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EMPOWERING FOOD SECURITY THROUGH WAQF

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ABSTRACT

Food scarcity is not an alien subject to people nowadays. Various plans and efforts have been made around the world to ensure adequate food supply including the waqf approach. This study is dedicated to developing and proposing the waqf model for food security. Waqf legislation and previous waqf models for livestock and agriculture were reviewed and studied before the Food Security Waqf Model (FSWM) was developed. The qualitative interview with an expert in the field of Islamic finance and Syariah has been employed to verify the validity of the proposed model. The experts support the suitability of FSWM in empowering food security through waqf. All expert panels also agreed that FSWM is practicable, compliant with waqf legislation, and feasible in general. They are also enthusiastic about the implementation of FSWM. The originality of this article lies in the proposed model, which is newly introduced in this study and has gone through the validity evaluation process by appointed expert panels. The model proposed in this study is expected to give an alternative pathway to the government in the effort of the national food security plan. By not undervaluing previous research models, this research model should give a new perspective to the academic literature on empowering food security through waqf.

Keywords: Empowering, Food security and Waqf.

ABSTRAK

Kekurangan makanan bukan perkara asing kepada manusia pada masa kini. Pelbagai perancangan dan usaha telah dibuat di seluruh dunia untuk memastikan bekalan makanan mencukupi termasuk pendekatan wakaf. Kajian ini didedikasikan untuk membangunkan dan mencadangkan model wakaf untuk keselamatan makanan. Perundangan wakaf dan model wakaf terdahulu untuk ternakan dan pertanian telah disemak dan dikaji sebelum Model Wakaf Keselamatan Makanan (FSWM) dibangunkan. Temu bual kualitatif dengan pakar dalam bidang kewangan Islam dan Syariah telah digunakan untuk mengesahkan kesahihan model yang dicadangkan. Para pakar menyokong kesesuaian FSWM dalam memperkasa keselamatan makanan melalui wakaf. Semua panel pakar juga bersetuju bahawa FSWM adalah boleh dilaksanakan, mematuhi perundangan wakaf, dan boleh dilaksanakan secara umum. Mereka juga bersemangat dengan pelaksanaan FSWM. Keaslian artikel ini terletak pada model yang dicadangkan, iaitu baru diperkenalkan dalam kajian ini dan telah melalui proses penilaian kesahan oleh panel pakar yang dilantik. Model yang dicadangkan dalam kajian ini diharapkan dapat memberi laluan alternatif kepada kerajaan dalam usaha pelan keselamatan makanan negara. Dengan tidak memandang rendah model penyelidikan terdahulu, model penyelidikan ini seharusnya memberi perspektif baharu kepada literatur akademik tentang memperkasa keselamatan makanan melalui wakaf.

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Kata kunci: Memperkasa, Keselamatan makanan dan Wakaf.

1. Introduction

Food security is a central issue to which paramount importance is attached at all national and international levels, not only because obtaining food is the right of every human being and the essence of their survival, but also because efforts exerted to overcome the food problem in many countries has so far failed. Thus, it has become inevitable to increase attention to the daily challenges faced by millions of households worldwide as they try to overcome hunger and poverty.

Global food security will remain a worldwide concern for the next 50 years and beyond (Rosegrant & Cline, 2003). According to the United Nations Committee on World Food Security Insurance, food security can be defined as a situation in which all men have physical access, social and economic to enough food, which is safe and nutritious. In addition, the food should be compliant with daily nutrition, to enable the human lifestyle active and healthy. The increase in the population in many countries, especially in developing countries such as Malaysia, poses a threat to food security. With rapid population growth, the demand for food is expected to increase by 70 to 100% in the year 2050 (Kumari, 2017). Therefore, food security must be given more serious attention because it is an important element in Malaysia's economic growth and meets the basic needs of millions of people.

