



Certification Process of Organic Agricultural Products and Problems Experienced in the Implementation in Turkey

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Abstract

Purpose: This study aims to identify the problems of the certification process of organic products by the control and certification companies in Turkey.

Design/Methodology/Approach: According to the records of the Ministry of Agriculture and Forestry, in 2017, there are 31 bodies authorised to certify organic agricultural products in the country. No sampling method was used because all 31 bodies were included into the study. Data were collected with telephones and emails from the companies to identify problems in the certification process of organic agricultural products. These control and certification companies provide certification services in 21 different provinces.

Findings: Organic farming certification process can be done in two ways, as a group or individual, in Turkey. As a result, certification organizations declared that farmers' thought that they overcharged for this process and low educational level of farmers. Also, 64% of the control and certification bodies indicated that residue analysis laboratory is urgently needed in order to make these analyses in all over the Turkey. Furthermore, control and certification bodies mentioned other important problems as follows; farmers' awareness level on organic agriculture, not enough registration, insufficient information on changes in implementation, low level of municipalities' pest control, and lack of information/consultancy activities for farmers.

Originality/Value: There is no study conducted with the control and certification organizations on the certification process of organic products.

Key words: Organic agriculture; certification process; application problems

Türkiye'de Organik Tarım Ürünlerinin Sertifikasyon Süreci ve Uygulamada Karşılaşılan Sorunlar

Özet

Amaç: Bu çalışma, Türkiye'deki kontrol ve sertifikasyon firmaları tarafından organik ürünlerin sertifikasyon sürecindeki sorunları tespit etmeyi amaçlamaktadır.

Tasarım/Methodoloji /Yaklaşım: Tarım ve Orman Bakanlığı kayıtlarına göre 2017 yılında ülkede organik tarım ürünlerini sertifikalandırmaya yetkili 31 firma bulunmaktadır. Çalışmaya 31 şirketin tamamı dahil edildiği için herhangi bir örnekleme yöntemi kullanılmamıştır. Organik tarım ürünlerinin sertifikasyon sürecindeki sorunları tespit etmek için şirketlerden telefon ve e-postalar ile veriler toplanmıştır. Bu kontrol ve sertifikasyon firmaları 21 farklı ilde sertifika hizmeti vermektedir.

Bulgular: Organik tarım sertifikasyon süreci Türkiye'de grup ve bireysel olmak üzere iki şekilde yapılabilir. Kontrol ve sertifikasyon kuruluşlarının çiftçilerin sertifikasyon maliyetlerini fazla bulması, üreticilerin bilgi seviyesinin düşük olması gibi sorunlarla sıklıkla karşılaştıkları belirlenmiştir. Ayrıca, kontrol ve belgelendirme kuruluşunun %64'ü Türkiye'de bu analizlerin yapılabilmesi için kalıntı analiz laboratuvarına acilen ihtiyaç olduğunu belirtmiştir. Bunların dışında kontrol ve sertifikasyon kuruluşları çiftçilerin organik tarım bilinci olmaması, kayıt yetersizliği, uygulama değişikliklerinde bilgilendirme yetersizliği, belediyelerin hasere mücadelesi yapması, üreticilere yönelik bilgilendirme/danışmanlık faaliyetinin bulunmaması gibi nedenleri de sektörün diğer sorunları arasında sıralamaktadır.

Özgünlük/Değer: Organik ürünlerin sertifikasyon süreci konusunda kontrol ve sertifikasyon kuruluşları ile yapılmış çalışma bulunmamaktadır.

