



PROBLEMS ENCOUNTERED IN MARKETING SUSTAINABLE PRODUCTS AND SUGGESTED SOLUTIONS IN TURKEY

Ebru Erdoğan¹

¹Ph.D., School of Business, İnönü University, Turkey

Abstract

The growth of the consumer economy in the last century has led to several significant issues that endanger human life. Overexploitation of nature and soils, the use of pesticides and growth stimulants have had a negative impact on the environment and water resources. The current situation has necessitated that societies worldwide adopt new production approaches to immediately halt soil degradation and improve water quality. One production approach that aims to protect public health and the environment is sustainable production. Sustainable production is an ecological management system that promotes biodiversity, biological cycles, and soil biological activity. The farming system is based on minimal use of off-farm inputs and management practices that restore, maintain or enhance ecological harmony. The aim of this study is to explain the importance of sustainable products and production, to address the problems and suggestions encountered in the marketing of sustainable products in Turkey, and to propose solutions.

Keywords

Sustainability, Sustainable Production, Ecological Harmony, Marketing

1. Introduction

Currently, the rising rate of consumption has a detrimental effect on resource utilization. Harmful waste generated during production and consumption harms the environment and human beings by destroying scarce resources. For humans, the destruction of the natural environment is a danger in itself (Ekinci, 2007). This has made it imperative that the activities of the organisations concerned respond first and foremost to the challenges of caring for the natural environment and human health (Sobocinska et al., 2021). In the 21st century, one of the most significant challenges facing the industry is the need to develop sustainable products due to the increasing pressure to adopt a more sustainable approach to product design and manufacturing. Therefore, the development of sustainable products and services is becoming a crucial aspect of cleaner production (Maxwell & Van der Vorst, 2003).

The natural environment is a crucial aspect of sustainable development. The implementation of sustainable development goals is linked to both the promotion of environmentally-friendly consumption and the establishment of sustainable production conditions that encourage ecological behaviour. Sustainable production is a system of production that safeguards the health of soils, ecosystems, and people. Sustainable production aims to optimise the health and productivity of the interdependent structure of soil life, plants, animals and people. It is based on ecological processes, biodiversity, and cycles adapted to local conditions instead of using inputs with negative impacts. At the same time, sustainable production combines tradition, innovation and science to benefit the environment and promote fair relations and a good quality of life for all involved (Jasti et al., 2022).

Turkey, which is in the group of developing countries, has started to give more importance to the sustainable product market, which is mainly orientated to meet export demands, with the increase in domestic market demands. As a sustainable production system, since its main focus is related to the protection of ecological balance and consumers' demand for healthy products, ensuring the continuity of organic product consumption is very important in terms of both supply and demand (Ayla & Altıntaş, 2017). However, Turkey still faces some deficiencies in the production and marketing of organic products. This study aims to raise awareness of the importance of sustainable product marketing by revealing related problems in the producer and consumer channels.

2. Literature review

2.1. Sustainable Product

Sustainable production involves a shift towards preventive initiatives, process management, and adapting to sustainability, influenced by contextual factors and firm characteristics, impacting customer attitude, employee behavior, and firm performance (Liu et al., 2021). According to Sobocinska et al. (2020), sustainable products are high quality, organic and ecological products that do not harm nature and living things at every stage of the production process, do not contain harmful chemicals, do not cause a negative impact on the environment, do not endanger human health. Aarset et al. (2004) defined sustainable product as “is an issue that is linked to concepts such as organic, natural, environmental, ecological, green”. Cervellon et al. (2011) defined sustainability as “the production of organic products and other ingredients without the use of pesticides, synthetic fertilisers, sewage sludge, genetically modified organisms or ionising radiation”. In addition, sustainable production involves raising animals that produce eggs, dairy products, and meat without the use of antibiotics or growth hormones. The primary aim of sustainable production is to contribute to the establishment of a dependable and healthy system that safeguards the well-being of the soil, ecosystems, and individuals (Sobocinska et al., 2020).

