

HARNESSING SUSTAINABLE NATIONAL FOOD SECURITY THROUGH INTEGRATED AGRO-TAKAFUL FRAMEWORK IN MALAYSIA

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Abstract: Agriculture is a crucial economic sector to generate income and supply food resources for a country. The agriculture sector contributes 7.1 per cent (RM101.5 billion) to Malaysia Gross Domestic Product (GDP) and provides 10.5 per cent (1,566.0 thousand) jobs in 2021. However, the agro-food agriculture sector is exposed to many risks due to disasters caused by climate change, diseases, and pest attacks. It is estimated that the loss suffered by the agro-food sector is around RM90.6 million due to the flood incidents that hit several states in recent years. This condition is quite concerning because it leads to the destruction of livestock and crops, which will have an impact on farmers' income. In the long run, this may have an impact on the assurance of national food security as well as the occurrence of poverty. Until now, there hasn't been a national takaful programme that safeguards the rice agro-food sector as the primary source of food supply in Malaysia. The takaful scheme is believed to have the potential to provide social security guarantees in the form of income protection for rice farmers and further ensure the national food supply. This study employs document analysis of article journals, internet sources and policy documents to understand the current state of Malaysia's takaful business in addressing agriculture risks. It is also important to explore the understanding of the rice farmers in Malaysia on the agriculture takaful. The novelty of this study is to explore the potential of introducing a blended financing mechanism of Islamic social finance (ISF) on the existing takaful business structure to establish a viable agriculture takaful framework based on the principle of ta'awun (cooperation) that can secure farmers' income more sustainably as well as preserve the national food security.

1. Introduction and Objective

The impact of climate change on agricultural production is real. Many countries worldwide are becoming increasingly vulnerable to natural disasters. A decline in agricultural productivity will mainly be due to excessive heat in tropical and subtropical regions, especially in Southeast Asia, and Malaysia is no exception to this problem (Tan et.al, 2021; Firdaus et, al, 2020). Lately, the flooding incidents that hit Malaysia not only claimed human lives but also caused property damage, including crops and livestock, which are the main sources of the country's food. According to the Ministry of Agriculture and Food Security Malaysia, the estimated loss suffered by the agro-food sector is around RM90.6 million due to the unexpected flood incident that hit the country (Berita Harian, 2021). Since rice is the staple food of most Asian countries, including Malaysia, rice production is given great priority in the national food security agenda. Climate change, however, has put national rice security at risk. To ensure the production of rice is guaranteed, various efforts have been implemented by the government to increase the

production rate. However, the impact of climate uncertainty not only affects food production but also affects the livelihood of rice farmers (Firdaus et al., 2020). The country's paddy and rice sector, although loaded with subsidies, the results are not much, even worsened by unforeseen disasters which have affected the security of the country's food supply (Kari et al., 2018).

In reality, most of the rice farmers are from B40 populations who do not afford to participate in any takaful scheme. One of the current thrusts of the government is to increase financial inclusion for those who have less access to financial services, including the B40 group. The situation is more hampered by the reality that in Malaysia as there is not a single insurance/takaful company that offers insurance/takaful policy for the agriculture sector. This is not the case of other neighbouring countries such as Indonesia, Vietnam, the Philippines and China (Bernama, 2021).

Islamic social finance is a type of finance that is based on Islamic principles and aims to create a successful community by assisting the poor and the weak (Cattelan, 2019). Islamic social finance includes philanthropic instruments such as zakat infaq, waqf and donations (Nor Rozinah & Engku Rabiah, 2017). Islamic social finance could have the potential to reduce the burden of the farmers to pay the takaful contribution. Thus, the current state of the Malaysian takaful industry in addressing risks and issues related to agriculture as well as the capability of the agriculture takaful scheme is worth to be examined.

2. Method

The study employs a qualitative method that involves data collection from journal articles, online resources and related government policy documents. The study would also explore any other potential inclusive mechanism that could be implemented to protect the related agriculture risks. The method reflects a qualitative approach to understanding how people interact and “make sense of their world and the experiences they have in the world” (Merriam, 2009). The content analysis technique will involve inductive and deductive reasoning of the articles, online resources and policy documents to organize and elicit meaning from the data collected and draw realistic conclusions in order to understand the current state of whether the existing takaful model in the market is capable of absorbing the agriculture risks. The issues and challenges of the formation of agricultural takaful in Malaysia will also be explored including the viability of Islamic social finance instruments namely zakat and waqaf to be integrated in the model.

