

The strategy of farmers' economic institution for managing organic rice marketing based on local wisdom

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Abstract: Strengthening institutional farmers in organizing marketing is one of the efforts to improve the bargaining position of organic rice farmers. Currently, strong Farmers' Economic Institutions include farming activities from upstream to downstream, nurtured and developed by farmers relying on local wisdom. Thus, Farmer's Economic Institution must be adapted to the culture, regional potential, market potential and policies of the applicable organic farming system, to increase the capacity. This study therefore aims to identify internal and external factors in managing organic rice marketing within Pangudi Bogo Farmer Group, in Boyolali District, using a qualitative descriptive data analysis, with IFE, EFE, IE, and SWOT matrix. According to the IFE matrix analysis, adequate facilities and infrastructure are the greatest strengths, while the biggest weaknesses are unattractive product packaging and labels. In addition, the greatest opportunity is the development of information and communication technology to support marketing activities, while the biggest threat is fake organic product claims. Also, the IE matrix analysis shows the Pangudi Bogo farmer group's marketing position is in quadrant V, meaning a keep and maintain strategy is required.

1. Introduction

The development of organic agriculture in Indonesia has increased rapidly [1], and this is driven by increasing consumer awareness on the importance of healthy and environmentally friendly products [2]. Furthermore, there has been awareness among farmers to adopt organic farming due to environmental safety [3]. Organic agriculture is therefore a considerable alternative option because of the expected long-term increase and maintenance in production and land fertility, thus, making farmers' economy more stable [4]. For farmers, the development of organic agriculture is an opportunity to improve livelihoods and manage land sustainably [5]. Also, healthy or natural lifestyle has become a new trend in society, as people are increasingly aware of the negative effects of chemicals, synthetic pesticides, and growth hormone use in agricultural production, on human health and the environment. This causes many people to be willing to buy organic products because of the attractive superiority [6], [7].

The public's attention to organic products increases with time and has an impact on improving organic rice producers' performance in balancing productivity with sales. Organic rice's limited market share causes organic rice to be less well known by the general public [8]. This has resulted in reduced sales, and consequently, reduced profits. Therefore, the development of an organic rice marketing strategy must be carried out appropriately to ensure effective and efficient marketing. The Pangudi Bogo



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Farmers Group is an organic rice producer group in the Boyolali Regency, with extensive farming experience.

2. Methodology

This study was conducted in the organic rice-producing Pangudi Bogo farmer group, located in Boyolali Regency. The location selection technique was conducted using a purposive method, by considering pioneer organic farmer group in Boyolali Regency, while data collection was carried out from April to July, 2020. In addition, respondents were selected using purposive sampling, by selecting parties considered to understand and possess information related to the Pangudi Bogo Farmer Group's marketing strategy. The internal respondents were the Pangudi Bogo farmer group head, as well as the farmer group marketing head, while, the external respondents 10 consumers (5 end consumers and 5 small traders), the Boyolali district agriculture agency head, and 2 organic rice producer competitors in Boyolali district.

This study used a descriptive method to method used is a descriptive method in order to explain the real farmer group conditions obtained from field observations. Meanwhile, the Internal Factor and External Factor Analysis matrix as used to analyze the internal (strengths and weaknesses) and external factors (opportunities and threats). The weight for each factor was 1.0 (very important) to (0.0) (very unimportant), while the total score obtained must be 1.00 (100%). Furthermore, the rating used was between 1 (very low) to 4 (very high). A rating of 4 implies the greatest strengths and opportunities, while a rating of 1 indicates the greatest weakness and threat. Subsequently, the total score was calculated to determine the position in the IE matrix and formulate alternative strategies in the SWOT matrix [9].

3. Result and Discussion

Pangudi Bogo farmer's group is a group of 69 organic rice farmers located in Panggul Hamlet, Dlingo Village, Mojosoongo Sub-District, Boyolali District. These members have all implemented organic agriculture and were certified by the Seloliman Organic Certification Institute in 2005. The inherent local wisdom in farmer groups is applied in the lives and cultures of members, and the development of agricultural cultivation paying attention to nature preservation combines with the cooperation from various stakeholders to increase the values of local wisdom. Prior to analyzing the most suitable strategy for an organization, there is a need to analyze the internal and external environment. The right analysis helps to determine the organization current position's and potential for future development. In this study, the Pangudi Bogo organic rice farmer group's internal factors were analyzed using a marketing mix approach. The marketing mix is a combination of various marketing variables used by organizations to pursue the desired level of sales in the target markets. Meanwhile external factor analysis was conducted to determine external factors able to influence the organization, and this consists of exploitable opportunities and threats to be avoided. Tables 1 and 2 show the weighting carried out after the internal and external factors were obtained.