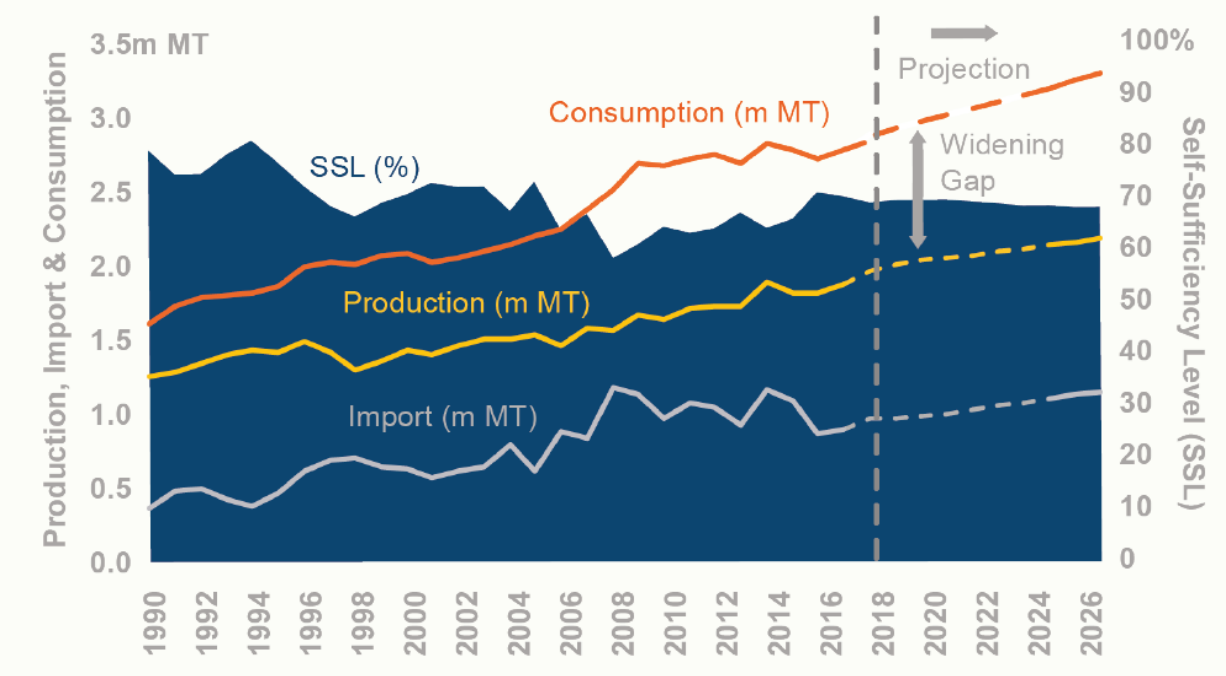
Although Malaysia has a supply of chicken meat, pork, fisheries, and eggs enough, they still rely on imports from foreign countries for multiple food commodities such as rice, fruit, milk dairy and beef (Omar *et al*. 2019). In 2015, the food import bill almost reached RM45.4 billion while export just RM27 billion leaving a deficit of over RM18 billion. If this condition persists, Malaysia was not able to provide an ongoing supply of food to the people and will probably face a food crisis in the future.

Recent studies such as Bryan (2013) show that rural low income is more susceptible to food crises caused by larger family size, the number of school children and many mothers that do not work. To ensure food security is assured, Malaysia through government departments, the private sector, and non-profit organizations must work together to improve the production of staple food through the use of agricultural biotechnology, investing in rural areas to reduce the marginalization of small farmers and other shareholders.

In this particular case study, the interest lies in observing the prospect of food security in terms of rice as the staple food in a currently developing nation called Malaysia in the present day and into the future until 2050 (Omar *et al.* 2019). Malaysia to begin with is situated in the Southeast Asia region bordering countries such as Thailand, Indonesia, Singapore, Brunei, and the Philippines. With a temperature average of 25^{o}C, Malaysia has a tropical climate that is favourable to the development of food industries all year round. In terms of agriculture, Malaysia is one of the largest producers of palm oil alongside Indonesia and Thailand with a production of 19.14 million metric tonnes in 2020. The population size in Malaysia has just reached over 32 million people in 2020 including non-citizens.

