Ciência Rural, Santa Maria, v.54:12, e20230122, 2024
http://doi.org/10.1590/0103-8478cr20230122
ISSNe 1678-4596
RURAL SOCIOLOGY

Consumers' willingness to pay for products with good agricultural practices-GAP- labelled for food Safety in Türkiye

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ABSTRACT: While food risks are increasing in many countries, consumers in Turkey are also worried about the risks of agricultural products. Uncontrolled agricultural production in Turkey both threatens consumer health and prevents export earnings. Agricultural products that cannot be exported in Turkey are easily marketed in the country. Low-income level in Turkey limits the consumption of certified safe food. This study particularly focused on consumers whose demands direct the production of safe food. This study determined the food safety perception of consumers, their demands for safe agricultural products with good agricultural logo, and their willingness to pay extra. Please no new line Data were obtained through face-to-face interviews with 422 individuals over the age of 18 residing in the city center of Tokat in Turkey. This study provided information on the necessity of good agriculture for consumer health, agriculture sustainability , sustainability of agricultural exports and willingness to pay for safe products with the GAP logo in Turkey. In Turkey, consumers' awareness of food safety is low, only 20.85% of the participants know the concept of food safety and only 52% recognize the good agriculture logo. Twenty-seven per cent of the participants stated that they would pay 10% higher for products with good agriculture logos while 23% of them would pay 20% higher. According to ordered probit analysis, it was determined that there was a relationship between knowing the good agriculture logo, knowing the logo of organic agriculture, adopting innovations, marital status, and willingness to pay extra for safe food.
Key words: willingness to pay, food safety, good agricultural practice label, ordered probit, Turkiye.

Disposição dos consumidores em pagar por produtos com boas práticas agrícolas-GAP- rotulados para segurança alimentar

RESUMO: Hoje a deterioração ecológica e a poluição tornam difícil para os indivíduos consumir alimentos seguros. Como a maioria dos países, os consumidores na Turquia também estão preocupados com os riscos dos produtos agrícolas. Os produtos agrícolas que não podem ser exportados na Turquia são facilmente comercializados no país. A produção agrícola descontrolada na Turquia ameaça a saúde do consumidor e impede as receitas de exportação. O baixo nível de renda na Turquia limita o consumo de alimentos seguros certificados. Torna-se importante produzir de acordo com as demandas externas por receitas de exportação. Este estudo abordou a necessidade e a situação atual da produção segura de alimentos e boas práticas agrícolas para agricultores, consumidores, agricultura sustentável e exportação sustentável na Turquia. Ele se concentra particularmente nos consumidores cujas demandas direcionam a produção de alimentos seguros. Este estudo teve como objetivo determinar a percepção de segurança alimentar dos consumidores, suas demandas por produtos agrícolas seguros com um excelente logotipo agrícola e sua disposição de pagar mais. Os dados foram obtidos por meio de entrevistas face a face com 422 indivíduos maiores de 18 anos residentes no centro da cidade de Tokat, na Turquia. Os dados foram analisados usando análise de regressão probit ordinal. Foi determinado que os participantes estavam dispostos a pagar 10% a mais em média por produtos com boas práticas agrícolas. Este estudo fornece informações sobre a necessidade de uma boa agricultura para a saúde do consumidor, sustentabilidade da agricultura e sustentabilidade das exportações agrícolas na Turquia. Ele fornece informações sobre a disposição dos consumidores em pagar por produtos seguros com o logotipo GAP contra o problema de resíduos em produtos agrícolas na Turquia.
Palavras-chave: disposição a pagar, segurança alimentar, etiqueta de boas práticas agrícolas, proibição ordenada, Turquia.

INTRODUCTION

Agriculture is a multifaceted production activity with social, economic, environmental, and ecological factors. Farmers dealing with agricultural production are interested in production patterns, production methods, and especially the economic dimension of the production. Ecological production, which protects nature, agricultural biodiversity, the quality of life, and food safety of future generations, often contradicts farmers' economic concerns. However, today's agricultural production must consider the sustainability of production, and the impacts of the product and production process on the environment, natural resources, human health, and the ability to meet the consumers' expectations for safe food. This is because today's consumers demonstrate a model of consumer behavior demanding adequate, balanced, and healthy food high in nutritional value and aiming to minimize economic losses (BISWAS et al., 2010). Today's consumers are increasingly concerned about food safety and are trying to get more complete information about the sources of input (BISWAS et al., 2010). It is indicated that there is a growing number of consumers around the world who are willing to pay a price premium