Compared to conventional production, sustainable production is an innovative production system that maximises the performance of renewable energy sources. It significantly reduces the release of CO₂, soil, metals and other harmful substances into the environment (Melovic et al., 2020). Additionally, it optimises the flow of nutrients and energy in agro-ecosystems. In addition, sustainable production involves prohibiting the use of pesticides, genetically modified organisms, food additives, and other potentially harmful substances. This results in healthy products with high nutritional value. Therefore, promoting organic production can significantly contribute to addressing some of the major issues faced by modern society globally, such as obesity (especially among young people), environmental pollution, unsustainable production, and the need to support local farmers (Melovic et al., 2020). The concepts of ecological marketing, green marketing, and sustainability marketing express the penetration of ideas and values related to sustainable development and ecology into marketing. To gain a better understanding of sustainable marketing and its origins, it is useful to analyse the historical development of marketing thought as shown in Table 1. This will provide insight into the roots of interest in environmental issues.

Marketing Approaches	Marketing Understanding and Distinctive Features
Classical marketing approach	<ul style="list-style-type: none"> - Forecasting demand and creating a market - Meeting customer needs and creating satisfaction. - To achieve the organization's objectives and maximize profits. - Implementation of marketing tools, such as product development, pricing policy, distribution, and promotion. - Management process
Strategic marketing approach	<ul style="list-style-type: none"> - Business asset management - Competitive Position - Competitive advantage - Competition - Market opportunities and threats - Strategy and marketing objectives - Target market and market segmentation - The company's primary goal is to achieve market share & profit through marketing efforts. - To anticipate changes in the business and its environment. - Long-term management
Relationship marketing approach	<ul style="list-style-type: none"> - Maintaining and strengthening the relationship with the customer - Building relationships - Developing partnership relationships with market participants, such as customers, suppliers, influential organisations, and potential and existing employees. - Customer loyalty - Costs of acquiring and retaining customers - Quality and customer service - Ensuring customer satisfaction
Sustainable marketing approach	<ul style="list-style-type: none"> - Implementing sustainable development and its objectives. - The positive impact of marketing on the environment - Environmentally conscious businesses and consumers. - Green consumers - Creating environmentally friendly products - Eco-labelling - Green advertising

Table 1. Changes in the Understanding and Meaning of Marketing

Note: Table adapted from Sobocinska et al. (2020).

Upon analysing Table 1, it is evident that the concept of environmental protection has evolved from classical marketing to sustainable marketing. This shift reflects a widespread adoption of sustainable practices. The concepts of ecological marketing, green marketing, and sustainable marketing express the penetration of ideas and values related to sustainable development and ecology into marketing.

The sustainable production system aims to protect human health, prevent environmental pollution, and help restore balance to ecosystems (Melovic et al., 2020). Agriculture is the most widely produced sector in the sustainable product category. Table 2 presents global agricultural indicators, including the countries with the most sustainable agriculture in the world. Although the number of publications in this field has been increasing in recent years, a look at the history of marketing thought reveals that the interest in environmental issues in marketing has its roots in a systemic approach of marketing.

Indicators	Year	World	Best Countries	
Countries involved in sustainable agriculture.	2020	190 Country		
Sustainable agricultural areas	2020	74,9 million ha	Australia Argentina Uruguay	5,7 million ha 4,5 million ha 2,7 million ha
Ratio of total agricultural areas to sustainable agricultural areas	2020	1,6%	Liechtenstein Austria Estonia	41,6% 26,5% 22,4%
Non-agricultural and natural collection areas.	2020	28,5 million ha	Finland Namibia Zambia	5,5 million ha 2,6 million ha 2,5 million ha
Manufacturers	2020	3,4 million	India Ethiopia Tanzania	1.599.010 219.506 148.607
Sustainable product market	2020	EUR 120.6 billion	USA Germany France	EUR 49.5 billion EUR 15.0 billion EUR 12.7 billion
Sustainable food consumption per capita	2020	15.8 Euros	Switzerland Denmark Luxembourg	418 Euro 384 Euro 285 Euro

Table 2. Indicators of sustainable agriculture in the world and top countries.

Note: Table adapted from Bulut and Şen (2023).

Upon analysing Table 2, it becomes apparent that sustainable product production has primarily commenced in developed countries. While indicators may fluctuate globally, natural farming remains a leading effort in promoting asset cycling, environmental equity, and biodiversity (Nedumaran & Manida, 2019). The sustainable product range, whose production has diversified in many countries with the demands of consumers and environmentalist organisations, has become a growing sector every day (Bulut & Şen, 2023).