The food price crisis in 2007 – 2008 has spawned serious implications for food security, particularly among rice-importing countries. Malaysia is a rice importer, where more than a quarter of its rice requirement is met by import (Tey & Radam, 2011). Notable, the pre-crisis rice prices are yet lower than the post-crisis levels. According to Demeke *et al.* (2009), most South-East Asian countries have shifted their rice policies towards production. The rice commodity is crucial for the diet of Malaysians even though it only contributes to Malaysia’s GDP by less than one per cent (Vengedasalam *et al.*2011). As noted by Omar et al. (2019) as shown in Figure 1, Malaysian consumption of rice has increased steadily

from 1990 (1.585 million metric tons) to 2018 (2.819 million metric tons) and is expected to keep growing to more than 3 million metric ton in 2026. Figure 1 also reveals an obvious widening gap between the consumption and the production of rice in Malaysia, which is not a good indicator. With the steady increase in the population of Malaysia, a plan needs to be done to ensure the stability of the food supply in the future.



Source: (Omar et al., 2019)

Figure 1: Rice production, consumption and imports in Malaysia, 1990 – 2026

Waqf and agriculture have long had a connection with each other. For example, al-Azhar University in Egypt has 15,000 acres of waqf farmland valued at billions of Egyptian pounds (Ahmad & Hassan, 2015). According to Peri (1992), the Haseki[2] Sultan of the Ottoman sultanate established a "soup kitchen" waqf programme in Jerusalem around the 18th century to ensure that no Jerusalemites went hungry. To realise this waqf project, several buildings have been constructed and several agricultural plots have been designated. The endowment of the Ruma Well as a public utility is an early example of waqf for food. It is said that when the Prophet arrived in Madinah, he realised that the Ruma Well was one of the city's few notable sources of water. The prophet inquired as to who would buy the Ruma Well and share the water drawn from it equally with his fellow Muslims. The Ruma Well was purchased by Uthman al Affan and left to the people of Madinah as waqf property to provide drinking water (Pitchay et al., 2014). Due to the permanent nature of waqf, it should be able to supply food for a long time and in turn, help the food safety program.

Waqf is not foreign to Malaysia because it has been practised since the inception of Islamic law and has been deeply ingrained in the Malay Archipelago since the 13th century. This is evident from a rock inscription dated 1302 AD (702 AH) in *Jawi* writing (the indigenous Malay impression of Arabic) found

[2] The title Haseki Sultan was given to an Ottoman Sultan's chief consort. Later, the title's meaning was changed to "imperial consort."

in the village Kampung Buluh, Sungai Teresat in the Terengganu version of the Arabic writings (Dahlan, 2003). Past literature shows that different classes manage the administration of waqf in Malaysia, and then it gradually moves the responsibilities under one organisation which is called State Islamic Religious Councils (SIRCs) in each state (Sait & Lim, 2005). After the independence, the administration of waqf was fully under the control of SIRC, which had been appointed as the sole trustee for its management. The appointment of the SIRC as the sole trustee of waqf assets in Malaysia started after the declaration of the Islamic administration laws in each state (Pitchay, 2015).

The circulation of wealth via some social support mechanisms like Sadaqah (charity), Zakat (compulsory alms) and waqf can ensure the equilibrium of possession between the rich and the poor so that wealth is not just confined to only the former (the rich) (Al-Qur'an 59:7). Islam condemns hoarding (Al-Qur'an 9:35-36). The history of waqf is very rich with prominent achievements in enhancing welfare in general and serving the poor. Thus, establishing a waqf is the most significant idea for the cause of humanity in the Muslim world. The waqf is a continuous charitable act for the sake of God and augmented by the prevailing spirit of altruism, which forms an integral part of the Islamic way of life. However, empirical research and work published on waqf or endowment-based foods in some other parts of the world are limited, particularly in Malaysia such as (Allah Pitchay et al., 2018; Mar Iman & Muhammad, 2020; Moh'd et al., 2017; Shafiai et al., 2015). In short, through which mechanism waqf foods contributes to food security and sustainability remain unclear.

Therefore, addressing these gaps by developing and proposing the waqf model for food security will contribute significantly to the growing waqf and food donation literature. On a theoretical level, this research is significant because it gives additional academic momentum to plans to create a food security paradigm based on waqf. On the other hand, the model suggested in this article can be a reference to a waqf mutawalli in implementing waqf-based crop or livestock projects.

2. Literature Review

2.1 Food security and sustainability

Many studies on food safety have been conducted by academics and professionals working in the industry. Previous studies on food security have not only concentrated on a single field but have also looked at the issue from a variety of perspectives, including food science, agriculture, economics, and others. The study on the effects of climate change on food production is one of many food security studies that have been conducted.

