ASEAN Journal of Management and Business Studies, 4 (3): 01-09, 2022
e-ISSN: 2600 - 9056

DOI: 10.26666/rmp.ajmbs.2022.3.1

Addressing the COVID-19 Impact on Food Security with Idle Agriculture Land Development

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Received: 15 August 2022; Revised: 20 September 2022; Accepted: 20 October 2022; Published: 30 December 2022

Abstract: While the pandemic poses multiple impacts on food security on a small or large scale in countries worldwide, it also opens up an opportunity to accelerate the agricultural sector's transformations. Many researchers have emphasized agriculture enhancement to stabilize and sustain the country's food security. However, studies focusing on idle land development perspectives appear to be scarce. Therefore, this study aims to explore the impact of COVID-19 on food security and analyse the significance of idle land agricultural development on food security. By using two sampling methods, primary data was gathered from an interview session with nineteen respondents. Purposeful sampling was used to determine the group of respondents from three states, Johor, Selangor, and Perak. Then, criterion sampling was used based on three sets of criteria to select the respondents. This study adopts a qualitative approach and applies descriptive narrative analysis to analyse the data. Finding transpired that the COVID-19 pandemic highlighted multiple food security impacts in selected countries, whether on a small or large scale. The finding reveals that there is vital significance to pursuing the concept of developing idle land agricultural as a means to enhance the country's food security, and six significances have been listed. The results delivered evidence of the potential to address the multifunctionality of idle agriculture land development to address the food security of the most at-risk populations and address food security risk at all times, especially in the face of unexpected situations.

Keywords: *Food security, COVID-19 pandemic impact, Idle Land Agricultural Development*

1.Introduction

The COVID-19 pandemic has sparked the point that threatens food security across countries. Strict quarantine measures and export bans on essential food items have affected all stages of food supply chains. Due to that, the prolonged COVID-19 pandemic is expected to have unprecedented long-term structural and transformational impacts, especially on the country's food security. In light of COVID-19, ensuring that food security is more sustainable and resilient is an even more urgent priority. The lockdown has proved agriculture is the backbone of every country and offered a solitary situation to manufacture strength in the food system. The COVID-19 pandemic also provides an opportunity to learn more about vulnerabilities in the food system to identify necessary investments and reforms that would further strengthen the sector's resilience to various future shocks and challenges.

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Due to that, it is crucial to engage stakeholders in understanding the pandemic's full impacts and the lessons to be learned on various population groups. In this regard, addressing the COVID-19 impact through developing idle agricultural land can significantly emerge as a positive solution to securing food sources for Malaysian households.

In general, the Department of Agriculture in Malaysia (DOA) defines idle land as land that used to be cultivated but is now in a status of disuse, abandoned land, or land fallow for two consecutive years [1]. According to the Department of Agriculture's (DoA) 2019 statistics, no less than 103,563hectares of land suitable for agricultural use was left idle throughout the nation, with about 46,382 hectares located in Peninsular Malaysia [2]. Malaysia could not be proud of the abundance of land resources since the percentage of existing idle land is higher, picturing a negative image of the country. According to Hakimi et al. [3], the abundance of idle land could symbolize a loss to the country's economy since land is a productive resource, yet it is not fully utilized. Besides, there is a link between idle land and the high incidence of poverty in rural areas, and the existence of idle land sheds doubt on the wisdom of continuing to develop new land. Thus, post-COVID-19 agriculture sector reforms should receive a full commitment and strategic collaboration from various stakeholders between the Federal-state government, private and corporate sector, and NGOs to promote and enhance our food security.

Therefore, this article emphasizes the adoption of idle land agricultural development as a solution to address COVID-19 impacts on food security. The main objective of this study is twofold: first, to explore the impact of COVID-19 on food security. Second, to analyse the significance of idle land agricultural development on food security. Findings from this study are expected to contribute to raising awareness and commitment to meet the solution for food security enhancement.

2. Literature Review

The review of the existing literature is composed of three themed subsections. First is definition of food security, next is overview of global COVID-19 impact on food security and lastly the significance of idle land development in Malaysia.

2.1 Definition of Food Security

The term food security emerged in the mid-1970s and became prominent when the first World Food Conference highlighted the discussions of global food problems during a global food crisis. Since then, the definition continuing evolving and has received wider recognition from global attention until now. The most recent definition of food security widely accepted by most researchers is the United Nations Committee on World Food Security definition. The UN defines food security as [4]:

> "Food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life".

