

CONSUMERS' PERCEPTION OF ORGANIC FOOD ITEMS: A CASE STUDY OF SİSLİ AND KARTAL ORGANIC BAZAARS OF ISTANBUL

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ABSTRACT

The primary purpose of this study was to determine consumers' perceptions of organic products. A sample of 88 consumers purchasing organic products from Sisli and Kartal Organic Bazaars of Istanbul were interviewed, and their socioeconomic characteristics and attitudes about these commodities were investigated. Results of the study showed that consumers purchase organic products because they believe that these goods are healthier than conventional products. They are satisfied with organic bazaars and found the prices quite reasonable. To broaden consumers buying organic products it is important to increase the number of organic markets, the number of producers, the number of food items, and quantity produced. This objective can be achieved by managing a cooperative work among NGOs, municipalities, and the Ministry of Food Agriculture and Livestock.

Keywords: Organic products, Organic agriculture, Organic food, Consumers, Consumption

1. INTRODUCTION

According to economic theory, the demand for a commodity is influenced by the price of the related commodity, income levels of consumers, prices of complementary and substitute goods, changes in tastes and preferences of consumers, expected future prices of commodities, and the number of consumers in the market (Gurler, 2009). Developing an organic market for farm commodities depends on the principles of supply and demand. Nowadays, there is a common belief that prices of organic products are relatively higher than conventional products. According to the principles of supply and demand, consumers decrease their demands as the prices of commodities increase, on the other hand, producers will be willing to produce and supply more of that commodity at the higher price levels. If only the prices of commodities are being taken

into consideration, it will be difficult to develop an organic value chain since consumers desire to buy at minimum prices while producers want to sell at higher prices. Price mechanism solves the problem in free- market economies, but many times it is impossible to find this kind of markets since many governmental and international interferences to agricultural markets are inevitable. Thus, all of the factors influencing supply and demand must be taken into consideration to develop an organic value chain for a commodity.

For the development a sustainable consumption and efficient use of agricultural resources, it is important to understand the factors that determine consumers' behaviors so that desired changes in these behaviors may be facilitated accordingly (Hayta, 2009). This process calls up the concepts of organic farming and organic product consumption (Güven and Pekmezci, 2015). Thus, these two concepts should be considered together since producing a commodity considering the economic, social and environmental sustainability of farming environment would attract consumers to buy that commodity even in higher prices. For this reason, production and consumption of organic commodities must be considered together, and proper measures must be taken accordingly.

The primary purpose of this study was to determine perceptions of consumers of organic products in Sisli and Kartal Organic Bazaars of Istanbul. Regarding consumption, customers of Sisli and Kartal organic Bazaars were asked some questions to measure their perceptions about organic products. Among these were information level about organic products, sources of information, frequency of purchasing organic commodities, reasons for preferring organic commodities, opinions about the price levels of organic product, if consumers can find enough numbers of organic food items, the numbers of organic bazaars in their locality, trust and transparency about organic products, markets they buy organic products, if they consider certification necessary when they buy organic products, whether they care about buying national brands, and if they are satisfied with packing of organic food items.

2. MATERIALS AND METHODS

Data for this study were collected by administering a questionnaire to 88 consumers purchasing organic food items from Sisli and Kartal organic bazaars of Istanbul. The population of this study was all consumers purchasing organic goods from these two organic markets. There is no certain information about the number of the population. Since the majority of the data were intended to be collected on categorical scales, the Cochran (2007)'s sample size determination formula for categorical data was used to determine the accurate sample size.

This formula, as presented by Barlett et al., (2001):

$$n = \frac{(t)^2 * (p) (q)}{(d)^2}, n = \frac{(1.96)^2 * (.5) (.5)}{(.1)^2} = 96$$

Where t is the value for the selected alpha level of 0.025 in each tail (1.96), (p) and (q) represent the estimate of variance (0.5 each), and d is the acceptable margin of error for the proportion being determined (0.1). The researchers conducted personal interviews with the respondents and filled the questionnaires accordingly. Of the 98 questionnaires, 88 were usable and considered for data analyses of this study.

The data collecting instrument was prepared by using previous research in this field. Technically, the process included closed-ended questions, and the respondents were asked to select the most appropriate answer. The researchers also noted the additional information and comments provided by the respondents. We used descriptive statistics including frequencies and percentages for data analysis. Each question was structured in such a way that we can achieve each objective of the study. Statistical Package for the Social Sciences (SPSS, Version 20) was used for the data analysis. All questionnaires were completed in May 2015, and it took approximately 15 min to complete one survey.

