

Strategic analysis of Bayburt in terms of organic agriculture

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Makale Künyesi

*Araştırma Makalesi /
Research Article*

*Sorumlu Yazar /
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Geliş Tarihi / Received:
25.04.2024

Kabul Tarihi / Accepted:
05.08.2024

Tarım Ekonomisi Dergisi
Cilt: 30 Sayı:2 Sayfa: 89-97

*Turkish Journal of
Agricultural Economic*
Volume:30 Issue:2 Page: 89-97

DOI: 10.24181/tarekoder.1472219
JEL Classification: M10, M19,
Q10, Q19

Abstract

Purpose: The aim of this study is to make a strategic analysis of Bayburt province, which has an important potential in terms of organic agriculture, in terms of organic agriculture and to develop strategies for the sector.

Design/Methodology/Approach: In the study, SWOT analysis was conducted with 25 people (engineers, civil servants, agricultural technicians, farmers and academicians) using the interview technique within the scope of qualitative research method. All SWOT analysis data obtained were subjected to content analysis and summarized into a single SWOT matrix, and strategies were developed based on the situation matrix and expert opinion.

Findings: In the study, a total of 12 strategies were developed, three for each SWOT analysis component. Some of these strategies are; conducting studies to recognize the value of organic agriculture by protecting the natural structure of the region, encouraging organic agriculture entrepreneurship and management in the region and ensuring the participation of young entrepreneurs in the sector, ensuring the establishment of cooperatives and unions operating in organic agriculture in the region, and developing policies to unify fragmented lands.

Originality/Value: This study is valuable in that the strategies developed in this research can guide provincial agriculture and forestry directorates, agricultural enterprises, managers and researchers in the strategic management of organic agriculture.

Key words: Organic agriculture, strategic analysis, SWOT analysis, Bayburt

Bayburt'un organik tarım yönünden stratejik analizi

Özet

Amaç: Bu çalışmanın amacı, organik tarım açısından önemli bir potansiyele sahip Bayburt ilinin organik tarım yönünden stratejik analizinin yapılarak sektöre yönelik stratejilerin geliştirilmesidir.

Tasarım/Methodoloji/Yaklaşım: Çalışmada nitel araştırma yöntemi kapsamında görüşme tekniği kullanılarak 25 kişi (mühendis, memur, ziraat teknikeri, çiftçi ve akademisyen) ile SWOT analizi gerçekleştirilmiştir. Elde edilen tüm SWOT analizi verileri içerik analizine tabi tutulup özetlenerek tek bir SWOT matrisi haline dönüştürülmüş, oluşan durum matrisi ve uzman görüşünden hareketle stratejiler geliştirilmiştir.

Bulgular: Çalışmada her SWOT analizi bileşeni ilgili üç tane olmak üzere toplamda 12 strateji geliştirilmiştir. Bu stratejilerden bazıları; bölgenin doğal yapısının korunarak organik tarımın değerinin bilinmesine yönelik çalışmaların yapılması, bölgede organik tarım girişimciliği ve işletmeciliğinin teşvik edilerek genç girişimcilerin sektöre katılımlarının sağlanması, bölgede organik tarım konusunda faaliyet gösteren kooperatif ve birliklerin kurulmasının sağlanması ve parçalı arazileri birleştirmeye yönelik politikaların geliştirilmesidir.

Özgünlük/Değer: Bu çalışma, araştırmada geliştirilen stratejilerin organik tarımın stratejik yönetimi konusunda il tarım ve orman müdürlükleri, tarımsal işletmeler, yöneticiler ve araştırmacılara yol gösterici olmaları bakımından değerlidir.