2.2. Consumer Perception of Sustainable Products

There are a number of motivators for companies to develop new innovative green products, e.g. compliance with regulations, environmental awareness of the government and public, customer requests, market pressure through competition, technological opportunities and ecological responsibility. Environmental policies and regulations push firms to focus more on green innovation and reduce uncertainty on whether investments in the environment will be valuable (Melander, 2017). In addition, numerous studies in the literature have attempted to answer the question of which product attributes consumers attach importance to and what motivates sustainable product consumption. Numerous researchers have argued that the purchase of sustainable food is primarily influenced by consumers' attitudes towards product quality and food safety (Chryssochoidis, 2000; Torjusen et al., 2001). According to Hemmerling et al. (2015), Illukpitiya and Khanal (2016), Rimal et al. (2005) and Tsakiridou et al. (2008), sustainable/organic food is generally perceived as the result of safe, healthy, nutritious and environmentally friendly production.

It is important to note that consumers' positive attitudes towards sustainable development and ecological products, as well as their concern for the state of the natural environment, do not always translate into corresponding purchasing behaviour. The results of research on consumer behaviour in various countries, including the UK, Belgium, and Sweden confirm this (Hughner et al., 2007; Tanner et al., 2003; Vermeir et al., 2006). There is a discrepancy between positive attitudes towards the environment and ecology and actual behaviour reflected in the purchase of organic products, which is sometimes referred to as the 'green purchasing paradox. In this context, marketing plays a crucial role in reducing the identified mismatch between attitudes and behaviour, ultimately increasing the share of organic purchases in total purchases.

Aertsens et al. (2009, 2011) and Shepherd et al. (2005) found that although consumers hold positive attitudes towards sustainable products, this does not necessarily translate into regular purchases. As a result, the market share of these products remains low across countries. Indeed, Magnusson et al. (2003) also show that only 4-10% of consumers with a positive attitude towards sustainable products actually purchase sustainable food. Morasso et al. (2000) analysed the issue as simple associated risks. They found that emotional and cognitive factors can affect the evaluation of risk and the perception of changing consumer attitudes towards sustainable products.

Sustainable food purchasing and consumption are regarded as environmentally friendly behaviours. Therefore, social norms are expected to account for a significant portion of purchase intention. However, studies conducted by Gotschi et al. (2007) and Tarkiainen & Sundqvist (2005) have shown that social norms do not have a significant impact on purchase intention. Chen (2009), Lockie et al. (2002), Prentice et al. (2019), and Williams and Hammitt (2000) suggest that the decision to consume organic food is a personal choice, rather than being influenced by subjective or personal norms, which can lead to moral and behavioural consequences. Sustainable and organic foods are generally more expensive than conventional foods. Therefore, purchasing sustainable food should be considered a luxury item that requires a portion of disposable income (Prentice et al., 2019).

2.3. Sustainable Production in Turkey

Organic farming activities in Turkey, which started in 1985s in line with the demands from EU countries, have progressed over the years and have reached a position of commercial importance. Organic farming is practiced in approximately 160 countries worldwide, and production areas are expanding daily. Organic farming activity, which started with only a few traditional products such as raisins and dried figs in Turkey in the early years, has now reached a sectoral structure with more than 200 products that can be classified as herbal products, processed food products and other organic products (Öztürk and İslam, 2014). In Turkey, sustainable product production is primarily conducted through organic agriculture and animal husbandry. Organic farming is a farming system that has been explicitly developed to be environmentally sustainable and is clearly governed by verifiable rules. The number of organic products in Turkey has increased from 150 in 2002 to 268 in 2022. The number of farmers has also increased from 12,428 to 44,927, while the total production area has expanded from 89,827 hectares to 310,584 hectares. Additionally, the production amount has risen from 310,125 tonnes to 1,600,858 tonnes. Based on 2021 data, sustainable agriculture is practiced on only 1.6% of the world's total agricultural land. Sustainable agriculture is practised on 9.6% of the total agricultural area in European Union countries. According to 2022 data, sustainable agriculture accounts for only 1.5% of the total agricultural area in Turkey. Based on 2023 data from the Ministry of Agriculture and Forestry, Figure 1 shows the percentage of sustainable agricultural areas in Turkey's total agricultural areas.