Received 03.03.23 Approved 14.03.24 Returned by the author 08.01.24
CR-2023-0122.R2
Editors: Leandro Souza da Silva Silviu Beciu

for environmentally friendly products (SHUKRI & MUHAMAD, 2007). The increasing demand of consumers for safe food compels suppliers and manufacturers to take measures to increase confidence in the production of agricultural products. Despite the negative consequences of the synthetic production inputs and processing techniques in the world and key, industrial agricultural production is the common practice in most agricultural production areas. However, increased consumer and producer awareness is pushing for the implementation of good agricultural production systems.

Sustainability in agriculture will be achieved using good agricultural practices (GAP) or similar agricultural systems that protect natural resources and use agricultural techniques that do not harm the environment. GAP emerged in the 1990s in Europe, where environmental pollution and food health and safety problems were intense and spread all over the world. EuropGAP is a protocol prepared in 1999 by 14 food retailers that control most of the fresh fruit and vegetable market in Europe, setting the standard for its minimum rules to minimize certain risks that threaten human health. GAP defines the minimum standards sought in agricultural products purchased by retailers (ATASEVEN, 2014). These specific good agricultural practices of Europe determine and implement the code of conduct for working conditions and environmental management on farmland as well as the health and safety issues for the producers and consumers (AMEKAWA, 2009). The EuropGAP which defined the minimum standards of obligations that all countries must comply with in cross-border agricultural trade, and which included classical good agricultural practices of European Union countries was changed to GLOBALGAP in 2007 when it became accepted and became widespread all over the world. The GLOBALGAP protocol, which includes GAP stipulating controlled and certified production of fruits and vegetables to be purchased by European Union countries, is the most common certificate requested worldwide in the trade of agricultural products (HASDEMIR, 2011).

To move the setbacks and obstacles that could be encountered in agricultural foreign trade in complying with the good agricultural practices that started in Europe and are accepted all over the world, these practices have also been put into effect in Turkish agriculture. Since 2003, GAP has been practiced based on EuropGAP criteria in the fresh fruit and vegetable sector of Turkey exporting to European countries (HASDEMIR, 2009). The first legal regulation in Turkey, "Regulation on Good Agricultural Practices", was enacted in 2004. The purpose of this Regulation was designated as "to regulate the procedures and principles of good agricultural practices to be carried out to make an agricultural production that does not harm the environment, human and animal health, to protect natural resources, to ensure traceability and sustainability in agriculture and to ensure reliable product supply" (ANONYMOUS, 2010). The good agricultural practices that came to the agenda of Turkey in 2003-2004 have started to be implemented in a registered manner since 2007 (ANONYMOUS, 2010).

Using GAP and similar practices and ensuring sustainability in agriculture is especially important for Turkey, whose farmland is on such a fertile land of the world as Anatolia, which has an important agricultural production and export, and has a large population that needs to be fed. Although, GAP has become widespread in Turkey, it has a very small share of the total farmland, and higher costs involved in GAP compared to conventional agriculture discourage the producers (ABA & IŞIN, 2014). In the studies carried out with GAP and organic farming producers, it was revealed that the most effective factor in the desire of producers in Turkey to switch to these systems was the state support to these systems (SAYIN et al., 2015; KARABAŞ & GÜRLER, 2011). Although, these systems are the solution to food security and export problems in Turkey, the poverty of producers and consumers makes difficult to use them on a larger scale. The two other studies on this issue mentioned that reflections of good agricultural practices implemented in the world on Turkey are delayed, that Turkey is late in adopting GAP, and that the country is far from the export targets intended by GAP. These studies emphasized that low income and awareness levels play role in this delay and that awareness and control should be increased to spread good agricultural practices (AVŞAR & AVŞAR, 2015; ERYILMAZ & KILIÇ, 2018).