Anahtar kelimeler: Organik tarım, stratejik analiz, SWOT analizi, Bayburt

INTRODUCTION

The rapid increase in the number of living beings in the world causes concern about the accessibility of nutrition for people in the world population (De Pinto et al., 2020). Agriculture is the most important sector to produce food in response to the increase in population and to prevent nutritional concerns. Agriculture involves extremely important activities to ensure the production of nutrients, the efficiency of this production and to meet the nutritional needs of the population. Since agriculture is a sector that provides the food needed to feed people in line with their needs, it aims to ensure the food security of society as well as agricultural supply security. Factors such as increasing environmental and health concerns and improving socioeconomic conditions increase the demand for organic agriculture (Demiryürek, 2011). Organic agriculture is a form of agricultural production in which no chemical pesticides and fertilizers are used, completely biological methods are preferred, product quality is targeted rather than production increase, and human and environmentally friendly production systems are adopted (Ece, 2008). Organic agriculture is a method that enables people to benefit from nature in the most efficient way without disrupting the natural structure of the soil in order to sustain their lives in a healthy way. This method is known as a strategic attitude that opposes the use of foods that threaten human and animal health and are produced in environments far from health conditions (Çınaroğlu, 2018). Compared to other agricultural systems, organic agriculture has many differences. Organic agriculture supports renewable resources, recycling and the return of nutrients from wastes to the soil. In organic animal production, production is based on animal welfare principles and the use of natural feeds. Organic farming respects the environment's own natural systems in the fight against pests and diseases and rejects the use of synthetic pesticides, chemical fertilizers, growth hormones, antibiotics or gene modification practices. Instead, organic producers use techniques that help protect ecosystems and reduce pollution (Merdan, 2014). The main purpose of organic agriculture is to meet the safe food needs of societies with a reasonable cost/benefit analysis for consumers and producers while protecting human and environmental health (Merdan and Kaya, 2013). Organic agriculture has many advantages such as the high quality of organic products, the guarantee that growers will purchase all products through contract farming, and the fact that organic products do not pose any problems that may adversely affect human health since they do not contain chemical fertilizers (Dertli, 2021; Hündür, 2021; Öztürk, 2012). In addition to the advantages of organic agriculture, there are also some disadvantages such as insufficient government support, insufficient market analysis and market research, and consumers' lack of trust in organic products (Karabaş and Gürler, 2012; Bozyiğit and Kılınç, 2019; Merdan, 2018). On the other hand, the lack of specialized personnel in organic agriculture, the negative effects of modern production in nearby regions and fluctuations in the supply of organic products constitute other disadvantages of organic agriculture (Hatunoğlu Durmaz, 2010). For this reason, it is important to make a strategic analysis of organic agriculture and determine its strengths, weaknesses, opportunities and threats, in other words, strategic management of organic agriculture.

Strategic management is the process of an organization's effective and efficient use of its production resources such as human, nature, capital and information in order to survive in the long term and to achieve sustainable competitive advantage and to achieve returns above the sector average, and the process of applying the five functions of management (planning, organizing, directing, coordinating and controlling) in this direction (Ülgen and Mirze, 2018). The strategic management process starts by developing a strategy. After the mission and vision, the goals and objectives of the organization are determined in line with the information obtained through the analysis of the environment. Alternative strategies that will bring the organization to its goals and objectives are developed and the most appropriate strategies are selected. Thus, the strategic management cycle is completed by implementing the plan, measuring the level of success and providing feedback for the next planning process (David, 2007). One of the most important steps of the strategic management process is the strategy development phase. Strategy is the path followed to achieve goals or objectives, and in order to develop a strategy, it is necessary to conduct a strategic analysis of an organization and determine its strengths, weaknesses, possible opportunities and threats. Strategic analysis is an important tool for organizations in every sector to see their current situation and plan for the future. One of the techniques commonly used in the strategic analysis process is SWOT analysis (Alcan et al., 2021; Esmer and Gezer, 2021). SWOT is an abbreviation consisting of the first letters of the words "Strengths", "Weaknesses", "Opportunities", "Threats". With this analysis, the strengths and weaknesses of the business are determined by examining the elements in the internal environment of the organization (internal analysis), and opportunities and threats are determined by examining the elements in the external environment of the organization (external analysis) (Ülgen and Mirze, 2018). When the relevant literature is examined, it is seen that although there are many studies on strategic analysis in agriculture in Türkiye, there are few studies on strategic analysis, economic analysis and current situation analysis in organic agriculture. Demiryürek (2011) analysis of the current situation of organic agriculture in

