Consumer Behavior in Their Buying Decision Process of Agro-Geographical Indication Products in Yogyakarta

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Abstract

Geographical Indication (GI) defined as a designation used for products that strongly attached with their origins. The purposes of the study are: to find out consumer behavior at all buying decision stages, to see their perception of agro-geographical indication products, and to determine the most considered attributes in buying decision process of the products. Questionnaires had been distributed to 240 respondents using a purposive sampling technique to collect relevant data for achieving the research's purposes. Population proportion and Fishbein multi-attributes model were used to analyze the obtained data. Buying decision process of agro-geographical indication products was differentiated into five stages, namely: need recognition; information gathering; alternatives evaluation; purchase decision; and post-purchase behavior. We found the importanceof product's authenticity at the first stage of buying decision process; the internet and social media as the primary source for GI's product information at the second stage; and product indigenousness at the third stage. At the fourth stage, most consumers bought the product in the traditional market; and the fifth stage, we found that most of them satisfied with the products, its price, and considered to purchase more in the future. Most of the consumer has a good perception of GI products. However; they had not prioritized GI products over other similar products. The quality of the GI products was the most considered factor in buying decision.

Keywords: *Consumer behavior, Fishbein multi-attributes, geographical indication*

1. INTRODUCTION

Indonesia has a variety of agricultural products, both fresh and processed. Among these products, there are some that are strongly associated with the area where the product comes from, either because of natural factors, human factors, or the combination of both. Due to its strong association, then when marketed, the origin of the product is used as part of the product name. The naming of such products is known as 'geographical indication.'

A geographical indication (GI) is a sign used for a product that has specific geographic origin and quality or reputation associated with their origin (Septiono, 2009). In general, the sign consists of product's name followed by the name of the region or product's place of origin, such as 'Salak Pondoh Sleman,' 'Kopi Arabika Gayo,'and 'Kopi Arabika Kintamani.' Communities capable of managing the potential of such geographical indications for the marketing of their products are likely to benefit economically. This benefit was illustrated with the high price of 'Kopi Arabika Gayo,' one of the geographical indication coffee in Indonesia, ranged from IDR 60,000 to IDR 65,000 at the trader/ wholesaler levels (Taufiq, 2015). Since not all the GI are agricultural products, in this paper, the term Agro-Geographical Indication (Agro-GI) is used to distinguish it from non-agricultural commodities.

Although already known by the international community, because it is not easy to find at stores/ traditional markets in Indonesia, an appropriate marketing strategy is still required for Agro-GI products to compete with similar non-GI products. Also, some Indonesian do not know well the advantages and uniqueness of these commodities. Therefore, consumer behavior in purchasing the agro-geographical indication products, their perception, and the most considered attributes in buying decision process should be studied.

2. MATERIAL AND METHODS

A questionnaire, consisting of three parts, i.e., buying decision, consumer perception, and consumer attitude, was developed from previous studies and tested for its content validity. Three agro-industrial technologists, two experts in marketing, and three experts in Agro-GI products were selected to evaluate and validate the developed questionnaire content (CVR$\geq$0.75; n=8). Likert-scale (1-5) was used in the survey to indicate the consumer's approval on each stated item, ranging from strongly agree to strongly disagree. The questionnaire was then distributed in 2015 to 240 respondents who have previously purchased and consumed the Agro-GI products. Their profiles are shown in Table 1.

Table 1 Profile of Respondents

Variable	Variable Definition	Count	% of sample
Gender	Male	91	38
	Female	149	62
Age in years	≤ 20	31	13
	20 – 30	132	55
	30 – 40	31	13
	40 – 50	30	12
	> 50	16	7
Education	Primary/ Secondary	133	56
	Undergraduate	98	41
	Graduate	9	3
Income	Less than IDR 2 million	154	64
	IDR 2 – 5 million	71	30
	More than 5 million	15	6
Origin	Yogyakarta	168	70
	Outside Yogyakarta	72	30

The collected data were then analyzed using simple proportion calculation and Fishbein multi-attributes model. While the simple proportion calculation was used to cover consumer buying decision and their perceptions, Fishbein multi-attributes was used to determine consumer's attitude. The consumer's attitude towards a product will be determined by their attitudes to various attributes possessed by the product (Sumarwan, 2011). Fishbein model could explain such attitudes (Umar, 2003). The models, therefore, was used to measure consumer's attitudes on the studied products.

The model, developed by Fishbein (1967), illustrates that consumer attitudes (A_o) toward a product or its brand are determined by belief in the product/ brand's attributes (b_i) and the importance of the attributes (a_i).

The equation of the model is:

$$Ao = \sum_{i}^{n} ai \, . \, bi \qquad (1)$$

3. RESULT AND DISCUSSION

3.1 Stages of Purchasing Decision

3.1.1 Recognizing the needs

The purchasing process started when the consumer understand their problem or needs (Kotler, 2007). Internal or external stimulation can cause those needs. On recognizing phase, this stage was represented by three simple questions listed in the questionnaire. The purpose of these questions is to identify the circumstance that causes the existence of a need or desire of consumers in buying agro-geographical indication products.