Anahtar kelimeler: Organik tarım; sertifikasyon süreci; uygulama sorunları

1. INTRODUCTION

To meet increasing food demand, enormous practices such as wrong tillage methods, excessive use of pesticides and chemical, have been applied to improve agricultural production. This heavy pressure on agriculture has resulted in degradation of ecological balance, destruction of soil structure, increase of diseases in human beings and animals. In the face of such adverse conditions, in many countries both producers and consumers with high-income levels are consciously organised against the problem mainly prefer to produce and consume agricultural products that do not cause toxic effects in humans with appropriate methods that do not damage the nature (Kızılaslan and Taner, 2011). Organic production represents the possibility of a substantial improvement for consumers' health and the long run yields of the soil (Gitli and Arce, 2001). Maintaining sustainability in agriculture, preserving ecological balance, and increasing consumer demand for healthy and reliable food are the primary factors which lead the spread of organic production. The most critical factor that separates organic agriculture from other sustainable agriculture methods is the existence of production and processing standards and certification procedures (George, 2001). Organic agricultural production and marketing is a process that is stages of the process (Demiryürek, 2011). The Organic Farming Law was prepared and published in the Gazette in 2004, manifesting the principles and procedures regarding the necessary precautions to ensure the production of organic products and feedstocks in to provide reliable, high-quality products to consumers in Turkey. According to the law, organic farming activities; producing or growing organic products or inputs using soil, water, plants, animals and natural resources, collecting, harvesting, cutting, processing, sorting, packaging, labelling, preservation, storing, transportation, marketing, importing, exporting and also they include other transactions from the production stage to the arrival of the input to the consumer (Anonymous, 2017). In Turkey, it is aimed to organise and develop organic agricultural production and marketing through preserving the ecological balance, ensuring sustainability in agriculture thus disseminating production and consumption of organic products to provide reliable and high-quality output to consumers (Cakır et al., 2015).

Organic agriculture is a production system, which requires that, every stage of the product to be under control and certificated until it reaches the consumer. The certification process consists of evaluating and documenting the conformity of the operator, product and input with accredited control and certification companies. This certificate can serve as a reliable quality indicator throughout the supply chain, guaranteeing these audit processes at each stage of the supply chain (Albersmeier et al., 2009). For a product to be considered as an organic, it must be certified by an Organic Farm Control and Certification Authority that is authorised by the Ministry of Agriculture and Forestry (MAF) and it should be carried out the Organic Product Logos which is defined by the MAF, as well. The Organic Product Certificate is not issued if a distorted application is encountered during the inspections of the Control and Certification Bodies (CCBs).

While there is an increase in demand for organic products, it is not possible to be able to meet the demand by current limited production. They argue that the shift in organic agriculture in Brazil and China is mostly market-oriented, and that significant external support is needed for technical consulting, documentation and marketing, especially when small farmers are adopting organic agriculture, and that support for farmers is mainly dependent on organic farming (Oelofse et al., 2010). Since organic production is a process that requires certification in every stage of control, the increases in this sector are not at the desired level. In addition, some problems in the organic product sector are also affecting the development process negatively. While one of the essential actors in this sector is the farmer himself and the other one is certification organisations.

In Turkey, there are so many studies have been conducted in organic production and the problem of the sector which were taken into consideration from the producer point of view (Atış et al., 2016; Akin et al., 2014; Kıp et al., 2013; Çobanoğlu and Işın, 2009; Bayram et al., 2007; Birinci and Er, 2006). This study aimed to identify the problems in the certification process and application of organic agricultural products from a different perspective; opinions of certification bodies, which are the important actors in this process.

2. MATERIALS and METHOD

The primary data of this study was obtained from the Organic Farm Control and Certification Bodies, which were authorised by the MAF. There were 31 organic farming control and certification bodies in Turkey on July 2017. The study was conducted between July and December, 2017. No sampling method was used because all 31 companies were included to the study. The questionnaire was designed by the researchers. While 31 companies were located in different provinces of Turkey, e-mails and phone calls were used to fill out the questionnaires. Only 25 companies were agreed to participate the study. The results were given as frequency distributions and means because of low sample number.

3. FINDINGS and DISCUSSION

The characteristics of the bodies' representatives participating in the research are as follows. 44% of the company representatives participating in the research are women and 56% are men. The average age of the respondents is 42. The average working period in the company is 5.27 years. While 56% of the questionnaire was answered by the persons working as controllers and certifiers, 20% was answered by the general manager, 16% by the assistant manager, and 8% by the people in other positions.

