

DISTRIBUTION CHANNEL FOR LOCAL FARM-BASED PRODUCE: A STUDY ON SMALL FARMERS DURING PANDEMIC CRISIS

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ABSTRACT

It has been contended in many studies that small enterprises are more sensitive to crisis. Small enterprises tend to progress relatively slower than larger enterprises during a crisis, and in fact may fail to sustain the business within three years after a crisis strike. The pandemic crisis in Malaysia has disrupted several important sectors especially agricultural due to the disruption of transportation and retail services. Small farmers experience dumping of farm produces due to the restricted delivery channels and loss of regular market. Small farmers are believed to demonstrate a viable strategy for the sustainability of their businesses during a crisis, through the use of an alternative distribution approach to deliver their perishable goods to consumers. Through structured interviews with two small farmers in Ranau, Sabah, this paper presents their perspectives on the alternative distribution strategy they had undertaken during a crisis. The results of the study provide insights into how the hub distribution approach might assist small farmers in managing the impact of the crisis on their business and can therefore be used as an effective distribution approach in the future.

Keywords: Distribution channel; Sustainability; Agribusiness, Pandemic crisis; Small farmers

1.0 INTRODUCTION

Several important business sectors are disrupted during physical movement restriction orders amid the pandemic crisis. Agri-based businesses, for example, have experienced dumping of farm produces due to disruption of the supply chain resulting from the closure of transportation and retail services. Distribution channel in agri-based business transfer products from agricultural farm to customers or other producers. Distribution channel consist of a variety of participating organisations that make a commodity for use or consumption accessible (Blanco, 2000). Yagana et al. (2014) pointed that the distribution choices channel depends not only on how to carry a product or service to the consumer at a lower cost but also on the constraints of each market operating channel. In order to survive during pandemic crisis, some farmers employ alternative approaches to move their local produce to end customers, including opt for online business, undertake business from home, and shorten the distribution channel through private runner (Halim, 2020; Dzul kifli, 2020; Aling, 2020). Agricultural products, depending on the particular product concerned, often change hands up to six times before reaching the customer (Adekanya, 1989). Three transactions are often involved in fruits and vegetables, with consumers buying from retailers after the commodity has been transferred from producers through assemblers and wholesalers (Yagana et al., 2014). Based on this situation, finding an innovative approach distribution of product has always been the most critical challenges in farm-based business. It is believed that not all agri-based businesses can adopt online business or to employ private runner as an alternative strategy in

distributing their produces as this can be influenced by firm resources and locality. For instance, distributing farm produces through a single or independent channel can be less economical to small farmers due to the unfair pricing of the middlemen or distributor (Kim & Frazier, 1996).

In addition, the adoption of an online distribution strategy for small farm-based businesses in rural areas can be less effective due to poor internet reception. In Sabah, the farmers have been encouraged by the Ministry of Agriculture and Food Industry (MAFI) to market their farm produces through farmer's market which serves as a collection center for farm produces. Nevertheless, some primary producers, especially the small farmers, might not be able to personally sell their product in the farmer's market, alongside working on the farm. Kim and Frazier (1996) contend there is still a lack of studies on the distribution channel from the producer's point of view, and most studies have been limited to a channel system for intermediaries. Scholars in the supply chain suggest two important factors that always have been neglected in the channel system, i.e. the environmental uncertainty (Achrol & Stern, 1988) and the value-added channel system for suppliers (Stern & El-Ansary, 1992). With the increasing occurrence of uncertain risks like disease spread crisis, natural disaster, and economic crisis, small agribusinesses need to consider an alternative distribution channel for their business continuity.

The purpose of this study is to present from the farmer's point of view on the alternative distribution channel they employ during a crisis. This paper also provides insights that the hub distribution approach might allow agribusiness sustainability.

2.0 LITERATURE REVIEW

A distribution channel is a medium where goods or services flow from the producers to the consumers. The conventional distribution channel is typically developed by a longer chain that involves several intermediaries, and consumers do not see or interact with the producer throughout the chain. The distribution channel for agribased products has been dominated by the vertical integration approach and technology-based supply chain management. Nevertheless, previous studies argued the extant distribution channel model might less significant for distributing the farm-based produce among small farmers in the rural areas due to poor communication between farmers and distributors; and unstructured logistic infrastructures (Yu-lian, 2008; Paciarotti & Torregiani, 2018). In addition, some argue about the issues of unfair pricing from the use of middlemen services, when the middlemen received more income than the producer as they can put more prices on end-users (Oguma, Nkwocha & Ibeawuchi, 2010).

