

# IMPORTANCE OF MARKETING MIX FACTORS IN COMMUNITY ENTERPRISE'S ORGANIC RICE PURCHASE, THAILAND

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## ABSTRACT

*Although rice production community enterprises have seen an improved growth in past years, they still faced several problems in promoting and developing organic rice package in response to modern consumers' demand. This study investigated the community enterprise consumers through examining their demographic characteristics and importance to marketing mix factors in purchasing organic rice. Data were collected using a questionnaire survey to 400 organic rice consumers of Baan Nong Saeng community enterprise in different distribution channels in Chachoengsao province, Thailand. Data were analyzed through descriptive (means and percentages) and inferential (one-way ANOVA) statistics. The results revealed that most organic rice consumers were females between 41 and 50 years of age, where most of them are married and have a bachelor's degree. As for the marketing mix factors, consumers had very important ratings for product ( $\bar{x} = 4.23$ ) and price ( $\bar{x} = 4.30$ ), and important ratings for place and promotion factors, which both have a mean of 4.10. Overall, these four Ps of organic rice marketing were rated as important ( $\bar{x} = 4.19$ ). Moreover, results show the high variation or difference in the consumers' preferences for organic products across demographic characteristics. Marketing strategies and policy recommendations base on the four marketing mix factors are presented.*

**Keywords:** Marketing Mix Factor, Demographic Characteristics, Organic Rice, Consumers, Community Enterprise

## INTRODUCTION

Organic rice businesses in Thailand continue to grow as consumers become increasingly aware of natural and healthy food products (Dalmiyatun et al., 2018). This has resulted from the development of organic farming, which has been given utmost importance by the Royal Thai Government through various programs and policies to support the domestic market for organic products (National Organic Farming Development Board, 2017). As a result, many organizations have focused on developing marketing channels and organizing various organic product markets (Naipinit et al., 2016; Suwanmaneepong et al., 2019). For organic rice, among these organizations are the rice production community enterprises (RPCEs), built not only for members' income but also for improving people's lives in the community (Petcho et al., 2019).

RPCEs are formed to enhance the production and market competitiveness of smallholder rice farmers in the rural provinces (Laiprakobsup, 2018; Petcho et al., 2019). Although RPCEs have seen an improved growth in past years, they still faced several problems in promoting and developing organic rice package in response to modern consumers' demand (Naipinit et al.,

2016). Previous studies have reported that most of these problems are related to marketing, such as poor product design and establishing consumer trust for their organic rice products (Distanont et al., 2017; Somswasdi et al., 2015). Therefore, consumer and marketing information are essential for the development of these RPCEs (Seenuankaew et al., 2018). The use of demographic characteristics is among the widely used segmentation variables as it provides complete market segmentation information helpful in product positioning and increasing target market share (Gajanova et al., 2019; Lin, 2002). Meanwhile, marketing mix is an essential element in marketing operations, consisting of product, price, place, and promotion (Maulana et al., 2021; Sricham, 2015).

Previous studies investigated consumer and marketing data for organic rice in the general market. For instance, Sricham (2015) studied marketing mix in the decision to purchase organic rice and found that the overall importance of marketing mix was at a high level. In addition, Zulkifli et al. (2015) examined the marketing strategies of organic rice in a farmer group in Indonesia and recommended alternative program strategies to improve organic rice marketing in the area. Although these studies demonstrated consumers' perception of marketing factors, most of them generally focused on developing general marketing strategies, and not much has been investigated about consumers' importance on product-specific marketing mix factors (i.e., organic rice) and the impact of socio-demographic factors on organic rice consumers' perception of various marketing mix factors.

Therefore, this study investigates the community enterprise consumers by examining their demographic characteristics and importance to marketing mix factors in purchasing organic rice; and exploring whether there are any statistical differences in marketing mix factors according to consumers' demographic characteristics. Baan Nong Saeng community enterprise was selected, being one of the most prominent organic rice producer groups in the Chachoengsao province. The findings of this study will provide important insights for the community enterprise and policymakers on setting marketing strategies and policies.

