



Original Research Article

Marketing Channel Selection by Pineapple Smallholder Growers in Samarahan, Sarawak

Aqila Nahar¹, Abdul Rahman Saili^{1*}, Nur Masriyah Hamzah², Ahmad Shahir Abd Aziz¹, Zubaidah Yusop¹

¹ Faculty of Plantation and Agrotechnology, Universiti Teknologi Mara (UiTM), Cawangan Sarawak, Jalan Meranek, 94300 Kota Samarahan, Sarawak, Malaysia

² Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA (UiTM) Cawangan Pahang 26400 Bandar Tun Abdul Razak Jengka, Pahang, Malaysia

*Corresponding author: Abdul Rahman Saili, Faculty of Plantation and Agrotechnology, Universiti Teknologi Mara (UiTM), Cawangan Sarawak, Jalan Meranek, 94300 Kota Samarahan, Sarawak, Malaysia; arsaili@uitm.edu.my

Abstract: The surging demand for pineapple creates opportunities for smallholder growers in maximising their income. However, the pineapple is a type of fruit that is easily perishable, thus it requires immediate sale to consumers and shorter shelf-life for them to get the best quality of the fruit. Moreover, its commodity price also depends on its quality on the shelves. In this respect, it is important for the smallholders to decide on the best marketing channel to distribute their farm produce to generate maximum profit. This study was conducted to investigate the most preferred pineapple marketing channel among smallholder pineapple growers in Samarahan, Sarawak. Questionnaires were distributed to 123 respondents and the data was analysed using descriptive analysis. The findings showed that the most popular marketing channel selected by pineapple smallholder farmers was the farmer's market and the least selected marketing channel was restaurant and online selling. With the introduction of the Fourth Industrial Revolution (IR4.0) by the government, it is essential to provide online marketing education via an online platform to farmers so that it creates marketing opportunities for selling their products and thus contribute to the overall economy.

Keywords: Smallholders, pineapple, marketing channels, farmers market

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1. Introduction

Pineapple is a very nutritional fruit as it contains lots of nutrients such as vitamin A, B, and C, minerals, and also bromelain enzyme (Martínez *et al.*, 2012). The fruit is available in most tropical countries, but the major producing countries are Brazil, India, China, Nigeria, Mexico, and Colombia (Esiobu *et al.*, 2014). In Malaysia, Sarawak (1,342 hectares) is the

second largest pineapple producing state after Johor (8,429 hectares). According to the Malaysian Pineapple Industry Board (MPIB) the total pineapple production in Sarawak is about 38,025 tons valued at RM 48.22 million (MPIB, 2019). Due to the increasing demand, Malaysia has started positioning itself among pineapple producing countries with several types of pineapple breeds planted in the country such as *Moris*, *N36*, *Sarawak*, *Moris Gajah*, *Gandul*, *Yankee*, *Josapine*, *Masapine*, and *MD2* (Amar Ahmadi *et al.*, 2015). However, all these types of pineapples are highly perishable in nature. Therefore, it requires shorter shelf-life and immediate sale to consumers in order to ensure the wholesalers, retailers and consumers to get best quality of fruits.

The marketability and commodity price are highly influenced by the quality of pineapples on the shelves. These factors have hindered the smallholder growers to directly market their pineapple, which made them turn to the middleman as the alternative for marketing their products. According to Nor Azlina and Abdul Rahman (2014), most farmers in Malaysia depend on wholesalers to market their yield. Most farmers are limited in terms of affordability, availability and flexibility mode of transport for distribution and delivery, access to proper facilities and access to the customers. Consequently, relying on middlemen has caused the farmers to lose their maximum profit and income due to marketing costs. The authors also argued that most independent farmers did not make any agreement with other parties to purchase their recently harvested fruits, and they fully own the cropped land, which allows them to sell their products to any buyers. The pineapple cultivation industry also significantly contributes to the country's socio-economic development in terms of improving the livelihoods of smallholder farmers through income generation either in terms of its quantity or marketing system (Jaji *et al.*, 2018). An increase in the pineapple production without efficient and good support from the marketing system might reduce the motivation of smallholder farmers to increase their cultivation or yield. So, the marketing system shows high influence on the preference of smallholder farmers on selecting marketing channels to increase their income and improve their well-being. Therefore, this present study addresses the market access and determines the preferred pineapple marketing channel among smallholders in Samarahan, Sarawak.