Some scholars suggest direct channels such as the alternative distribution approach for the farm-based product (Crosi, Novelli & Pettenati, 2018; Hamzaoui, Sirieix & Zahaf, 2013; Yu-Lian, 2008), i.e. either customer buy the products at the farmer's place (on-farm distribution) or farmers bring their product to the one-stop center in the city, for example in the farmers' market (off-farm distribution). The choice of distribution approach for farm-based produce can be influenced by several factors, including the characteristics of the producers and their farm products, the proximity to urban or city areas, and the availability of complement resources to support the distribution. It is contended by many scholars that the emerging channel for distributing perishable products to the urban area should be simpler than the durable products, and should not involve several middlemen. Yu-Lian (2008) suggests perishable goods is suitable to be distributed via direct sales (e.g. in farmer's place

or farmers' market) or a single stage-channel which contains only one intermediary (e.g. retailer in the consumer market) as the win-win chain approach between the farmers and consumers as both can enjoy fair price and quality products.

Studies on distribution channels for farm-based produce from small farmers' perspectives in rural areas have not been fully studied. There have been many previous studies on the distribution channel focusing on the influence of technology-based supply chain management on business performance (e.g. Green, Inman, Sower & Zelbst, 2019; Borah, et al, 2019). Besides, there are still limited studies on the alternative distribution channel for perishable products during crisis especially when the supporting services like transportation and retail sectors are disrupted due to emergency orders imposed by the government during the crisis. A study by Debus (2000) found that the environmental factor in which the channel operates will affect the farmers' channel of distribution. An economic downturn or an unpredictable situation will lead to a decrease in the rate of consumption. A farmer would favor a short channel of distribution, thus limiting the profit margins. During crisis, it is believed that farmers may opt to distribute their goods to end-users through alternative approach. This paper explores from the perspectives of small farmers in Ranau, Sabah, about the distribution channel used by them during the movement control orders amid the pandemic outbreak.

3.0 METHODOLOGY

This study involved unstructured phone interviews with two small farmers in Ranau, Sabah. The unstructured interview allows the researcher to gather opinions and beliefs of respondents based on their life experience (Marshall & Rossman, 2006) in a free flow but informative conversation (Miles & Huberman, 2019). Respondents were purposively selected to participate in the study on the grounds that they were the owners of a farm-based enterprise and that the sector was affected by a pandemic crisis due to logistic disruption. Purposive sampling was used in this study as it focuses on gathering information befitting the research objective. The insights and thoughts gathered from respondents were analysed and summarised into a proposed diagram to provide meaningful hindsight about how farmers manage the distribution of their farm produces to end consumers during the pandemic crisis.

4.0 FINDINGS AND DISCUSSION

The interviews revealed that farmers use a multi-synchronous strategy during the pandemic crisis to ensure the continuous delivery of their farm produces to end-users by simplifying the distribution channel from a variety of intermediaries to a single designated city distributor/runner. The distributor collects the produce from the farmer's place and transports them to a particular grocery store in the city area, where consumers can collect from the store or request the runner to their home. Besides, the use of mobile applications (WhatsApp) allows the transfer of products from the farm to the consumer in the city much faster and easier. This consumer-driven distribution approach is parallel to Corsi, Novelli and Pettenati (2018) and Hamzaoui, Sirieix and Zahaf (2013) who suggest direct distribution channels as appropriate for perishable goods.

The results also proposed centralised distribution channel for small farm-based produces. A centralised channel is the one in which farmers produce and sell

together in broad central and terminal markets (Adeyeye and Dittoh, 1985). In this case, farm-fresh mart equipped with frozen storage and post-harvest storage could be built as a collection centre for agricultural products. Farm-fresh mart is proposed by farmers to be located in a variety of major high-traffic areas. It can be placed in government administration offices areas, higher education institutions, or main housing areas. This strategy was seen by farmers as more economical and capable of maintaining their business in the future, albeit during a crisis. It can be said that farm-based businesses use hub-distribution channels to optimise the overall logistic cost of distributing their produce to consumers. According to Manikas, Malindretos and Moschuris (2019), the hub distribution strategy refers to a central store that is used to cater to various destinations that may be customers, stores or other smaller warehouses, and generally are placed at the places that are near to customers.