Türkiye, Öztürk (2012) analysis of the importance of organic agriculture for the Turk economy, Merdan and Kaya (2013) economic analysis of organic agriculture in Türkiye, Merdan (2014) economic analysis of organic agriculture in the Eastern Black Sea Region, Aygün and Akbulak (2017) strategic analysis of organic animal husbandry in Ardahan, Bayraktar (2017) current situation analysis of organic agriculture and animal husbandry in Bayburt, Çınaroğlu (2018) conducted an economic analysis of organic agriculture in Kilis, Merdan (2018) conducted an analysis of the current situation of organic agriculture in Türkiye and a strategic analysis of its development potential, Kara and Gül (2019) analyzed the future of organic agriculture in Bayburt, Hündür (2021) conducted a strategic analysis of organic vegetable cultivation in the world and Türkiye and made recommendations for the sector.

With the rapidly increasing demand for organic products in the world, the global and local organic agriculture food market is growing. Especially considering Türkiye's geographical structure and climate conditions, it can be said that it is in an important position in the world in terms of suitability for organic agriculture. In this context, Bayburt is one of the provinces with suitable geography and nature for organic agriculture due to its low number of industrial facilities, low level of environmental pollution, and the use of natural barn manure instead of chemical fertilizers and pesticides in agricultural production (Kara and Gül, 2019). According to the data of Bayburt Provincial Directorate of Agriculture and Forestry, Bayburt constitutes 0.481% of Türkiye's land area with 373,900 hectares of land. Within the scope of organic agriculture in Bayburt, 34 producers are engaged in organic fodder crops production (alfalfa, sainfoin, vetch), 7 producers are engaged in ovine breeding (approximately 3227 sheep) and 10 producers are engaged in organic beekeeping (honey, pollen, propolis) (Bayburt Provincial Directorate of Agriculture and Forestry, 2014, 2023). In addition, it can be said that Bayburt province is a competitive and promising province in the organic agriculture sector because it is an open market due to its geopolitically important location and has an existing and developable organic production potential (Bayraktar, 2017). However, Bayburt is a small province located in the northeast of the Anatolian peninsula where agriculture is important for the local economy, and the profitability and continuity of agricultural enterprises are important for the production and employment level of the province (Özel and Esmer, 2023). Therefore, it is important to strategically manage organic agriculture in Bayburt province. In this study, it is aimed to contribute to the relevant literature, sector and stakeholders by making a strategic analysis of organic agriculture in Bayburt province. In line with this purpose, it is tried to develop strategies for the sector by determining the strengths, weaknesses, opportunities and threats of Bayburt province in terms of organic agriculture.

MATERIAL AND METHOD

Qualitative research method was used in this study. Qualitative research is a method that involves collecting and analyzing non-numerical data such as text, video or audio to understand concepts, views or experiences, as well as being used to gather in-depth information about a problem or to generate new ideas in research (Bhandari, 2023). In this context, the interview technique frequently used by social scientists was preferred in the data collection phase. In the research, an open-ended question form developed based on the SWOT analysis technique was utilized. The question form consists of three parts. In the first part, there are questions about the profession, institution, experience, age and duration of stay in Bayburt province of the experts included in the sample. The second section includes questions aimed at determining the strengths, weaknesses, opportunities and threats of organic agriculture in Bayburt province. In the third section, experts' suggestions and strategies for the development of organic agriculture are asked. The population of the research consists of experts living in Bayburt province and working in the field of agriculture. In this context, 25 people (engineers, civil servants, technicians, farmers and academicians) were determined as the sample of the study. Although there are different approaches in determining the sample size in qualitative research, according to Yağar (2023), this number was determined as approximately 24 in in-depth interviews. Therefore, it can be said that this number is sufficient in terms of sample size and data saturation (Başkale, 2016). Ethics committee approval was obtained from Bayburt University Ethics Committee in order to conduct the research (Date: 09/04/2021 and Decision Number: 2021/71). The research was conducted between October 2021 and February 2022, and a face-to-face interview of approximately 60 minutes was conducted with each participant included in the sample in order to reach sufficient data in terms of data saturation. However, since some participants did not find it appropriate to meet face-to-face due to the COVID-19 pandemic, online interviews were conducted with these participants. Content analysis, one of the qualitative analysis techniques, was used in the data analysis phase. All SWOT analysis data were subjected to content analysis and summarized into a single SWOT matrix and strategies were developed based on the situation matrix (Esmer and Gezer, 2021). The research model developed in this direction is as shown in Figure 1.

