

## An Examination of the Agriculture and Technology Days Fair in Terms of the Development of Open Field Applied Agricultural Exhibitions


Tarımda Açık Alan Uygulamalı Fuarcılığının Geliştirilmesi Açısından Tarım ve Teknoloji Günleri Fuarının İncelenmesi


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### Abstract

“Agriculture and Technology Days Fair” has introduced a new dimension to agricultural fair organization by bringing together the theme of agriculture and technology together in the open field. Producers are informed about the current technological developments and agricultural systems in the agricultural sector at the “Agriculture and Technology Days Fair”. Producers can see the innovations with different and informative events organized in the fields of fertilizers, pesticides, seeds, agricultural mechanization, etc. within the scope of the fair and have the opportunity to apply the latest technological developments immediately through the demonstration areas prepared in the fair area. During the fair, communication and interaction between producers takes place in a practical area, so that producers can share their opinions, experiences, expectations and problems instantly and on site. In this study, “Agriculture and Technology Days Fair” was evaluated from the perspective of the companies participating in the fair in terms of the development of open field applied fair in agriculture, and their expectations and suggestions from the fair were examined. For this purpose, a face-to-face survey was conducted with 51 company officials who participated in the “Agriculture and Technology Days Fair” in Tekirdağ province in 2024. As a result of the study, it was determined that the participating companies rented an average of 275.80 m<sup>2</sup> of space in other fairs and 291.18 m<sup>2</sup> in the “Agriculture and Technology Days Fair”. It was determined that the participants made the fair announcements mostly through social media (78.43%) and that they considered social media (84.31%) as the most effective method in fair announcement. Expanding the exhibition area and/or increasing the application area of the companies and increasing the location of the companies in the exhibition area were found to be important. The organisers of the fair were found to be successful, however, it was determined that the information about the participating companies and the shows to be held during the fair should be increased before the fair. "Agriculture and Technology Days Fair" should be taken into consideration with its contribution to the marketing of agricultural products, demonstration of agricultural innovations and agricultural dissemination. "Agriculture and Technology Days Fair" should be developed with its significant permanent contribution to producer incomes in the long term in rural areas and its contribution to rural areas in economic, social and cultural terms by creating alternative income opportunities such as tourism during the fair.

**Keywords:** Agriculture, Fair, Agriculture fair, Agriculture and technology, Tekirdağ

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## Öz

“Tarım ve Teknoloji Günleri Fuarı”, tarım ve teknoloji temasının birlikte uygulamalı olarak açık alanda gösterilmesi ile tarım fuarcılığına farklı bir aşama kazandırmıştır. Üreticiler “Tarım ve Teknoloji Günleri Fuarı”nda, tarım sektöründeki güncel teknolojik gelişmelerden ve tarım sistemlerinden haberdar olmaktadır. Üreticiler, fuar kapsamında gübre, ilaç, tohum, tarımsal mekanizasyon vb. alanlarında gerçekleştirilen birbirinden farklı ve bilgilendirici etkinlikler ile yenilikleri görebilmekte ve fuar alanında hazırlanan demonstrasyon sahaları vasıtasıyla en son teknolojik gelişmeleri hemen uygulama imkanına sahip olmaktadır. Fuar süresince üreticiler arasında iletişim ve etkileşim uygulamalı bir alanda gerçekleşmekte, böylece üreticiler görüş, deneyim, beklenti, sorunlarını anında ve yerinde paylaşabilmektedirler. Bu çalışmada, tarımda açık alan uygulamalı fuarcılığının geliştirilmesi açısından “Tarım ve Teknoloji Günleri Fuarı”, fuara katılan firmaların bakış açısıyla değerlendirilerek fuardan beklentileri ve önerileri incelenmiştir. Bu amaçla, 2024 yılında Tekirdağ ilinde “Tarım ve Teknoloji Günleri Fuarı”na katılım sağlayan 51 adet firma yetkilisiyle yüz yüze anket yapılmıştır. Çalışmanın sonucunda, katılımcı firmaların diğer fuarlarda ortalama 275,80 m<sup>2</sup>, “Tarım ve Teknoloji Günleri Fuarı”nda ise 291,18 m<sup>2</sup> yer kiraladıkları tespit edilmiştir. Katılımcıların, fuar duyurularını en çok sosyal medyadan yaptıkları (%78,43), fuar duyurusunda en etkili yöntemi yine sosyal medya (%84,31) olarak gördükleri belirlenmiştir. Fuar alanının genişletilmesi ve/veya firmaların uygulama alanının artırılması ile firmaların fuar alanındaki yerlerinin artırılması önemli bulunmuştur. Fuar organizatörlerinin başarılı buldukları, ancak fuar öncesinde katılacak firmalar ve fuar sırasında yapılacak gösteriler ile ilgili bilgilendirmelerin artırılması gerektiği belirlenmiştir. “Tarım ve Teknoloji Günleri Fuarı”, tarım ürünlerinin pazarlanması, tarımsal yeniliklerin gösterilmesi, tarımsal yayıma katkısı görülerek dikkate alınmalıdır. “Tarım ve Teknoloji Günleri Fuarı”, kırsalda uzun vadede üretici gelirlerine olan belirgin kalıcı katkısı ve fuar süresince turizm gibi alternatif gelir olanakları oluşturması ile kırsal kesime ekonomik, sosyal ve kültürel bakımlardan katkılarıyla geliştirilmelidir.