The study says climate change programmes are vital. For fewer rice subsidies, people are willing to pay more and willing to pay 25% more for rice to offset subsidy cuts (Chen Khee *et al.* 2011). Climate variability shocks are also associated with a reduction in consumption and welfare across all household types, with the effects being most pronounced in rural areas (Solaymani, 2018). Low agricultural investment and a focus on export crops have left Malaysia's food sector unattended (Arshad & Hameed, 2010). A significant threat is posed by climate change to paddy cultivation. This in turn threatens food security because the two are intertwined (Alam *et al*. 2011; Firdaus *et al*. 2020; Vaghefi *et al*. 2016).

Slowing manufacturing in developing countries like Malaysia is linked to falling food investment. In light of the sector's importance for global security and growth, it is proposed that food sector investment and provision be increased (Siwar *et al*. 2014). According to the findings of the study, Malaysia may be unable to maintain the targeted level of self-sufficiency unless adequate research and development are undertaken to address production constraints, particularly below-optimal productivity, as well as the threats posed by climate change (Fatimah Mohamed Arshad *et al*. 2015). Razak *et al.* (2014) summarises the FAMA's (Malaysian Federal Agricultural Marketing Authority) current extension programmes in the food supply chain from farm to consumer. Local farmers and agribusinesses have increased food

production to meet local and global demand. FAMA overcame the food production crisis through an effective marketing mix and supply chain management.

Abdullah *et al.* (2020) believe that there is still a lack of understanding about the importance of adopting innovation in ruminant farming for food security, which can improve productivity if done correctly. Furthermore, Abdullah *et al.* (2021) discovered, based on 235 responses, that most households are food secure, i.e., have similar access to food as before MCO and have not skipped any meals. To accomplish this, households had to switch food sources, shop online, and give up their favourite foods. In Johor, forests and their resources significantly improved food security and reduced rural poverty. In rural areas, it contributes up to 21.5 per cent of monthly cash income, and without it, poverty rates rise to 13.7 per cent (Abdullah, Mohd Parid, & Faten Naseha, 2021). The study found that paddy farmers' households in Kedah, Malaysia, ate less food. This group relies on chub mackerel for protein as well as freshwater fish for the same reason it is less expensive than other saltwater fish (Ibrahim, 2021).

The food security and sustainability policy that is currently applied in many parts of the world is exposed to complex problems, with socioeconomic, political influence and ethical issues. Since food insecurity is a worldwide threat, this would harm agricultural productivity contributing to shortfalls in food availability, with knock-on effects causing food price hikes and income losses that reduce people's access to food (FOA, 2018). Therefore, serious efforts to promote food security and sustainability must respond to the complexities of the challenge (Abdelhady, 2012). To understand food security, it is necessary to ask not just how global change is shifting the landscape of food security threats and vulnerabilities, but also to consider how world food problems are emerging as questions that are key to global governance, prosperity, and security (McDonald, 2015). After the 2007–2008 and 2010 world food price crises have resulted in a greater amount of attention being paid to food security concerns, academically and practically (Candel, 2014; Piesse, 2016). Subsequently, it has become a clear concept that finds wide resonance among academic institutions and in policy considerations (Abdelhady, 2012; Candel, 2014; Moh'd *et al.* 2017).

One of the best solutions for the issues of food security is waqf (Abdelhady, 2012). However, the current state of leaving these matters as self-managed ideas would not lead to amelioration of the conditions. The potential users of the waqf system should be seized upon to develop a plan to use the dormant assets to expand economic activities at the local level, beyond the mosque management (Mohamad and Arif, 2015). Furthermore, Hassan and Shahid (2010) stated that waqfs have been experiencing mismanagement, and therefore should be properly managed and disbursed to ensure that the operation is performed professionally. FAO *et al*. (2018) stated that food security can be categorized into four dimensions, namely availability, access, utilization, and stability. Atmanti (2010) further elaborated on food security by dividing it into three parts, namely availability, distribution, consumption and supporting sub-system. Hence, this indicates that the food needs to be accessible at any time and sufficient (in quality and quantity) for the daily intake of a person (Wildana & Alhabshi, 2018).