2. Literature Review

Marketing channel is also known as the distribution channel. According to Watson *et al.* (2015), the distribution channel is interdependent of an organisation that involves processing until the consumption of a product or service. In a simpler explanation, the marketing channel is the flow of the product from raw materials until it reaches the consumers end. It is important to explore and identify the distribution channel or marketing channel as it influences the marketing activity throughout the journey of the product. In the marketing of pineapple produce, there are several marketing channels commonly used such as direct selling and selling through the intermediaries. Smallholders who utilize a correct marketing channel to market their yield can help them generate more income. Through market selection,

smallholders can improve their decision in choosing the best marketing channel. Market selection is a process where several factors are determined, whereby the cash crop products such as pineapple are sold in different market outlets (Arinloye *et al.*, 2016). Many determinants may influence the market selection among farmers as per proposed by Jari and Fraser (2012). These identified determinants are lack of information, transportation, proper infrastructure, expertise in quality management and contractual agreement in marketing yield.

Farmer's market is one of the most important marketplaces for farmers to market their goods, produce and farm products. Moreover, prices at this kind of market are fairer and reasonable (McGuirt *et al.*, 2014). This has caused more consumers to shop at the farmer's market due to the reasonable price of products and the location of the market was incrementally closer to their residence. Also, the most common positive perceptions towards farmer's markets as mentioned by Freedman *et al.* (2016) are about the quality, freshness, healthfulness and taste of foods available at farmer's markets. Similarly, Misyak *et al.* (2014) argued that the quality of food, knowing who grows the food, and the safety of foods available as the top benefits to shopping at farmer's markets. Smallholder farmers also sell their produce to the neighboring areas. Direct marketing channel offers the opportunity to foster close relationships between consumers and farmers through regular communication between both parties (Alia *et al.*, 2014). This channel also provides the opportunity for consumers to support local farmers and contributing towards expanding the local economy (Misyak *et al.*, 2014).

Due to their small-scale cultivation, the farmers prefer to sell their produce at the roadside stalls. Roadside or street stall operator refers to an individual who offers goods for sale or services to the public without having a permanent built-up structure, but with a temporary static structure or a mobile stall (ILO, 2013). This seems to be one of the reasons why farmers prefer to sell at the roadside stalls as they can quickly move to another place, when they are asked to leave and can easily reopen their small businesses because of their mobility (Lei *et al.*, 2019). Another marketing channel commonly preferred by smallholder farmers is the middlemen. According to Abebe *et al.* (2015), older farmers tend to choose middlemen as their trading partners rather than selling directly to wholesalers as they are likely to be more embedded in social networks. Furthermore, the online platform is another avenue for marketing channels, and farmers are encouraged to make use of social media for them to sell their products and not depending entirely on wholesalers. Robina-Ramírez *et al.* (2020) stated that online tools are not only helping consumers to pay more attention to food intangible values such as health, nutritional content, environmentally friendly production, and animal welfare, but also product's intangible value can increase the options of online purchase because of the advantages of e-commerce (i.e. low cost, high efficiency and openness). Moreover, online trading not only protects the environment, but also promotes socio-economic development (Rong-Da Liang, 2014).

3. Methodology

This study was conducted in Samarahan, which is a district in Sarawak. Sarawak was chosen since it is the second largest pineapple producer state in Malaysia, while Samarahan is the largest pineapple producer in Sarawak. The population of smallholders who cultivate pineapple in Samarahan is about 190 farmers. Therefore, based on Krejcie and Morgan (1970), the sample size (n) was decided as 123 respondents. Questionnaires were used as the primary instrument to gather data for the current study which were randomly distributed to the respondents in Samarahan. The questionnaires contain two major sections of demographic and preferred marketing channels. The quantitative data were analysed using descriptive analysis.