**Anahtar Kelimeler:** Tarım, Fuar, Tarım fuarı, Tarım ve teknoloji, Tekirdağ

## **1. Introduction**

Fairs can be defined as promotional events that are held regularly at certain times of the year, usually in the same places, to promote and market of tradable products and services, technological developments, innovations and information, and for the establishment and development of future commercial relations and technical cooperation (Tütüncüoğlu, 2009). Exhibitions provide one of the most effective environments for participating companies to carry out promotional activities. When the companies in the sector come together, it enables companies that aim to create alternative or new distribution networks to find opportunities and reach distributors/dealers more easily. With fairs, it is quite possible to reach companies with which they can establish new business partnerships and networks. Exhibitions gain importance in terms of hosting participants from different places and helping to realize the cultural exchanges that develop on this occasion. Fair organizations provide a commercial activity during the fair period thanks to the exhibitors and visitors coming from other cities and countries. The necessity of meeting the basic needs of exhibitors and visitors such as accommodation, eating and drinking contributes to the income of many businesses operating in the region. In addition, the people of the region have the chance to participate in the activities organized during the fair period and can participate in social and cultural activities (Göksel, 2005).

Since fairs are also used to exhibit products that the agricultural sector can benefit from, the number of fairs organized for agricultural purposes is increasing every year. Companies, on the other hand, should consider making more use of the advantage of fairs in marketing their products (Nogay and Azabağaoğlu, 2024). When planning agricultural fairs, it should be ensured that the agricultural sector, which is the main addressee of the subject, benefits from the fair in the best way. First and foremost, the effectiveness and importance of the site are taken into consideration when planning fairgrounds. Even if a wide variety of issues need to be taken into account in making a site an exhibition area and/or an exhibition center, geography and the opportunities it offers cannot be neglected, and geographical advantages and disadvantages are taken into account (Acartürk, 2013). The main components that make up the fair are fair organizers, exhibitors and visitors. In addition, the area where the fair will be held and therefore the operator of this area and the undertakings that provide ancillary services to the area operator, organizer or exhibitor for the realization of the fair can also be considered as components of the fair (Turkish Competition Authority, 2019). When the positive features of fairs and new developments in fair organization are evaluated, studies that are calculated to increase the contributions of fairs in terms of exhibitors, visitors, organization, and contributions to the region should be increased to support decision-makers. When fairs are analyzed according to their focus on specific sectors, such as the agricultural sector, it is important to ensure that the stakeholders of the sector are together and interact in the area where the fair is established.

Educating producers in agricultural development allows them to better adapt to the conditions (Kızılaslan, 2009). It can also be said that producers who consult and consult information sources in their agricultural production make a more profitable production compared to others (Özer and Özden, 2016). Today, almost no agricultural activity can achieve the desired benefit without extension and advisory services (Aydoğdu and Altun, 2019). In previous studies, it has been emphasized many times that agricultural research and development (Subaşı and Ören, 2013); (Subaşı et al., 2014), inputs (Yılmaz et al., 2009); (Karaçayır, 2010), production methods (Avkıran and Yılmaz, 2021); (Öcal-Kara and Binici, 2021), and environmental interaction (Demirtaş, 2021) are not taken into account by producers at all or in the right ways due to lack of information. Producers are more likely to participate in agricultural extension activities when they see benefits and appropriate methods are presented to them (Demirtaş, 2017). In the “Agriculture and Technology Days Fair” as an example of an open field applied fair in agriculture, participating companies introduce their products, companies and innovations; various competitions, etc. in the context of increasing interest in the fair by the fair organizers, and a wide variety of performances of sector pioneers and leaders, public institutions and professional organizations can be seen, and in this respect, producers can turn into educated producers. The fair supports agricultural dissemination in the desired way by delivering innovations in agriculture to producers on-site and visibly. During the fair, experts provide information on the shortcomings known to exist and expected to be developed in producers (Abacı, 2023), especially on current issues such as digital transformation and artificial intelligence in the agricultural field in Türkiye.

Some of the participants and screenings of the “Agriculture and Technology Days Fair” are as follows;

- Seed, fertilizer, pesticide, agricultural equipment-machinery demonstrations; companies operating in the seed, fertilizer, pesticide, agricultural equipment-machinery sectors and participants of the fair can use the opportunities of open field applied fair organization in agriculture such as showing the products instantly and on site, experiencing their performance, and proving the product. This situation can leave positive features such as leaving no doubt on the producers, making them use, and measuring the performance, which can leave attractive traces for the companies during and after the fair.
- Demonstrations of agricultural mechanizations and technology companies; agricultural mechanization and technology companies can attract the attention of visitors during the fair by presenting the features of the product in the open area. The product promotion and marketing of these companies is effective, understandable and provable for producers and farmers, and its application can be demonstrated instantly. In this sense, agricultural mechanization and technology companies have a high contribution to both their companies and the purpose of the fair in a fair whose thematic direction is technology in agriculture.
- In order to reach farmers and to best explain the availability of financing conditions, agricultural lenders want to explain their credit opportunities through presentations and interviews at the agricultural open field applied fair, where farmers and producers show more interest. For lending institutions in agriculture, this outdoor fair is of great importance in reaching producers and farmers.
- Agricultural producers' unions and cooperatives organize various competitions, talks, presentations, etc. in the agricultural open field applied fair in order to explain their activities, to introduce the agricultural product pattern of the region and to market their products. They also play an important role in attracting visitors and exhibitors to the fair.
- Professional organizations and other farmer organizations exhibitions; The fact that the organizations of professions active in the agricultural field, especially farmer organizations, have stands at the fair, participate in presentations and organize interviews contributes to the transfer of information by creating interaction between professions. Professional and civil society organizations such as Chambers of Agriculture, Chamber of Agricultural Engineers are expected to contribute to the dissemination of expectations, challenges and opportunities of agricultural production.
- The demonstrations of universities, institutes and academicians; Institutions such as universities, institutes, which have the function, responsibility and duty to produce and disseminate knowledge, and academicians who have adopted to follow the light of knowledge are expected to act with their responsibilities in the places where the producers they serve are. In this context, they are expected to be present at the open field applied fair in agriculture and transfer their knowledge.
- The representation of sector pioneers and leaders; producers want to be able to see those who will contribute to their production, deal with their problems and respond to them in policy-making at the agricultural open space fair. In this context, sector pioneers and leaders should be invited to the fair and their participation in the fair should be increased.
- Demonstrations by other organizations operating in the field of agriculture; other participants who set up stands and other agricultural sector organizations that provide support to the participants are also important for the successful realization of the fair. The suitability of the fairground, successful implementation of fair services, etc. can be effective in attracting interest in the fair and participation in the following years.
- The impressions of the fair organizers and sponsors can be expressed as the perfect success of the fair organization, the complete fulfillment of the goals and objectives of the companies and visitors around the effective participation, the realization of the fair in accordance with the plan and program, and the achievement of the next year's target. In this sense, the coordination of the fairground area, basic needs, security-health- transportation is expected to be successful.
- The displays of state institutions; governorships, district governorships, municipalities, provincial/district directorates of agriculture and forestry can reach producers and farmers by explaining their activities and