This definition highlights that food security is fundamental to sustaining human and development security and becomes the responsibility of each country's direction, especially in combating hunger and poverty in local demography.

2.2 Overview of Global COVID-19 Impact on Food Security

The stability of food supply chains is essential to people's food security worldwide. Since 2020, this stability has undergone one of the most vigorous pressure tests due to the COVID-19 outbreak. Globally, the full impact of COVID-19 on short- and long-term food security is difficult to predict; however, its effects are already being seen. In food crisis contexts, needs are already extremely high, and immediate service delivery is poor. Movement restrictions necessary to contain the virus spread threaten to disrupt the entire food chain from production to processing, packaging, transporting, marketing, and consumption, as well as livestock movements, which are critical for pastoralists' survival [5]. Supply chain disruption is likely to affect higher-value items first, as these items typically involve more level of supplier and human interaction, and nutritious foods are more at risk than staple foods.

FOA listed the food security impact in humanitarian context that encompass the impact of containment measures, food supply chains, food price increases and social tension, people's migration, social tensions, and conflict which all this impact might deepen existing vulnerabilities [6]. Whereas, according to Laborde et al. [7], food security in a country can be disrupted by the COVID-19 impact due to three pillars that include (i) disruption of food availability, (ii) food access limitation, (iii) nutritional adequacy of food products. Every impact will have different implications and will more strongly affect the poor and vulnerable.

Many countries were affected by the impact of this COVID-19 pandemic. In Malaysia, depreciation of the ringgit has also led to high food prices as Malaysia relies heavily on meat and dairy imports. A recent study among low-income families in the urban area found that the COVID-19 crisis modified their food spending due to reduced income [8]. When the movement restriction was enforced, affected people could not buy food and suffered from hunger. Due to that, the White Flag Campaign is one of the good initiatives launched by non-governmental organizations and the Malaysian people to help those in

need of food and essentials during the COVID-19 pandemic [9]. Another study also revealed that middle-income individuals with a monthly earned of less than RM4000 were more likely to be food insecure during the pandemic [10]. Also, due to COVID-19, there is a new finding that there is an association between food insecurity and depressive symptoms, including depressive feelings, thoughts, and behaviors [11][12].

FAO-WFP [5] has listed 25 food insecurity hotspot countries in the early warning situation of acute food insecurity due to several COVID-19 risks. Bangladesh, Nigeria, and South Sudan are one of the region's most food security affected by COVID-19. In Bangladesh, the COVID-19 pandemic impacts the entire country's food consumption status, affecting all segments of the population. People are curtailing their food expenditures due to decreasing in monthly income. A report has indicated a 15% decrease in rural populations having three meals per day compared to the pre-pandemic period [13]. At the same time, another study revealed a 27% decrease in per capita food expenditure in lower poverty regions during the pandemic [14]. The increasing food prices during the pandemic can cause a decrease in dietary diversity, which might continue long impact the population even after the COVID-19 pandemic.

In Nigeria, COVID-19's rapid spread is further straining the current economy, which is already affected by falling oil prices, further impacting government revenues and foreign exchange reserves, and amplifying the devaluation of the local currency. According to Inegbedion [15], inadequate labor and transport facilities could undermine food production, thus triggering food insecurity. Even before the pandemic, poor and low-income households struggled and lacked the money to purchase food. Unfortunately, the prices of these items skyrocketed during the lockdown, resulting in many households experiencing deficient levels of insecurity. In concurrence with this, the finding from Alemano [16] also reveals a similar result, which classified the household as having "very low food security" and seeing violence as a means of attaining food. This extreme volatility in Nigeria shows that the COVID-19 pandemic will deepen social and economic hardship, exacerbating an already dire food and nutrition insecurity situation.

In South Sudan, the existing macroeconomic conflicts combine with multiple challenges such as natural hazards, a desert locality, and the peak of the May to July lean season with the overlapping COVID-19 impact further threatens to deteriorate the food security situation. Before the pandemic in 2018, the study by IPC [17] projected that 5.5 million people were severely food insecure. However, the number of food-insecure people is revealed to be higher, which is 5.8 million (2019), and 7.3 million (2021). The latest data shows that around 9.6 million people across Sudan were highly food insecure due to COVID-19. Besides, evidence of negative impacts of COVID-19 is seen emerging in agricultural production, the marketing of crops and livestock, fishing, petty trade, and labour opportunities. This, coupled with extremely high and increasing food prices, will cause a decline in purchasing power [5]. From this situation, it could be claimed that the COVID-19 pandemic impacts are stalling the implementation of the peace agreement and exacerbating political fractures and pre-existing macroeconomic crises.