4. Results and Discussions

4.1 Socio-Demographic Profiles of Respondents

Table 1 illustrates the socio-demographic profiles of the respondents. Most of the pineapple farmers were between 31 to 40 years old with a percentage of 50.4%, followed by 41 to 50 years old, and 20 to 30 years old with a percentage of 21.1% and 20.3%, respectively. The least group age of farmers was between 51 to 60 years old with a percentage of 8.2%.

Table 1. Socio-demographic profiles of respondents.

Profiles	Frequency (n)	Percentage (%)
Age (years old)		
20–30	25	20.3
31–40	62	50.4
41–50	26	21.1
51–60	10	8.2
Education		
Primary School	13	10.6
Secondary School	89	72.3
Tertiary Education	21	17.1
Gender		
Male	64	52.0
Female	59	48.0
Monthly Income (RM)		
Less and equal to 500	62	50.4

Profiles	Frequency (<i>n</i>)	Percentage (%)
501–1,000	44	35.8
1,001–1,500	9	7.3
1,501–2,000	3	2.4
2,001–2,500	2	1.7
More than 2,500	3	2.4
Years of Experience		
0–2	19	15.5
3–5	87	70.8
6–8	17	13.7

Note: *n* = 123

In highlighting their education level, most of the pineapple farmers had only a secondary school qualification with a percentage of 72.3%. It is then followed by the tertiary education level in a university with a percentage of 17.1%. A small fraction of the farmers in this study had only a primary school education level (10.6%). Table 1 also shows that the smallholding pineapple sector in Samarahan was dominated by male farmers with a percentage of 52.0%. However, this number was only slightly higher than the female farmers with a percentage of 48.0%. The almost equal gender population in the pineapple cultivation sector indicates that both genders are highly participating in growing pineapple.

Considering the farmers' income status, most of the pineapple farmers earn below RM 500 with a percentage of 50.4%. It is then followed by a monthly income bracket of RM 501 to RM 1,000, and RM 1,001 to RM 1,500 with the percentage of 35.8% and 7.3%, respectively. Furthermore, the monthly income bracket of RM1501-RM2000 has a percentage of 2.4% which shared the same percentage with those who earned more than RM 2500. Interestingly, a small percentage of the smallholder farmers in the study earn about RM 2,001 to RM 2,500 monthly, with a percentage of 1.7%. Another item in the demographic section prompts the farmers' experience in the sector. Most of the pineapple farmers have three to five years of experience with a percentage of 70.8%. It is then followed by zero to two years of experience with the percentage of 15.5%. Only 13.7% of the farmers have six to eight years of farming experience.

4.2 Preferred Marketing Channel

Based on the finding from the previous study, the pineapple growers in Samarahan have been using some of the marketing channels available. Therefore, this study has successfully discovered what would be their preferred marketing channel to trade if they can choose any of them. Table 2 shows the marketing channels that were preferred by the pineapple growers in Samarahan, Sarawak. From the analysis performed, it showed that most

of the respondents preferred to market their pineapple products in the farmer's market. It is constituted of 48.0% of the total respondents. Next, the roadside stall was preferred with a percentage of 19.5%, while selling through the middleman at 13.8% and 3.3% of them preferred selling it to their neighbours. Then, it is followed by 10.6% of the respondents who chose to sell their pineapple products to the Federal Agriculture Marketing Authority (FAMA). Only 2.4% of the respondents preferred selling their products to the restaurant owners and via online selling.

Table 2. Preferred marketing channel.

