons having a7-9member family -68.4%, the persons having a10-12member family -33.0%and the ones having more than 12 members in their family agreed in a percentage of 100%.

The respondents' answers related to the idea that "I do not buy ecologic products because they do not have an attractive aspect, though it is known they are healthier" determined a certain classification of answers (table 3).

Table 3 Consumers' trend not to buy ecological vegetables because they do not have an attractive aspect, by the income class and the number of family members

| Incomeclass (lei) | Number of members | I do not buy ecologic products because they do not have an attractive aspect, though it is known they are healthier | | | | | Total |
|----------------------|-------------------|---|---------|------------------|---------------|-----------------------|-------|
| (IGI) | members | l totally agree | I agree | I am not sure | l disagree | l totally disagree | |
| | 1 – 3 | 2 | 6 | 30 | 28 | 7 | 73 |
| | 4 – 6 | 1 | 7 | 19 | 22 | 5 | 54 |
| upto400 | 7 – 9 | 0 | 0 | 3 | 7 | 0 | 10 |
| | 10 – 12 | 0 | 0 | 1 | 1 | 0 | 2 |
| | > 12 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total | | 3 | 13 | 53 | 59 | 12 | 140 |
| | 1 – 3 | 3 | 13 | 34 | 42 | 9 | 101 |
| | 4 – 6 | 2 | 8 | 21 | 36 | 5 | 72 |
| 400 – 800 | 7 – 9 | 0 | 1 | 2 | 3 | 0 | 6 |
| | 10 – 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| | > 12 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total | | 5 | 22 | 57 | 82 | 14 | 180 |
| | 1 – 3 | 0 | 2 | 8 | 17 | 3 | 30 |
| | 4 – 6 | 0 | 4 | 10 | 13 | 5 | 32 |
| 800 – 1200 | 7 – 9 | 0 | 0 | 1 | 0 | 1 | 2 |
| | 10 – 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| | > 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | 0 | 6 | 19 | 30 | 9 | 64 |
| | 1 – 3 | 0 | 6 | 5 | 18 | 4 | 33 |
| | 4 – 6 | 0 | 1 | 3 | 15 | 8 | 27 |
| 1200 – 2000 | 7 – 9 | 0 | 1 | 0 | 0 | 0 | 1 |
| | 10 – 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| | > 12 | 0 | 0 | 0 | 0 | 1 | 1 |
| Total | | 0 | 8 | 8 | 33 | 13 | 62 |
| over 2000 | 1 – 3 | 1 | 3 | 3 | 10 | 5 | 22 |
| | 4 – 6 | 0 | 1 | 1 | 10 | 3 | 15 |
| | 7 – 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10 – 12 | 0 | 0 | 0 | 0 | 1 | 1 |
| | > 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | 1 | 4 | 4 | 20 | 9 | 38 |
| TOTAL | | 9 | 53 | 141 | 224 | 57 | 484 |

Thus, 12.9% out of the persons interviewed answered they would not buy ecologic vegetables because these do not have an attractive aspect, 29.1% were not sure and 58.1% expressed their wish to buy such products, regardless of their aspect. The relatively low percentage of those who answered positively in relation with the aspect of the ecologic vegetables has a high relevance in the commerce with such products.

As for the answers received by the income class, the percentage of persons who would buy ecological vegetables even if they do not have an attractive aspect is the following: persons having an income below 400 lei -50.7%, persons having an income between 400-800 lei -53.4%, persons having an income between 800-1200 lei -61.0%, persons having an income between 1200-2000 lei -74.2% and persons having an income over 2000 lei -76.3%.

As for their distribution by the number of family members, the persons having a 1-3 member family agreed or totally agreed in a percentage of 55.2%, the persons having a 4-6 member family agreed in a percentage of 61.0%, the persons having a 7-9 member family -57.9%, the persons having a 10-12 member family -66.6% and the ones having more than 12 members in their family agreed in a percentage of 100%.

CONCLUSIONS

- 1. Consumer's preferences in relation with the ecologic vegetables depend on the income class and the number of family members.
- 2. The highest preferences for ecological vegetables belong to the persons having high and very high incomes (1200-2000 lei and over 2000 lei).
- 3. Depending on the number of family members, consumers' preferences to buy ecological products registered a majority percentage in case of the families having 4-6 family members.
- 4. When speaking about their orientation towards the ecological product market, consumers prefer first of all high quality products with an attractive aspect whereas price is the second criterion taken into account.

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