3. Previous Model

Again, it should be noted, that this kind of article is not the first attempt to propose a waqf model aimed at food sustainability. Some past scholars have designed and proposed waqf models related to livestock or agriculture. Among the strengths of the models proposed by previous researchers is that their models are specific, i.e., specialize in a certain product, for example, studies from (Babatunde *et al*. 2015; Mar Iman & Muhammad, 2020). For general models as suggested by (Allah Pitchay *et al*. 2018; Shafiai *et al*. 2015), the advantage of this type of model is that this model can be developed in various situations as appropriate. It's just that, of the waqf models that have been presented, there is no specific reference to food safety. Because of that, this study tries to close this gap by looking at and referring to previous models.

One of the earliest attempts to propose the documented model of collaboration of waqf in agricultural land development was by Shafiai, Moi, and Ahmad (2015). They pointed out that in Figure 3 when using waqf as one of the possible instruments for activating idle agricultural land, there are two major scopes to be highlighted: the first is the creation of a waqf to address the problem of idle land, and the second is the administration of a waqf for agricultural development.

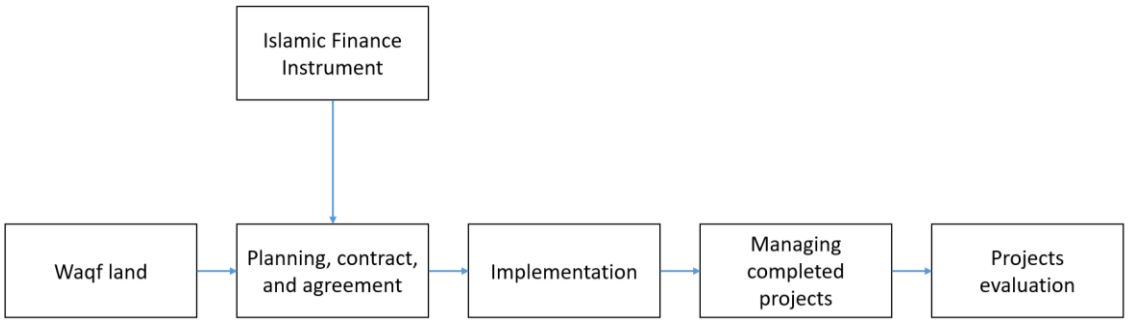


Figure 2: Model Proposed by Shafiai *et al.* (2015)

Figure 3 depicts how cash waqf can be used to establish a poultry company, using funds provided by Baitul-Mal. Employment will be provided in various sections of the feed mill, grinding, crate-making, transportation, management, and security under this model, which will be based on a Mudarabah contract. When this model is properly implemented, it will not only provide employment opportunities for the unemployed but will also improve the general well-being of the general public.

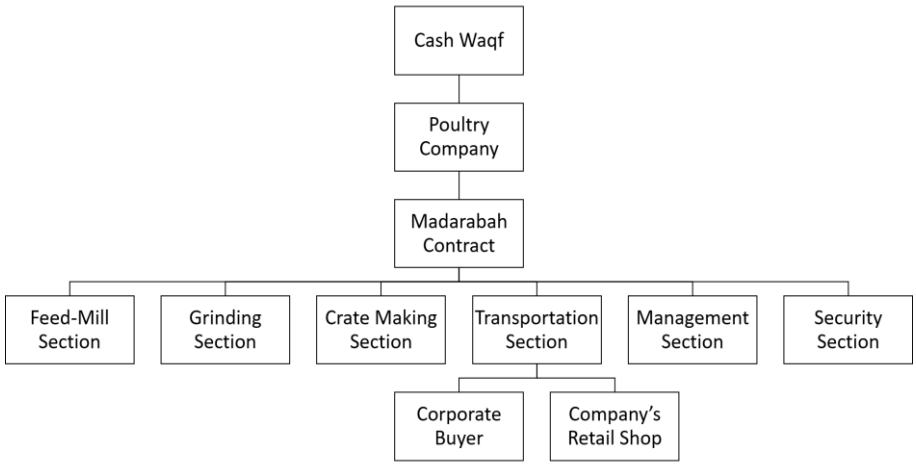


Figure 3: Model Proposed by Babatunde *et al.* (2015)

Moh'd *et al*. (2017) on the other hand as shown in Figure 4, in the planned waqf-Muzara'ah-Supply Chain Model, commercial institutions, such as banking institutions, are anticipated to play a larger role since they are in partnership with farmers. One of the most important aspects of the Supply Chain Model is to delight customers and guarantee product support from the beginning.