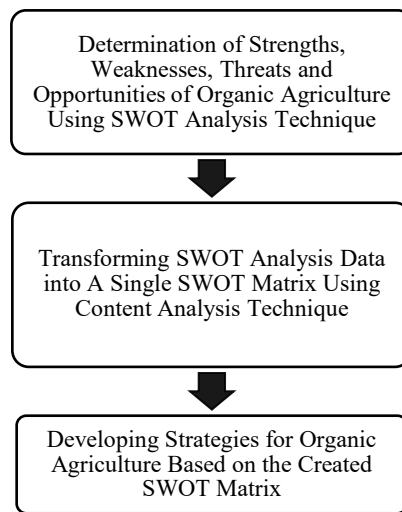


Figure 1. Research model (Esmer and Gezer, 2021).

The research model consists of 3 stages. The first one is to determine the strengths, weaknesses, opportunities and threats of organic agriculture in Bayburt by using SWOT analysis technique, the second one is to transform the SWOT analysis data into a single SWOT matrix by using content analysis technique, and the last one is to develop strategies for organic agriculture in Bayburt through the created situation matrix.

RESULTS AND DISCUSSION

In this section, demographic results, SWOT analysis results and results on strategy development are presented and interpreted.

Demographic results

Demographic information about the professions, experiences, ages, institutions they work in and the duration of their stay in Bayburt are given in Table 1.

Table 1. Demographic information of experts

	Variables	Frequency	%
Occupation/Position	Agricultural Engineer	14	56
	Officer	4	16
	Academician	4	16
	Farmer	2	8
	Agriculture Technician	1	4
Age	25-35	19	76
	36-45	3	12
	46-65	-	-
	65+	3	12
Experience (Year)	1-5	16	64
	6-10	5	20
	11-15	-	-
	16-20	1	4
	21+	3	12
Duration of stay in Bayburt (Year)	1-5	19	76
	6-10	-	-
	11-15	2	8
	16-20	-	-
Affiliated Institution	21+	4	16
	Bayburt Provincial Directorate of Agriculture and Forestry	19	76
	Bayburt University	3	12
	Other Institutions	3	12

When Table 1 is analyzed, 56% of the experts consulted are agricultural engineers, 16% are civil servants, 16% are academicians, 8% are farmers and 4% are agricultural technicians. This result shows that more than half of the experts work in the agricultural sector. It is understood that 76% of the experts are between the ages of 25-35, 12% are between the ages of 36-45 and 12% are 65 years and over. This result shows that a significant portion of the experts are in the young category. It is seen that 64% of the experts have 1-5 years of experience, 20% have 6-10 years of experience, 4% have 16-20 years of experience and 12% have 21 years or more of experience. This result shows that a significant portion of the experts have little experience. It is seen that 76% of the experts have been in Bayburt for 1-5 years, 8% for 11-15 years and 16% for 21 and more years. This result shows that a significant portion of the experts have been in Bayburt for a short period of time. It is understood that 76% of the experts work in Bayburt Provincial Directorate of Agriculture and Forestry, 12% in Bayburt University and 12% in other institutions. This result shows that most of the experts are closely related to the agriculture of Bayburt province. It can be said that this will enable to obtain healthier data for organic agriculture in Bayburt in the SWOT analysis phase of the research.

SWOT analysis results

SWOT analysis is a simple strategic management tool that helps to identify the strengths, weaknesses, opportunities and threats of a project, organization or sector and to develop a strategy (Downey, 2007). SWOT analysis data obtained from expert opinions on organic agriculture in Bayburt were examined in depth with the content analysis technique in accordance with scientific principles and inferences were made and a situation matrix was created as shown in Table 2.