3. Findings and Argument

Agriculture is also a sector that is difficult to predict in terms of production results and even exposure to risks. Farmers have faced various forms of increasing risk for the past few years. In general, risks in the agricultural sector are divided into several categories, namely production risk, human capital risk, political risk, and market risk (Hardaker et al., 1997). After a series of incidents of destruction that hit the agro-food industry as a result of natural disasters such as droughts and floods, there is an urgent need to establish an agricultural insurance scheme to guarantee the survival of farmers (Bernama, 2021).

Various initiatives have been implemented by the government through infrastructure maintenance, increasing soil fertility, pest and disease control and farm mechanization to protect the national food security, including the yield of rice production. However, more need to be done to face the challenges and risks caused by uncertain climate changes, such as droughts and floods, as well as disease and pest attacks (Fauzilah et al., 2020). Accordingly, there should be a mechanism to reduce damage caused by weather changes and other uncertainties that may affect production (Abdullah et al. 2014). In this regard,

agriculture/takaful insurance is a very important instrument from a financial management perspective (Botzen et al., 2009).

The novelty of this study lies in the proposed framework of a viable agriculture takaful with the integration of Islamic social finance to support the holistic sustainability of the scheme. The proposed framework is beneficial in providing a holistic approach to address agriculture-related risks of not only protecting the yield of rice production but also guaranteeing the income of the farmers from slipping into the extremely poor category. This is also in fulfilling the aspiration of creating a Sharia-compliant takaful protection model that supports financial inclusion goals. The scheme is expected to be reasonably priced, value for money, easily accessible in most locations, easy to understand, easy to join, and easy to claim. This new model is also important to fulfil the agenda of guaranteeing future national food security in line with the global Zero Hunger initiative of the United Nations Sustainability Development Goals (SDGs).

The significance of the study highlights the promising future implications to the government, policymakers, takaful operators and Islamic social finance institutions in harnessing the great potential of agriculture takaful to be implemented in Malaysia to safeguard national food security. The integration of Islamic social finance such as *zakat* and *waqf* in the proposed agro-takaful model with the spirit of *ta'awun* (cooperation) will cultivate a blended financing approach in tandem with the Value-Based Intermediation Takaful (VBIT) framework. The execution, however, encountered certain Sharia concerns, including the status of *zakat* as a *tabarru'* (donation) when it is paid to the takaful fund and whether the transfer of ownership or *tamlík* (*qabd*) of the *zakat* is accomplished when the *zakat* is not transferred directly to the *asnaf* but rather to the takaful operator. The challenges shall be crystallised via a thorough deliberation based on the primary sources (*dalil syar'i*) of *Quran*, *Sunnah*, *ijma'* (consensus) and *qiyas* (analogy), while also considering the *waqi'* (reality) of its application in our time and the applicable of Islamic legal maxim in achieving *maslahah* or *maqasid shari'ah* (objectives of Shariah).

4. Conclusion and Suggestions

This study is a noble attempt to propose a viable model of an integrated agro-takaful scheme with the involvement of Islamic social finance as a risk management tool to protect the yield of rice production along with the income of the rice farmers in the event of unexpected disasters. The involvement of the Islamic social finance sector, namely *zakat*, *waqf*, and donation is expected to reduce the government's burden of subsidizing the contribution of agriculture takaful participants as it is shared with the Islamic social finance sector. It is worth highlighting that the proposed framework will elevate the role of Islamic social finance in the national agenda to guarantee agro-food security in line with the National Agriculture Policy.

Its positive impact has yet to be achieved through increased rice production to reduce dependence on rice imports. This will ensure the supply of rice is sufficient to meet unexpected demands during challenging times in future. The study concluded that integrating Islamic social finance into the takaful agriculture scheme is viable to achieve financial inclusion by helping the underserved rice farmers in Malaysia in tandem with the Value-Based Intermediation Takaful (VBIT) framework.

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