

HOUSEHOLD FOOD SECURITY AND COPING STRATEGIES DURING COVID-19 PANDEMIC

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Tarikh dihantar: 6/2/2021 / Tarikh diterima: 29/6/2021*

ABSTRACT Food security is one of the crucial areas of global concerns, especially during the COVID-19 pandemic. When the World Health Organisation (WHO) declared COVID-19 as a pandemic, a number of countries, including Malaysia, started to impose a generalised quarantine or lockdown as a measure to curb the spread of the disease. The key aspect of this measure is the restricted movement of people, goods and transportation. As a result, food supply and consequently, food security became embroiled in the mix. Questions such as will we be able to get the food supply during the pandemic, will there be enough food for everyone, and how will we cope in ensuring household food security were asked. Thus, the aim of this paper is to explore the issues of household food security and the short-term coping strategies during the COVID-19 pandemic, specifically focusing on the views of respondents from Sarawak, Malaysia. Findings and discussion in this paper are based on data that was collected online from 235 respondents from all over Sarawak, Malaysia. It is found that availability of food is not really an issue but the challenges of food security during the COVID-19 pandemic are more focused on access to their preferred food and the choices of food that are available. A number of coping strategies has also been identified, such as getting food from alternative sources like online shopping, home vegetable gardens and preservation and storing of surplus food to make them last longer. These measures are not considered as severe.

Keywords: Food security, food accessibility, coping strategies, COVID-19 pandemic, Sarawak.

INTRODUCTION

Food security becomes one of the crucial issues during the COVID-19 pandemic. Scholars have expressed concerns on how the COVID-19 pandemic had caused, and continue to cause, challenges to the people with regards to their food security (Bhavani & Gopinath, 2020; Galanakis, 2020; Hobbs, 2020; United Nations, 2020). For instance, Bublitz et al. (2020) raise the questions of vulnerabilities in food access as a result of the COVID-19 pandemic. Similarly, Hobbs (2020), highlights how food supply chains are compromised during the pandemic and thus, underscoring the significance of ensuring supply chain resilience. Meanwhile, United Nations (2020) explains how measures, such as lockdowns and border restrictions, to mitigate the spread of COVID-19 are already affecting global food supply chain. These measures have, to a large extent, disrupts the supply chain and many people, especially in urban centres, now struggle to access fresh fruits and vegetables, dairy, meat and fish (United Nations, 2020).

In general, food security is a broad concept. It can be seen from how the concept has evolved since the 1970's till the present day. In the 1970's, for example, the focus of food security has been on the issue of 'availability' of food. This was clear from the wordings in the definition of food security used by the World Food Conference (1994, in FAO, 2006:1);

Availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices.

In other words, the focus then was on whether there are enough supplies at both national and international levels. However, in the 1980's, the focus shifted to the notion of 'food accessibility'. This was highlighted by the definition used by the Food and Agriculture Organisation (FAO) at that time, which states that food security is about *ensuring that all people at all times have both physical and economic access to the basic food that they need* (FAO, 1983). In this context, there is a clear shift from the national and international focus, to individual and household levels. In order to be food secured, an individual or a household has to have access to the basic food that they need. By 1990's, the focus of food security is expanded to encompass

the multi-dimensional aspect of food security. The World Food Summit (1996) had reiterated the definition of food security to include food access, food availability, the use of food, and stability. Based on this refinement of the definition, food security is defined as exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (World Food Summit, 1996 in FAO, 2006:1).

Recognising the multi-dimensionality of the concept of food security, this paper seeks to explore how people perceive food security during the COVID-19 pandemic, specifically in the context of Sarawak, Malaysia. It attempts to answer questions on how people from different spatial locations view food security, and how they cope in ensuring their household food security during the COVID-19 pandemic.

BACKGROUND OF THE STUDY

The Malaysia Government announced the implementation of the Movement Control Order (MCO) as a preventive measure against the spread of COVID-19 on 18th March 2020. The measure was implemented a week after the WHO declared the COVID-19 disease as a global pandemic. At the same time, other countries worldwide also imposed similar measures to curb the spread of COVID-19. These measures have different names but essentially they are what can be categorised as ‘generalised lockdowns’ and/or quarantines with different degree of severity. The key element in this measure is the restriction of movements.