Marketing channel	Frequency (<i>n</i>)	Percentage (%)
Farmer's market	59	48.0
Roadside stall	24	19.5
Middleman	17	13.8
FAMA	13	10.6
Neighbourhood customer	4	3.3
Restaurant	3	2.4
Online selling	3	2.4

The most preferred marketing channel by the pineapple growers in this study was through direct selling (48.0%) by the farmers to the final consumers at the farmer's market. This might be due to several reasons such as the ability of the farmers to communicate, negotiate, and promote the uniqueness of their products to their customers without any interference from others. This improves the chance for them to build the networking with the customers and the chance to negotiate for a better deal based on their produce and to meet the customers' requirements and quantity especially for those wholesalers, retailers and operators at the hypermarkets which require huge quantity purchasing. This is supported by Detre *et al.* (2011) who stated that farmers who used direct marketing strategies to promote their products were likely to have higher income in their growing sales. This is due to the ability of the farmers to reduce the cost they must bear when using the middleman in promoting their products. Besides, it can be said that farmers with more experience will choose a direct selling approach to sell their products as it provides the opportunity to have good communication and relationships with their end-users. According to Dries *et al.* (2012), the direct marketing interactions with the consumers allow the farmers to supply the relevant knowledge and information on their produce to them. Therefore, the consumers can value the produce by distinguishing between a good and a bad quality produce. The result in Table 1 also showed that 85.5% of the total respondents in the study have more than 2 years' worth

of experiences, which constituted around 85.5% of the total respondents, while 15.5% of the total respondents have less than 2 years of farming experience. So, it can be deduced that farmers with longer farming experience tend to sell or market their products at farmer's markets. However, this is contradicted with the finding by Muthini *et al.* (2017) who reported that the experience of the farmers did not significantly affect the choice of marketing channel.

Besides, the result also showed that market preferences among respondents might be due to age factor. The result showed that 70.7% were age less than 40 years old and only 29.3% were more than 40 years old. It can be concluded that younger farmers at the age of less than 40 years old, in the context of this current study, were inclined to choose markets as their preferred location to sell their products. As mentioned by Barret *et al.* (2007), younger people participated more in the market because they are more receptive to new ideas and are less risk averse than older people. So, the markets which are the spot for the consumers to find and purchase their daily necessities will be the best location for the farmers to sell and promote their products. Nevertheless, selling goods at a market also can be a difficult task for some individuals, factors such as competition, networking, and others will affect their marketing activities. This is in line with the finding by Zegeye *et al.* (2001), who stated that the young farmers are willing to take risks as they might have long-term planning instead of short-term money making. Apart from direct selling of the produce, the farmers must also be more innovative in making home-made delicacies or products to be sold at the customers, such as pineapple-based such as fruit salad, jam, jelly, pudding, juice, fried-rice, cake, tartlets, health drinks or candies. This approach will create awareness on the usage of pineapple in our daily lives especially for the younger generations, who loves to try ready-food from the road stalls.

The second preferred marketing channel was roadside stalls which also involved the direct selling approach to reach the consumers. The small-scale farmers most probably choose the method as it is easier for them to reach the consumers who own their own vehicle or transport, while maintaining the low price of their products. Prospect passers-by of the road driving different type of vehicles will stop and buy the produce or products they sight from a distance, and they will become regular customers to get the supply of the produce direct to their business premises. Farmers who are not equipped with proper packaging and distributing knowledge, will find the location to sell at the shortest distance from their farm to reduce the chances of the pineapple to rot before purchasing date and time. This is due to the ability to sell the products directly to final consumers, while minimizing the risk related to their products such as the freshness and perishability of their produce. However, some of the respondents still used an indirect marketing approach to reach their consumers. Based on the data, the middleman (13.8%) and FAMA (10.6%) came in third and fourth place, respectively as the preferred marketing channel for the respondents. This was due to several factors such as the location, production, and knowledge that lead them to use the services of the middleman. As mentioned by Mmbando *et al.* (2016) some of the smallholder farmers had a problem with insufficient marketing price information, association or group, poor road

quality to the market, cooperation and communication with the buyer, bargaining power, access to credit, extension service and low education. These factors contribute to their tendency to use the service of the middleman even though they have to bear an extra cost based on the services. Moreover, the smallholders sometimes face a condition, where they need to sell the products as soon as possible after harvesting, which made them use the indirect marketing approach (Soe *et al.*, 2015). This is also supported by Ogunleye and Oladeji (2007) who argued that the distance to the market increases transportation costs and marketing costs which hinder the extent of market participation among smallholder farmers in direct marketing approach, especially those who reside and farm far away from the town.

