

APPLICATION OF SWOT-AHP TO DEVELOP ORGANIC FOOD MARKETING STRATEGY

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ABSTRACT

Eco-friendly products such as organic food have become one alternative solution for food security in the future. Organic farming practices are also aligned and support the creation of Sustainable Development Goals (SDGs) number 2 that keep ecosystems through environmentally friendly agriculture and the empowerment of local farmers. Although Indonesia has good potential for developing eco-friendly products, the growth of the domestic organic food market share as an eco-friendly product is still relatively low. Therefore, an appropriate marketing strategy is needed to increase the number of purchases and consumption. The purpose of this study was to determine the factors that influence the marketing of organic food and to recommend priority strategies to increase the organic food market in Indonesia. The analytical methods used in this study are SWOT analysis and analytical hierarchy process (AHP). The results showed the alternative marketing strategies that become strategic priorities are product strategies that focus on improving product quality.

Keywords: SWOT, AHP, Organic Food, Indonesia.

INTRODUCTION

Eco-friendly products such as organic food become potential solutions to solve both food safety and environmental problems (Annunziata & Vecchio, 2016; Sazvar et al., 2018). Furthermore, organic agriculture is also in line with the Sustainable Development Goals (SDGs) program, namely the creation of zero hunger, food security, improved nutrition, and sustainable agricultural practices that pay attention to the ecosystem impact of the production process. In practice, organic farming has four principles namely the health, ecology, justice, and protection principle (International Federation of Organic Agriculture Movements, 2013). In Indonesian context as a developing country, organic food can be an alternative solution for food safety and security (Najib et al., 2020).

The area of organic land in Indonesia from 2012 to 2015 on average experienced an increase. The total number of producers in 2015 was 17,468 (including small farmers, companies, and processors), which increased 56% from 2014 (11,189) (Aliansi Organik Indonesia, 2016). The increase in land area, the number of producers involved, and the potential for developing organic food in Indonesia must be balanced with the development of organic food markets. The reason is, although it has increased in terms of size and popularity over the past few decades, the national organic food market share only grows 5% per year with a sales value of around Rp 10 billion (Septiani et al., 2019). Global Organic Trade (2017) stated that Indonesia's organic packaging product market share in 2017 ranked 44th in the world, but it is estimated to only grow by 8.4% until 2022 and the market of organic food relatively experienced stagnancy.

Even though there are tremendous benefits of organic food for health, the growth of the Indonesian market is very slow and even stagnant. The Indonesian government has a campaign program to promote organic food called “*go organic*” and “*1000 organic village*”. However, the response of consumers is still not satisfactory. Previous research found that there were various factors influencing organic food purchase intention (Septiani et al., 2019). To increase them, an effective marketing strategy is needed by organic producers (Teng & Wang, 2015). As mentioned by Walker et al. (2006), the main objective of a marketing strategy is to successfully distribute and organize marketing resources and activities to achieve marketing objectives in a specific product market. Therefore, Melović et al. (2020) noted that an appropriate marketing strategy was the key for fostering organic business.

In order to develop an appropriate marketing strategy, it is important for organic food producers to understand factors affecting success of organic food marketing. However this issue is still not well-researched particularly in Indonesian context as a developing country. Hence, the purpose of this study was to determine the factors that influence the marketing of organic food and to recommend priority strategies to increase the organic food market in Indonesia.

LITERATURE REVIEW

Organic Food as Eco-Friendly Product

Organic production can be defined as a production management system with ecological orientation that increases biological soil activity, biological cycles, and biodiversity (Dangelico & Vocalelli, 2017). This is a management practice that restores, maintain, and enhance ecological harmony based on the use of minimal non-agricultural inputs. Organic farming as a production system will produce an organic product based on organic food system standards. Food which is produced without using chemical pesticides and fertilizers can be considered as organic food (Pham et al., 2019; Rana & Paul, 2017). In the production process, organic foods do not use modern synthetic inputs such as pesticides and chemical fertilizers, are not processed using chemical food additives, and do not contain genetically modified organisms. Moreover, organic food is produced using agricultural methods that are safe for the environment. Therefore organic food can be considered as an eco-friendly product (Dangi et al., 2020).

Marketing Strategy in Organic Food Context

Marketing strategy is an important decision related to marketing activities to facilitate the achievement of a competitive advantage in the marketplace (Knollenberg et al., 2020). Meanwhile Kotler et al. (2014) define marketing strategy as a marketing mindset to achieve marketing goals which include determining market segments, positioning, and developing the marketing mix. Marketing mix itself can be defined as a set of marketing variables that marketer used to pursue desired sales targets. From the company’s perspective, the marketing mix is summarized in 4P, namely product, price, promotion, and place (Kotler et al., 2014).