In Malaysia, the MCO which started in mid-March, is still on-going at the time of writing this paper (albeit at a less restrictive phase. At the start of the MCO, no mass movement or gathering of any kinds are allowed. Businesses were shut down, except for those selling food and essential items. Subsequently, the MCO was superseded by three other phases of movement restrictions. At the time of writing, Malaysia is at its fourth phase (known as the Recovery Movement Control Order). Most restrictions on movement have been uplifted and the economy has been slowly reopening.

When the MCO was announced, many Malaysians were worried about their food security. People formed long queues outside of supermarkets nationwide, panic buying and stockpiling food items ensued. People rushed to stock up on their food and essential items before the MCO started. This, in a way, highlights how food security is at the forefront of people's mind. This unprecedented move by the government raises questions like do we have enough food for the whole family during MCO, will we be able to get the food that we need despite our restricted movements, what are our alternatives to ensure we have enough food. These are among the questions that the paper attempts to answer, based on responses from respondents from all over Sarawak.

METHODOLOGY

This paper is part of a larger study focusing on food security in Sarawak, Malaysia. The scope of this paper is on how people perceive food security during the COVID-19 pandemic and the unit of analysis is at individual level. Respondents were asked about their views on accessibility and availability of food prior to the implementation of the MCO and during the MCO. Their views will relate to their individual and household food security. It should be noted that there are respondents who are individuals staying on their own (e.g. college students).

Due to the MCO and restricted movement, data for this paper was collected via an online platform between May to June 2020. Questionnaire was designed and translated into a Google Form before it was made available online. The questionnaire is divided into four sections: (i) food security issues prior to MCO; (ii) food security issues during MCO; (iii) perception on household food security; and (iv) demographic profile of the respondent. A total of 235 responses was collected from various locations in Sarawak. This includes respondents from Lawas and Miri in the northern part of Sarawak to Sibu in the central region and to Betong, Sri Aman and Kuching in the southern part. Additionally, the responses were further divided into three spatial categories: urban (140 respondents), suburban (78 respondents) and rural (17 respondents), for the purpose of data analysis in this paper.

RESULTS AND DISCUSSION

The study found that more than half of the respondents were worried about their food security when the government announced the MCO on 18 March 2020. Approximately 50.6 per cent (i.e. 119 respondents) said they were worried while another 12.3 per cent (i.e. 29 respondents) stated that they were very worried about their food security. Similar pattern is also observed when the responses are categorised by spatial location, as shown in Table 1 below.

Table 1 Reaction to MCO announcement regarding household food security

	Urban (%)	Suburban (%)	Rural (%)
Very worried	11.4	14.1	11.8
Worried	49.3	51.3	58.8
Not worried	32.9	32.1	29.4
Did not think about it at all	6.4	2.6	-

In this context, the respondents were referring to situations whether they can access their usual food supply and/or whether the food supply is available at all times during the MCO period. These questions are very much tied up with the definition of food security discussed earlier, specifically on the concept of availability and accessibility. As stated earlier, the notions of availability and accessibility in the context of food security is interlinked. For instance, the term availability here refers to whether the food items are available and sufficient to cater for the need of the individual and household (FAO, 2006). Meanwhile, the concept of accessibility refers to access by individuals and households to adequate resources for acquiring appropriate food for a nutritious diet (FAO, 2006). It should be noted that even if the availability of food in a region could be sufficient, but there are instances where not all households have adequate access both in quantity and choices of food (Mutiah & Istiqomah, 2017).

There are also a small number of respondents who were not worried or even think about food security when the MCO was announced. One urban-based respondent, for instance, said that he was not worried about food security because;

... during MCO, the Government has promised that grocery stores and shops selling daily needs will not be closed...so I am not that worried [about food shortage]. I found out the food supply was good, (so far) it was never a problem to get fresh food at the supermarket and wet markets...

When asked if the respondents and their respective families were able to access the same amount of food throughout the MCO and its subsequent phases, a large majority of the respondents (i.e. 74 per cent) indicated that they do not have problem with accessing the same amount of food during the MCO. Slightly over half of the respondents from the rural area stated that they were able to get the same amount of food during MCO. Similar patterns are also observed for the suburban and urban area in terms of this aspect of accessibility. The finding implies that a majority of the respondents were able to get sufficient food for their family during the MCO period, regardless of the spatial location. This is crucial as it shows that access to food and availability of food during the pandemic is not a problem for half of the respondents.