3. RESULTS

Demographic characteristics of the respondents are shown in Table 1. Five demographic characteristics were investigated, and three of them were tabulated. The first demographic variable was the age of the interviewees. It was asked in six categories. As it can be followed by the table, 36.4% of the respondents were in the 46-60 age group while 34.1% were in the 36-45 age group. These two groups made more than two-third of the respondents indicating that most of the customers buying products from organic bazaars are adults. The second demographic characteristic was education level for which 68.2% of the respondents were college graduates while 23.8% were high school graduate. Compared with earlier studies of Ayan et al., (2017), Akbay et al., (2007), and Akbay and Boz (2005), education level of the respondents in the present study is quite higher, indicating that consumers purchasing commodities from organic bazaars are more educated than consumers buying products from regular markets.

The third demographic variable was gender for which 70.5% of the respondents were females, and 29.5% were males. Of the female respondents, a vast majority (more than 90%) were married women with one or two children. Although it wasn't showed in tabular form, income level and occupations of the respondents were also asked, but the majority were reluctant to give precise answers to these questions, particularly the question related to income. However, the majority reported that they have a regular income and permanent jobs which make it possible for them to purchase organic food even with higher prices. These findings create a profile of organic

bazaar customer who is an average aged, well-educated, employed, and married woman who earns a regular income from her job.

Table 1: Demographic characteristics of consumers

Variables	Number	%
Age of respondents		
15-25	5	5.7
26-35	19	21.5
36-45	30	34.1
46-60	32	36.4
61+	2	2.3
TOTAL	88	100.0
Education level		
Primary school	2	2.3
High school	21	23.8
College	60	68.2
Masters Ph.D.	5	5.7
TOTAL	88	100.0
Gender		
Male	26	29.50
Female	62	70.50
TOTAL	88	100.0

Table 2: Information sources of organic products consumers

Variables	Number	%
How much information do you have about organic products		
I have quite enough information	60	68.2
Medium level information	17	19.3
Low level information	9	10.2
No information	2	2.3
TOTAL	88	100.0
Information sources of organic products		
Mass media (written sources)	26	29.5
The Internet	25	28.4
Friends, relatives	16	18.2
Television	12	13.6
Education/training	8	9.1
Other	1	1.2
TOTAL	88	100.0

Having information about organic commodities and suppliers of organic products is very important for consumers to become regular customers of the sellers. If consumers have proper information about organic goods and they receive this information from reliable sources, they may tend to become regular consumers of these products. Respondents were asked the amount of information they had about organic products and a vast majority (68.2%)' s answers were that they had enough information (Table 2). Mass media (written sources) was the most frequently used source of information (29.5%), and it was followed by the Internet (28.4%), and friends and relatives (18.2%). These findings indicate that consumers of organic products are quite conscious about the products they consume and they receive information from mostly written sources such as books, newspaper, and magazines. This finding provides opposite information with the earlier studies of Boz and Ozcatalbas (2010), Yalcin and Boz (2007), Boz et al., (2004), and Boz, (2002) which found that the primary sources of information on different farming practices were traditional sources such as neighbor farmers, peers, and own family members. Therefore, it can be stressed here that information sources of consumers of organic products are different than farmers and they tend to be more modern sources such as written materials and the Internet.

Consumers' perceptions of organic commodities and organic bazaars are presented in Table 3. Most of the consumers (69.4%) purchase organic food items weekly as most of the organic markets open on the weekends. Reasons for buying organic products had the highest frequency of choice "they are healthy" (32.9%), and the lowest rate in the choice "they are more delicious" (17.1%). More than half of the respondents (53.4%) thought that the prices of organic products are quite reasonable while the rest believed that the prices are high. The majority of consumers (69.3%) thought that there are enough number of organic food items in the local organic bazaars. More than half of the respondents (54.5%) thrust organic products by checking the labels; 68.2% purchased organic products from organic markets; 95.5% believed that certification is necessary; 68.2% preferred national brands, and 90.9% satisfied with the packaging of organic products. Some of these findings verified by earlier research. For example, a study conducted in Spain found that consumers buy organic food because they are concerned about healthy diet and environmental degradation (Gil et al., 2000). Although more than half of the respondents in this study stated that the prices of organic food items are quite reasonable, Agir et al. (2014)'s study in Kayseri province found that 84.8% of the respondents found organic products very expensive.

Table 3: Consumers' perceptions of organic products

Variables	Number	%
How often do you buy organic products?		
Daily	12	13.6
Weekly	61	69.4
Monthly	12	13.6
Rarely	3	3.4
TOTAL	88	100.0
Why do you prefer organic products?		
They are healthy	29	32.9
Concerns about children health	24	27.3
They are environment-friendly products	20	22.7
Organic products are more delicious	15	17.1
TOTAL	88	100.0
What do you think about the prices of organic products?		
Quite reasonable	47	53.4
Very expensive	41	46.6
TOTAL	88	100.0
Can you find enough number of organic food items in local bazaars?		
Yes, there are quite enough number of organic food items	61	69.3
No, there must be more different organic products.	24	27.3
No, I can only find few organic items.	3	3.4
TOTAL	88	100.0
How do you trust the products you buy?		
I check with organic labels	48	54.5
I trust the people organizing this bazaar	30	34.1
I trust the seller	8	9.1
I am always suspicious about this products	2	2.3
TOTAL	88	100.0
Where do you buy organic products?		
Organic bazaars	60	68.2
National markets	12	13.6
Organic products selling points	9	10.2
Farms	7	8.0
TOTAL	88	100.0