Approximately 32% of the Organic Agriculture Control and Certification Bodies have been working as a certification company for 1 to 3 years and 36% of them have been providing this service about ten years or longer. To increase in organic agricultural activities also leads to an increase in the number of bodies providing control and certification services.

Especially new bodies can be defined as a micro enterprises because 48% of them having less than ten employees. Almost 44% of them had 10-49 employees. The number of the employee is important because of the time of the process. Almost every company has at least one certifier and five controllers. These control and certification bodies provide certification services in 21 different provinces. Ankara, which is the capital of Turkey, leads the company size with 36%. Izmir follows with 32% and the remainings are located in Antalya, Mersin, Istanbul, Yalova and Van. Most of the companies (88%) are Turkish owner and only 12% are foreign owner. The findings shows that because of low number of companies, some of them provide certification services to the different regions' farmers.

Organic farming certification process can be done in two ways in Turkey. It can be arranged individually and also possible for the bodies to provide a "group certification" for a producer group, as well. While 92% of the certification company in Turkey provide group certification services, only 8% of them provide individual certification. This bodies' reasons for not providing group certification services were; the regulation is not appropriate for this kind of utilizations and some farmers do organic farming just to get subsidies from government. The main reason for the widespread use of group certification services in Turkey is due to the high cost of certification. Farmers are trying to reduce certification costs by receiving group certification services.

Organic farming principles were defined as health, ecology, honesty and sensitivity, in Turkey. The importance of these principles are given in Table 1. As seen below most bodies are stated that ecology is the most important principle.

Table 1. Organic farming principles

Principles	Not Important at all		Not Important		Not Sure		Important		Very Important		Mean
	f	%	f	%	f	%	f	%	f	%	
Health	1	4.0	0	0	2	8.0	3	12.0	17	68.0	4.52
Ecology	0	0	0	0	2	8.0	3	12.0	19	76.0	4.71
Honesty	2	8.0	0	0	1	4.0	2	8.0	19	76.0	4.50
Sensitivity	1	4.0	1	4.0	0	0	4	16.0	18	72.0	4.54

Seventy six percent of the control and certification bodies also provide raw material certification services. Eighty-eight percent of the bodies have been prepared only one contract after inspections but they should be specified every single of the activity in this contract. However, the remaining 12% of the company have been prepared different contracts for each activity. The product certificate is issued mostly (48%) by giving a wholesale product certificate for unprocessed products.

Progration process refers to the period from the very beginning of the operation by the provisions of the Regulation on Organic Farming Principles and Implementation (Anonymous 2017a), until the certification of the product as organic. The transition process can be shortened or extended in some cases. The transitional period can be shortened by one year if the official company determined that the land was not exposed to fire or any chemicals during the last three years. In this study, it was found that the control and certification company shortened the transition period (73%), because the land was not exposed to any fire or any chemicals during the last three years; documentation of the absenteeism of agricultural activities within five years (8%) and land exploitation for the first time (8%). As a result of this inspections, the progration process could be extended when faced improper applications. These applications include; chemical use, use of medicines which are not allowed to be administer, influences from the surrounding environment and the risk of contamination. Also, in some cases direct organic farming is allowed before the transition process is implemented; if the control and certification organisations acknowledged that the crops were collected from nature (64%) and the agricultural soils were not exposed to any kind of processing at all (8%).