Table 2. SWOT matrix of organic agriculture

Internal Analysis	
Strengths (S)	Weaknesses (W)
S1. Soil is not exposed to too much chemical treatment	W1. Producers do not have sufficient knowledge about organic agriculture
S2. Land is suitable for organic agriculture	W2. Farmers have difficulties in meeting inputs because their incomes are not high
S3. Ability to grow various crops in natural conditions	W3. Failure to market the organic products produced
S4. Location of lands away from chemical substances and wastes	W4. Lack of organic agriculture management and production habits
S5. The climate is at the transition point of the Black Sea and Eastern Anatolia climate	W5. Low productivity due to unfavorable climatic conditions
S6. Opportunity to find labor-intensive young agricultural workers	W6. Small and scattered agricultural lands
S7. Application of traditional agricultural methods	W7. Difficulty in recruiting specialized labor force
S8. Result genetically intact ancestral seeds	W8. Bayburt's disadvantageous position in terms of branding
S9. The region is in a position to receive support from the government for organic agriculture and there are supervisory institutions	W9. Very low number of entrepreneurs in the field of organic agriculture
S10. Availability of irrigation and transportation facilities	W10. Producers are not certified
External Analysis	
Opportunities (O)	Threats (T)
O1. Domestic production is not sufficient to meet the demand for organic agricultural products in Türkiye	T1. Problems of inheritance due to the fragmentation of land
O2. Increasing awareness of organic agriculture	T2. Agricultural lands are replaced by construction areas
O3. Low level of competition in the sector	T3. Lack of effective protection system against diseases and pests
O4. Bayburt being one of the provinces benefiting from state support as a priority	T4. More tendency to consume ready-to-eat food
O5. Easy transition to organic agriculture with the planting of suitable products in agricultural areas	T5. Continuous increase in input prices
O6. Obtaining training from Bayburt University on organic agriculture	T6. Inadequate incentives provided
O7. Increasing demand for healthy and high quality products with consumer awareness	T7. Organic product prices are higher than conventional products
O8. Development of organic agriculture projects supported by the EU	T8. Bayburt is a province that emigrates too much
O9. Bayburt being a province where development through agriculture is inevitable	T9. Negative effects of global climate change
O10. Enactment of a law on producer unions to improve organization in the sector	T10. Unconscious fertilizer use

When the SWOT analysis results given in Table 2 are analyzed:

Bayburt has many strengths in terms of organic agriculture; the soil is not exposed to too much chemical treatment, the lands are suitable for organic agriculture, various products can be grown in natural conditions, the lands are away from chemicals and wastes, the climate is at the transition point of the Black Sea and Eastern Anatolia climate, there is the opportunity to find labor-intensive young agricultural workers, traditional agricultural methods are applied, there are genetically intact ancestral seeds, the region is in a position to receive support from the state for organic agriculture, irrigation and transportation facilities. In this context, Bayraktar (2017) emphasized that Bayburt is a promising province in the organic agriculture sector and therefore the value of organic agriculture should be understood in the region. Özel and Esmer (2023), on the other hand, argued that organic agriculture should be promoted in the region by expanding joint working environments with state institutions.

It is understood that Bayburt has many weaknesses such as; producers not having sufficient knowledge about organic agriculture, farmers having difficulties in meeting the inputs since their incomes are not high, inability to market the organic products produced, lack of organic agriculture management and production habits, low productivity due to adverse climatic conditions, small and scattered agricultural lands, difficulties in the employment of expert labor force, being in a disadvantageous position in terms of branding, very few entrepreneurs in the field of organic agriculture and the products produced are not certified. In this context, Esmer and Gidik (2020) emphasized that organic agriculture students should be supported socially, legally, politically, economically, financially and technologically in order to become agricultural entrepreneurs, while Esmer and Gezer (2021) emphasized that capitalists should be guided to support organic agriculture entrepreneurs.