supports in agriculture and rural areas. In addition, the fair should be promoted from the center and supported locally in order for the fair to be effective and successful with the announcement of the fair to wide and relevant segments, transportation, health, security, cleaning, etc. during the fair.

Agricultural producers state that they visit the “Agriculture and Technology Days Fair” with the following expectations (İnan and Konyalı, 2024);

- To be able to see innovations,
- Expanding business circles,
- Contributing to the use of technology,
- Seeing people and narratives that will increase their production,
- Receive effective briefings,
- To be able to interact more with the sector,
- To be able to see it in different agricultural products,
- To be able to see new technologies,
- To be able to see new and previous companies in the sector,
- Being able to experience innovations, etc.

As in other fairs, rural and local people in the region where the “Agriculture and Technology Days Fair” is organized have expectations from the fair. In order to organize a better fair and ensure the participation of local people in these events, event managers can try to explain more comprehensively how citizens will benefit from the fairs organized, especially in social, individual and cultural terms (Binbaşıoğlu and Gültekin, 2017). The contributions of the fair to the region can be counted as follows;

- Accommodation, food and beverage, sightseeing etc.
- Increasing rural tourism revenues of the region with the desire to come back again,
- Improving rural infrastructure through the fair,
- Increasing the contribution from the center to the region,
- Experiencing and strengthening local governance,
- Increased investments in rural areas and contribution to development, etc.

In this study, firstly, information about the “Agriculture and Technology Days Fair”, which is the first and only example in Türkiye in applied outdoor fair organization in agriculture, is given. This study was carried out during the 14th “Agriculture and Technology Days” fair held for the 14th time in Tekirdağ Süleymanpaşa Karaevli between 04 - 07 September 2024. With the questionnaires, 51 people from the company owners, managers and staff who participated in the fair were interviewed face to face and their impressions, expectations, suggestions for improvement and other thoughts about the fair were determined. With the information obtained from the survey results, it will be possible to directly contribute to the development of the “Agriculture and Technology Days Fair” in the following years, whose organization improves every year, which already attracts a lot of attention from the region, which can be distinguished from other examples with its open field application feature and technology theme in agriculture. Based on the analysis of the data obtained from the visitor perspective, suggestions can be made on agricultural fairs in Türkiye, open field fairs with applications in agriculture and technology-themed agricultural fairs in general. In addition to all these, based on the analysis of the data obtained from the survey study, the findings on the development of open area fair organization and “Agriculture and Technology Days Fair” are shared and recommendations are listed in the conclusion section.

## **2. Materials and Methods**

### **2.1. Material**

In order for the research to be published as an article, the Ethics Committee of T.C. Tekirdağ Namık Kemal University of Science and Engineering Sciences Scientific Research and Publication Ethics Board of Science and Engineering Sciences on 15.08.2024 (11:00) at the session of the meeting numbered T2024-2099 (Document Date and Number: 16.08.2024-480735).

"Agriculture and Technology Days Fair" has been organized by DLG Fuarçılık limited company in Tekirdağ Süleymanpaşa Karaevli in September every year since 2011. At the fair, pesticide, seed and fertilizer manufacturers have the chance to introduce their latest products to visitors as applied in the field. At the same time, visitors can get all the information about the products they may need for their own businesses from agricultural professionals and experts. In 2024, companies from the fields of pesticides, seeds, fertilizers, mechanization and technology participated in the fair with their expert teams to provide information. In addition, local universities, research institutions, governorships, district governorships, municipalities, provincial/district directorates of agriculture and forestry, producer unions and cooperatives, and other individuals and organizations from civil society also participated in the fair. The fair is important as it is the first and only specialized fair with these features in Türkiye and attracts great interest from producers every year. The fair is specialized in the use of technology in agriculture. Agricultural mechanization and tractor dealers take part in the fair with their most up-to-date technologies. For the first time in 2023; examples of the use of drone technology in agriculture such as spraying with drones, fertilization with sensor technology, etc., technologies such as detection of fertilization deficiency with GPS technology were shown to producers-farmers on site. In the fair area, which is 122,000 square meters in total, including parking and other usage areas, there are alternative plants as well as field plants and garden plants that will attract the attention of visitors. New varieties of the main products grown in the region are shown. In the event tent set up in the fairgrounds, talks are organized, various competitions are held, and agricultural technological products can be given as gifts to visitors through raffles (Anonymous, 2024).

### **2.2. Method**

#### **2.2.1. Data Collection**

In the study, the data obtained from a face-to-face survey conducted with 51 people from the officials of the participating companies of the fair during the "Agriculture and Technology Days Fair" held for 4 days between 04-07 September 2024 in Karaevli neighborhood of Süleymanpaşa district of Tekirdağ province. The fact that the "Agriculture and Technology Days Fair" has an open field application feature, can attract the attention of visitors in many parts of Türkiye and shows a pioneering feature in applied open field fair organization in agriculture with its innovations reveals the importance of the study.