The implementation of local wisdom in organic rice cultivation and marketing is reflected in the Pangudi Bogo farmers group's strength. This group's biggest strength is the availability of adequate facilities and infrastructure. Rice seeds developed independently are superior local seeds from preserved ancestral heritage, and several varieties of rice including "fragrant pandanus, slegreng, and black cempo", are produced. Therefore, local rice needs to be preserved to ensure seed availability, and as an effort to maintain farmers' culture in production. The farmer groups also produce organic fertilizers and vegetable pesticides with raw materials from farmers or the group's environment. Each group member also has 1-2 cows as a source of manure for fertilizer production. This is an advantage for farmer groups running organic farming because costs are minimized and the dependence on fertilizer as well as pesticide suppliers is reduced. Thus, the amount of organic fertilizers and pesticides produced is sufficient for organic rice production. Farmer groups also pay great attention to water sources as one of the main factors in organic farming. The organic rice development's location is close to natural water sources safe from chemical contamination. In addition, local wisdom is the basis for community

participation in building a business with various efforts, including developing the community's infrastructure [10].

Table 1: Calculation of IFE analysis in the marketing of the Pangudi Bogo Farmer Group.

Key Factors	Weight (A)	Rating (B)	Weight Score (AxB)
STRENGTH			
1. Skilled human resources	0,084	4	0,336
2. Participation of local leaders	0,133	3	0,399
3. Supporting facilities and infrastructure	0,109	4	0,436
4. Motivate group members to raise capital independently	0,071	3	0,213
5. Direct delivery service to consumers	0,069	4	0,276
WEAKNESS			
1. Lack of use of technology as access to information and promotional media	0,112	1	0,112
2. The ability of human resources in marketing is still weak	0,116	1	0,116
3. There is no agreement with partners	0,074	2	0,148
4. Do not have adequate product packaging and labels	0,142	2	0,284
5. Marketing volume does not match the volume of production	0,090	1	0,090
TOTAL	1,000		2,420

Source: Primary Data Analysis, 2020

Table 2: Calculation of EFE analysis in the marketing of the Pangudi Bogo Farmer Group.

Key Factors	Weight (A)	Rating (B)	Weight Score (AxB)
OPPORTUNITY			
1. The high price of organic rice benefits farmers	0,127	4	0,508
2. The aware of the importance to consume healthy food	0,112	3	0,336
3. The development of information and communication technology supports marketing activities	0,130	4	0,520
4. Support from central and local governments (supporting facilities, grinders, grading sorting tools, so as to produce quality).	0,079	3	0,237
THREAT			
1. Economic crisis	0,114	2	0,228
2. Organic products are not always available in all stores	0,143	2	0,286
3. High competition for organic and non-organic rice	0,136	2	0,272
4. Product threats with organic claims (fake products)	0,159	3	0,477
TOTAL	1,000		2,864

Source: Primary Data Analysis, 2020

Local leaders also have an important role in organic agriculture sustainability. As a respected person, these leaders implement approaches and effective communication in the community. Generally, local leaders are characterized by high empathy for the community and environment, the ability to interact well with farmers, willingness to allocate time for farmers and the ability to diagnose farmers' problems

and needs. Thus, the presence of local figures is a very significant driving force for bringing about positive change in the community.

The biggest weakness of farmer groups is unattractive packaging and product labels. Consumer trust in organic rice are visible in several attributes, including the benefits of organic rice, information in packaging, and product maturity [11]. Therefore, producers must understand the market by using attractive packaging and informing about the complete nutritional information of organic rice as well as the benefits for health and the environment. The consumer knowledge about organic products is one of the factors influencing organic rice is purchase rate [12]. Knowledge and information absorption tend to affect consumer tendencies towards organic products [13]. Thus, producers are able to educate consumers through attractive packaging, with information about the advantages of organic products, to increase awareness.