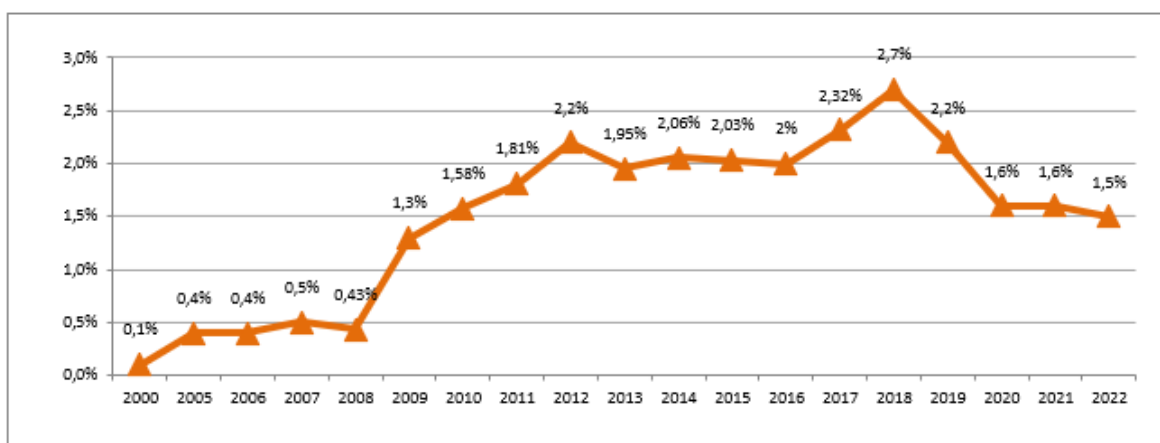


Figure 1. Ratio of Sustainable Agricultural Areas in Total Agricultural Areas in Turkey (%)

Source: <https://cevreselgostergeler.csb.gov.tr>

Based on the 2023 data from the Ministry of Agriculture and Forestry, a total of 101 producers in Turkey engaged in sustainable animal husbandry in 2022. This included 7,220 cattle, 5,330 sheep, and 684,408 poultry for organic animal production. Furthermore, 591 producers maintained 95,733 hives for organic beekeeping.

In Turkey, sustainable production is mainly focused on exports. However, although there have been positive developments in the domestic market, the proportion of sustainable production in agricultural production remains low. In preventing the development of the domestic market, the production of sustainable agricultural products is dependent on external sources, the lack of necessary market research in the domestic market and the average price that consumers are willing to pay for sustainable products is around 2% (Merdan, 2018). In order to support the development of the domestic market, it can be said that it would be beneficial to carry out promotion and awareness-raising activities on sustainable production.

2.4. Marketing Sustainable Products

The emergence of concepts such as ecological marketing, green marketing and sustainability marketing is an expression of the penetration of ideas and values related to sustainable development and ecology into marketing. According to this concept, marketing is about building and strengthening sustainable relationships with customers and the social and natural environment. Like relationship marketing, sustainable marketing takes a long-term perspective (Sobocinska et al., 2020). Increased sales and margins are key objectives for retailers marketing organic and sustainable products, but little is known about their marketing effectiveness and crossover effects on sales of conventional products.

First, it can be said that sustainable products are provided by strategies that comply with the criteria of natural cultivation (Nedumaran & Manida, 2019). Although the marketing process for ordinary products is based on the same principles, the marketing of sustainable products requires different methods to those used for conventional products. The main reason for this difference is that sustainable products require inspection, various certificates and labelling at every stage from the beginning of production until they reach the consumer. Furthermore, it is important to ensure sustainability throughout the entire production process, including collection, storage, packaging, and distribution (Bulut and Şen, 2023).