On the other hand, the study also found that a small proportion of the households stated that they faced difficulties in buying food during the MCO period. Approximately 12 per cent, 19 per cent and 15 per cent of those stated that they face difficulties are from the rural, suburban and urban areas respectively. As mentioned by one of the respondents, financial security is crucial in ensuring food security during the period of COVID-19 pandemic;

... financial security enables urban dwellers to purchase food as not everybody can grow their own food ... during MCO, people were not allowed to go out, and those who rely on other food sources (e.g. wild vegetables, fish and other produce) were not able to access those food items... so everybody needs cash and financial security to survive...

As movements are restricted, people were not able to go out to obtain food from non-market sources. A significant number of households, especially in suburban and rural areas, indicated that they also relied on food from other sources prior to MCO. This includes edible forest produce, such as edible ferns, shoots and mushrooms, foraged from the jungle or forest near their residences, meat from hunting activities or reared livestock, fish and other crustaceans from hunting and fishing activities. These food items were not

available to them during the MCO and they ended up having to rely completely on food items bought from supermarket, grocery stores, and wet market. Hence, having sufficient cash (or good financial standing) is crucial during the MCO in order to ensure continuous food security. Approximately 80 per cent (equivalent to 196) of the respondents agreed that the food security for their household is highly dependent on the household's financial situation. In the words of one respondent;

The income of the family as buying power is strongly determined by household income...during MCO period many people are retrenched or out of jobs ... they have to find alternative ways to cope in ensuring food accessibility ...

There are also households that could not afford the same meal as before the MCO. A large proportion of the respondents who said this were from the urban areas, and half of them are students. This is related to the aspect of financial accessibility with regards to food security. Approximately 66 per cent of the respondents stated that the prices of most food items went up during the MCO period. This price hike is an additional burden to households that are already financially-challenged. Maxwell (1996), for instance, states that people quickly adopt short-term, food-based coping strategies when faced with similar challenges. It ranges from eating less preferred food to the most drastic of action, which is to skip meals for days. However, in this study, there is no proof that such drastic measures (i.e. skipping meals and skipping meals for days) was evident.

Another commonly cited issue of food security during the MCO period is the physical accessibility of food. Respondents who are students have indicated that their main challenge during the COVID-19 MCO period is in relation to food accessibility. It should be noted that the students in this study are those who are in tertiary education. Almost all of them stated that they have limited access to food sources as they were not able to go out to get the food that they need. A few respondents also stated that during the MCO, they have to change their normal routine in terms of meals and food stock as the items they preferred or the cafes that they frequented on daily basis were not operational during the period. Instead, they had to resort to buying food that they would not usually buy and/or have to cook own meals during the MCO

period. These short-term coping strategies are what Maxwell (1996: 294) describes as relatively small changes in eating practices that include eating less expensive and less preferred food.

According to a large number of respondents, getting access to fresh food is not actually a problem. Their main challenge is in the form of getting access to their favourite dining out places, their favourite fast food restaurants and specific food that they usually have. All of these were not accessible during the MCO period especially during its first few weeks of implementation. For example, approximately 54 per cent of the respondents (i.e. 126 out of 235 people) indicated that they could not have many varieties of their preferred food during the MCO and its subsequent phases. For instance, they are able to stock up on vegetables, but the variety of vegetables that are available to them are limited. This is similar to the findings of a study by Mutiah and Istiqomah (2017: 109) in Indonesia, who argue that many urban consumers, due to their fast-paced urban lifestyles, rely on fast food and street food. With the implementation of MCO, their access to such items was curtailed. Thus, prompting, a large number of the respondents to state that they are not really food secured as they are unable to have the choices of food that they preferred.

Although a large majority (93 per cent) of the respondents indicated that they are food secured during the MCO period, a large proportion of them attributes this to a number of coping strategies that they employed. One urban-based respondent argued that his household cannot be food secured if the family members practiced their normal routine during the period of COVID-19 pandemic;

... if we still eat out and buy the brands and type of food that we love, we won't have enough food to sustain us because those food items were not available... so, we make do with what we have and what is available to us...