While food security in many countries might be hugely impacted due to COVID-19, some countries, such as Singapore and Thailand, are strong and face much less impact. During the COVID-19 pandemic, Singapore, a country with minimal agricultural land and freshwater resources, showed a significant improvement in its position in the Global Food Security Index by scoring fifteenth place in 2021 [18] compared to nineteenth in 2020 [19], with the highest score of 100 percent in agricultural import tariffs, food safety net programs, and food safety and access to policy commitment. However, some study acknowledges the impact of COVID-19, which indicated that 10.4% of Singaporean households experienced food insecurity at least once in the 12 months of the pandemic [20]. Surprisingly, a positive impact emerged when the food security status of a significant proportion of previously food-insecure participants improved from 2019 (pre-COVID-19 era) to 2021 [21]. The most likely reasons for the change were the increasing support rendered during the COVID-19 pandemic and the "circuit breaker" period in 2020 that led to increased supplementary income for some families due to opportunities that opened up during the pandemic.

While during the COVID-19 pandemic, Thailand did not seem to have huge obstacles to food security since the country has been acknowledged as one of the countries that committed to agriculture as a food product producer. This is also agreed by Angraeni et al. [8] when they also claimed that Thailand's food security during COVID-19 was quite strong. Rice production in Thailand in 2019 reached 28.4 million tons and consumed approximately 13.3 million tons. Even during the pandemic, Thailand's exports increased by 2.12%, with 19.7% of agricultural products such as rice, marine processed products, and fruits in April 2020 [22]. In contrast with the brief from ADB [23], Thailand's food security also faced the COVID-19 impact, whether the scale is small or large. The prices of Thailand's staple foods, such as rice, have risen significantly by about 20% in 2020 compared with the same months in 2019. This is driven by the disruptions in production and distribution combined with panic buying.

Overall, in the countries already affected by existing

shocks, including political instability and multiple other conflicts, the COVID-19 impact could prove much more food security challenges and give a complex signal to control. Besides, it will add to the challenges and potentially exacerbate tensions, likely increasing the number of vulnerable people further. However, the COVID-19 impact has also opened up new opportunities and insight for every country to focus on agricultural development to accelerate transformations in the food and agriculture sector. Developing agricultural research can play a vital role in transforming food systems and making them more sustainable; thus, the existing and idle agricultural land is a valuable resource to build a country's food security resilience.

2.3 Idle Land Development in Malaysia and its Significance.

Food production for the world's growing rural and urban populations begins with agricultural land. Agricultural land is one of the easiest accesses to produce food and prevent food insecurity. Improving food supply by increasing agricultural productivity and expanding agricultural land use seems to be a possible method to eliminate hunger [24]. Reducing the current high levels of hunger and malnutrition depends on land use decisions and governance from the global to the local level. The COVID-19 pandemic proved that agriculture is the backbone of every country and offered a solitary situation to manufacture strength about food arrangement or conducting law and agro-based frameworks to assist the farmers worldwide [25]. Even though Malaysia has abundant growth in agricultural land to be utilized, the spending on the import of food has increased from RM30 billion in 2010 to RM50 billion in 2018 and is predicted to escalate further in the future, with the growth rate soaring than the export value [26].

Currently, the Department of Agricultural (DOA) 2019 statistics indicated that 103,563 hectares of agricultural land were left idle throughout the nation, with about 46,382 hectares located in Peninsular Malaysia [2]. Due to that, Malaysia's government has consistently implemented various policies to ensure food security by developing idle land. The Ministry of Agriculture and Food Industries (MAFI) plays a significant role in helping to restore idle land in Malaysia. One promising initiative to develop idle agricultural land is the Idle Land Development Program under the Department of Agriculture of Malaysia. MAFI encourages farmers and landowners to develop idle land and has set a target to develop 100 hectares of idle land with 50 entrepreneurs per year. At the federal level, relevant ministries, departments, and agencies have played their respective roles in supporting Malaysia's idle land development programs. Agriculture and Food Industry Minister Datuk Seri Dr. Ronald Kiandee has said 8,179 entrepreneurs had received incentives with a total allocation of RM111.6 million [27]. The DoA allocates a total of RM2 million yearly for this program, with incentives of up to RM20 000 per hectare (subject to a maximum of 5 hectares per individual) to landowners or others who wish to develop their abandoned land [28]. Incentives are provided in the form of infrastructures such as irrigation systems and land clearing activities, as well as farm inputs such as seedlings, fertilizer, and technological support. The program's implementation was well received, with Pahang recording the highest number of participants (1,130), followed by Terengganu (1,051), Kelantan (811), Kedah (772), Penang (617), Perak (423), Negeri Sembilan (384), Johor (357), Melaka (190), Perlis (134), Selangor (63) and the Federal Territory of Labuan (31). Daim Zainuddin [29] remarked that the DOA is making a reasonable effort with the Idle Land Development Programme; however, more people need to get involved and use the available incentives.