The first question was designed to find out how many registered GI products were recognized by the respondents. It was known that most of them only know five products

among 27 agro-industrial products that have been registered in Directorate General of Intellectual Property in Indonesia. The most well-known GI product among the respondents (15.4%) is 'Salak Pondoh Sleman,' followed by 'Ubi Cilembu,' and 'Carica Dieng' (each of them about 10%). This condition explained that 'Salak Pondoh Sleman' is indeed a popular product and most of the respondents have ever bought it.

The second question was intended to determine whether consumers considered originality when purchasing the GI products. We observed that originality was important for them (92.92%). The third question was aimed to see the consumer's motivation in buying the GI products. Based on the results obtained, we found that consumer bought those products due to their origin authenticity (42.50%).

A similar trend occurred in the case of IG labeled products in Thailand, where the results showed that most of the respondents (65%) were willing to pay higher for products with IG labels than those not. The circumstance indicates that the origin of the product as one of the important indicators affecting the purchase decision of the product in Thailand but does not apply to the daily product (Seetisarn, 2011).

3.1.2 Information Gathering

According to the result from the questionnaire distributed to the respondents, the majority of them (51.25%) have not seen an advertisement of GI product. Then, 48.75% respondents witnessed an advertisement or information related to GI product. This condition shows that an effort to educate or persuade consumers to buy GI products have not been fully made yet. Consequently, users cannot obtain clear explanation regarding GI products. Until now, consumers received information, related to GI products, mostly from internet sources or social media (23.33%).

Afterward, respondents were also asked how the effort should be made to improve people's interest to buy GI product. About 48.83% of the interviewees agree that promotion through electronic media (TV ads, news or radio) is necessary.

3.1.3 Alternatives Evaluation

Based on the results obtained, authenticity or uniqueness of their origin become an alternative consideration for the consumer to prefer GI products (40.83%), while immaculate and impressive packaging has the smallest percentage (0.83%). Authenticity or uniqueness become the exceptional value of GI products that cannot be found in other product. Thus, it becomes advantage since several loyal consumers will put GI product as their favorite choice.

3.1.4 Purchasing Process

After knowing their needs, gathering information and evaluating the offered choices, consumers then initiate purchasing process. In this stage, 30.42% respondents bought GI product through the traditional market, and 3.33% respondents bought via online market.

In the purchasing decision process of GI product, 53.75% were initiated depending on the situation, and 19.58 % carried out abruptly or without any prior planning. This condition related to many factors affecting it, such as household economic conditions, necessity, and individuality.

3.1.5 Post Purchasing Attitudes

In post – purchasing stage, consumers will experience satisfaction or even disappointment regarding the product they bought. Based on the result shown, it can be assumed that majority of the respondents stated that they are satisfied with GI product (98.33%). Meanwhile, 80.83% consumers reported that their perception regarding the price of GI products are proportional with their satisfaction. The fact that there are respondents who satisfied with GI product consequently affect their decision to expense or buy GI products in the future (95.83%).

3.2 Consumer Perception on GI Products

Consumer perceptions toward agro-industrial products with geographical indication are as follows: majority of the consumers know what agro-geographical indication is (57.92%), consumers know what kind of GI product is (40.2%), consumers have faith with the authenticity of GI product if there were GI label on it (49.17%), consumers are confident that GI products have proper standard (53.75%), consumers are extremely proud buying GI product as it is local products

(42.50%), consumers agree that choosing GI products will improve the popularity of product's place of origin (45.42%), registered GI products have not been known by people (47.50%), distinctive agricultural product must be registered as GI products (48.75%) and consumers understand if GI products have higher price compared non-GI products due to its quality assurance(49.58%).

However, compared to similar products, GI products have not become the first choice for the consumers. Also, the attitude value is "ordinary" (38.75%).

3.3 Analysis of Fishbein Multi-Attributes

According to Table 2, the highest belief's score considered necessary by consumers was placed on product quality attribute (4.46). Product quality becomes required for GI products since it involves consumers trust toward the product. Therefore, it has to be maintained. On the other hand, an attribute which has the lowest score was product's reputation (3.87) because consumers consider the status of GI product was not necessarily significant compared with another attribute.

In Table 3, it can be known that the most important attribute for consumers based on what they feel was product's originality attribute, with the highest score of 4.02. GI product's authenticity is a factor that affects the quality of the product where every product registered as GI product has indeed undergone an official administrative process in every level of the distribution chain. Consequently, product received by the consumers will not be mixed with the fake one. Subsequently, the lowest evaluation score placed on an attribute of product promotion (3.28). The score explains that consumers found ads / or related effort is not accordance with their expectation since, in reality, GI products have not been promoted commercially.