#### **2.2.2. Sampling**

In order for the data provided in the study to best represent the main population, it was aimed to conduct a face-to-face survey with all participating companies of the fair with the full census method. The full census method is the inclusion of all units that make up the population within the scope of the analysis (Karagölge and Peker, 2002). However, a face-to-face survey was conducted with 51 of the company authorities who wanted to respond to the questionnaires. It was determined that there were a total of 102 participants from public, private and civil society. Considering the purpose of the study, face-to-face surveys were mainly conducted with the officials of private sector companies, and only 1 survey conducted with a company official from the public sector was included in the study. Thus, it was calculated that 51 questionnaires could reveal the targeted outputs of the study.

#### **2.2.3. Data Analysis**

The questionnaire form of the study was composed of "1. open-ended, 2. yes-no, 3. multiple choice and ranked, 4. Likert scale" questions.

In the first section, there are data obtained from the questions (11 questions) measuring the general knowledge about the fair and the level of awareness about the fair, which has an open area application feature. In this section,

“open-ended, yes-no, multiple-choice” questions were prepared in order to reveal the sector of the participants, the working time of the company and the participant in agriculture, the m2 rented by the company in this fair, the average and the most m2 rented in other fairs, the fair participation status, fair announcements and other information, etc. Again, in this section, multiple-choice ranking questions such as yes-no, multiple-choice ranking questions such as 1st, 2nd, 3rd, 4th, and 5th were asked. The study utilized cross-tables, which are widely used in categorization research. The purpose of crosstabs is to show the relationship between two or more independent groups. With these tables, the relationships between data obtained by measurement techniques (surveys, etc.) can be revealed with 2×2, 2×3, 3×3 or more variable tables (Çakmakçı and Hurma, 2021).

The second section aimed to learn the expectations and suggestions of the participants. For this purpose, the statements of the participants prepared in Likert scale as “1. Strongly disagree, 2. Disagree, 3. No opinion, 4. Agree, 5. Strongly agree” were learned. The data in this section consists of the statements obtained from the answers given by the fair visitors to the judgments directed on a 5-point Likert scale (15) in order to understand their pre-fair information activities, their experiences during the fair and their expectations from future fairs. In addition to averages and percentage calculations in data analysis, the Likert scale can be used to measure the attitude variables of the officials of the participating companies regarding the contributions of the fair to their companies and the sector, as used in previous studies of this type (Çukur and Çukur, 2017). In this study, the results obtained are summarized and interpreted in charts and evaluated under the charts.

In the third section, an open-ended question was asked to find out the expectations of the participants from the applied open field fair in agriculture, their suggestions for improvement and other thoughts. The responses obtained were presented and ranked in numbers and percentages (%) by creating cross tabulations.

After the questionnaires were completed, all questionnaires could be evaluated as there were no incorrect, incomplete or incomprehensible completed questionnaires. In total, the data obtained from 51 participants through the questionnaire study were coded and processed in the SPSS 25 package program, and the significant results of the research were shared.

### 3. Results and Discussion

The findings of the survey are shared in the findings of the research with tables and explanations. The participants of the survey consisted of company owners, managers and other personnel from fertilizer, pesticide, agricultural equipment-machinery, seed, agricultural technology, government agencies and other sectors.

It was determined that 24 (47.06%) of the participating companies operate in one sector, 14 (27.45%) in two different sectors, 9 (17.65%) in three different sectors, 3 (5.88%) in four different sectors and 1 (1.96%) in 5 different sectors. It was determined that 29 (30.21%) of the companies were operating in fertilizers, 25 (26.04%) in pesticides, 19 (19.79%) in agricultural tools and machinery, 15 (15.79%) in seeds, 5 (5.21%) in agricultural technology, 1 (1.04%) in state institutions and 2 (2.08%) in other sectors (*Table 1*).

**Table 1. Distribution by sectors**

Distribution of Participating Companies by Sector		
	Quantity	(%)
Fertilizer	29	30.21
Medicine	25	26.04
Agricultural Equipment-Machinery	19	19.79
Seed	15	15.79
Agriculture Technology	5	5.21
Government Agency	1	1.04
Others	2	2.08
<b>Total</b>	<b>96</b>	<b>100</b>

\*Source: Author calculation

The average length of time that the participating companies have been operating in agriculture was determined as 21.88 years. It was determined that 7 (13.73%) of the participating companies have been operating

in agriculture for 1-5 years, 8 (15.69%) for 6-10 years, 18 (35.29%) for 11-20 years, and 17 (33.33%) for 21 years or more. No response was received from 1 (1.96%) of the participating companies. The average duration of experience of the respondents in the field of agriculture was determined as 8.04 years. It was determined that 16 (31.37%) of the participants have been working in agriculture for 1-3 years, 11 (21.57%) for 4-5 years, 12 (23.53%) for 6-10 years, and 11 (21.57%) for 11 years or more. One of the participants (1.96%) did not answer this question (Table 2).