Researchers found that the superiority of natural products from organic food gives more value to customers (Götze et al., 2016; Zander et al., 2018). In the organic product, consumer’s purchase intentions are affected by product quality, organic certification and packaging (Dangi et al., 2020). Meanwhile, the price factor of organic food products plays a significant role in achieving the expected marketing performance (Najib et al., 2020; Zhang et al., 2018). Some

consumers have no problem with premium prices and some other consumers expect normal price when buying organic food (Pham et al., 2019; Zhang et al., 2018).

To convince consumers about organic food an appropriate promotional strategy is necessary. There are three types of promotional tools that are considered effective in convincing consumers about the benefits of organic food, namely social media, exhibitions, and edu-tourism (Najib et al., 2020). In addition, marketing channel (place) is the key to form a market success for organic food (Pandey et al., 2019; Zhang et al., 2018). There are five types of marketing channels in Indonesia that can be used to distribute organic food, namely modern retail, traditional retail, business-to-business (B2B) channels, direct sales and online markets (Najib et al., 2020).

METHODS

Research was conducted in West Java and Jakarta, Indonesia. Data was collected through interviews and Focus group discussion (FGD). Participants in this study involved stakeholders in the organic food chain such as: farmers, distributors, agricultural government officers, academics, retailers and organic consumers. A total of 15 FGD and interview participants were selected based on the purposive sampling technique. The interview and FGD were conducted to identify the strengths; weaknesses, opportunities, and threats (SWOT) of organic farming in West Java and Jakarta. The strengths and weaknesses are associated to internal organizational factors, while opportunities and threats cover an external environment in which the entity operates (Helms & Nixon, 2010). The result of SWOT was used to develop alternative marketing strategies.

Data analysis in the selection of alternative organic food marketing strategies was carried out using the Analytical Hierarchy Process (AHP) method. Decision making in AHP is based on three main principles, namely the preparation of hierarchy, determination of priorities, and logical consistency (Saaty, 1987). To collecting data, a pair-wise comparison questionnaire was distributed. To assess the validity, we applied the quantitative and qualitative approaches. In the qualitative technique, we invited five experts to give suggestion on the questionnaire. In the quantitative technique, we used the content validity ratio (CVR) and content validity index (CVI). The result of CVR and CVI values were, respectively, 0.83 and 0.84. The reliability was measured using the consistency ratio (CR). Generally, CR less than 0.1 is considered acceptable. In this study, the CR value was 0.04, meaning that the instrument used was highly reliable. Hierarchical framework can be seen in Figure 1.

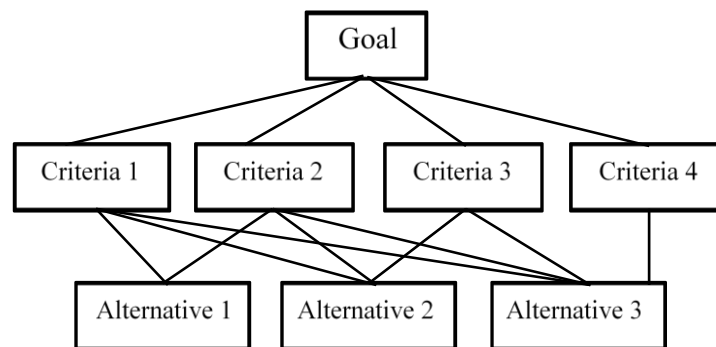


FIGURE 1
HIERARCHICAL STRUCTURE IN THE AHP METHOD

RESULT AND DISCUSSION

Internal and External Factors

Based on interview and FGD, external and internal factors affecting organic farming had been identified. Weight and rating in IFE and EFE tables were obtained from FGD process. Then, we calculate the score for each factor. Table 1 shows that the three highest strengths of organic food agriculture in West Java and Jakarta were the commitment of farmers to supply organic food products (0.388), business management based on fair trade (0.347) and diversity of products/commodity types (0.314). With the high commitment from organic farmers, it is expected that the provision of safe food products will be even higher. The high commitment of farmers was basically supported by the active marketing institutions that helped the quality assurance process of the products from farmers until they reached the consumers. Fair trade-based business management increases farmers' motivation to produce higher quality organic food, as a result, consumers' intention to buy organic food also increases. As mentioned by Zander et al. (2018), perceived fair trade is important in organic food market.