## METHODOLOGY

### Study Area and Sample Size

Ban Nong Saeng community enterprise was selected, being one of the most prominent organic rice producer and marketer groups in Chachoengsao province. This study involved organic rice consumers of the community enterprise whose exact population was unknown. The sample size was computed using the Cochran (1977) method at a 95% confidence level. A total of 400 respondents were sampled from five outlets, namely, hospital market, temple market, organic product exhibition, community stores, and online channel.

### Data Collection

Data collection was done through a face-to-face survey with consumers using a structured questionnaire. Prior to data collection, the questionnaire was pre-tested to 30 consumers to assess the internal consistency of the measurement items. The overall Cronbach's alpha was computed at 0.940, which is greater than the threshold value of 0.70, ensuring the scale reliability of the items. The structured questionnaire was composed of two parts: the consumers' socio-demographic characteristics and the their level of agreement to the marketing mix factors based on the 4 Ps of marketing – product, price, place, and promotion. The items were adopted from

the studies of Hongthong (2014) and Thipmontha (2016) rated based on a 5-point Likert scale (Likert, 1932). The scale measured the level of importance from 1 as not important to 5 as very important.

### Data Analysis

Data were analyzed using Statistical Package for Social Sciences (SPSS) v. 26.0.0. Descriptive statistics (means and percentages) was used to analyze consumers' demographic data. For the marketing mix factors, means and standard deviation were computed. The mean values were interpreted based on the method of Bunnag (1994) as presented below. Meanwhile, to determine the differences between marketing mix factors, one-way ANOVA was performed, and the level of significance was interpreted at 0.50 level. For this particular analysis, it was hypothesized that organic rice consumers with different demographic characteristics would have different levels of importance to the marketing mix factors.

- 4.21–5.00 = Very Important level
- 3.41–4.20 = Important level
- 2.61–3.40 = Moderately Important level
- 1.81–2.60 = Slightly Important level
- 1.00–1.80 = Not Important level

## RESULTS

### Consumers' Socio-demographic Profile

The demographic characteristics of sampled consumers were analyzed, and the summary is presented in Table 1. Results indicate that most consumers were females (72.5%) between 41 and 50 years of age (22.5%) where most are married (46.5%). As with education level, the majority of the consumers graduated with a bachelor's degree (41%). The analysis also showed that most of the respondents had an average personal income in the 10,000-20,000 Thai baht bracket (36.3%), with the highest proportion of self-employed (22.5%). In addition, most respondents are living in less than three members per household (52.3%).

Table 1 SOCIO-DEMOGRAPHIC PROFILE OF ORGANIC RICE CONSUMERS (N=400)		
Variable	Frequency	%
<b>Gender</b>		
Male	110	27.50
Female	290	72.50
<b>Age (<math>\bar{x}</math> = 42.29 years)</b>		
Under 20 years	31	7.80
21 – 30 years	75	18.80
31 – 40 years	78	19.50
41 – 50 years	102	25.50
51 – 60 years	55	13.80
Above 61 years	59	14.80
<b>Civil status</b>		
Single	183	45.75
Married	186	46.50

<b>Variable</b>	<b>Frequency</b>	<b>%</b>
Divorced / Window	31	7.75
<b>Education Level</b>		
Lower than primary school	14	3.50
Primary school	45	12.00
Junior high school	35	8.80
Senior High School/ Vocational Certificate	55	13.80
High Vocational Certificate	25	6.30
Bachelor's degree	164	41.00
Post-graduate	59	14.80
<b>Occupation</b>		
Farmers	55	13.80
Business owner	90	22.50
Government officer	81	20.30
Private company officer	53	13.30
General contractor/ Freelance	51	12.80
Student	53	13.30
Pensioner	17	4.30
<b>Income per month</b>		
Below 10,000 THB	83	20.80
10,001 – 20,000 THB	145	36.30
20,001 – 30,000 THB	95	23.80
30,001 – 40,000 THB	41	10.30
Above 40,001 THB	36	9.00
<b>Household size</b>		
Below 3 people	209	52.30
3 – 5 people	133	33.30
Above 5 people	58	14.50