**Table 2. Distribution according to years worked in agriculture (companies and individuals)**

Year	Duration of Employment in Agriculture of the Respondent Firms		Year	Duration of Employment in Agriculture of the Respondents	
	Quantity	(%)		Quantity	(%)
1-5	7	13.73	1-3	16	31.37
6-10	8	15.69	4-5	11	21.57
11-20	18	35.29	6-10	12	23.53
21 and up	17	33.33	11 and up	11	21.57
No answer	1	1.96	No answer	1	1.96
<b>Total</b>	<b>51</b>	<b>100</b>	<b>Total</b>	<b>51</b>	<b>100</b>

\*Source: Author calculation

Among the participants, 39 people (76.50%) stated that they had previously participated in an outdoor fair other than the “Agriculture and Technology Days Fair”, while 10 people (19.60%) stated that they had not participated in an outdoor fair before. 2 people (3.90%) did not answer this question. Among the participants, 17 people (33,33%) stated that they had attended 1-5 times, 13 people (25,49%) 6-10 times, and 2 people (3,92%) 11 times or more. Among the participants, 38 people (74.50%) stated that they had attended the “Agriculture and Technology Days Fair” before, while 9 people (17.60%) stated that they had not attended this fair before. 4 people (7,80%) did not respond to this question. When the previous participation of the participants in the “Agriculture and Technology Days Fair” was analyzed, it was determined that 19 people (37.25%) had participated 1-5 times, 7 people (13.73%) 6-10 times, and 2 people (3.92%) 11 or more times (Table 3). It is seen that the participants showed great interest in another open-air fair and “Agriculture and Technology Days Fair”.

**Table 3. Distribution of participants according to their participation in agricultural fairs**

Participation Status	Number of Participation	Participation in Another Open Air Fair		Participation in “Agriculture and Technology Days Fair”	
		Quantity	(%)	Quantity	(%)
Yes	<b>Total</b>	<b>39</b>	<b>76.50</b>	<b>38</b>	<b>74.50</b>
	1-5 time	17	33.33	19	37.25
	6-10 time	13	25.49	7	13.73
	11 and up	2	3.92	2	3.92
	No answer	7	13.73	10	19.65
<b>No</b>		<b>10</b>	<b>19.60</b>	<b>9</b>	<b>17.60</b>
<b>No answer</b>		<b>2</b>	<b>3.90</b>	<b>4</b>	<b>7.80</b>
<b>General Total</b>		<b>51</b>	<b>100</b>	<b>51</b>	<b>100</b>

\*Source: Author calculation

19 of the participating companies (37.25%) stated that they participated in the “Agriculture and Technology Days Fair” above their average m<sup>2</sup> participation compared to other fairs. In addition, 3 of the participating companies (5.88%) stated that this year's fair was the fair with the highest m<sup>2</sup> participation compared to all the other fairs they have participated in. On average, the participants rented 291.18 m<sup>2</sup> of space in the “Agriculture and Technology Days Fair”, 275.80 m<sup>2</sup> in other fairs and 383.83 m<sup>2</sup> in the fairs they participated in with the largest area (Table 4).

**Table 4. Distribution of participating companies renting space in fairs by m2**

M2 / Average. M2	M2 Participation in "Agriculture and Technology Days Fair"		Average M2 Participation in Fairs		Maximum M2 Participation in a Fair	
	Quantity	Average. M2	Quantity	Average. M2	Quantity	Average. M2
100 and below	12	68.33	12	71.17	4	47.50
101 – 200	9	197.78	11	190.91	8	187.50
201 – 400	22	359.09	21	338.10	18	338.89
401 and up	8	543.75	6	616.67	17	602.94
No answer	0	0	1	-	4	-
<b>Total</b>	<b>51</b>	<b>291.18</b>	<b>51</b>	<b>275.80</b>	<b>51</b>	<b>383.83</b>

\*Source: Author calculation

Among the participants, 12 people (23.53%) stated that they would like to participate in the “Agriculture and Technology Days Fair” with more m2, while 35 people (68.63%) stated that they did not want to participate. 4 people (7.84%) did not express their opinion on this issue. When asked about the factors affecting the willingness of the participants to participate in the fair with more m2; among those who said no, 31 people (60.78%) stated that they found the space for their products sufficient, 2 people (3.92%) stated that the rental m2 prices were high and 1 person (1.96%) stated that the space offered to them was limited. Of the 11 people who were willing to participate in the fair with more m2, 5 people (9.80%) stated that the rental m2 prices were high, 1 person (1.96%) stated that they did not participate with a higher m2 due to being a new company and company budget.

Among the participants, 26 people (51.00%) who participated in the “Agriculture and Technology Days Fair” in previous periods stated that the fair met their expectations, while 6 people (11.75%) stated that it did not meet their expectations. 19 participants (37.25%) did not express their opinion on this issue. 34 participants (66.70%) stated that previous fairs increased their sales, while 4 participants (7.80%) stated that previous fairs did not increase their sales. 13 people (25.50%) did not answer this question. 44 respondents (86.30%) expect this year's fair to contribute to their agricultural business.

The participants were asked the question “How do you announce that you will participate in the fair?” and they were asked to rank from 1 to maximum 5. 40 (78.43%) of the participants announced their participation in the fair through their social media accounts, 13 (25.49%) through the promotions of the organizing company, 10 (19.60%) through word of mouth announcements and invitations, 8 (15.69%) through the press (TV, newspaper, magazine, radio, etc.), 6 (11.76%) through road signs (TV, newspaper, magazine, radio, etc.), 6 (11.76%) through road signs and markings, 5 (9.80%) through the internet and 2 (3.92%) through academics/experts (Table 5). It is seen that the majority of the participants announced their participation in the fair through their social media accounts.

**Table 5. Announcement methods for participation in the fair**

Reasons	Announcement Methods	
	Quantity	(%)
Social Media	40	78.43
Organization Company	13	25.49
Word of Mouth	10	19.60
Press (TV, Newspapers, Magazines, Radio, etc.)	8	15.69
On Road Signage etc.	6	11.76
Websites	5	9.80
Like Academics, Experts	2	3.92

\*Source: Author calculation

The participants were asked the question “Which do you think was more effective in announcing your participation in the fair?” and they were asked to rank from 1 to maximum 5. In announcing their participation in

the fair, 43 people (84.31%) found social media effective, 14 people (27.45%) found road signs effective, 12 people (23.53%) found the press and websites effective, 9 people (17.65%) found the information provided by the organization company effective, 8 people (15.69%) found word-of-mouth communication effective and 1 person (1.96%) found the announcements of people such as academics and experts effective (Table 6). Forty-eight (94.10%) of the participants stated that it would be useful to publicize the fair more.