The behavior of consumers, as well as that of producers, towards products of good agricultural practices, is important in terms of guiding this production. However, like producers, a considerable percentage of consumers in Turkey do not know good agricultural practices and consider it the same as organic agriculture. Production methods considering people and the environment, whether it is organic, natural, GAP, local or traditional, are important for today's consumers. Consumers are more interested in learning the origin of food, and this requires manufacturers to be prepared to explain and defend the content of their products and production methods in a

way that satisfies the consumers. Due to consumers' concerns about health and social responsibility, the increasing demand for high quality makes labeling the product quality an important marketing tool. While food products with invisible quality properties are increasingly marketed, information problems and their impact on food supply will continue to gain importance in chain stores, markets, and trade (SCHMALTZ, 2018).

Within the scope of safe food, there are many studies in the international literature on consumer behavior towards organic products, GAP products, and local and traditional products. In these studies, the drivers of the demand for local food, organic food, GAP products, willingness to pay for these foods (WTP), consumer perceptions, and other important dimensions of these alternative foods were discussed. For the growth of the safe food product market, which is an alternative to industrial agriculture, the supply and demand forecasts of these foods, determining the demographic characteristics of natural and organic food shoppers, and providing information and advertising have always been important. There are not enough studies in Turkey that evaluate consumer behavior related to the products of good agricultural practices. In the present study, the willingness of consumers in Turkey to pay extra for products produced with good agricultural practices and labelled with the good agricultural logo was investigated.

LITERATURE REVIEW

Good agricultural practices and similar food safety approaches in the world and Europe in search of safe food started to be the subject of debate and the focus of much academic research long ago. The interest of consumers all over the world in foods that they consider safe, and which are produced by any of the organic, local, traditional, or good agricultural practices, has resulted in many studies involving the markets, trades, production, and consumption of these foods, producer and consumer behaviors and preferences for them. Early studies in the international literature on safe food in the early 1990s focused on concerns about pesticide risk, marketing of safe products and associated problems, and determinants of consumer demand (JOLLY et al., 1989; MISRA et al., 1991; HUANG, 1996). In the following years, studies investigating the characteristics of consumers buying natural and organic groceries gained importance. Research so far has focused on-demand analysis and consumer demographics such as age, education, income, marital status, and the number of children. Since 2003, price premiums for safe foods have started to be questioned. Studies reported that the premiums vary based on the product, region, season, etc. Of these studies, HUANG & LIN (2007) and DETTMANN & DIMITRI (2009) showed that relatively high income and education levels increased the tendency to prefer safer foods. SMITH et al. (2009) and DIMITRI & DETTMANN (2012) noted in their more recent consumer demographic reviews that higher education, income, access to organic food, and being married increase consumption of such safer products.

CAMPBELL (2005) described the EurepGAP using a nice analogy calling it a new invisible hand system for food safety and agricultural sustainability. Good agricultural practices have become an important tool for food supply chains by making it necessary to observe several social standards in the name of sustainability in agriculture, environment, and human health. In Turkey, good agricultural practices (GAP) production systems are used and tried to be disseminated to meet domestic consumer demands for agricultural production and to produce agricultural products of significant export potential by world standards. Despite the increasing importance of agricultural systems such as good agricultural practices in the world aiming to reduce food terrorism, the negative effects of intensive agriculture, consumer anxiety, and problems in agrarian product exports arising from poor agricultural practices, the spread of Good Agriculture practices in Turkey has been delayed. This has also delayed the research associated with production and consumption. A study conducted in Turkey showed that Turkish consumers have a positive attitude towards organically grown seafood and that approximately 64% of Turkish respondents are willing to pay a premium between 11 and 30% for these products (BUDAK et al., 2005). According to FRESHLEY (2009), consumers are willing to pay a premium of 10% only when the market price premium for "green" products is much higher. Green products are known as environmentally friendly or ecological products (CHEN & CHAI, 2010). Most Chinese consumers are aware of green food in China. Research of XIA & ZENG (2009) showed that consumers' willingness to pay more for green food in China is 6-10%. Another study conducted in China YIN et al. (2017) concluded that consumers are willing to pay high prices for safe and certified tomatoes. REZAI (2013) estimated that the average desire of consumers in Malaysia to pay more for

green food was 16.93%. Also in Malaysia, JOYA et al. (2022) investigated consumers' willingness to pay for tomatoes' food safety features and concluded that consumers' willingness to pay increases as age, income level, and education level increase.