Bayburt; Insufficient domestic production to meet the demand for organic agricultural products in Türkiye, increasing awareness of organic agriculture, low level of competition in the sector, being one of the provinces that primarily benefit from government support, easy transition to organic agriculture with the planting of suitable products in agricultural areas, and the ability to receive education from universities on organic agriculture, It has been determined that the region has many opportunities such as the increase in demand for healthy and quality products with the awareness of consumers, the development of organic agriculture projects supported by the European Union, being a province where development through agriculture is inevitable, and the enactment of a law on producer unions that will improve the organization in the sector. In this context, Merdan (2018) argued that producers and consumers should be organized by raising awareness through multifaceted training and promotion activities, while Esmer and Gezer (2021) argued that agricultural entrepreneurs should be trained to increase the productivity of agricultural lands.

It is foreseen that Bayburt is faced with many threats such as the emergence of inheritance problem due to the fragmentation of lands, the replacement of agricultural lands by construction areas, the lack of an effective protection system against diseases and pests, the tendency to consume more ready-to-eat food, the continuous increase in input prices, insufficient incentives, organic product prices being higher than conventional products, being a province that emigrates a lot, the negative effects of global climate change and unconscious fertilizer use. In this context, Merdan (2018) emphasized the importance of focusing on land reform and land titling activities.

Results on strategy development

In order to adopt a strategic management approach in organic agriculture, it is important to develop appropriate strategies for the sector. According to Ansoff, strategy is "an action or a series of specific actions of an organization" (Güçlü, 2003). In this context, a total of 12 strategies, three for each component, were developed based on SWOT analysis data and experts' opinions.

Strategies for using strengths:

SS1: Modern organic and natural production by protecting ancestral seeds, protecting the soil structure suitable for organic agriculture in the region by preventing the use of chemicals.

SS2: Chemical analysis of the Çoruh River and development of clean irrigation facilities.

SS3: Monitoring the organic products produced and conducting inspections at all stages of production, conducting studies to recognize the value of organic agriculture by protecting the natural structure of the region.

Strategies aimed at minimizing or overcoming weaknesses:

SW1: Providing information on agricultural insurances and ensuring that producers are insured against the negative effects of climate.

SW2: Providing information on organic agriculture certification procedures and enabling producers to obtain certificates, promoting organic agriculture entrepreneurship and management in the region and ensuring the participation of young entrepreneurs in the sector.

SW3: Increasing market share and developing marketing opportunities (e-market, branding, etc.), carrying out studies to ensure productivity and sustainability in organic agriculture.

Strategies for pursuing opportunities:

SO1: Ensure the establishment of cooperatives and unions operating in organic agriculture in the region, ensuring that the Provincial Directorate of Agriculture and Forestry, universities, local administrations and farmer organizations act together on organic production and consumption.

SO2: Providing trainings on organic agriculture to producers in cooperation with the university and developing projects.

SO3: Encouraging the production of products that are suitable for market conditions, contribute to the regional economy and have high economic value, directing producers to the production of quality products that will provide competitive advantage.

Strategies for avoiding threats:

ST1: No construction allowed on agricultural land, develop policies to consolidate fragmented land (agricultural cities, etc.).

ST2: Encourage the production and use of organic fertilizers, develop projects to inform consumers about the negative effects of convenience food consumption and encourage them to consume organic products.

ST3: Develop a protection system to protect crops and animals against diseases and pests.

When the strategies developed are examined, it can be said that strategies related to each component of the SWOT analysis such as supervision, education, agricultural insurance, agricultural entrepreneurship, agricultural organization, protection system, natural production and irrigation have been developed and all of these strategies are important for organic agriculture in Bayburt. It is also possible to say that these strategies are valid for organic agriculture in Türkiye as a whole. In this context, it is thought that these strategies will guide the enterprises engaged in organic agriculture activities to increase productivity in production as well as to ensure their sustainability by turning possible threats related to the sector into opportunities (Özel and Esmer, 2023). Therefore, it is very important to support these strategies that will contribute to the future of Bayburt in terms of organic agriculture with projects, training activities and agricultural supports (Kara and Gül, 2019).