### Marketing Mix Factors in Organic Rice Purchase

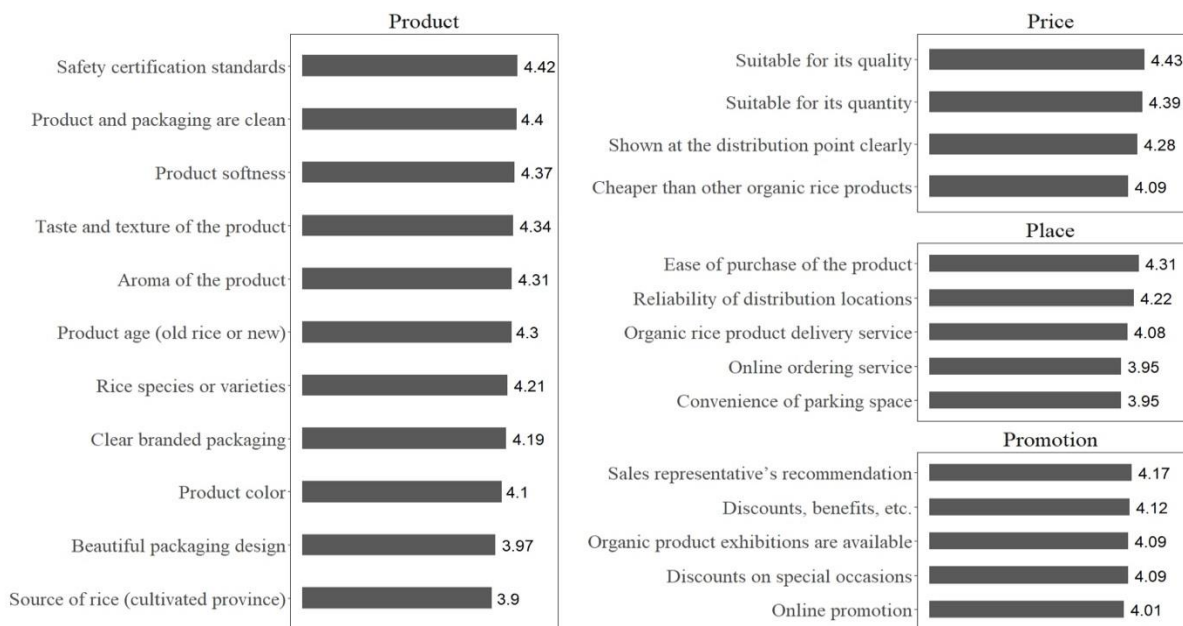
Table 2 shows the consumers' importance rating to four aspects of organic rice marketing – the product, price, place, and promotion. Results show that consumers had very important ratings for product ( $\bar{x} = 4.23$ ) and price ( $\bar{x} = 4.30$ ). This finding indicates their high level of agreement to product and price factors related to organic rice consumption. Meanwhile, important ratings were given by consumers for place and promotion factors which both have a mean of 4.10. Overall, these four Ps of organic rice marketing were rated as important ( $\bar{x} = 4.19$ ), indicating consumers' considerable importance given to these marketing mix factors.