3.Materials and Methods

In order to provide supportive evidence of the importance of idle land development on food security, an empirical study is conducted based on the qualitative approach. Chawla and Sondhi [30] highlighted how the qualitative approach could be used to collect more intensive and in-depth information to explore, understand and describe certain phenomena. This is suited for this empirical investigation since the in-depth description from the chosen expertise is used to describe the relationship and significance between idle agriculture land development and food security. Two sampling methods were applied sequentially to narrow the pool of potentially viable groups of respondents. To determine the initial population of potential respondents, The first approach to sampling was purposeful sampling. Purposeful sampling was used to select respondents based on what could be learned from them and how information-rich they were [31].

This study chooses three states, Johor, Selangor, and Perak, to determine the group of respondents. The states are chosen due to the highest idle land coverage compared to others in Peninsular Malaysia. Besides, the state's area encompasses the northern, central, and southern regions of the country. The second sampling method that was implemented was criterion sampling. Palinkas et al. [32] described criterion sampling as the selection of cases based on a set of criteria. The respondents were selected based on several criteria: i) involved in the Idle Agricultural Land Development Programme, ii) Must process adequate knowledge qualification in agricultural and land-related matters, and iii) Have hands-on experience with agricultural and land-related matters for more than ten years. These criteria were developed to assure that the results are not biased, accurate, and have some impact on improving food security.

An interview session was conducted to ascertain nineteen respondents' opinions on the relationship and importance of idle land development in enhancing country

food security. An interview session was conducted to ascertain nineteen (19) expert participants, among them the Agriculture Department Director (1), Chief Assistant Director (3), Deputy Director of Agriculture (3), Deputy Director of Land & Mines Office and planning (2), Agriculture Assistant Director (3), Planning Assistant Director (1), Principal Assistant of Land & Mines Office (2), and Section Head of Agriculture Department (4). Interviewing key informants was done by the appointed research assistant covering three states (Johor, Selangor, and Perak) and took place at their convenient place (office) and time. The session lasted for four months to complete.

Then, a qualitative approach was adopted as the research paradigm by incorporating the Descriptive Narrative Analysis to analyse and interpret the data. This analysis was particularly useful for exploring dynamic experiences from expert participants who had the opportunity to construct the story and narrate the important highlighted opinion from their own experiences. In this case, the expert is involved in the Idle Agricultural Land Development Programme and has hands-on experience with agricultural and land-related matters for more than ten years.

4. Results

Findings in this section indicate the narrative descriptive analysis of food security and the importance of idle agricultural land development from nineteen experts from Johor, Selangor, and Perak.

Respondent Johor 1 stated that:

> "Developing the idle agricultural land to secure the country's food security becomes the indirect option for solving the various issues pertaining to the existing idle land conflict. It helps the landowner see the economic and sustainable value of utilizing, optimizing, and developing their land. In addition, the government, through the Minister of Agriculture and Food Industries, also supported the idea of developing idle land to ensure a sustainable food supply. (Respondent Johor 1)

This is agreed with respondent Johor 2 stated:

> "Developing idle agricultural land is crucial especially to secure food security since one factor of food production availability comes from land resources. However, some food supply is still heavily dependent on imports, due to not having enough suitable land to grow some crops on that locality, even though both landowners and entrepreneurs want to develop fallow land." (Respondent Johor 2).

Whereas Respondent Johor 3, Respondent Johor 4, Respondent Johor 5, Respondent Johor 6, Respondent Selangor 6, and Respondent Perak 5 claimed:

> "Developing idle agricultural land will accelerate the agro-based industrial development and performance that generate more off-fam opportunities for smallholders to earn additional income. With the participation of a new generation of farmers who develop idle land, it will help generate more input through technology to increase yield production and achieve the stability of food security. Thus, the idle land development can strongly secure the food security in Malaysia."