Figures 1 and 2 summarises the distribution channel used by small farmers during normal time and during the pandemic crisis, respectively. Figure 1 shows the conventional distribution channel used by farmers to distribute their farm produce during the old normal time before the pandemic outbreak. Farmers viewed the conventional approach to be adequate when all supporting services like transportation and small retail stores are operated as usual. Nevertheless, an alternative distribution channel was employed by farmers, which they believe is the most economical approach during the pandemic crisis. This alternative approach can be regarded as a hub distribution channel in which farmers are able to use a shorter chain. This is a possible option to sell items from their farms to customers via the one-stop collection centre which are located in several main towns near the customers. This approach enables individual customers, local retailers and runners to pick them up on their own.

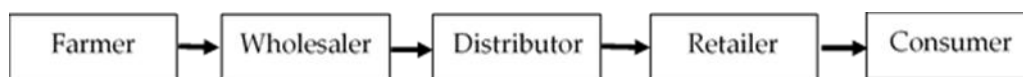


Figure 1. Conventional Distribution Channel for Farm-based Produces

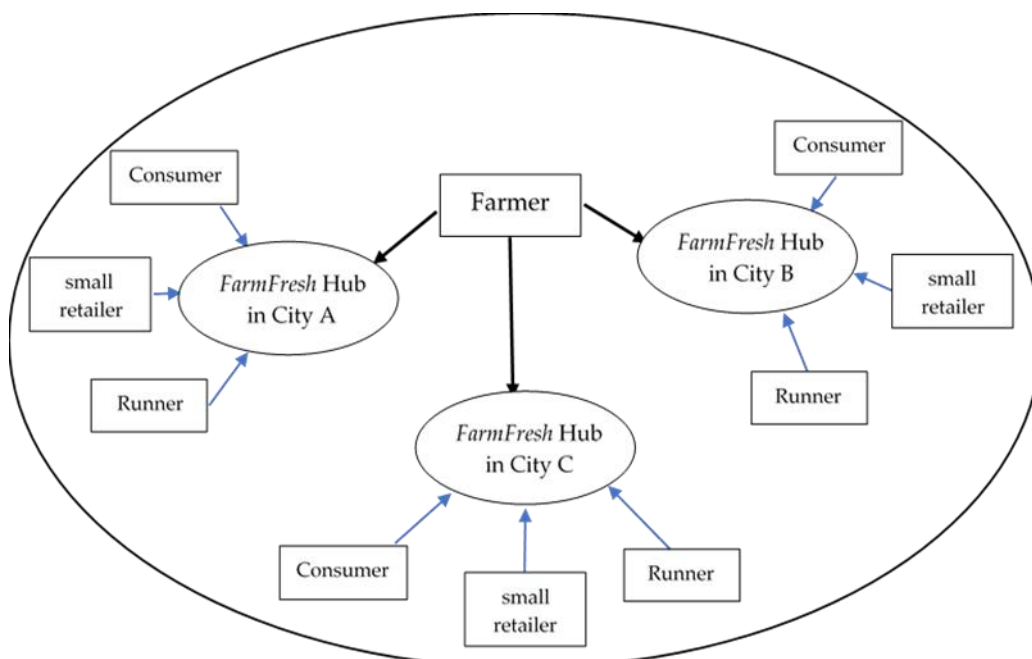


Figure 2. Alternative Distribution Channel for Farm-based Produces During

Pandemic Crisis

5.0 CONCLUSION

In conclusion, this exploratory study provides an overview of the potential business continuity approach through an appropriate distribution channel for small farm-based businesses in rural areas, especially during the crisis. The interviews with local farmers in Ranau, Sabah indicate that a hub distribution channel is a more cost-effective solution for small farmers than the use of multiple intermediaries in a traditional supply chain. This result is in line with the government's initiatives that encourage all farmers to sell their products in a one-stop centre, i.e. bazaar or farmers' market. During the pandemic crisis, however it is believed that farmers need to consider a more effective distribution and marketing channel approach with the cooperation and support of government agencies such as the Ministry of Agriculture and Food Industry (MAFI) and the Federal Agricultural Marketing Authority (FAMA), as well as by networking with the community association.

This study is limited in that it focuses primarily on results from two farmers only and employs exploratory qualitative analysis of the results. Notwithstanding, this study provides a preliminary insight into the literature relating to alternative distribution channel approach for small farm-based business in a rural area in time of crisis. Further analysis using relationship test with the larger group of respondents, including the distributors or runners in the chain might provide a holistic view of the distribution channel system of small agribusiness in Sabah. The paper identifies a number of lessons that can be used to improve our understanding of the resilience of the mechanism of distribution of agricultural products in the light of the COVID-19 crisis and other shocks. This study could potentially improve the capacity of policy makers to react more effectively in the future to adverse events affecting agro-businesses dealing with perishable food systems, especially agricultural products in Sabah.

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