PERCEPTIONS OF ALBANIAN CONSUMERS ON PRODUCTS WITH A LOW LEVEL OF PESTICIDE

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ABSTRACT

In general, even though consumers are to some extent aware of organic products, in the majority of cases, they do not understand what organic products are (Yiridoe et al., 2005). Analysis of the consumers' preferences will answer the following research questions: *What is the importance that a consumer in Tirana attributes to products with reduced levels of chemicals, pesticides, and organic products? What is the consumer's willingness to pay for products with reduced levels of chemicals and pesticides? Is there a significant effect of demographic characteristics on consumer's behavior?* The main purpose of this paper is to assess the willingness to pay of consumers living in the city of Tirana for a particular quality standard for the products that they consume, such as products with a low level of pesticides and chemicals. The Paired T-test was used to understand the degree of importance assigned to the attribute, the low pesticide level, the low level of chemicals and organic products.

INTRODUCTION

The understanding process is complex and many consumers do not have any information about the direct attributes of organic products. Uncertainty about the attributes of organic products and skepticism about food labeling (partly due to distrust of certifying entities and unequal standards in production and certification) make consumers hesitant when purchasing these products. In these circumstances, other forms of labeling of products with reduced levels of pesticides and chemicals are a good opportunity for marketing agricultural products. Safety and health concerns are the main motives that drive consumers to buy organic and low-level pesticide products. In Albania, as in other parts of the world, the interest for organic products is increasing as a result of perceived risk and possible health issues that conventional products may cause.

Analysis and findings

The main purpose of this paper is to assess the willingness to pay of consumers living in Tirana for a particular quality standard for products consumed, such as products with a low level of pesticides and chemicals. The results of this paper can be used by various actors such as producers and public institutions supporting these products in Albania. Contingent Valuation is the method used for this study. The ease of developing and understanding this method, the cost, and time required by the method to be developed are some of the key reasons why this method was chosen. The technique used was the payment card method.

Suppose a kg of vegetables (vegetables that you consume daily) costs 100 lek, how much more are you willing to pay for vegetables with low levels of chemicals and pesticides? Select one of the alternatives: 10%, 20%,30%,40%,50% _____?

Source: Author's work

Surveys were conducted in 2016 in Tirana. Convenience sampling was used to select the study sample. This sampling form consists in selecting individuals willing to become part of the study. The main advantages of this sampling are the availability of individuals and the timeline for data collection. The interviews were conducted near farmer markets in different areas of Tirana. The sample consists of about 150 individuals.

The questionnaire consists of three parts. The first part covers respondents' socio-demographic data including gender, age, education, and income. The second part covers information related to purchasing behavior, regarding the importance that consumers give to low-pesticide/chemical products and organic products. The study findings show that there are no significant changes between the status of the study participants and the importance given to the discussed attributes. Also, education and income do not affect the preferences for the considered attributes.

Tabela1: Status and attribute importance

		df	Mean Square	F	Sig.
pest * Status	Between groups	2	,704	,328	,721
	Within the group		2,147		
	Total				
Chem * Status	Between groups	2	,910	,800	,451
	Within the group		1,138		
	Total				
organic * Status	Between groups	2	,309	,117	,890
	Within the group		2,646		
	Total				

Source: Author's work

In conclusion, it can be said that the reduction of chemicals is more important than the other two attributes and that only gender affects the determination of the level of importance. The other demographic factors are not significant. For the analysis part, we will analyze the willingness to pay for fruits and vegetables with a reduced level of pesticides/chemicals. Willingness to pay may be as a result of the hypothetical scenario and the method used. Moreover, the study data show that the Albanian consumers are becoming more aware of various health issues.

Tabel 2: The demographic characteristics and the willingness to pay for a reduced level of chemicals

		Shuma e katrorëve	df	Mean Square	F	Sig.
Gender	Between Groups	,813	4	,203	,998	,411
	within Groups	26,491	130	,204		
	Total	27,304	134			
Age group	Between Groups	13,840	4	3,460	2,961	,022
	within Groups	151,894	130	1,168		
	Total	165,733	134			
Status	Between Groups	2,156	4	,539	1,482	,211
	within Groups	47,281	130	,364		
	Total	49,437	134			
Education	Between Groups	5,851	4	1,463	4,293	,003
	within Groups	44,297	130	,341		
	Total	50,148	134			
Income	Between Groups	30,167	4	7,542	6,951	,000
	within Groups	141,048	130	1,085		

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	Total	**50,148**	**134**			
Income	**Between Groups**	**30,167**	**4**	**7,542**	**6,951**	**,000**
	within Groups	**141,048**	**130**	**1,085**		
	Total	**171,215**	**134**			

Source: Author's work

Table 8 shows that there are statistically significant changes related to willingness to pay (GP) and age group. From post-hoc comparisons, the highest GP is observed in the age group 35-44 around 35% more for products with reduced level of chemicals. While the lowest payment level is observed in elderly individuals (10%). These results are consistent with findings from other authors, according to whom the perceived health risks is higher in younger ages (see annexes). Therefore, additional payments are higher in this group of consumers. Another demographic factor affecting the GP is the level of education. There is a link between the GP and the level of education. Highly educated individuals have a higher willingness to pay when compared to individuals with lower educational level. The latter group pays about 10% less than the highly educated consumers. Regarding the level of income, medium-to-high-income consumers have a higher willingness to pay. More specifically, consumers with X-income pay an additional 41%, while low-income consumers have a 16% GP. This result is understandable because one of the factors influencing the GP is the level of income. Low-income families have fewer opportunities to buy these products.

CONCLUSIONS

Consumer analysis shows that the attributes related to reduced level of pesticides and chemicals are valued more than the organic attribute. The first two attributes contain a more direct information to the consumer than the organic product attribute. These findings are in line with the findings of other scholars (see Kokthi et al., 2016). While when comparing the level of pesticides with the level of chemicals, the latter is most valued by the consumer. This result is related to the information available to the consumer; according to the consumer, chemicals are more harmful than pesticides. Among the demographic factors, it is evident that gender is influencing consumer's behavior. According to the results, females are more likely to evaluate the three attributes examined in the analysis than men. Also, similar studies show that women are more sensitive to information related to food safety. The agricultural production systems with reduced levels of pesticide and chemicals are less productive than conventional production systems. In general, low production of non-conventional systems are compensated by the relatively high prices offered for these products, the prices are different for different products in different customer groups. In our study, the respondents are willing

to pay about 31% more for vegetables with reduced levels of chemicals and about 30% more for products with reduced pesticide levels. Although the reduced level of chemicals was found to me more important than the pesticide level, the willingness to pay is roughly the same.

Age, level of education and income are three demographic variables that are statistically significant regarding willingness to pay. Individuals within the age group of 35-44 with high educational attainment and with a high and middle income level are more willing to pay (41%).

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