It was indicated that food safety systems are facing a transformation process with emerging markets in the world and that the strategy of gradually raising food safety standards is being adopted due to the increasing demand for safe food. Increased interest in food safety and labelled products have increased the importance of food safety labeling policies and controls, and studies have begun to focus on this issue (MCFADDEN & HUFFMAN, 2017). Consumers concerned about the dangers posed by food are looking for reliable products that are produced by organic or good agricultural practices, controlled to meet certain standards, certified, labelled, and have a geographic ID associated with certain standards. However, the problem of deceiving consumers arises related to the labels of the safe foods for which the consumers pay premiums. It is important to reduce the risk of consumer deception and to ensure the reliability of the labels of these foods. In recent studies on the subject, it has been noted that due to the trust problem consumers in the world prefer products with government-certified labels. Studies showed that consumers rely more on government-certified food safety control measures (ORTEGA et al., 2011; WU et al., 2015). Consumers were found to consider government safety certification an important factor when deciding to buy fresh food (CANAVARI & WONGPRAWMAS, 2017).

Research design

The present study is exploratory research, and the data was obtained through a survey. The study included multiple-choice questions. The data was collected in April 2019 from 422 consumers over the age of 18 in the central town of Tokat Province through face-to-face interviews. The sample size was determined by a staged random sampling method that was not grouped by household size (COLLINS, 1986).

$$n = \frac{t^2[1 + (0.02)(b-1)] * pq}{E^2} \quad (1)$$

Where n is the sample size, t is the significance level (assumed to be 95%), b is the sampling stage, p is the existent probability of the investigated situation (assumed to be 50% in the study), and q is the probability of non-existent situation (1-p), and E is the error accepted (considered 4.77%). I equal to one (1), equality is as follows:

$$n = \frac{(t^2 * pq)}{E^2} \quad (2)$$

$$n = \frac{1.96^2 * (0.5 * 0.5)}{0.0477^2} = 422 \quad (3)\ (\text{COLLINS, 1986})$$

In the study, consumers' willingness to pay extra for the products of good agricultural practices was analyzed based on socioeconomic and demographic factors. The experimental m"odel was as follows:

$$WTP_i = \alpha_0 + \alpha_1 GEN_i + \alpha_2 MAR_i + \alpha_3 AGE_i + \alpha_4 EDU_i + \alpha_5 AMI_i + \alpha_6 NOC_i + \alpha_7 HSZ_i + \alpha_8 LSR_i + \alpha_9 AIN_i + \alpha_{10} RST_i + \alpha_{11} FFS_i + \alpha_{12} LGAP_i + \alpha_{13} LORG_i + \varepsilon_i \quad (4)$$

The dependent variable, willingness to pay extra for the products of good agricultural practices, was categorized into five different options. To explain which factors, explain the willingness to pay extra for the products of good agricultural practices, the value range of the dependent variable was kept in a wide range between 0 and 30%. Threshold values must be positive and in the form of $\mu1 < \mu2 < \mu3 < \mu4$ (given as /cut1 < /cut2 < /cut3 < /cut4 in model). A large number of models were tried using independent variables in table 1, and the most appropriate regression model is presented in table 2.

In the preparation of the questionnaire, similar relevant studies were considered. For this purpose, age, gender, educational status, marital status, living place, level of social responsibility, whether to adopt innovations and income level were included in the survey.

The dependent variable of the model was the willingness of consumers to pay extra for the food produced by good agricultural practices. Consumers' desire to pay extra for the food produced by good agricultural practices was classified as "never", "10% more", "20% more", "30% more" and "over 30% more". The basic hypothesis of the study was that the consumers' willingness for extra payments for the food produced by good agricultural practices would differ b on socioeconomic and demographic characteristics. Definitions of socioeconomic/ demographic variables and defining statistics of consumer attitudes and samples are given in table 1. Data from 422 participants were analyzed. For the regression model, the most suitable model was decided by preferring the appropriate variables in table 1.

The ordered probit model was preferred to determine the degree to which socioeconomic/ demographic characteristics and attitudes affecting participants' desire to pay extra for good agricultural products were effective. The theoretical framework of the ordered probit model is the maximization of standard normal random

Table 1 - Variables and descriptive statistics of ordered probit regression model.