Lastly, the results also found that selling their produce to the neighborhood customers, restaurants and online platforms were less favorable among the farmers as shown in Table 2. The lack of exposure, poor internet coverage, lack of knowledge and inadequate experience in digital marketing might be the reason for the lack of preferences to use online platforms as the mean for marketing purposes, especially in Malaysia. Based on the result, only 17.1% of the respondents have tertiary education level, whereas 82.9% were non-college graduates with education level at primary (10.6%) and secondary schools (72.3%). The lack of exposure, experience as well as knowledge on how to use the online platforms might be the reason for not using the platforms as their preferred marketing channel as digital marketing and strategies are taught deeper in tertiary level of education.

As mentioned by Boz and Ozcatalbas (2010), farmers' educational level and farm size have a significant effect on the usage of modern information to communicate. Furthermore, Yahaya (2002) also stated that there was a significant relationship between farmers' education level, gender, farm size, and frequency on the usage of traditional as well as conventional marketing among farmers. Several factors affected agricultural producers and agribusinesses to adopt computer and internet platforms for business purposes such as age and education, financial management skills, familiarity with computer interfaces, access to reliable Internet service, and lack of familiarity with the latest technology (Carpio & Kelly, 2015). A lot of advantages and benefits to both sellers and buyers can be obtained, if this medium is used efficiently for marketing purposes, such as the distribution rate of information among the sellers and the buyers in the future.

4. Conclusion

The results indicate that most smallholder pineapple growers in Samarahan chose to direct market their pineapple produce because it allows for better potential profit margins compared to selling with intermediaries. The benefits of cutting out the middleman and meeting the satisfaction level of the consumers by providing them with affordable prices can make these marketing channels worth it. Due to small quantities of farm production, they can manage to sell it directly to the customers. This enables the farmers to set the price, in which they have more control over the price and therefore, small farms can be profitable. Besides, farmers receive instant feedback from the customers on their products which allows them to

improve their business through this input and increase farm profitability. These days, smallholder farmers had to get courageous to survive in the stiff competition. They had to get involved in an online market that provides more opportunities to expand their market worldwide. Therefore, the time is right for pineapple farmers in Samarahan to make the shift and investment from traditional to digital marketing approaches and obtain their maximum sales available for the pineapple market. At this moment, a farm that is set up to sell directly to consumers is well-positioned to take advantage of the unprecedented demand. This online marketing can help farmers in promoting the right agricultural products to its rightful buyers by reaching out to the new people across diverse locations. Furthermore, with proper packaging, handling and distributing skills of the produce will further facilitate the smallholder's business that can penetrate not only domestically, but internationally, for a good start with the neighboring countries. Despite most of the pineapple farmers in Samarahan is still lagging behind in using online marketing, they can start selling their products through social media platforms such as Facebook, Twitter, Instagram, and many other social networks as these online platforms are growing stronger as the technology advances. Besides, they also can set up their own web store as most of the farmers are at young age and able to sell online via food delivery or domestic courier services such as Poslaju and J&T Express direct to the customers without having to pay the middleman for their services. Thus, the introduction of online platforms for agricultural products is very helpful from the point of view of farmers and governments. It is essential to provide online marketing education to farmers so that it creates a marketing opportunity for selling their products that can also contribute to the overall Malaysia's economic growth.

Conflicts of Interest: The authors declare no conflict of interest.

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