<b>Marketing mix factor</b>	<b>Mean (<math>\bar{x}</math>)</b>	<b>S.D.</b>	<b>Level of importance</b>
Product	4.23	0.719	Very Important
Price	4.30	0.693	Very Important
Place	4.10	0.760	Important
Promotion	4.10	0.789	Important
<b>Overall mean (<math>\bar{x}</math>)</b>	<b>4.19</b>	<b>0.737</b>	<b>Important</b>

The ranking of all the marketing mix factors is shown in Figure 1. Considering product factors, results show that consumers' top three considerations in purchasing organic rice are that:

safety certification standards ( $\bar{x} = 4.42$ ), clean product packaging ( $\bar{x} = 4.40$ ), and rice softness ( $\bar{x} = 4.37$ ). These factors are rated by consumers as very important. Meanwhile, as for the price factors, three out of four factors were rated as very important by organic rice consumers. Results revealed that consumers give more importance to organic rice price that is suitable for the quality ( $\bar{x} = 4.43$ ), suitable for the quantity ( $\bar{x} = 4.39$ ), clearly displayed at the point of sale ( $\bar{x} = 4.28$ ). Meanwhile, organic rice that is cheaper than other organic rice products is also important among community enterprise consumers ( $\bar{x} = 4.09$ ).

Regarding place factors, very important consideration among rice consumers is the ease of purchase ( $\bar{x} = 4.31$ ), followed by reliability of distribution ( $\bar{x} = 4.22$ ). Meanwhile, other factors were also considered by consumers as important: delivery service, parking space convenience, and online service. As for the promotion factors affecting consumers to purchase organic rice, consumers consider sales representative's recommendations as the most important ( $\bar{x} = 4.17$ ), followed by discounts, benefits, and the likes ( $\bar{x} = 4.12$ ).



**Note:** 4.21–5.00 = Very Important level; 3.41–4.20 = Important level; 2.61–3.40 = Moderately Important level; 1.81–2.60 = Slightly Important level; 1.00–1.80 = Not Important level

**FIGURE 1**  
**RANKING OF ALL MARKETING MIX FACTORS**

### Differences in Marketing Mix Factors Across Demographic Characteristics

We investigate whether there are differences in the level of importance in the marketing mix factors across demographic characteristics of consumers through ANOVA. In most demographic variables, there are significant differences in the level of importance (Table 3).

**Table 3**  
**PERCEIVED IMPORTANCE OF MARKETING-MIX FACTORS ACROSS DEMOGRAPHICS CHARACTERISTICS**

Marketing Mix	Significance level			
	Gender	Educational Level	Occupation	Income level
<b>Product</b>				
Rice seed variety	.661	.004**	.250	.114
Source of rice (cultivated province)	.672	.629	.084	.008**
Product softness	.485	.108	.056	.109
Aroma of the product	.294	.361	.021*	.031*
Product color	.021*	.266	.267	.401
Product life (old rice or new)	.026*	.357	.047*	.208
Taste and texture of the product	.946	.304	.001**	.002**
Product and packaging are clean	.349	.060	.284	.806
Beautiful packaging design	.648	.756	.211	.909
Clear branded packaging	.031*	.494	.704	.668
Safety certification standards	.020*	.306	.482	.460
<b>Price</b>				
Suitable for its quantity	.839	.002**	.011*	.025*
Suitable for its quality	.369	.003**	.024*	.127
Shown at the distribution point clearly	.376	.046*	.094	.090
Cheaper than other organic rice products	.113	.564	.002**	.004**
<b>Place</b>				
Ease of purchase of the product	.172	.004**	.033*	.016*
Reliability of distribution locations	.939	.052	.086	.316
Convenience of parking space	.063	.170	.001*	.000**
Online ordering service	.034*	.000**	.008**	.000**
Organic rice product delivery service	.000**	.004**	.016*	.000**
<b>Promotion</b>				
Sales representative's recommendation	.008**	.016*	.006**	.087
Introduced online	.003**	.000**	.060	.003**
Discounts, benefits, etc.	.359	.002**	.020*	.161
Discounts on special occasions	.038*	.005**	.258	.028*
Organic product exhibitions are available	.298	.105	.312	.017*

In terms of gender, there is a significant difference in the perceived level of importance regarding factors such as color, product shelf-life, packaging, safety certification, delivery services and promotion. While no significant difference in features related to price between men and women. However, perceived level of importance in features related to price and promotion are statistically different across consumer's educational level but not significantly different to features under product factors. Conversely, perceived level of importance to most marketing-mix factors differs significantly across occupational level of consumers. Since income level and occupation are highly related, similar observation regarding consumers' perceived importance on marketing-mix factors in organic rice consumption was observed.