**Table 6. Announcement methods found most effective for participation in the fair**

Reasons	Announcement Methods Found Effective	
	Quantity	(%)
Social Media	43	84.31
On Road Signage etc.	14	27.45
Press (TV, Newspapers, Magazines, Radio, etc.)	12	23.53
Websites	12	23.53
Organization Company	9	17.65
Word of Mouth	8	15.69
Like Academics, Experts	1	1.96

\*Source: Author calculation

Participants were asked whether they agreed or disagreed with 15 different statements in order to determine their expectations and suggestions from the fair, and the results are presented in Table 7. The participants stated that they found the “Agriculture and Technology Days Fair” more useful than indoor fairs and other outdoor fairs. The increase in the number of visitors to the fair also increases the willingness of the participants to participate in the fair. The most important expectation is that the fair should be more publicized. In addition, it has been determined that increasing the exhibition area or increasing the application area of the exhibitors by other methods and increasing the location of the exhibitors in the exhibition area are important. It was stated that the number of exhibitors and visitors was not sufficient. In this sense, it was stated that the organizers of the fair were successful, but they should provide more information about the companies that will participate in the fair and the shows to be held during the fair before the fair. Another important issue is that improvements should be made in the general condition of the fairground during the fair, fair floor, stand controls, provision of basic needs (such as toilets, cleaning), fair visitor seating area, transportation to the fair, etc. (Table 7).

**Table 7. Mean and standard deviation of expectations and suggestions from the fair ( $\bar{x}$  / ss)**

Judgment No.	Judgment Definition	$\bar{x}$	ss
J4	I find the fair more useful than indoor fairs.	4.86	0.448
J14	If the fair attracts more visitors, it will increase my willingness to participate.	4.84	0.703
J13	More publicization of fair activities would increase my willingness to participate.	4.78	0.541
J15	Giving more space to exhibitors at the fair would increase my willingness to participate.	4.69	0.812
J5	I find the fair more useful than other outdoor fairs.	4.63	0.747
J6	The fact that the fair includes applications increases my desire to participate.	4.55	0.901
J12	It would be useful to locate the fairground on a larger area.	4.55	0.986
J2	Companies that will participate in the fair are adequately informed before the fair.	4.43	0.964
J10	I find the organization of the fair sufficient.	4.41	0.853
J9	Exhibitors are allocated enough space at the fair.	4.31	0.990
J11	I find the fair organization adequate in terms of entrance, exit, transportation, security, food supply.	4.18	1.090
J1	Before the fair, visitors are generally adequately informed about the fair.	4.16	1.102
J3	There is enough information in advance about the shows that will take place during the fair.	4.14	1.020
J8	I find the number of companies participating in the fair sufficient.	3.20	1.484
J7	I find the number of visitors to the fair sufficient.	2.75	1.468

\*Source: Author calculation

In the study, participants were asked as an open-ended question about their expectations from the applied open field fair in agriculture. Among the participants, 27 people (52.94%) shared their expectations from the applied open field fair in agriculture, while 24 people (47.06%) did not share their opinions on this issue. Expectations were allocated to 27 respondents in terms of %, proportioned and ranked. 19 (70.37%) of the participants stated that they wanted to reach more people, 15 (55.55%) wanted to increase the awareness of the company, 6 (22.22%) wanted to interact with the sector, 4 (14.81%) wanted to prove the successful works of the company, 3 (11.11%) wanted to introduce new products of the company. 2 people (7.40%) expressed their expectations on other issues (Table 8).

**Table 8. Expectations from the applied open field fair in agriculture**

Expectation No	Expectation Definition	Quantity	(%)
E1	Reaching more people	19	70.37
E2	Increasing the awareness of the company	15	55.55
E3	Interacting with the sector	6	22.22
E4	To prove the successful work of the company	4	14.81
E5	Introducing new products of the company	3	11.11
E6	Others	2	7.40

\*Source: Author calculation

Participants were asked an open-ended question about their suggestions for the development of open-field applied fair organization in agriculture. Among the participants, 38 people (74.51%) shared their suggestions for the development of open field fair organization in agriculture, while 13 people (25.49%) did not share their suggestions. The suggestions of the participants were ranked and ranked by distributing the percentage of 38 people. For the development of the open field applied fair in agriculture, 15 (39.47%) of the participants suggested increasing the advertising and announcements of the fair, 13 (34.21%) suggested increasing the participation of farmers through promotion and awareness raising, and 10 (26.32%) suggested bringing farmers from different regions. 9 (23.68%) of the participants suggested revising the dates of the fair and 2 (5.26%) suggested revising the duration and time of the fair. Other important suggestions included ensuring the participation of competitive companies, providing transportation support to visitors, inviting sector leaders/scientists, and increasing the effectiveness of applications and presentations (Table 9).