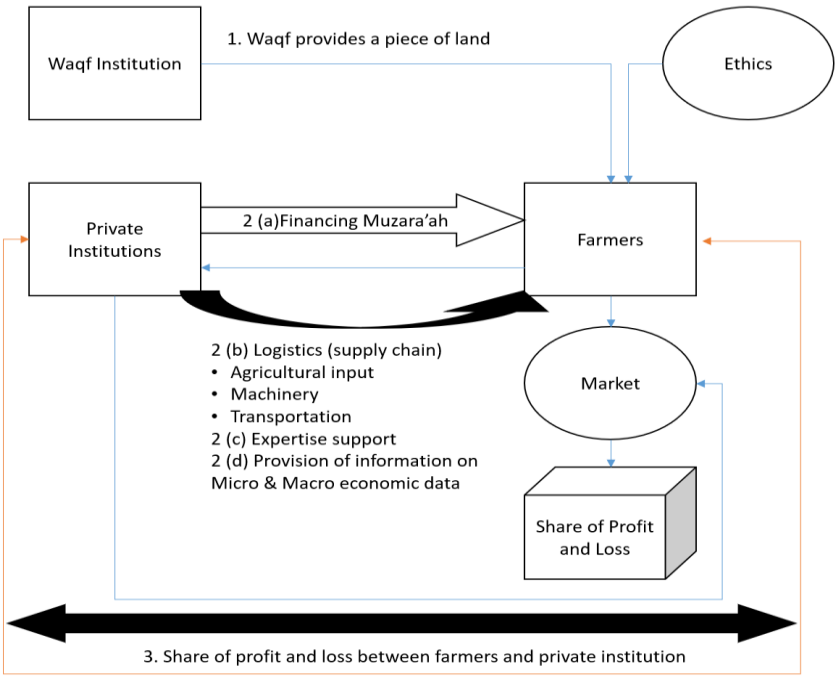


Figure 4: Model proposed by Moh'd, Mustafa & Buerhan (2017)

Allah Pitchay, Mohd Thas Thaker, Mydin, Azhar, & Abdul Latiff (2018) propose a hybrid model of cooperative-waqf (Figure 5) to finance idle waqf lands in Malaysia and at the same time inject agricultural investment. With a central government connection but independent in terms of funding, operations, and other activities, Wildana and Alhabshi's (2018) study's proposed structure (Figure 6) sought to develop a waqf institution. Its function is restricted to providing the existing legal framework and distribution connections to help distribute waqf and market rice throughout the nation. Mainly to enhance Indonesia's food security and stabilise rice production, stock, and price.

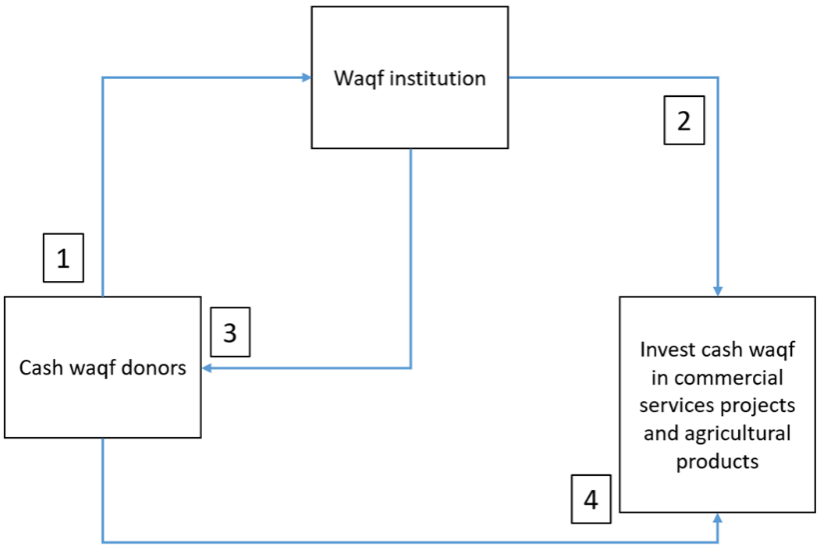


Figure 5: Model Proposed by Allah Pitchay *et al.* (2018)