Do you consider certification when you buy organic products?		
Yes	84	95.5
No	4	4.5
TOTAL	88	100.0
Is it important for you to buy national or export organic products?		
I prefer domestic products	60	68.2
It makes no difference	25	28.4
I prefer import products	3	3.4
TOTAL	88	100.0
Are you satisfied with the packaging of organic products?		
Yes	80	90.9
No	8	9.1
TOTAL	88	100.0

4. CONCLUSIONS AND RECOMMENDATIONS

According to the results of this study, a general profile of consumers purchasing organic food items from Sisli and Kartal organic bazaars of Istanbul can be drawn as a medium aged woman who is married and holding a college degree. She thought that she has enough information about organic products and used mass media, mainly written sources and the Internet to get information about these commodities. Since most of the organic bazaars in Turkey open on weekends, the majority of respondents purchased their organic products weekly. Consumer purchased organic products because they believed that these products are healthier than other products. They also concerned about their children to be healthy and wanted to raise them with organic products.

According to the results of this study, most of the consumers are satisfied with organic food items. However, considering the 15 million population of Istanbul much more organic bazaars and suppliers are needed to reach other customers. To achieve this objective, first of all, different NGOs should take the initiative and raise awareness. Local municipalities and the Ministry of Food Agriculture and Livestock must also take the initiative and organize farmers who are willing to produce organic commodities. Income losses in the initial period, if any, must be compensated. Once an adequate number of food items in sufficient quantities are produced and made available to the consumers at reasonable prices, the number of consumers will probably be broadened, and a sustainable value chain for organic products will be established.

REFERENCES

Ađır, H. B., Poyraz, N., Yılmaz, H. I., & Boz, I. (2014). Tüketicilerin Organik Ürün Algisi: Kayseri İli Örneđi. XI. Ulusal Tarım Ekonomisi Kongresi 3-5 Eylül 2014, Samsun

Akbay, C., & Boz, I. (2005). Kahramanmaraş'ta Ailelerin Ev ve Ev Dışı Gıda Tüketim Talebi ve Tüketici Davranışlarının Ekonomik Analizi. *KSÜ Fen ve Mühendislik Dergisi*, 8(1), 122-131.

Akbay, C., Boz, I., & Chern, W. S. (2007). Household food consumption in Turkey. *European Review of Agricultural Economics*, 34(2), 209-231.

Ayan, A. K., Boz, I., Kaynakci, C., Aytac, S. (2017). Suppliers of organic food: Evidence from Sisli and Kartal ecological bazaars of Istanbul. *International Journal of Scientific Research and Management (IJSRM)*, 5(6): 5553-5559.

Barlett, J. E., Kotrlik, J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, And Performance Journal*, 19(1), 43.

Boz, I. (2002). Does Early Adoption Affect Farmers' Use of the Extension Service?. *Journal of International Agricultural and Extension Education*, 9(3), 77-82.

Boz, I., & Ozcatalbas, O. (2010). Determining information sources used by crop producers: A case study of Gaziantep province in Turkey. *African journal of agricultural research*, 5(10), 980–987.

Boz, I., Akbay, C., Orhan, E., & Candemir, S. (2004). Çiftçilerin tarımsal faaliyetlerde kullandıkları bilgi kaynaklarının belirlenmesi ve tarımsal yayım açısından değerlendirilmesi. Türkiye VI. Tarım Ekonomisi Kongresi, 16-18.

Cochran, W. G.(2007). *Sampling techniques*. John Wiley & Sons,

Gil, J. M., Gracia, A., & Sanchez, M. (2000). Market segmentation and willingness to pay for organic products in Spain. *The International Food and Agribusiness Management Review*, 3(2), 207-226.

Güven, S., Pekmezci, P. (2015). Tüketicilerin “organik ürünler” e bakışı ve tüketicileri organik ürünlere yönlendiren motivasyonlar. *Hacettepe Üniversitesi Sosyolojik Araştırmalar E Dergisi*. Accessed August 4, 2017, from <http://www.sdergi.hacettepe.edu.tr/?page=makaleler>

Hayta, A. B. (2009). Sürdürülebilir tüketim davranışının kazanılmasında tüketici eğitiminin rolü. *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi* 10 (3), p. 143-151.

Gurler, A. Z. (2009). Genel ekonomi (2. Baskı). Nobel Yayın Dagitim Tic Ldt Sti.

Yalcin, M., Boz, I. (2007). Kumluca Ilesinde seralarda ureticilerin kullandıkları bilgi kaynakları. Bahçe, 36(1). Accessed August 4 2017 from: file:///C:/Users/%C4%B0smet%20BOZ/Downloads/5000050417-5000068305-1-PB%20(2).pdf