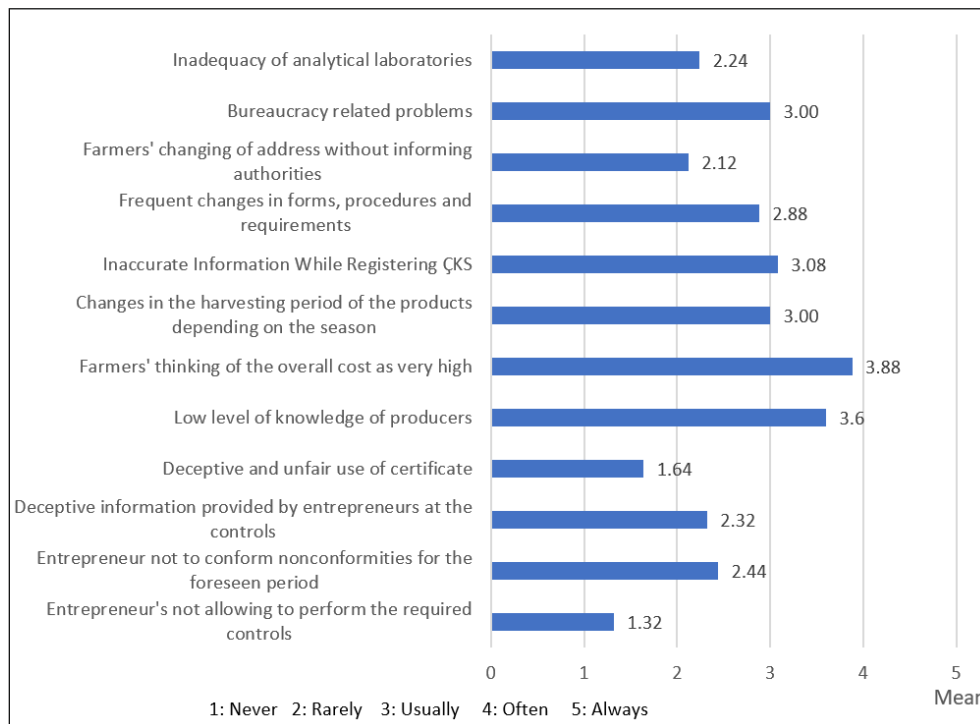
Specific control requirements are necessary and certification companies were handling during the organic agriculture certification process. These inspections such as field inspections, product inspections, control are essential and always carried out by certification companies (Table 2).

Table 2. Controls of certification process

Controls	Never	Rarely	Usually	Often	Always	Mean
	%	%	%	%	%	
Field Control	8.0	4.0	0	0	88.0	4.56
Training and Inspection of Farmer	32.0	12.0	16.0	8.0	32.0	2.96
Seed Control	24.0	8.0	8.0	4.0	56.0	3.6
Natural Fertilizer Control	20.0	4.0	12.0	8.0	56.0	3.76
Natural Pesticide Control	28.0	12.0	0	8.0	52.0	3.44
Growing Product Control	8.0	0	0	12.0	80.0	4.56
Product Processor Control	4.0	12.0	8.0	8.0	68.0	4.24
Product Marketing Process Control	8.0	8.0	4.0	4.0	76.0	4.32
Product Conservation Control	16.0	12.0	8.0	4.0	60.0	3.8

In this study, 64% of the control and certification bodies indicated that residue analysis laboratory is needed urgently in order to make these analyses in Turkey. However, 36% of the bodies declared that the residue analysis laboratories are not enough. Only one control and certification body has its' own residual analysis laboratory. Others have stated that none of the body should own residual analysis laboratory. Government has to own these laboratories to have more reliable results.

Of course, there are so many problems in the certification process of organic agricultural products. The certification companies declared that the farmers thought that they were overcharged for this process and their educational level was low. While they were registering Farmer Registration System (FSR), they were frequently having trouble because of misinformation and the changes in harvesting period of products and bureaucracy problems. Moreover, there were other problems rarely faced like farmers' did not bring the conditions within the given period of time, incomplete and misinformation provided by farmers, not enough number of laboratories and change of address by farmer without informing authorities (Figure 1).

**Figure 1.** Problems encountered in the organic agricultural products certification process

The control and certification bodies were stated that they never have obstruction from farmers during the inspection and illegal use of certification. They state that the most crucial problems in organic farming are coming from farmers. First of all, producers are not organized under cooperatives or unions (Bayram et al., 2007). This causes cost-enhancing effect on the contracts with the inspection and certification companies in small areas. Secondly, farmers have insufficient knowledge about organic agriculture. The results showed that, to increase and improve organic agriculture in Turkey, farmers need to be organized to get support for production, raw materials, marketing and certification and also technical education/consultancy services. Çobanoğlu and Işın (2009) stated that the most important factor in the orientation of farmers to organic agriculture is that the export companies make contractual production with the farmers and they give purchase guarantee to the product, the farmers do not turn to an environmental protection production, and that they do not become widespread due to the lack of sufficient awareness about organic agriculture. Birinci and Er (2006) found that the problems faced by organic peach producers in production were; lack of knowledge on diseases and technical issues, lack of organization in marketing, storage and packaging. Pezikoğlu (2006) stated that the low level of education, knowledge and awareness of the farmers and processor/ exporter companies are not enough number regarding the organic farming method.