That statement was echoed by the other respondents, regardless of locations, who believed that their households are food secured because they made changes to their normal routines. These changes are their coping strategies, or what Maxwell (1996) described as fall-back mechanisms to deal with the short-term insufficiency of food. A number of coping strategies

was identified and the primary ones are changing the types of food they take, starting home gardens and learning new skills in preserving food.

For example, approximately 72 per cent of the respondents who said they practised coping strategies in order to be food secured said that they have started their own home garden. These are mainly from the urban and suburban categories of respondents. The produce from the home garden will be for family consumption and would reduce their food expenses. Furthermore, ten respondents stated that producing own vegetables would ensure that they have fresh supply of vegetables and more importantly, they are their preferred vegetables. This goes back to the notion of availability and accessibility of preferred food items as discussed earlier.

In addition, 64 per cent of the respondents who practice coping strategies said that they have acquired new skills on food preservation and food storing during the MCO. Such skills are significant in relation to food security as it enables food to be stored for longer period of time, avoid food wastage, and ensuring the food is available, albeit in different forms, past their seasons. The techniques mentioned by the respondents include food preservation/ salting techniques for fish, meat and prawns, the drying techniques for bamboo shoots and leftover rice, and the curing and fermentation techniques for vegetable and fruit pickling. Past studies have indicated the significance of food preservation in terms of ensuring food security (Law, Sulaiman, Gan & Mohd Nasir, 2018; Skinner, Hanning, Desjardins & Tsuji, 2013; Swain, Anandharaj, Ray & Rani, 2014). Swain et al. (2014) have argued that drying and salting are common fermentation practices in the oldest methods of food preservation and very crucial in addressing food scarcity.

Other coping strategies mentioned by the respondents include dietary change, food sharing between neighbours and family members, and resorting to online shopping and other non-conventional sources of food. Food sharing between family members and neighbours are more prevalent among those living in suburban and rural locations while online shopping is higher among the urban households. This is in line with findings from previous studies such as the study on Orang Asli's coping mechanism by Law et al. (2018), and the Inuit in Canada by Skinner et al. (2013).

CONCLUSION

Based on the explanation above, it can be concluded that food availability is not really an issue among these respondents. A large majority of the respondents indicated that they managed to get the same amount of food during the MCO as compared to before the MCO was implemented. This implies availability is not a significant problem. However, it seems that accessibility is more of a challenge to the respondents, regardless of their spatial locations. This issue of access can be categorised into three: financial accessibility, physical accessibility and access to preferred food choice. The above discussion shows how respondents were not able to get their preferred food items or that they did not have as much choices as before the MCO was implemented.

A number of coping strategies has been identified in the study, ranging from starting a home garden to learning how to preserve food. In this context, the level of severity of the coping strategies employed by the respondents in this study is relatively low. This is based on the severity level as discussed by Maxwell (1996) and Law et al. (2018). It should be noted that Maxwell (1996) uses four categories of severity to denote how severe is the level of insecurity based on the chosen coping strategy. Those findings are good indication that respondents are coping well in terms of food security during the pandemic.

However, bearing in mind that the data used for this paper was collected via online questionnaire and, thus, only accessible for those with internet access, the findings cannot be generalised to the whole population. Despite that, the empirical evidence and findings of this study is significant in providing information on the state of food security among these groups of respondents in Sarawak. While the problem may not be exactly the same, it is good to understand how different people perceive their food security during the pandemic. Undoubtedly, the COVID-19 pandemic has created a multiple dimension of challenges in the context of food security and having this basic information allows us to have an idea about people's experiences in ensuring their households are food secured.

The findings of the study also raise the key questions of what are the lessons learnt during the COVID-19 pandemic in terms of food availability, and accessibility as well as how to ensure that households are food secured if the pandemic continues and/or happens again in the future. The limited scope of this study should be expanded to cover more aspects of food security and social demographic in future research.

ACKNOWLEDGEMENT

The authors wish to thank the Ministry of Higher Education for funding this project (F06/RACER/1845/2019), Universiti Malaysia Sarawak (UNIMAS) for its constant support, and to all the respondents for their participation and co-operation.

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