2.5. Problems Encountered in Marketing Sustainable Products in Turkey and Suggestions for Solutions

Just like conventional products, marketing is a crucial process for the rapidly growing category of sustainable products. Although the sustainable product market in Turkey has grown compared to previous years, it has not developed as fast as sustainable markets worldwide. The most important reason for this is that sustainable product marketing activities and strategies are not sufficiently developed. Furthermore, the inadequate level of exported goods can be considered a significant shortcoming (Bozyiğit & Doğan, 2015). Turkey has an extremely low ratio of sustainable agricultural areas in total agricultural areas, which is a significant deficiency. Turkey's favourable geopolitical position provides high potential for sustainable agriculture due to its climate, water resources, soil fertility, and diversity. In this context, in order to reach the effectiveness of developed countries, the importance of the issue should be understood by taking into account the sociological, psychological and economic conditions of the country and a common conscious demand should be created by transferring the results to economic units. At this stage, it can be suggested that creating policies to support producers technically and economically during and after production, as well as efforts to generate demand would be beneficial (Ayla & Altıntaş, 2017).

One of the most important difficulties encountered by producers in Turkey in marketing their products as "Sustainable-Ecological Products" is that marketing companies work with a small number of producers. As the domestic market is not yet established, the producer has no alternative market. The export companies limit the number of producers they contract to the contacts they make with foreign buyers. In Turkey, small-scale producers with limited capital are required to engage in sustainable production through contractual agreements with companies. Certification can be an expensive process. Producers or producer communities can self-certify their products if the relevant units provide sufficient capital. However, this situation creates the necessity for the producer to find a market for the sale of the product. Furthermore, the lack of distribution and promotion in the domestic market may pose a challenge in finding a suitable outlet to sell the product. For this purpose, it may be easier for retailers to enter the market with the production of sustainable products under their own brand, although it is difficult to reach large retailers through the use of sales points owned by farmers' unions or cooperatives, sales points that still exist in some cities and sell only sustainable products, and direct marketing methods (Öztürk & İslam, 2014).

One of the significant challenges in marketing sustainable products is the lack of knowledge among producers and consumers. For this reason, with the support and organisation of relevant institutions, producers should make efforts to inform consumers about the differences of sustainable products from other products, where and how to buy them (Kılıç et al., 2014). Factors such as limited product variety, insufficient R&D activities, insufficient government support, lack of good planning, lack of access to sound data on the production of sustainable products are among the problems that negatively affect the production, export and market development of sustainable products in Turkey. At the point of solving the problems, it can be said that increasing product diversity to develop the domestic market and enable more producers to enter the domestic market, as well as creating an information network that is easily accessible and accurately transferred will be useful practices (Merdan, 2018).

3. Conclusion

Despite the initiation of sustainable production in Turkey dating back to 1985, the local market for those products has not developed sufficiently, mainly relying on foreign demand. This reliance poses risks, as fluctuations in foreign market activity or a decrease in demand might lead to income instability (Çınar & Göktaş, 2019; Öztürk and İslam, 2014). In this regard, it is considered beneficial for the development of sustainable production to conduct studies that address the above-mentioned shortcomings of the domestic market. In this respect, it is

considered beneficial for the development of sustainable production to carry out studies to address the above-mentioned shortcomings of the domestic market. First, government support should be given to producers to expand production and lower prices. The aim is to ensure that the producer, with the necessary support, makes the right market and product choices and produces to standards. It is extremely important to establish an effective certification and inspection system. In addition, the fact that the products are of high quality, their packaging is durable and attractive, and they are offered to consumers at affordable prices with appropriate promotional tools and the right distribution channels are also important success factors in the marketing of sustainable products (Kılıç et al., 2014). Therefore, when governments or societies as a whole mobilise or move towards lifestyles and technologies that contribute to sustainability, it has a profound impact on all stakeholders, both locally and globally.

In summary, promoting the growth of the domestic market for sustainable production in Turkey requires the combined efforts of a wide range of entities, including government agencies, producers and consumers. By enacting supportive regulations, cultivating ingenuity and raising consumer awareness, Turkey is poised to realise its capacity as a focal point for sustainable production, thereby promoting both economic progress and environmental protection.