Variable	Denotation	Mean	Standard deviation
----------Descriptive variables----------			
Gender (Female: 0; Male: 1)	GEN	0 .4313	0 .4958
Marital status (Unmarried: 0; Married: 1)	MAR	0 .5640	0 .4965
Age (18-25 years: 1; 26-35 years: 2; 36-50 years: 3; 51 years and over: 4)	AGE	1 .9123	0 .9793
Education level (Illiterate: 1; Literate: 2; Primary school: 3; Secondary school: 4; High school: 5; College graduate: 6; Post-graduate: 7)	EDU	4 .7180	1 .4321
Average monthly income (Less than 2000 TL: 1; 2001-4000 TL: 2; 4001-6000 TL: 3; 6001-8000 TL: 4; 8001 TL and over: 5)	AMI	2 .6351	1 .1876
Household size	HSZ	4 .2038	1 .5751
Level of social responsibility (Very low: 1; Low: 2; Moderate: 3; High: 4; Very high: 5)	LSR	3 .2322	1 .0027
Adopting innovations (Adopting innovations immediately: 1; Adopting innovations before long: 2; Adopting innovations in time: 3; Adopting innovations after the half of the society: 4; Adopting innovations as the last: 4)	AIN	2 .2986	1 .0967
High level of risk taking (No: 0; Yes: 1)	RST	0 .0665	0 .2495
Familiar with the food security concept (Unknowing: 0; Knowing: 1)	FFS	0 .2085	0 .4905
Familiar with the logo of good agricultural practices (Unknowing: 0; Knowing: 1)	LGAP	0 .5237	0 .4999
Familiar with the logo of organic farming (Unknowing: 0; Knowing: 1)	LORG	0 .3460	0 .4754
----------Dependent variable----------			
Willingness of the consumers to pay extra for the products of Good Agricultural Practices (Any: 0; 10%: 1; 20%: 2; 30%: more than 30%: 4)	WTP	1 .3128	1 .2700

TL: Turkish Lira.

benefit (MCFADDEN, 1973). The answer options used to determine the extra payment status of the consumers for the products of good agricultural practices are constituted by ordered forms since they would be a certain percentage of the normal price. The ordered probit model has extensive use in the literature for the modeling of responses that could be grouped as orders. The ordered probit model is created as an unobservable (hidden) variable regression model, such as a two-result probit model (MADDALA, 1983; LONG, 1997). In the present study, the consumer's benefit function for the desire to pay extra for products of good agricultural practice was assumed to be a vector of the ranking of willingness for relative extra payment, their socioeconomic/demographic characteristics, and other characteristics.

ANALYSIS AND RESULTS

In the study, first, the descriptive statistics of the data were obtained and then the ordered probit regression model was used. The descriptive statistics of the data are given in table 1 and briefly summarized below:

According to the results of the descriptive analysis of the data from 422 consumers over the age of 18 in the central town of Tokat Province, the percentages of women and men were 57 and 43%, respectively. Of the 422 respondents, 44% were single and 56% married. The mean age of the participants was in the 26-35 years of age group. Families had an average of two children, and the average number of individuals in the family was about 4. Most of the families were in the average monthly income group of 2001-4000 Turkish Liras.

Of all participants, 20.85% were not knowledgeable about the food safety concept. While 52% of respondents knew the good agricultural practices logo, approximately 35% knew the organic agricultural product logo. The percentage of the participants who did not want to pay any extra for the products of good agricultural practices was 34%. The proportion of consumers who indicated that they could pay 10% more for the products of good agricultural practices was 27%, while 23% of the consumers stated that they could pay 20% more for these products. It was found that 8% of consumers were willing to pay 30% more for products with good agricultural practices logo whereas 9% were

Table 2 - Ordered probit regression model and variables included in the model.

Variables	Coefficients	Standard error	Calculated Z
GEN	0.4589	0.1111	0.41
MAR	-0.2555**	0.1352	-1.89
AGE	0.0398	0.0743	0.54
EDU	0.0241	0.0451	0.53
AMI	-0.0014	0.0478	-0.03
HSZ	0.0251	0.0347	0.72
LSR	0.0185	0.0564	0.33
AIN	-0.0874*	0.0529	-1.65
RST	0.0269	0.0485	0.55
FFS	0.0537	0.1320	0.41
LGAP	0.3307***	0.1142	2.90
LORG	-0.2031*	0.1204	-1.69
/cut1	-0.2086		
/cut2	0.5045		
/cut3	1.1868		
/cut4	1.5813		
Number of observations	422	Log likelihood	-611.91908
LR $Chi^2(13)$	20.46	Prob > Chi^2 = 0.0589	Pseudo R^2 = 0.0164

***, **, * significant at 1%, 5% and 10% level of probability.

willing to pay more than 30%. The most appropriate regression model is presented in table 2.