To add, Respondent Johor 5, Respondent Johor 6 and Respondent Selangor 7 stated:

> "The development of idle agricultural land must be optimized and fully utilized by encouraging and maximizing the participation of various parties such as private and corporate sector, individuals and publics, to transform the sector into a more competitive and efficient sector.

While Respondent Johor 1,2,3, Respondent Selangor 2,3 and Respondent Perak 4,5,6 stated:

> "The idea of developing idle agricultural land complements the Sustainable land development concept since it becomes one of the determinant elements influencing the country's food security. Indirectly it conserves and utilizes the land resources on a sustainable basis" (Respondent Selangor 4).

Moreover, Respondent Selangor 3, Respondent Selangor 5, Respondent Perak 2, and Respondent Perak 4 responded to the question with:

> "The agricultural land has mostly been gazette for agricultural purposes. Therefore, it should be used for agricultural purposes, especially for food production, so that our food resources will be sufficient for local consumption and have high-value products for export markets." (Respondent Selangor 3, Respondent Selangor 5, Respondent Perak 2, and Respondent Perak 4).

> "The development of agricultural land is significant. Malaysia does not focus on coastal agricultural land. However, the land use zones have been established in the local plan. Malaysia is eager to promote green neighborhoods. For example, Malaysia will introduce the community garden. However, when PLAN Malaysia starts with the green neighborhood guidelines by holding competitions for community gardens, it is an ongoing initiative to make urban agriculture activity of the event communities. So that, the idle land in community garden can be fully utilized with positive impact among neighbourhood" (Respondent Perak 3).

While the Respondent Selangor 6,7 and Respondent Perak 6 stated that:

> "The basis for agriculture to get produce or food is to start with the land first. If put to good use, the output can help the nation to slash its yearly food import bill, which now runs into billions of ringgits. To develop idle agricultural land, many others factor also need to be required. It also needs to be supported by other factors

such as water resources, land conditions, organization or manpower, government assistance, and individuals who work the land themselves. In terms of government assistance through incentives, it is only for the early stage of land development, and the rest depends on their commitment." (Respondent Perak 6).

Table 1 below shows a result summary and link highlighted on the importance of idle agricultural land development towards enhancing food security.

Table 1: The Significant Between Idle Agriculture Land Development and Food Security

No	The Significant Between Idle Agriculture Land Development and Food Security	RJ1	RJ2	RJ3	RJ4	RJ5	RJ6	RS1	RS2	RS3	RS4	RS5	RS6	RS7	RP1	RP2	RP3	RP4	RP5	RP6
1.	Idle agriculture land development is important for food security.	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2.	The agenda receive government support and acknowledgement	■																		■
3.	Solving the various issues pertaining to the existing idle land conflict	■																		
4.	Economic value of utilizing, optimizing, and developing the idle land.	■																		
5.	Influencing the factor of food production availability.		■																	
6.	Accelerate the agro-based industrial development and performance that generate more opportunities to earn additional income.			■	■	■	■						■						■	
7.	Generate more input through technology to increase yield production.			■	■	■	■						■						■	
8.	Participation of a new generation of farmers who develop idle land			■	■	■	■						■						■	
9.	Land resources will be effectively optimized and fully utilized.					■	■													
10.	Maximizing the participation of various parties to transform the sector into a more competitive and efficient sector.					■	■							■						
11.	Complements the Sustainable land development concept.	■	■	■					■	■	■							■	■	■
12.	Remain gazzeted for agricultural purpose for food production and sufficient the local consumption.									■		■				■		■		
13.	Idle land development has the potential to reduce food imports and save the quality of high-value products for export markets.									■		■	■	■		■		■		■
14.	Green neighbourhood guidelines for a community garden enhancing idle land utilizing.																■			
15.	Supported by water resources, land conditions, organization or manpower, government assistance and individuals who work the land themselves.												■	■						■

5. Discussion

As seen in Table 1 (above), fifteen significances have been listed as proof of the importance of idle land development for enhancing food security. From this data, we can see that there is six significance that is most agreed upon by the respondents, which:

(i)Idle agriculture land development is important for food security.

(ii)Complements the Sustainable land development concept.

(iii)Idle land development has the potential to reduce food imports and save the quality of high-value products for export markets.

(iv)Accelerate agro-based industrial development and performance, generating more opportunities to earn additional income.

(v)Generate more input through technology to increase yield production.