References

- Aarset, B., Beckmann, S., Bigne, E., Beveridge, M., Bjørndal, T., Bunting, J., & Young, J. (2004). The European consumers' understanding and perceptions of the "organic" food regime: The case of aquaculture. *British Food Journal*, 106(2), 93-105. <http://dx.doi.org/10.1108/00070700410516784>
- Aertsens, J., Verbeke, W., Mondelaers, K., & Van Huylenbroeck, G. (2009). Personal determinants of organic food consumption: A review. *British Food Journal*, 111(10), 1140-1167. <https://doi.org/10.1108/00070700910992961>
- Aertsens, J., Mondelaers, K., Verbeke, W., Buysse, J., & Van Huylenbroeck, G. (2011). The influence of subjective and objective knowledge on attitude, motivations and consumption of organic food. *British Food Journal*, 113(11), 1353-1378. <https://doi.org/10.1108/00070701111179988>
- Ayla, D., & Altıntaş, D. (2017). Organik Üretim ve Pazarlama Sorunları Üzerine Bir Değerlendirme. *Kastamonu University Journal of Economics & Administrative Sciences Faculty*, 19(4), 7-17.
- Bozyiğit, s., & Doğan, g. k. (2015). Türkiye'deki doğal ve organik ürün üreticilerinin yaşadığı pazarlama sorunları: Keşifsel bir araştırma. *Afyon Kocatepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 17(2), 33-47.
- Bulut, M., & Şen, B. (2023). Organik Ürünlerin Pazarlanmasına İlişkin Durum Değerlendirmesi. *Güncel Gelişmelerle Pazarlama Konular ve Araştırmalar-I*, 95-116. <https://doi.org/10.58830/ozgur.pub87.c249>
- Cervellon, M. C., Rinaldi, M. J., & Wernerfelt, A. S. (2011, January). How Green is Green? Consumers' understanding of green cosmetics and their certifications. In *Proceedings of 10th International Marketing Trends Conference* (pp. 20-21).
- Chen, M. F. (2009). Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle. *British Food Journal*, 111(2), 165-178. <https://doi.org/10.1108/00070700910931986>
- Chrysochoidis, G. (2000). Repercussions of consumer confusion for late introduced differentiated products. *European Journal of Marketing*, 34(5/6), 705-722. <https://doi.org/10.1108/03090560010321992>
- Çınar, D., & Göktepe, B. (2019). Organik Tarım Ürünleri Konusunda Yapılmış Pazarlama Çalışmalarından Örnekler. *Bayburt Üniversitesi Fen Bilimleri Dergisi*, 2(1), 131-144.
- Ekinci, T. (2007). Yeşil Pazarlama Uygulamalarında Yaşanan Sorunlar ve Örnek Bir Uygulama. Yayınlanmamış Yüksek Lisans Tezi. Marmara Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
- Gotschi, E., Vogel, S., & Lindenthal, T. (2007). *High school students' attitudes and behaviour towards organic products: Survey results from Vienna* (No. DP-27-2007). Diskussionspapier.3-25.
- Hemmerling, S., Hamm, U., & Spiller, A. (2015). Consumption behaviour regarding organic food from a marketing perspective- a literature review. *Organic Agriculture*, 5, 277-313. <https://doi.org/10.1007/s13165-015-0109-3>
- Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J., & Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour: An International Research Review*, 6(2-3), 94-110. <https://doi.org/10.1002/cb.210>
- Illukpitiya, P., & Khanal, P. (2016). Consumer perception of organic food and product marketing. *Organic Farming for Sustainable Agriculture*, 315-324. https://doi.org/10.1007/978-3-319-26803-3_14
- Jasti, N. V. K., Jha, N. K., Chaganti, P. K., & Kota, S. (2022). Sustainable production system: literature review and trends. *Management of Environmental Quality*, 33(3), 692-717. <https://doi.org/10.1108/MEQ-11-2020-0246>
- Kılıç, S., Dumanb, O., & Bektaş, E. (2014). Organik Ürünlerin Pazarlama Stratejileri ve Üreticiler Üzerinde Bir Alan Araştırması. *Business & Economics Research Journal*, 5(1), 39-65.

