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Price Strategy of Rice in Chiang Mai, Thailand

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Abstract: This study aims to investigate price strategy of rice in Chiang Mai province of Thailand. The amount of 827 consumers from 25 districts in Chiang Mai is sample size of this study. Results of this study reveal that there are two common types of market: General (conventional) and safety/organic markets. The rice are packed in three common units of purchase are litre, sack, and kilogram, respectively. In general, ultimate consumers purchase rice in the unit of litre at any time as they want. The results also show that the price of rice sold in the general (conventional) and safety/organic markets are the same, regardless of units of purchase. Some recommendations could be, therefore, made since ultimate consumers could not distinguish quality and standard between general and safety/organic products; therefore, business firms should provide clear information that is more useful to ultimate consumers. On the other hand, ultimate consumers should purchase rice at the safety/organic market, since its price is the same as that in the general (conventional) market. In addition, rice sold in the safety/organic market has higher standard quality than that in the general (conventional) market.

INTRODUCTION

Rice remains the pre-eminent crop in Thai agriculture. Rice production in Thailand further uses over half of the arable land and labour force. It plays a vital role in Thai socio-economic development. It also puts the country the world's largest rice exporter in the last several decades (International Rice Research Institute, 2017). From January to May 2017, the amount of rice has been exported around 5.50 million tons and is expected to reach the target of 11 million tons by December 2017 (Suvansombut, 2017). The rice industry in Thailand has reached a mature stage of development, with a high degree of specialisation in high-value native rice (Titapiwatanakun, 2012). In addition, food safety is recently important in the food selection;

therefore, many countries have brought sanitary and phytosanitary measures (SPS), which are non-tariff trade barriers. SPS screens the import of agricultural products without chemical residue. Therefore, famers emphasise the organic agricultural production with standard quality. Organic agriculture is the production concerned with environmental balance and biodiversity. It further avoids chemical inputs (e.g., fertiliser, insecticide, herbicide, and fungicide) and uses organic substances such as manure and compost, resulting in safe products on producers and consumers (Boonrang & Atchariyamontree, 2007; Jierwiriyapant *et al.,* 2012). From the above situation, the trend of organic products marketing both domestically and internationally has also risen with the growth rate of 77.9% and 22.06%, respectively. Organic agriculture also leads to an opportunity of production change and marketing advantages since Thailand has proper geography and climate for organic production. Additionally, the Thai government has been supporting all parties related to organic agriculture in terms of knowledge transfer of production and marketing and issuing/certifying organic certificated standards accredited by the international organisations (Eillis *et al.,* 2006; The Government Public Relations Department, 2014). Chiang Mai has implemented the food safety campaign organised by the Department of Agriculture to encourage market fair of agricultural products.

Business firms generally use a variety of price strategies when selling products/services. Selling price could be used to maximise business firms' profitability. It could also be set to defend the existing market from new competitors, to increase market share or to enter a new market (Gregson, 2008). Pricing is one of the most vital and highly demanded factor within the modern marketing theory. It could help ultimate consumers to have an image of the products/services standards from business firms' offer. It also helps business firms to increase their reputation in the market (Kotler, 1998). The decision of business firms on setting the price of their products/services could affect ultimate consumers' decision on whether or not to purchase products/services. Since the competition within the market today is extremely high, business firms have to be attentive to their actions in order to have the comparative advantage in the market (Pongwiritthon & Awirothananon, 2014). Hence, the study of investigating price strategy of rice is the starting point of the agriculture production, resulting in an improvement of production and marketing strategy. This study mainly aims to explore the price differences of unit purchase among market type in all 25 districts in Chiang Mai, Thailand.

RESEARCH METHODOLOGY

This study focused only on ultimate consumers in Chiang Mai, Thailand. The data is collected from questionnaires completed by 827 ultimate consumers in all 25 districts in Chiang Mai who purchase rice from the markets in Chiang Mai. The questionnaire is designed based on the theory. This is subjected to comprehensive pre-testing among academia, who is expert in the marketing aspect. The questionnaire is also pre-tested with marketing consultants and students. The development and testing result in a significant degree of refinement and restructuring in addition to the implementing the initial content validity (Nunnally, 1978). To assess the internal consistency of a questionnaire, this study uses the Cronbach's (1951) alpha. This could identify the reliability of the data from questionnaire. The result shows that the Cronbach's (1951) alpha is 0.789, which is greater than 0.70. It implies that the questionnaire has the internal consistency or the data is reliability (Nunally, 1978; Hair *et al.,* 1992).

RESULTS AND DISCUSSION

The results of this study show that there are four common types of rice market in Chiang Mai, which are general (conventional) and safety/organic, as shown in Table 1. The general (conventional) market means that the consumers could purchase rice in the local market of community or anywhere they are convenient (Wheeler, 2008). The safety/organic market also defines as local food safety/organic markets where the rice are sold specifically for ultimate consumers who realise hazard of chemical residue on health (Green Net, 2017). Moreover, the rice sold in the market must be monitored by checking residual chemicals from qualified officers. If chemicals are found, that rice will be discarded from the markets. The last type of market could further attract most of ultimate consumers, which accounts around 67.59% of the total consumers. In addition, most ultimate consumers are female, which accounts around 79.56%, as presented in Table 1. It, therefore, indicates that female is decision maker in the households. This finding is similar to Sripraset and Vilamas (2011), Autchasai and Worasinchai (2012) and Tipmonta (2016). Most ultimate consumers also purchase rice with the unit of litres (around 47.40%), since they are familiar and comfortable to consume and purchase. This finding is similar to Sripraset and Vilamas (2011). Ultimate consumers normally purchase rice at any time with the frequency of 441 (or 53.33%), as reported in Table 1. The results also find that ultimate consumers make a decision of purchasing rice by themselves.