**Table 9. Suggestions for the development of open field applied fair organization in agriculture**

Recommendation No	Recommendation Definition	Adet	(%)
R1	Advertising and announcements of the fair should be increased	15	39.47
R2	Increase participation of farmers through promotion and awareness raising	13	34.21
R3	Bring farmers from different regions	10	26.32
R4	Fair dates should be revised	9	23.68
R5	Industry leaders/scientists should be invited	8	21.05
R6	Many competitive companies should be able to participate in the fair	7	18.42
R7	This fair should be organized in different regions	6	15.79
R8	Fairground should be expanded	5	13.16
R9	Innovative, high quality and content-rich presentations	4	10.53
R10	Conscious farmers should be reached more effectively	3	7.89
R11	Provide transportation support for visitors	3	7.89
R12	Fair duration should be extended	2	5.26
R13	Fair hours should be extended	2	5.26
R14	Participation (m2) prices should be reviewed	2	5.26
R15	Companies should be encouraged	2	5.26
R16	Farmer organizations should provide support	2	5.26

\*Source: Author calculation

#### 4. Conclusions and Recommendations

Fairs undertake many different functions such as advertising, awareness and dissemination by establishing visitor and participant interaction in general and in the agricultural sector in line with their purpose and within their scope. It is desirable for fairs to be developed, to increase their activity purposes and to be sustainable. For this purpose, academic studies should be supported. In this study, the deficiencies of the ‘Agriculture and Technology Days Fair’, which is the first and only fair in the field of agriculture in Türkiye, were identified by evaluating the opinions and expectations of the participants for the development of the fair and open field applied fair organization in agriculture. This study, in which the evaluations of the majority of the fair participants about the fair can be obtained, is one of the researches that can offer remarkable suggestions as it has rare data on applied open field fair organization in agriculture. As a result of the research, it was observed that the participants showed great interest in another outdoor fair and the ‘Agriculture and Technology Days Fair’. Participants stated that they found the ‘Agriculture and Technology Days Fair’ more useful than indoor fairs and other outdoor fairs. It was determined that the participating companies participated in the ‘Agriculture and Technology Days Fair’ with a space above their average m<sup>2</sup> participation compared to other fairs. While 23.3% of the participants stated that they would like to participate in the ‘Agriculture and Technology Days Fair’ with more m<sup>2</sup>, 68.63% stated that they did not want to participate. It was determined that most of the participants announced their participation in the fair on their social media accounts. Participants stated that the number of exhibitors and visitors was not sufficient and that more information should be provided on this issue. Participants suggested improvements to be made in the general condition of the exhibition area, exhibition floor, stand controls, provision of basic needs (such as toilets, cleaning), exhibition visitor seating area, transportation to the fair, etc. during the fair. In line with the suggestions made, concrete steps should be taken to develop the ‘Agriculture and Technology Days Fair’ by eliminating the deficiencies in these issues and at the same time contribute to the development of applied outdoor fair organization in agriculture. For the development of the open field applied fair in agriculture, 39.47% of the participants suggested increasing the advertising and announcements of the fair, 34.21% suggested increasing the participation of farmers through promotion and awareness raising, and 26.32% suggested bringing farmers from different regions.

The ‘Agriculture and Technology Days Fair’ with open field applications in agriculture contributes to rural areas in economic, social and cultural terms. Some of these are as follows;

- Bringing innovations in agriculture to rural areas and promotion; The fact that the thematic feature of the ‘Agriculture and Technology Days Fair’ is technology and agriculture ensures that the participants already carry out promotional and marketing activities for this purpose, and that the mass of visitors are people who want to see, experience and use innovation and technology in agriculture. In this respect, it is expected that technological products in agriculture will become widespread in rural areas after the fair.
- Promotion of some products in rural areas and marketing opportunities; The ‘Agriculture and Technology Days Fair’ enables some of the products of the region to be seen instantly in the demonstration areas. In addition, it is possible for producers and companies to carry out marketing activities that can bring new business ideas and products to the forefront for already common agricultural products. In this respect, the ‘Agriculture and Technology Days Fair’ can create attractive products in the region and prepare the infrastructure for festivals.
- Increase in the expectation of income from agricultural production in rural areas; With the ‘Agriculture and Technology Days Fair’, it can be expected that the use of technology in agriculture will become widespread after the fair as it is better explained to the producers in rural areas, thus increasing agricultural production and the expectation of income from agriculture.
- Promotion of rural areas and tourism opportunities after the fair; fairs are always the gateway of the economy and therefore tourism to the outside and a showcase that directs development. When the subject is evaluated from this point of view, it is necessary to emphasize the importance of ‘Agriculture and Technology Days Fair’ in terms of domestic and foreign tourism.
- Contribution to the local economy, especially in service sectors such as accommodation, food and beverage, transportation and in general; During the ‘Agriculture and Technology Days Fair’, demand is expected from the participating companies and visitors of the region, especially in service sectors such as accommodation, food and beverage, transportation and in general, contribution is expected.

- Revitalization of the rural economy and its contribution to development, etc.; both before and after the “Agriculture and Technology Days Fair”, revitalization in agriculture and tourism is inevitable with the effects of the fair. In addition to this, many other sectors can also generate income with the revitalization of the fair in the countryside, the deficiencies of the social infrastructure in the countryside can be seen and improved more urgently, etc. contributions can be provided.

The research is limited to the responses of the questionnaires conducted during the fair with the officials of the participating companies in the “Agriculture and Technology Days Fair” held in 2024 in Karaevli neighborhood of Süleymanpaşa district of Tekirdağ province, and the literature review in the field of fair organization and outdoor applied fair organization. The fair is also of great importance in terms of promoting policies that support rural development and strengthening agricultural marketing channels. In this respect, it is not only a commercial but also an educational and strategic environment. The evaluation of the fair, which is extremely important for agriculture, from the perspective of the company constitutes the original aspect of the research. Academic studies on agricultural fairs are of great importance in understanding the dynamics of the agricultural sector and evaluating the effectiveness of fair organizations. This study aims to contribute to the development of open field applied fair organization in agriculture and to contribute to the limited literature with its findings.

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#### **Ethical Statement**

In order for the research to be published as an article, the Ethics Committee of T.C. Tekirdağ Namık Kemal University of Science and Engineering Sciences Scientific Research and Publication Ethics Board of Science and Engineering Sciences on 15.08.2024 (11:00) at the session of the meeting numbered T2024-2099 (Document Date and Number: 16.08.2024-480735).

#### **Conflicts of Interest**

We declare that there is no conflict of interest between us as the article authors.