Table 2. Belief Score for Agro-GI Product Attributes

No	Attribute	The frequency of each Likert scale					Belief score (b_i)
		1	2	3	4	5	
1	Uniqueness	8	2	16	130	84	4.17*
2	Quality	4	3	3	98	132	4.46
3	Originality	8	0	16	96	120	4.33
4	Reputation	4	7	50	134	45	3.87
5	Availability	6	6	31	141	56	3.98
6	Labeling	6	4	28	119	83	4.12
7	Promotion	5	11	29	116	79	4.05
8	Price	8	3	31	130	68	4.03

* calculated as [(8×1) + (2×2) + (16×3) + (130×4) + (84×5) / 240]

Table 3. Importance Score for Agro-GI Product Attributes

No	Attribute	The frequency of each Likert-scale					Importance Score (a_i)
		1	2	3	4	5	
1	Uniqueness	8	2	16	130	84	4.00*
2	Quality	4	3	3	98	132	3.95
3	Originality	8	0	16	96	120	4.02
4	Reputation	4	7	50	134	45	3.65
5	Availability	6	6	31	141	56	3.46
6	Labeling	6	4	28	119	83	3.43
7	Promotion	5	11	29	116	79	3.28
8	Price	8	3	31	130	68	3.48

* calculated as *[(3×1) + (2×2) + (39×3) + (145×4) + (51×5) / 240]

Table 4. Attitude Score for GI Products

No.	Attribute	Belief Score (b_i)	Importance Score (a_i)	Attitude Score ($A_o = b_i \times a_i$)
1	Uniqueness	4,17*	4,00*	16,65
2	Quality	4,46	3,95	17.65
3	Originality	4,33	4,02	17.42
4	Reputation	3,87	3,65	14.14
5	Availability	3,98	3,46	13.76
6	Labeling	4,12	3,43	14.15
7	Promotion	4,05	3,28	13.28
8	Price	4,03	3,48	14.02
			$\sum A_o$	121.07

Based on multiplication result of interest evaluation score with belief scores, as shown in Table 4, the score of consumer's attitude toward the most considered attribute when buying GI product was quality (17.65). Afterward, it is followed by originality, uniqueness, labeling, reputation, price, availability and lastly promotion.

As a whole, the score of consumer's attitude obtained was 121.07. This score then compared with interval scale in Table 5 to determine consumers' attitude assessment which explains that those scores fall within the ordinary category.

Table 5. Description of Attitude Score

Attitude Score	Description
8.0 – 46.4	Worst
46.5 – 84.9	Bad
85.0 – 123.4	Ordinary
123.5 – 161.9	Good
162.0 – 200.4	Finest

3.4 Possible Improvements

We observed that most products which already registered as GI products had not been known by people outside the region of the GI products itself resulted in a low score in their reputation. For instance, Salak Pondoh Sleman has a massive reputation in Sleman regency and the majority of Yogyakarta. Consequently, the majority of the citizens must have been consumed it. However, the perception might be in the opposite way for consumer outside the region that might not have tried Salak Pondok Sleman.

Additionally, since easy access to obtain GI product was one of the consumers' expectation, the score in the availability of the product was also low. Because there still less place selling GI products, the seller must able to utilize the opportunity by facilitating the consumers with easy-to-reach location. Up to this moment, GI products are still rarely found in the modern market. Most of them are still being sold in the traditional market, grocery store or even in the online shop. Increasing product's distribution to wider regions, especially for well-packaged processed, therefore, could increase products availability.

According to Tregear in (Rangnekar, 2003), the recommendation for marketing strategy and distribution of GI product are as follows:
1. Product strategy: product characteristic must have appropriate specifications. The manufacturer must be consistent to focus on the improvement of GI product.
2. Communication strategy: manufacturer of GI product must consider building a set of promotion which emphasized the relation between GI product and the development of the region, environment, etc.
3. Price strategy: a willingness to pay GI product with higher value has been shown in many research. However, that price varied according to consumer experience with the product itself.
4. Distribution strategy: fact shown that manufacturer of GI product must take different distribution route from the various country as well. Therefore, trading is operated by merchant and supermarket in countries with centered supply chain (e.g. England) and used local market, direct selling, and specified shops

CONCLUSION

Consumers consider authenticity as an important factor and primary motivation when buying GI products. Most of them have not seen an advertisement of the products, and they get the related information through the internet and social media. As a result, the term "Geographical Indication (GI)" is still unfamiliar. Therefore, a commercial via electronic media is considered the practical choice. In the purchasing-decision stage, most of the GI products are bought in the traditional market which influenced by the situation. However, because of the satisfaction experienced by consumers, the high price of the products was not considered as a problem. Consequently, consumers planned to rebuy it in the future.

In term of consumer perception, most users agree with the proposed statement, placing the products to have a good impression. However, respondents still do not prefer GI product in their first choice compared with the similar non-GI product.

Consecutively, the most considered attribute toward agro-industrial products with geographical indication analyzed with Fishbein multi-attributes are quality, originality, uniqueness, labeling, reputation, price, availability and promotion of the product.

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