STRENGTH	Weight (a)	Rating (b)	Score (axb)
High commitment of farmers	0.097	4	0.388
Active farmer institutions	0.078	3.75	0.293
Certification and labeling	0.056	3.5	0.197
Production and marketing authorization	0.052	3.25	0.170
Business management based on fair trade	0.087	4	0.347
Lower input cost/planting process	0.077	3.5	0.270
Diversity of products/commodity types	0.078	4	0.314
Captive market	0.071	3.5	0.249
WEAKNESS			
No written contract between farmers and marketing agency	0.070	1.5	0.106
Knowledge of traditional farmer	0.071	1	0.071
Capability to fulfillment of market demand	0.077	1.25	0.097
Perception of farmer certification	0.062	2	0.124
Ability to access market for traditional farmer	0.060	1.25	0.074
Brand made by farmer	0.063	2	0.127
TOTAL	1.000	38.50	2.824

In terms of weaknesses, the three biggest weaknesses were knowledge of traditional farmer (0.071), ability to access market for traditional farmer (0.074), and capability to fulfillment of market demand (0.097). Farmer knowledge from the cultivation process to marketing is very important. Mentoring for small-scale farmers is identified as an important action in the strategy of developing organic food agriculture. The total score of 2.824 from the internal analysis showed that the response of the development of organic agriculture by actors engaged in organic agriculture was still in the medium category. This means that the market development of organic products based on the strengths and weaknesses of organic farming that had not been responded to maximally by the actors of organic agriculture.

	Weight (a)	Rating (b)	Score (a x b)
OPPORTUNITY			
Ecosystem sustainability trends (go green)	0.085	3.25	0.276
Growth of organic market in big cities	0.091	3.5	0.320
Increased public awareness of health	0.085	3.75	0.319
Increased number of middle class consumers	0.081	3	0.244
Fairly strong consumer loyalty	0.104	3.5	0.366
The development of organic food communities	0.097	3.5	0.339
THREAT			
Robust and consigned retail payment method	0.070	1.75	0.123
Cheating practices on distribution channel against organic standard	0.068	1.75	0.118
Extreme season/weather	0.121	1.5	0.212
Product handling and storage at retail (combined with inorganic products)	0.086	1.5	0.128
The low interest of the young generation to farm	0.112	1.75	0.196
TOTAL	1.000	25.75	2.315

Table 2 shows that the highest opportunity to market organic food in West Java and Jakarta was loyal consumers. Generally they had a high awareness of health and the environment. Furthermore, these consumers were generally in big cities that were relatively better in purchasing power. On the other hand, there was a threat to the development of organic agriculture, namely seasons or extreme weather. Nearly all farmers say that extreme seasons made their cropping patterns often fail even if they cannot produce because inadequate water availability made the land dry and crops die. The total score of 2.315 from the external analysis showed that the response of the development of organic agriculture by actors engaged in organic agriculture was still in the medium category.

Based on the SWOT analysis, this study found that the commitment of farmers to supply organic food and provide the market with various types of products was match with the available market opportunities, namely strong consumer loyalty and the growth of organic markets in big cities. Hence, a market development strategy can be applied in this situation. Kotler et al. (2014) said that the right marketing mix can be an effective tool for developing markets, therefore it is necessary to determine the marketing mix to be applied. Furthermore, the determination of alternative marketing strategies based on the marketing mix was carried out using AHP.

Alternative of Marketing Strategies

Figure 2 is an AHP framework for determining priorities in marketing strategies for organic food in Indonesia. The strategy criteria were based on the 4P marketing mix (Kotler et al., 2014). The AHP framework for the market development strategy consisted of three levels (Sudiono et al., 2019). The first level of purpose was to obtain an appropriate strategy for developing organic food markets. Second level was the criteria. Criteria consisted of four marketing mix components which included product, promotion, price, and place. The third level was the alternative, where each criterion had a different alternative. Based on the literature review mentioned before, the product criteria had three alternatives which included product quality, certification, and packaging. Alternatives of the promotion criteria were using social media, providing edu-tourism, and exhibition. In terms of price criteria, this study provides two alternatives, namely premium price and normal price. The place or marketing channel criteria

alternatives included B2B markets, traditional markets, modern retail, direct selling, and online marketing.

In order to understand the prioritization of strategy that important in organic food marketing, the respondents' judgments on four criteria were examined. Table 3 demonstrated a priority in criteria and alternative marketing strategy. At the level of market development strategy, the most priority was the product strategy (0.46758). In Product criteria, the most priority was to maintain and improve product quality (0.70045). This is not surprising because one of the reasons to consume organic food is perceive superior quality (Melović et al., 2020). In Promotion criteria, the priority was promotion through social media (0.50785). Social media become a modern trend especially in millennial generation (Teng & Wang, 2015), so that the promotion of organic food through social media can reach this segment well. In terms of pricing criteria, the priority is to set a premium price for organic food (0.66309). Price is important to construct image related to quality (Zhang et al., 2018). In the variable of Place, the priority strategy was the B2B market (0.39836). In short, marketing strategy for organic food in Indonesia should be implemented by providing good quality with premium price and then promoting them through social media and B2B market.