- Liu, F., Lai, K. H., & Cai, W. (2021). Responsible production for sustainability: Concept analysis and bibliometric review. *Sustainability*, 13(3), 1275. <https://doi.org/10.3390/su13031275>
- Lockie, S., Lyons, K., Lawrence, G., & Mummery, K. (2002). Eating 'green': Motivations behind organic food consumption in Australia. *Sociologia Ruralis*, 42(1), 23-40. <https://doi.org/10.1111/1467-9523.00200>
- Magnusson, M. K., Arvola, A., Hursti, U. K. K., Åberg, L., & Sjöden, P. O. (2003). Choice of organic foods is related to perceived consequences for human health and to environmentally friendly behaviour. *Appetite*, 40(2), 109-117. [https://doi.org/10.1016/S0195-6663\(03\)00002-3](https://doi.org/10.1016/S0195-6663(03)00002-3)
- Maxwell, D., & Van der Vorst, R. (2003). Developing sustainable products and services. *Journal of Cleaner Production*, 11(8), 883-895. [https://doi.org/10.1016/S0959-6526\(02\)00164-6](https://doi.org/10.1016/S0959-6526(02)00164-6)
- Melander, L. (2017). Achieving sustainable development by collaborating in green product innovation. *Business Strategy and The Environment*, 26(8), 1095-1109. <https://doi.org/10.1002/bse.1970>
- Melovic, B., Cirovic, D., Dudic, B., Vulic, T. B., & Gregus, M. (2020). The analysis of marketing factors influencing consumers' preferences and acceptance of organic food products- Recommendations for the optimization of the offer in a developing market. *Foods*, 9(3), 1-23. <https://doi.org/10.3390/foods9030259>
- Nedumaran, D. G. (2019). E-Marketing Strategies for Organic Food Products. 1-10. <https://dx.doi.org/10.2139/ssrn.3551995>
- Prentice, C., Chen, J., & Wang, X. (2019). The influence of product and personal attributes on organic food marketing. *Journal of Retailing and Consumer Services*, 46, 70-78. <https://doi.org/10.1016/j.jretconser.2017.10.020>
- Rimal, A. P., Moon, W., & Balasubramanian, S. (2005). Agro-biotechnology and organic food purchase in the United Kingdom. *British Food Journal*, 107(2), 84-97. <https://doi.org/10.1108/00070700510579162>
- Shepherd, R., Magnusson, M., & Sjöden, P. O. (2005). Determinants of consumer behavior related to organic foods. *AMBIO: A Journal of the Human Environment*, 34(4), 352-359. [https://doi.org/10.1579/0044-7447\(2005\)034\[0352:DOCBRT\]2.0.CO;2](https://doi.org/10.1579/0044-7447(2005)034[0352:DOCBRT]2.0.CO;2)
- Sobocińska, M., Mazurek-Łopacińska, K., Skowron, S., Graczyk, A., & Kociszewski, K. (2020). The role of marketing in shaping the development of the market of organic farming products in Poland. *Sustainability*, 13(1), 130. <https://doi.org/10.3390/su13010130>
- Tanner, C., & Wölfling Kast, S. (2003). Promoting sustainable consumption: Determinants of green purchases by Swiss consumers. *Psychology & Marketing*, 20(10), 883-902. <https://doi.org/10.1002/mar.101014>
- Tarkiainen, A., & Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, 107(11), 808-822. <https://doi.org/10.1108/00070700510629760>
- Tischner, U., & Charter, M. (2017). Sustainable product design. In *Sustainable Solutions* (pp. 118-138). Routledge.
- Torjusen, H., Lieblein, G., Wandel, M., & Francis, C. A. (2001). Food system orientation and quality perception among consumers and producers of organic food in Hedmark County, Norway. *Food Quality and Preference*, 12(3), 207-216. [https://doi.org/10.1016/S0950-3293\(00\)00047-1](https://doi.org/10.1016/S0950-3293(00)00047-1)
- Tsakiridou, E., Boutsouki, C., Zotos, Y., & Mattas, K. (2008). Attitudes and behaviour towards organic products: An exploratory study. *International Journal of Retail & Distribution Management*, 36(2), 158-175. <https://doi.org/10.1108/09590550810853093>
- Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer "attitude-behavioral intention" gap. *Journal of Agricultural and Environmental Ethics*, 19, 169-194. <https://doi.org/10.1007/s10806-005-5485-3>