Other problems declared by the control and certification companies in the certification process other than those mentioned above; the fact that farmers unconsciousness about organic agriculture and it is also considered to be sufficient to apply the measures only because of the commercial dimension of organic agriculture. Furthermore, inadequacy of registration and of information in changing applications, application of pest management by municipalities, and lack of information/consultancy activities for producers were defined other problems during the certification process.

Some suggestions were provided by the control and certification companies for the development of organic agriculture in Turkey. These recommendations are as follows; solving the problem of organic input, increasing the funding from government, supporting the growth of organic seeds, defining the basin region just for only organic agriculture production, increasing number of organic fertilizer, increasing the number of organic markets, and organic stock market, establishment of cooperatives and producer unions at regional level, increasing the awareness of consumers about organic products, establishing mandatory organic product departments in the markets, supporting infrastructure investments needed for organic production, increasing agricultural extension and education activities, and providing consultancy services. Atış et al. (2016) stated that the price support being at the expected level will positively affect the desire to produce organic raisins. Dalbeyler and Işın (2017) found out that there is a linear relationship between organic production and supports, and supports are of great importance for the sustainability of organic production. In addition, they stated that the marketing of organic products to the farmers, establishment of market connections, training of the farmers and consultancy services should be provided effectively. Government support is very important to encourage young farmers because young farmers engaging with agricultural activities and their families do not want their children to pursue the same profession (Berk, 2018).

During this study, 72% of the control and certification bodies stated that support for organic agriculture from government is inadequate. This inadequacy came from the fluctuations in the price of the per unit, the conditions of applicability to receive support, inappropriateness of the support regarding the overall purpose, the lack of support for inputs and labor, the lack of support for animal based productions.

Sixty four percent of the control and certification companies stated that they should also receive incentives to practising this activity by the government. These incentives could be funding of technical staff, training and accreditation, Value Added Tax Discount, support to attend Fairs, CCBs staff personnel, social security and salary support, office vehicle support, accreditation support and project support will contribute to the development and dissemination of control and certification bodies.

4.CONCLUSION

Organic agriculture is a process that needs to be checked and certified in every each step. One of the important part of this process is the control and certification companies. The development and widespread use of organic agriculture may be possible by identifying and solving the problems of the field and actors in this sector. The survey was conducted with the control and certification companies in Turkey to define the problems of the certification process. While the cost of certification and lack of knowledge are expressed as the most important problems, the control and certification companies also stated that the bureaucratic problems and the inaccurate information while registering FRS of producers were the other mostly faced problems. It is suggested that these problems can be eliminated and organic farming can be promoted with educating farmers with agricultural extension activities. Likewise, it is claimed that control and certification companies need to create not just product-oriented but also a process-oriented support system. In order to facilitate the marketing of organic agricultural products, extra importance should be given on advertisement and producers should be organised under the cooperatives or unions to decrease the cost. The control and certification companies in Turkey also pointed out that the incentives should be provided by the government. Particularly, it is asserted that government funding of the cost of certification will contribute to the decision of the producer to enable them towards the transition to organic production and to the improvement of the services of CCBs. In order to provide healthier service in practice, the technical personnel support can be provided by the government.

Social security premiums and salary support will also advance to the national economy by increasing employment in these companies. To increase organic agriculture young farmers can be used with appropriate supports.

Contribution Rate of Researchers Declaration Summary

The authors declare that they have contributed equally to the article and have not plagiarized.

Conflict of Interest Declaration

The authors of the article declare that there is no conflict of interest between them.

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