(vi)Participation of a new generation of farmers who develop idle land.

Overall, what stands out in the table is that all respondents agreed that developing idle land for farming can be an effort toward national food security. Recently, this initiative is also supported by all Federal and State governments. Minister of Agriculture and Food Industries Datuk Seri Ronald Kiandee also acknowledged and claimed that developing idle land is among the government's solutions to ensure a sustainable food supply [33]. Moreover, the government has recently been committed to seeking measures and actions to ensure food security by developing idle land. Second, developing idle land complements the sustainable land development concept, and it aligns with SDG 15 that required us to protect, restore, and promote sustainable practices for the life of lands [34]. The occurrence of idle land symbolizes a loss to the economy since land is a productive resource, and it is not being fully utilized. In addition, the National Land code and title document have the necessary provisions and conditions to maximize land use and curb the practice of leaving land idle. When large tracts of agricultural land are not used productively, jobs cannot be created, foreign exchange cannot be earned, and the government cannot optimize its collection of taxes. In particular, examining land's multifunctionality is required to address the regional sustainability of the land [35]. On the other hand, it has to spend billions of ringgits annually to import food for the people.

Besides, Idle land development has the potential to reduce food imports and save the quality of high-value products for export markets. Malaysia has relied on imports to meet local demand for food items, with the level of reliance for each food item measured through the Import Dependency Ratio (IDR). This is supported by Ruiz [8] that state Malaysia has depended on importing food and agricultural products from neighboring countries such as Indonesia, Thailand, and the Philippines. To prove this, IMF [26] finding reveals that in 2020, Malaysia exported RM33.8 billion worth of food products but imported RM55. Billion of food products. Thus, developing idle land for agricultural activities can reduce food imports and save the quality of high-value products for export markets to sustain food security. Furthermore, another significance of developing idle land to enhance food security highlighted by the respondents is accelerating agro-based industrial development and performance, generating more opportunities to earn additional income. This is due to the synergizing and support from the government and critical stakeholders that lends a helping hand to develop idle land [36]. Apart from DOA, other agencies also play an essential role in supporting efforts to develop idle land, including government agencies, NGOs, and private companies. This includes MAFI, MARDI, KEDA, LPP, LPNM, RISDA, Malaysian Biotechnology Corporation, Johor Bio-Tech (JBiotech), Koperasi Usahawan Masjid Tanah Berhad (KUSMET) and so on. A good collaboration between supportive agency and entrepreneur contributes to the success of idle land development implementation. On the other hand, most respondents also highlight that generating more input through technology to increase yield production is one of the significances of developing idle land development to enhance food security. This can be related to the others significance highlighted that claimed developing the idle land can enlarge the participation of a new generation of farmers who develop idle land. The traditional methods the farmers used were not sufficient to fulfill these requirements. Surprisingly, although being the least digitized, agriculture has seen momentum for developing and commercializing agricultural technologies. Khandelwal [37] says that artificial intelligence will enable farmers to collect and analyze large amounts of data from government and public websites to provide farmers with solutions to many obscure problems. As a result, it can provide a more intelligent way of irrigation, resulting in higher yields for the farmers. Furthermore, AI-based technical solutions have enabled farmers to produce more with less input and even improve their products' quality and ensure faster time to market the harvested volumes [38].

6. Conclusion

This study aims to explore the impact of COVID-19 on food security and analyse the significance of idle land agricultural development on food security. Thus, this study has shown that the unprecedented surge of COVID-19 impact is a wake-up call for every stakeholder to acknowledge the agricultural reform and transformation. The Descriptive Narrative Analysis undertaken here has extended our knowledge of the importance of interpreting the identical opinion across different expert participants so that opinions on issues and perceptions relating to the significance of developing idle land can be examined in detail and depth. In conclusion, the finding from this study reveals that there is vital significance to pursuing the idea of developing idle land agricultural as a means to enhance the country's food security and requires immediate attention from the relevant stakeholders and authority to address them. In the long run, a collaboration between Government agencies, NGOs, and educational institutions will be needed to create and sustain awareness of the importance of this measure, particularly for supporting the implementation of the National Food Security Action Plan (2021-2025) and sustaining the country's food security at all times, especially in the face of unexpected situations.

7. Acknowledgements

The authors would like to thank the financial support provided by University Teknologi MARA (UiTM) through the Lestari-Covid19 grant’s funding scheme

[600-RMC/LESTARI COVID/5/3 (025/2020)].

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