CONCLUSION AND RECOMMENDATIONS

Agriculture is a sector that has an important place in economic terms depending on the level of development of countries. Because most of the foodstuffs and raw materials required for people to continue their lives are met by agriculture. The fact that agriculture has a strategically important place compared to other sectors and the increase in demand for healthy and quality products, especially with the awareness of consumers, has increased the interest of enterprises in the organic agriculture sector. The survival of businesses and their ability to make more profit depend on their efficient management and this is possible with strategic management. In this study, a strategic analysis of organic agriculture was made based on the example of Bayburt province. In this direction, strategies were developed by determining the strengths, weaknesses, opportunities and threats of organic agriculture by applying expert opinion and using SWOT analysis technique.

When the strengths of Bayburt province in terms of organic agriculture are examined as a result of SWOT analysis; it is seen that it is advantageous in many aspects such as clean air and soil, lands being away from chemicals and wastes, being in a position to receive support from the state and having supervisory institutions. For this reason, it is recommended that inspections should be carried out at all stages of organic production and studies should be carried out to recognize the value of organic agriculture for the region by protecting the natural structure of the region. When the weaknesses are examined, it is understood that the region is disadvantaged in terms of unfavorable climatic conditions, the very low number of organic agriculture entrepreneurs, and the lack of business and production habits.

In this case, it is recommended that information on agricultural insurances should be provided to ensure that producers insure against the negative effects of the climate and that organic agriculture entrepreneurship and management should be encouraged and young entrepreneurs should be encouraged to participate. When the opportunities are examined, it is seen that there are opportunities such as making legal regulations on agricultural organization, receiving training from the university on organic agriculture, and developing EU-supported organic agriculture projects. In this context, it is recommended to ensure the establishment of cooperatives and unions operating in organic agriculture in the region and to develop projects to provide training on organic agriculture to producers in cooperation with the university. When the threats are examined, it is seen that the lands are fragmented, agricultural lands are replaced by building areas, fertilizers are used unconsciously, and there is no effective protection system against diseases and pests. At this point, construction should not be allowed on agricultural lands, fragmented lands should be combined, organic fertilizer should be encouraged, and a protection system should be developed to protect plants and animals against diseases and pests.

When the results on strategy development are examined, it is seen that strategies have been developed at many points related to each component of the SWOT analysis, and it can be said that all of these strategies are important for Bayburt organic agriculture. In conclusion, it is thought that this study will be useful for provincial agriculture and forestry directorates, agricultural enterprises, managers and researchers on the strategic management of organic agriculture.

Summary of Researchers' Contribution Rate Declaration

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

Conflict of Interest Statement

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

Ethical Statement

Ethics committee approval was obtained from Bayburt University Ethics Committee in order to conduct the research (Date: 09/04/2021 and Decision Number: 2021/71)

Additional Information

This study is derived from Master's thesis entitled "Strategic Analysis of Organic Agriculture in Bayburt" prepared by Pınar YILDIZ under the supervision of Assoc. Prof. Dr. Yusuf ESMEER

REFERENCES

- Alcan, Ö., Esmer, Y. and Alcan, Y. (2021), "Strategy development for the applicability of photovoltaic systems in hospitality enterprises using SWOT analysis and AHP method: The case of Sinop province", *Düzce University Journal of Science and Technology*, 9(1), pp. 360-375.
- Aygün, G. and Akbulak, C. (2017), "Evaluation of the organic livestock potential of Ardahan province", *Dumlupınar University Journal of Social Sciences*, Issue 53, pp. 144-161.
- Başkale, H. (2016), "Determination of validity, reliability and sample size in qualitative studies", *E-Journal of Dokuz Eylül University Nursing Faculty*, 9(1), pp. 23-28.
- Bayburt Provincial Directorate of Agriculture and Forestry. (2014), Organic agriculture and organic production in Bayburt, <https://bayburt.tarimorman.gov.tr/Belgeler/BAYBURT%20-%20%20ORGANİK%20TARIM.pdf>
- Bayburt Provincial Directorate of Agriculture and Forestry. (2023), Study report, <https://bayburt.tarimorman.gov.tr/Belgeler/ÇALIŞMA%20RAPORU%202023.pdf>
- Bayraktar, B. (2017), "Organic agriculture and animal husbandry in Bayburt current status", *Turkish Journal of Agriculture-Food Science and Technology*, 5(13), pp. 1762-1768.
- Bhandari, P. (2023), "What is qualitative research? Methods & examples", *Scribbr*, Issue June, pp. 1-1.
- Bozyiğit, S. and Kılınç, G. (2019), "Healty food perceptions and consumption behaviours of consumers: An exploratory study", *Van Yüzcüncü Yıl University The Journal of Social Sciences Institute*, Issue 45, pp. 201-229.
- Çınaroğlu, M. S. (2018), "Economic analysis of organic agriculture: The application of Kilis", Kilis: s.n.
- David, F. R. (2007), *Strategic management concept and cases*, Boston: Prentice Hall.
- De Pinto, A., Cenacchi, N., Kwon, H., Koo, J. and Dunston, S. (2020), "Climate smart agriculture and global food-crop production", *PLoS ONE*, 15(4), pp. 1-19.
- Demiryürek, K. (2011), "The concept of organic agriculture and current status of in the World and Turkey", *Journal of Agricultural Faculty of Gaziosmanpaşa University*, 28(1), pp. 27-36.