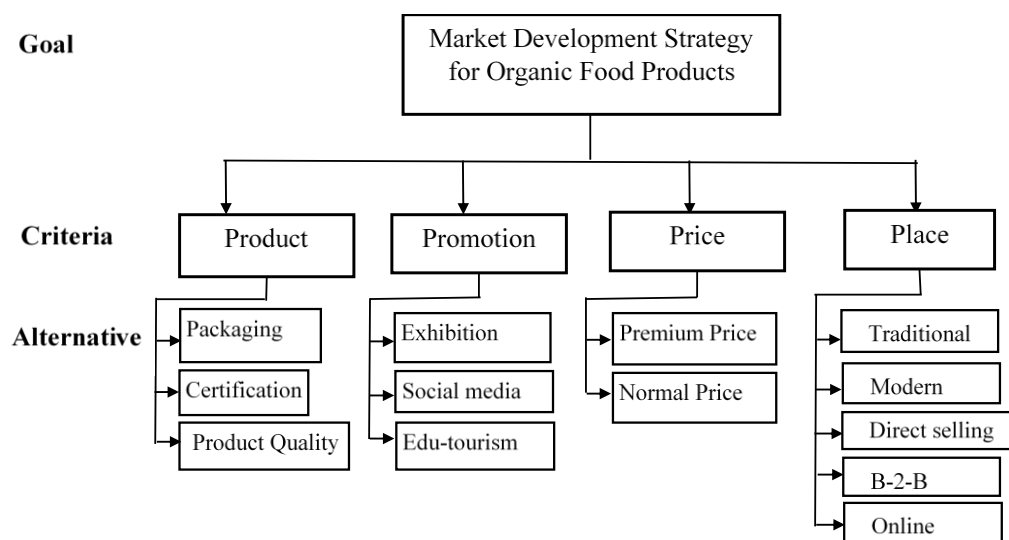


FIGURE 2
AHP FRAMEWORK

The findings of this study imply some managerial implication. First, producers must ensure the food quality. During this time, Indonesian consumers still perceived organic food to have several weaknesses, such as the visual appearance that is worse and less smooth than conventional products (Septiani et al., 2019). Before reaching consumers, organic products must go through several marketing channels. In this case, good product handling becomes very important to maintain quality (Sazvar et al., 2018). Second, producers could maintain premium price. Since organic food customers in Indonesia have loyalty, set up premium price will indicate that organic food had a high value. This is in line with the study of Zhang et al. (2018) which stated that loyal consumers perceive a premium price on organic food as a reasonable price for a valuable food. Third, it is better for organic producers to use B2B such as restaurants, hotels and

hospitals as marketing channels. The advantages of marketing organic food in B2B included no return of goods (different from the consignment system at retail), demand was stable, sustainable, and quite large (Najib et al., 2020). Fourth, producers or marketers of organic food can optimize social media as promotion tools. Indonesia is a country with the largest number of social media users. This is certainly an opportunity for marketers to promote their products at the lowest possible cost.

Cluster	Strategy	Normalized
Strategy	Place	0.20975
	Price	0.20363
	Product	0.46758
	Promotion	0.11904
Place	Direct selling	0.18568
	Modern retail	0.13781
	Traditional market	0.04516
	B2B market	0.39836
	Online market	0.23299
Price	Normal price	0.33691
	Premium price	0.66309
Product	Product Quality	0.70045
	Packaging	0.18098
	Certification	0.11856
Promotion	Edu-tourism	0.22105
	Exhibition	0.27110
	Sosial media	0.50785

CONCLUSION

The target markets of marketing organic food products were end user, B2B (restaurant, hospital, and hotel), and foreign market. Based on internal external analysis, the strength of marketing organic products was the commitment of farmers to provide products while the weakness was the absence of trademarks for conventional farmers. Opportunities of marketing organic food were the loyal consumers and the threat was the unpredictable seasonal changes. Based on the results of AHP analysis, it was known that the priority in developing organic food markets was product strategy. In the product variable the priority was to maintain and improve product quality. The priority in marketing channels was the B2B market, while the priority in price criteria was premium price and the priority in promotion was promotion in social media. This study highlights that organic farmers and marketers should be aware that product quality becomes a key success factor to develop the organic market in Indonesia. Farmers should apply the principle of good agricultural practices so that consumers may perceive organic food as a high quality food. In order to promote organic food, farmers and marketers can conduct promotion via social media. Organic food can be seen as an eco-friendly product so that promotion in social media should mention this issue. The results of this study have achieved the expected objectives. However, using AHP in this study had limitations. Although experts with their competence have made good evaluations, it should be remembered that this method does not completely reveal the style of human thinking. The Structural Equation Model (SEM) is

recommended for future research. In this method the relationships between independent and dependent variables are examined simultaneously. Hence, factor affecting an effective marketing strategy can be discovered well.

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