The Pangudi Bogo farmer group's biggest opportunity for marketing organic rice is the increasing development of information technology and technology. Technology is the most important factor for business progress, and must be supported by in-depth knowledge of use. Furthermore, low technological adoption is due to several factors, including human resources (majority of the human resources are above 40 years, lack technological understanding as well as the willingness to learn more about the currently developing communication technology). Meanwhile, the biggest threat is presented by products with false organic claims (fake products). A rise in demand for organic food products means more companies are competing to meet consumer demand. In reality, a long time is required for the organic nature of food products to be believed or proven, thus, there tends to be fraudulent claims of fake organic products from irresponsible producers. Figure 1 shows the scores obtained based on the calculation results.

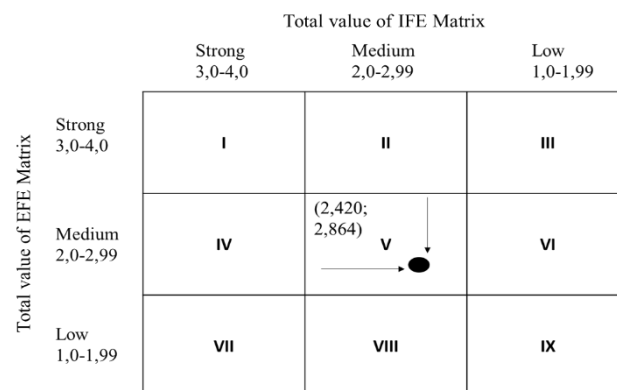


Figure 1. IE Matrix.

From the SWOT matrix, there are 4 main strategies, SO, WO, ST, and WT. The first SO strategy is to improve human resources quality through training and mentoring organized by the private sector, government, or academics. Farmers' participation in training leads to marketing management, communication, and technology adoption skill acquisitions. Thus, some of the strategies for improving human resources quality in organic rice farming include training, seminars, and consultations. The second strategy is to maintain consumer service quality. The convenience of consumers in obtaining organic rice with a delivery system is an advantage for farmer groups, because the cost of transportation, energy, and time expended becomes much more efficient, thus benefitting customers. Also, providing product-related information is one of the best services provided by groups to consumers. This aims to educate and promote organic rice products, significantly different from the competitors, non-organic rice.

	<u>Strength (S)</u>	<u>Weakness (W)</u>
	1. Skilled human resources 2. Participation of local leaders 3. Supporting facilities and infrastructure 4. Motivate group members to raise capital independently 5. Direct delivery service to consumers	1. Lack of use of technology as access to information and promotional media 2. The ability of human resources in marketing is still weak 3. There is no agreement with partners 4. Do not have adequate product packaging and labels 5. Marketing volume does not match the volume of production
<u>Opportunity (O)</u>	SO	WO
1. The price of organic rice benefits farmers 2. The aware of the importance to consume healthy food 3. The development of information and communication technology 4. Support from central and local governments	a. Improving the quality of human resources through training and mentoring b. Maintain quality service to consumers	a. Cooperate with partners to expand market share b. Utilizing information technology (social media) for promotional activities
<u>Threat (T)</u>	ST	WT
1. Economic crisis 2. Organic products are not always in all the stores sell them 3. High competition for organic and non-organic rice 4. Product threats with organic claims (fake products)	a. Maintain the quality of organic rice to maintain consumer loyalty	a. Build an image of organic rice to consumers b. Improve safe and informative rice packaging

Figure 2. SWOT Matrix.

Meanwhile, the first WO strategy is to work with partners to expand market share. Current consumer preferences lead to a rapid rise in demand for organic products [14]. This aims to increase farmer group profits, and this is often done by optimizing resources, thus, the market coverage is not only on a local scale but attains a national or even international level. According to consumers, organic rice is difficult to procure, and therefore has limited availability. Organic rice is only found in certain places, for instance supermarkets or organic specialty shops. Therefore, farmer groups and partners build mutually beneficial cooperation to ensure products are absorbed and stockpiling, a cause of decline in quality is reduced. The second strategy is to utilize information technology (social media) for promotional activities. Marketing with online media is very useful for growing consumer awareness of a product. Therefore, the use of online platforms, whether Instagram, Facebook, or blogs, increases public knowledge on the existence of organic rice produced by the Pangudi Bogo farmer group. The use of information technology also helps to bridge consumers with producers in a situation where not all outlets provide organic rice. In addition, Issues related to environmental friendliness (green issues) are a strategic key to improving customer perceptions in increasing word of mouth [15].