The ordered probit model was found to be statistically significant based on the maximum likelihood method (P < 0.0589). The threshold values predicted in the model indicated the numerical relationship between the consumer's benefit function and the willingness to pay extra. The threshold values ranked from the lowest to the highest, and only the /cut1 threshold value was close to zero and negative. The threshold values in table 2 indicated that the organization of dependent variable categories was partially appropriate. Accordingly, the degree to which the independent variables participating in the model affected the dependent variable was partially high.

The "marital status" variable (MAR), which was included in the model as a dummy variable, had a negative coefficient and was significant (P < 0.05). The negative coefficient meant that being married would have a reducing effect on the willingness of individuals to pay extra for the products of good agricultural practices. According to this finding, it could be stated that single people have the flexibility to allocate a greater share of their income for healthy products than married people do.

The "adopting innovations" (AIN) variable in the model was significant (P < 0.10) and had a negative coefficient. This variable was coded inversely (from positive to negative). In other words, it positively affects the willingness to pay extra. Accordingly, it can be said that as the consumer's tendency to embrace innovations increased, their willingness to pay more for the products of good agricultural practices would be higher.

The "knowing the products of good agricultural practices logo" (LGAP) variable in the model had a negative and significant (P < 0.01) coefficient. Thus, knowing the logo of good agricultural practices would affect the willingness to pay extra for the products of good agricultural practices. Consumers who recognized the good agricultural practices logo could be willing to pay more for these products because they were sensitive about their health and the environment.

The coefficient sign of the "knowing the logo of organic agriculture" (LORG) variable included in the model is negative and statistically significant at the 10% significance level. Accordingly, it can be said that as the consumer's awareness of the organic agriculture logo increases, their willingness to pay more for products with good agricultural

practices will decrease. Because consumers who have high concerns about their health and the environment will prefer to consume more controlled organic agricultural products, their willingness to pay extra for good agricultural products will decrease.

The variables "gender" (GEN), "age" (AGE), "education level" (EDU), "average monthly income" (AMI),"household size"(HSZ), "individual's level of social responsibility" (LSR), "high level of risk taking" (RST) and "familiar with the food security concept" (FFS)in the regression model were not discussed because they were not statistically significant. CHEN & CHAI (2010) reported that there was no difference between the genders in their attitudes towards the environment and green products.

DISCUSSION AND CONCLUSION

Research on this topic is expected to be information set for consumers and manufacturers. The measures to be taken based on the findings of the present study would cause consumers to become increasingly aware of their environment and health and increase the demand for the products of good agricultural practices. Thus, scarce resources could be used more effectively and for a longer period, contributing to the upbringing of healthier generations. In terms of producers; conversely, determining the factors that have an impact on the prices of products from good agricultural practices and planning accordingly would contribute to the effective use of both their own and the world's natural resources. Along with more conscious consumers, both the amount and diversity of the products of good agriculture practices would increase in Turkey. This would give producers the advantage of getting better prices and an improvement in their wealth. It is especially important for a country like Turkey, which has an important place in world agricultural production, to achieve a production that considers the demands of world consumers and to take its deserved share in world exports.

The present study, determined the factors affecting consumers' willingness to pay more for the products of good agricultural practices. In the study, ordered probit regression analysis was conducted on data obtained through a survey carried out in April 2019 on 422 consumers who were 18 years old and over and living in an urban area of Tokat province. Of the variables in the regression model, "adopting innovations", "knowing the products of good agricultural practices logo", "knowing the logo of organic agriculture" and "marital status" were significant. It was revealed that the participants were willing to pay an average of 10% more for good products of good agricultural practices. The results are consistent with previous research to predict willingness to pay for food safety features. A similar study in Turkey showed that Turkish consumers had a positive attitude towards organically grown seafood, with about 64% of respondents paying a premium of between 11% and 30% (BUDAK et al., 2005). The average desire to pay more for green foods in Malaysia was estimated to be 16.93% (GOLNAZ et al., 2013). Consumers' willingness to pay extra for green food in China was 6-10% (XIA & ZENG, 2009). In developed countries, consumers may be more likely to pay a premium for healthy foods and read food labels. Based on the results of the study, it was observed that it is very important to publicize the products of good agricultural practices and to explain their contributions to the economy and consumers by considering the variables that were statistically significant. Other studies on developing countries have also argued that the knowledge of producer and consumer demand for food safety is very limited (ORTEGA & TSCHIRLEY, 2017; ÖDEYEMI et al., 2018).