- Dertli, Ş. (2021), "The effect of organic agricultural products on tourism marketing applications: the case of Erzurum province", Bayburt: s.n.
- Downey, J. (2007), *Strategic analysis tools-Topic gateway series*, London: The Chartered Institute of Management Accountants.
- Ece, S. (2008), "A research in Şanlıurfa city aimed at marketing problems in organic agriculture firms", Şanlıurfa: s.n.
- Esmer, Y. and Gezer, Y. (2021), "Strategic analysis in agricultural enterprises: The case of Erzurum province", *Atatürk University Journal of Agricultural Faculty*, 52(2), pp. 119-127.
- Esmer, Y. and Gıdık, B. (2020), "A Research on determination of agricultural entrepreneurship tendencies of organic agriculture students", *Turkish Journal of Agricultural Economics*, 26(2), pp.147-156.
- Güçlü, N. (2003), "Strategic management", *Gazi University Journal of Gazi Educational Faculty (GUJGEF)*, 23(2), pp. 61-85.
- Hatunoğlu Durmaz, D. (2010), "Dimension of organic agriculture in Turkey and the world: Organic agriculture in Adana economy", Eskişehir: s.n.
- Hündür, İ. (2021), "Organic agriculture in the world and Turkey: Organic vegetable growing, current status problems and solution proposals", Erzurum: s.n.
- Karabaş, S. and Gürler, A. Z. (2012), "Predicting of the factors affecting consumer behavior the choice of organic products by logit regression analysis", *Adıyaman University Journal of Social Sciences*, 5(10), pp. 129-156.
- Kara, H. and Gül, V. (2019), "The future of organic agriculture in Bayburt", *Bayburt University Journal of Science*, 2(1), pp. 119-123.
- Merdan, K. (2014), "The economic analysis of organic agriculture in Turkey: Eastern Black Sea application", Erzurum: s.n.
- Merdan, K. (2018), "Current state of organic agriculture in Turkey and evaluation of its potential development by means of SWOT analysis", *Social Sciences Studies Journal (SSSJJournal)*, 4(4), pp. 523-536.
- Merdan, K. and Kaya, V. (2013), "The economic analysis of organic agriculture in Turkey", *Atatürk University Journal of Graduate School of Social Sciences*, 17(3), pp. 239-252.
- Özel, E. and Esmer, Y. (2023), "SWOT analysis in agricultural enterprises: The case of Bayburt province", *AS-Proceedings*, 1(1), pp. 164-167.
- Öztürk, E. N. (2012), "Turkish economy and the importance of organic agriculture", Kırıkkale: s.n.
- Ülgen, H. and Mirze, S. K. (2018), *Strategic Management in businesses*. Updated 9th ed. İstanbul: Beta Publications.
- Yağar, F. (2023), "Determining sample size in qualitative research: Data saturation", *Aksaray University Journal of Institute of Social Sciences*, 7(2), pp.138-152.