The alternative ST strategy is to maintain the quality of organic rice, and consequently, consumer loyalty. Good quality rice starts from quality seeds, not contaminated with chemicals, long durability of rice, durable products and fulfilled nutritional content. Thus, satisfied consumers tend to be willing to make repeat purchases from a producer. Meanwhile, the first WT strategy is to build an image of organic rice to consumers. The main competitor for organic rice is non-organic rice, widely consumed as a staple

food by Indonesians. Therefore, intensive education to the public helps to improve the general knowledge of organic rice in general. Organic rice is significantly different, compared to non-organic rice, in terms of cultivation process, price, taste, nutritional content, and environmental benefits. The second or alternative WT strategy is to improve rice packaging safety and informativeness. Packaging greatly influences product quality and consumers' willingness to shop. Thus, attractive and informative packaging fosters consumer confidence in a product.

4. Conclusion

Based on the results of analysis, the Pangudi Bogo farmer group's marketing position is in the V quadrant, with IFE and EFE values of 2.420 and 2.864, respectively, indicating a keep and maintain position. The possible alternative strategies include improving human resources quality with training and mentoring, maintaining the consumer service quality, working with partners to expand market share, utilizing information technology (social media) for promotional activities, maintaining organic rice quality to maintain consumer loyalty, building organic rice's image in the eyes of consumers, and improving packaging safety and informativeness.

References

- [1] Krystallis A and G Chrysoschoidis 2010 Consumers willingness to pay for organic food: Factors that affect it and variation per organic product type *British Food Journal* **107** p 320- 343
- [2] Shaikh T H, Hideki S, Hideto U and Sheikh M R 2007 Adoption Of Organic Rice For Sustainable Development In Bangladesh *Journal of Organic Systems* **2** p 27-37
- [3] Saha M and Darnton G 2005 Green companies or green con-panies: Are Companies Really Green, or Are They Pretending to Be? *Journal of Business & Society* **102** p 117-157
- [4] Sumarno 2006 Sistem Produksi Padi Berkelanjutan dengan Penerapan Revolusi Hijau Lestari *Iptek Tanaman Pangan* **1** p 1–18
- [5] Elzakker B V and Eyhorn F 2010 *The Organic Business Guide, Developing Sustainable Value Chains With Smallholders* (Germany: IFOAM)
- [6] Gil J M, Gracia A and Sanchez M 2000 Market segmentation and willingness to pay organic product in Spain *International Food and Agribusiness Management Review* **3** p 207–226
- [7] Tanner C and Kast S W 2003 Promoting sustainable consumption: determinants of green purchases by Swiss consumers *Journal Psychology and Marketing* **20** p 883–902
- [8] Magnusson M K, Arvola A and Hursti U K 2001 Attitudes Towards Organic Foods Among Swedish Consumers *British Food Journal* **103** pg. 209-226
- [9] Rangkuti F 2006 *Analisis SWOT Teknik Membedah Kasus Bisnis* (Jakarta: PT. Gramedia Pustaka Utama)
- [10] Vitasurya V R 2016 Local Wisdom for Sustainable Development of Rural Tourism, Case on Kalibiru and Lopati Village, Province of Daerah Istimewa Yogyakarta *Procedia - Social and Behavioral Sciences* **216** p 97-108
- [11] Fathia Q N, Nurmalina R and Simanjuntak M 2018 Consumer's Attitude And Willingness To Pay For Organic Rice *Indonesian Journal of Business and Entrepreneurship* **4** p 11-21
- [12] Xie B, Wang L, Yang H, Wang Y and Zhang M 2015 Consumer perception and attitudes of organic food products in eastern China *British Food Journal* **117** p 1105–1121
- [13] Kalashami M, Heydari M and Kazaerani H 2012 Investigating consumer's WTP for organic chicken in Iran *International Journal of Agricultural Management and Development* **2** p 235–241
- [14] Dalmyiatun T, Prastiwi W D and Setiyawan H 2018 Strategic Development Of Organic Rice Farm Business At Susukan District Of Semarang *Agricultural Socio-Economics Journal* **18** p 61-69
- [15] Wang J, Wang S, Xue H, Wang Y and Li J Green image and consumers' word-of-mouth intention in the green hotel industry: The moderating effect of Millennials. *Journal of Cleaner Production* **181** p 426-436

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