#### **Authorship Contribution Statement**

Concept: İnan, O., Konyalı, S.; Design: İnan, O., Konyalı, S.; Data Collection or Processing: İnan, O., Konyalı, S.; Statistical Analyses: İnan, O., Konyalı, S.; Literature Search: İnan, O., Konyalı, S.; Writing, Review and Editing: İnan, O., Konyalı, S.

## References

- Abacı, N. İ. (2023). Agricultural extension system in USA and evaluations in terms of Türkiye. *The Journal of Agricultural Economics Researches (JAER)*, 9(EKS 1): 62-79. (In Turkish)
- Acartürk, K. (2013). Fair organisation and its geographical distribution in Turkey. *Journal of Geography*, (25): 55-66. (In Turkish)
- Anonymous (2024). Agriculture and Technology Days Fair website. DLG Fuarçılık Ltd. Şti. Access site: <https://tarimteknolojigunleri.com/> (Access Date: 26.09.2024)
- Avkıran, B. and Yılmaz, H. (2021). Evaluation of agricultural extension methods participated by paddy farmers according to their sustainable agriculture perception levels. *Çukurova Journal of Agricultural and Food Science*, 36(2), 405-416. (In Turkish)
- Aydoğdu, M. H. and Altun, M. (2019). The attitudes of corn producer farmers' for the payment for agricultural extension and consultancy services: Şanlıurfa sampling. *Al-Farabi International Journal on Social Sciences*, 3(2): 109-115. (In Turkish)
- Binbaşoğlu, H. and Gültekin, B. (2017). Residents' attitudes towards social impacts of fairs and festivals organized in Malatya. *İnönü University Journal of Culture and Art*, 3(2): 1-13. (In Turkish)
- Çakmakçı, Y. and Hurma, H. (2021). The relationship between socio-economic characteristics and environmental awareness levels of consumers and the factors effective in purchasing environmentally friendly food products. *Turkish Journal of Agriculture - Food Science and Technology*, 9(7), 1297-1303. (In Turkish)
- Çukur, T. and Çukur, F. (2017). Fair organizations from the participating firms in the agricultural fairs perspective and its contributions on the local economy: the case of Milas 2. South Aegean Agricultural Fair. *Atatürk University Journal of Agricultural Faculty*, 48(2): 93-98. (In Turkish)
- Demirtaş, B. (2017). The evaluation of attendance in agricultural extension programs of olive growers. *Harran Journal of Agriculture and Food Science*, 21(3): 309-322. (In Turkish)
- Demirtaş, M. (2021). A research on agricultural extension activities related to environmental pollution in Tokat province. *International Journal of Anatolia Agricultural Engineering*, 3(2): 37-47. (In Turkish)
- Göksel, A. B. (2005). Çişil Sohodol, Strategic Exhibition Management. Mediacat, İstanbul, Türkiye.
- İnan, O. and Konyalı, S. (2024). Open field applied fair in agriculture, expectations and suggestions: Agriculture and technology days fair example. *The Journal of Agricultural Economics Researches*, 10(2): 242-260. (In Turkish)
- Karaçayır, H. F. (2010). *Pesticide usage extension approaches in apple production enterprises; the case study of Karaman province* (MSc. Thesis). Selçuk University, Graduate School of Natural and Applied Sciences, Konya, Türkiye.
- Karagölge, C. and Peker, K. (2002). Using stratified sampling methods in the resource of agricultural economics. *Research in Agricultural Sciences*, 33(3): 313-316. (In Turkish)
- Kızılaslan, N. (2009). Attitudes and behaviors of the farmers towards agricultural extension (Tokat province research Yesilyurt county). *Journal of TÜBAV Science*, 2(4): 439-445. (In Turkish)
- Nogay, Y. and Azabağoğlu, M. (2024). Analysis of factors affecting corn seed preferences of producers: case of Sakarya province, Turkey. *Journal of Tekirdag Agricultural Faculty*, 21(1): 125-138.
- Öcal-Kara, F. and Binici, T. (2021). Evaluation producers knowledge of irrigation in terms of agricultural extension: case of Suruc plain. *Turkish Journal of Agricultural and Natural Sciences*, 8(3): 772-783. (In Turkish)
- Özer, O. O. and Özden, A. (2016). Analysis of agricultural extension and education activities for farmers that was conducted by Cattle Breeders' Association. *Journal of Tekirdag Agricultural Faculty*, 13(3): 29-36. (In Turkish)
- Subaşı, O. and Ören, M. (2013). The relationship between agricultural research expenditures and agricultural growth in Turkey. *Akdeniz University Journal of the Faculty of Agriculture*, 26(2): 99-104. (In Turkish)
- Subaşı, O. S., Ören, M. N., Uysal, O. and Demirtaş, M. (2014). Agricultural Research, Development of Extension Policies, and Agricultural R&D Expenditures In Turkey. *XI. National Agricultural Economics Congress*. 3-5 September, pp.560-570, Samsun, Türkiye.
- Turkish Competition Authority (2019). Fair Sector Review Report (Prepared by: Tuncel, Ç., Sağlam, B., Muhammed Safa Uygur, M.S., Cesur, H., Nezir Furkan Kıran, N. F.). Turkish Competition Authority IV. Department of Inspection and Enforcement. (In Turkish).
- Tütüncüoğlu, İ. (2009). *The importance of the participation to international fairs and exhibitions as an international marketing tool for the foreign trade companies*. (MSc. Thesis). Dokuz Eylül University, Institute of Social Sciences, İzmir, Türkiye.
- Yılmaz, H., Demircan, V. and Gül, M. (2009). Determining farmers' information sources in chemical fertilizer use and their evaluation in terms of agricultural extension. *Journal of Agriculture Faculty*, 4(1): 31-44. (In Turkish)