Table 1
General information of ultimate consumers

Items		*Frequency*	*Percentage*
Gender	Female	658	79.56
	Male	169	20.44
	Total	827	100.00
Types of market	General (conventional)	268	32.41
	Safety/Organic	599	67.59
	Total	827	100.00
Units of purchase	Litre	392	47.40
	Kilogram	206	24.91
	Sack	229	27.69
	Total	827	100.00
Time of purchase	Morning	249	30.11
	Afternoon	14	1.69
	Evening	123	14.87
	Any time	441	53.33
	Total	827	100.00
Who influence the purchase	Yourself	535	64.69
	Family	276	33.37
	Sellers	6	0.73
	Other consumers	10	1.21
	Total	827	100.00

Table 2 presents some descriptive statistics of price that sold in both general (conventional) and safety/organic markets. Most ultimate consumers, for example, purchase rice in a litre unit. This finding is similar to Sripraset and Vilamas (2011). The price per litre in the general (conventional) market is 51.5630 Baht, while its price in the safety/organic is 53.2088 Baht. In addition, one kilogram of rice costs 174.4906 Baht in the general (conventional) market. At the same unit of purchase in the safety/organic market, its price is 172.0915 Baht. This finding is similar to Autchasai and Worasinchai (2012). To investigate the price differences of unit purchase (litre, kilogram, and sack) among market types (general (conventional) and safety/organic markets) in all 25 districts in Chiang Mai province of Thailand, this study uses the independent t-test. The results of the t-test are shown in Table 2. It clearly points out that there is no difference in price among the market types, as the t-test is not statistically significance. This implies that the price will be the same no matter which the market dose ultimate consumer purchase, as presented in Table 2. One litre of rice, for example, will cost 51.563 Baht as well as the price will be 174.4906 Baht per kilogram or 1,244.9896 Baht per sack.

Table 2
Comparison of price in each market according to the unit of purchase

Units of purchase	*Types of market*	*N*	*Mean*	*SD*	*t-test*
Litre	General (conventional)	119	51.5630	84.5220	-0.178
	Safety/Organic	273	53.2088	84.1224	
Kilogram	General (conventional)	53	174.4906	274.7359	0.021
	Safety/Organic	153	172.0915	810.5934	
Sack	General (conventional)	96	1,244.9896	356.1184	-0.231
	Safety/Organic	133	1,256.1429	364.0667	

Note: SD and N stand for standard deviation and the total number of observations.

CONCLUSION AND RECOMMENDATIONS

This study aims to explore the price differences of unit purchase among market type in all 25 districts in Chiang Mai province of Thailand by using questionnaire. The sample size is 827 respondents, who purchase rice from markets. The results show that there are two common types of market, which are general (conventional) and safety/organic markets. Three common unit of purchase for rice also found, which are litre, kilogram, and sack, respectively. In general, ultimate consumers purchase rice at any time as they want. They also make a decision of purchasing rice by themselves. It could also be concluded that the rice packed in three units of purchase, which are litre, kilogram, and sack, respectively, at the general (conventional) and safety/organic market are the same from the sense of consumer who want the rice without chemical residue, resulting in willingness to pay in an increased price for induced rice production (Pracharuengwit & Chiaravutthi, 2015). Marketing promotion is, however, irrelevant to ultimate consumers who realise their health, since they have already recognised about consumption knowledge of organic products (Jierwiriyapant et al., 2012; Petyoo & Guild, 2016). Furthermore, packing in weighed of kilogram is standard that the most of ultimate consumers generally agree in domestic and international markets. Hence, the packed rice in the litre and sack form should focus on mass production, while the packed rice in weighed of kilogram should focus on the specific market of quality rice.

Some recommendations are made to help business firms as follows: First, the results show that the price in both general (conventional) and safety/organic markets are the same. This implies that ultimate consumers could not distinguish quality and standard between general (conventional) and safety/organic products; therefore, business firms should provide clear information that is more useful to ultimate consumers (Napolitano et al., 2010; Janssen & Hamm, 2012). Additionally, distinctiveness is defined as the degree to which ultimate consumers perceive a suppliers' product design quality, price, after-sale-service, and other marketing mix elements to be unique and valuable (Woodside, 1994), especially in households who are concerned about the health of their members. Normally, these households are the high-income level, which they could spend money toward organic food without chemical residue (Sriwaranun, 2013; Pracharuengwit & Chiaravutthi, 2015). Moreover, quality and variety of products related to substitution influenced buying decision when valuable and quality products are more than the price (Autchasai & Worasinchai, 2012) and brand awareness and brand equity could lead to consumer demand (Huang & Sarigöllü, 2012; Akgün *et al.,* 2014).

Some recommendations are suggested to benefit ultimate consumers as follows: First, they should purchase rice at the safety/organic market since its price is the same as that in the general (conventional) market. In addition, rice sold in the safety/organic market has higher standard quality than that in the general (conventional) market. This purchase could improve environmental balance and biodiversity because the safety/organic agriculture production avoids chemical inputs (e.g., fertiliser, insecticide, herbicide, and fungicide) and uses organic substances such as manure and compost, resulting in safe products on farmers/producers and ultimate consumers (Boonrang and Atchariyamontree, 2007; Jierwiriyapant *et al.,* 2012).

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