## DISCUSSION

The demographic information shows that most organic consumers in Thailand tend to be older, hold an academic degree and relatively with higher income. Moreover, like reports in the literature, e.g., Posri et al. (2008); Jitrawang & Krairit (2019), women are more likely to

purchase organic products than men. This may reflect the typical division of household work, where women are more involved in food preparation and family care than men. In assessing the consumers' motives in purchasing organic products, we used the marketing mix factors such as product, price, place, and promotion, as following.

### **Product and Price**

The study found that safety certification standards, product packaging and product softness under the product factor are the main motives among sampled consumers to purchase organic products. Also, across the educational level, occupational and income levels, there is no significant difference in the importance of safety certification standards. Therefore, since most respondents rated safety certification as very important, the non-significant difference indicates that regardless of differences in the demographic characteristics of sampled consumers, food safety is considered the primary motivation for organic product patronage. The study's findings add support to a consensus among studies that perceived health benefits are the primary reason for organic purchase (Jiumpanyarach, 2018; Kapuge, 2016).

Suitability of price to product quality and quantity are the most frequently rated as very important. However, a closer look at the perceived importance of price factors shows significant differences across demographic characteristics of sampled consumers. It reflects the sensitivity of consumers towards organic price premium relative to their earning capacity and status. Consumers with high health consciousness tend to be less responsive to premium prices and are more concerned about the perceived health benefit. This indicates that price as a factor in the organic purchase is not an absolute barrier when the premium price is justified. For instance, conducted a review of organic purchase research across counties in the US, Europe, Australia, and other parts of Asia that show consistency among sampled consumers who are willing to pay for the organic premium price.

### **Place and Promotion**

The study results also found that Thai consumers ranked ease of purchase and reliability of distribution points as very important when developing new outlets for organic products. Moreover, supermarkets continued to be the most popular outlet for organic products and preferred among consumers since it offers the convenience of shopping for other needs in one place (Jitrawang & Krairit, 2019; Padel & Foster, 2005). Whereas interviewees mentioned that consuming organic products may also depend on what is stocked in stores where they usually shop. However, several studies found that there is unavailability or difficulty among consumers on where to buy organic products (Bahadir et al., 2015; Hemmerling et al., 2015; Padel & Foster, 2005). Furthermore, the insufficient availability of distribution points of organic products is more pronounced outside the metro city or urban areas (Kramol et al., 2006).

Recommendation from the sales representative and discounts are rated as important for promotional strategy. While there is a significant difference in the perceived importance of product exhibits and online promotion across the demographic characteristics of sampled consumers. Effective promotional strategies allow wider market coverage and increase consumers awareness of the existence of the marketed product. However, Kapuge (2016) found that consumers have general knowledge but not the complexities of organic farming. Previous studies found mixed results regarding the level of awareness among Thai consumers regarding their perceptions of an organic product (Jitrawang & Krairit, 2019; Jiumpanyarach, 2018).

## CONCLUSION

The findings in this exploratory and descriptive study illustrate the important factors when considering whether consumers intend to buy or not organic products. The study results confirm that food safety and health are the top priority among sampled consumers for organic products. While the premium price is not an absolute barrier since perceived health appears to be a more potent driver for organic product patronage. The availability of more organic outlets was confirmed to be necessary, especially outside the metro city. Since organic outlets are concentrated in urban areas such as supermarkets, developing organic outlets outside metro cities improves consumers' ease of purchase. Whereas, the importance of promotional strategies in organic product induce awareness through integrating organic information in farmers promotional activities.

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