It is expected that the research to be done on this subject will be information set for consumers and producers. Measures to be taken according to the results of the research will cause consumers to become more conscious of the environment and health, and the demand for well-practiced agricultural products will increase. In this case, scarce resources can be used more effectively and for a longer period and contribute to the growth of healthier generations. In terms of producers, determining the factors that affect and do not affect the prices of good agricultural products and making their plans accordingly will contribute to the effective use of both their own and the world's natural resources. As the number of conscious consumers increases in Turkey, Good Agricultural Practices production will increase both in quantity and variety. This will provide the producers with the advantage of obtaining better prices and an increase in the welfare level of the producers. It is particularly important that a country like Turkey, which has an important place in world agricultural production, produces a product that takes into account the world consumer demands and takes its place in exports.

In their study on organic agricultural products within the scope of safe food, ERYILMAZ et al. (2015) observed that the consumption of organic agricultural products in Turkey was unstable and low. They mentioned that this was due to the high price and

insufficient information about these products. They emphasized the need to understand the marketing and information problems and policies about them and stressed the need for more research on this. The same applies to products from good agricultural practices. The products of good agricultural practices could be more advantageous than more expensive organic foods, as they can be accessed by a larger part of the population due to the price advantage. Similarly, valuable products continue to be produced locally and traditionally in Turkey. The world's interest in these products is increasing. Indeed, recent research has focused on the shift in consumer preferences towards local food, and its broad effects on the food system, environment, and society (CARPIO & ISENGILDINA-MASSA, 2009; ADAMS & SALOIS, 2010). GAP and local products could be more advantageous for Turkey. It will be important to be aware and prepared for the effects of these consumer trends on the food system in general.

Audit gaps in Turkey sometimes allow opportunists to deceive consumers and make unfair profits. Food of good agricultural practices or organic foods sometimes may lack the characteristics guaranteed by their labels. Consumers do not prefer these products due to the risk of being deceived, considering them as money traps. Similar to consumers throughout the world, consumers in Turkey want to rely on the food labels and expect good control of these labels by certification authorities or the state (CANAVARI & WONGPRAWMAS, 2017). Having a control mechanism for the foods sold is crucial for preventing consumers from being deceived economically and for food safety. Turkey must strengthen its controls on food in parallel with the world food agenda.

For Turkey, strengthening the mechanism that controls the sales and use of pesticides and subsidizing the price disadvantage of the pesticides more friendly to human health and the environment are important for domestic consumers' health and overseas sales. Thus, the problem of returning export could also be prevented. Turkey should not be any further late in implementing good agricultural practices to safely offer its agricultural potential, which is very valuable in quantity and variety, to consumers in the world and Turkey and to protect its agricultural production. The number of GAP producers should increase, and all agrarian producers must keep up with the changes in the environment and the world to protect their presence in the sector. However, their strategies can be on solid foundations only with consumer-oriented production, sale, and marketing approaches.

ACKNOWLEDGEMENTS

There is not any financial found for this research.

DECLARATION OF CONFLICT OF INTEREST

The authors declare no conflict of interest.

BIOETHICS AND BIOSECURITY COMMITTEE APPROVAL

We author of the article entitled "Consumers' Willingness to Pay for Procucts with Good Agricultural Practices-GAP- Labelled for Food Safety" declared, for all due purposes, the project that gave rise to the present data of the same has not been submitted for evaluation to the Ethics Commettee of the University /Research Institure "Tokat Gaziosmanpasa University", but we are aware of the contents of Resolution No. 466, of December 12, 2012 of the Brazilian National Health Council http://conselho.saude.gov.br/resolucoes/2012/Reso466.pdf" if it involves human.

Thus, the authors assume full responsibility for the presented data and are available for possible questions, should they be required by the competent authorities.

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