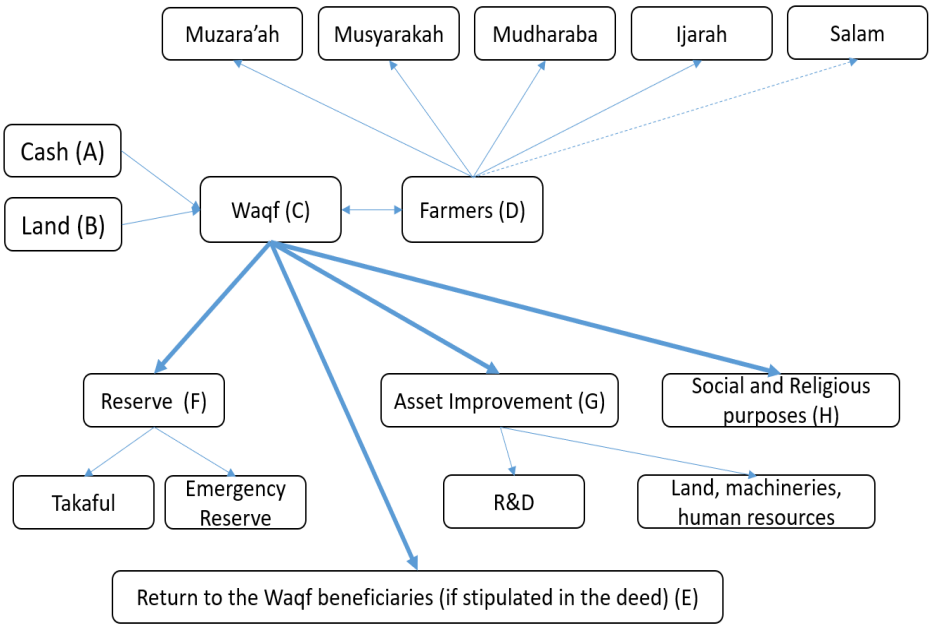


Figure 6: Model Proposed by Wildana and Alhabshi (2018)

Figure 7 depicts the approach proposed by Hossain *et al.* (2019), whose goal was to create a plan to ameliorate the vulnerable financial position of impoverished smallholder farmers in Bangladesh by using the *zakat* and *salam* contract.

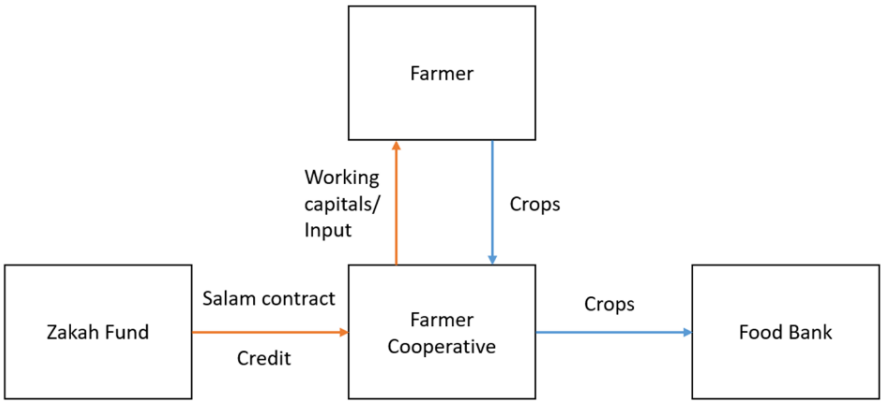


Figure 7: Model Proposed by Hossain *et al.* (2019)

As shown in Figure 8, Mar Iman & Muhammad (2020) explore the mechanism of livestock waqf, in particular the *bahīmatul an'ām* (common four-leg livestock animals in the category of a ruminant such as a camel, buffalo, cow, sheep, and goat), that could be introduced to the farming community in Malaysia.

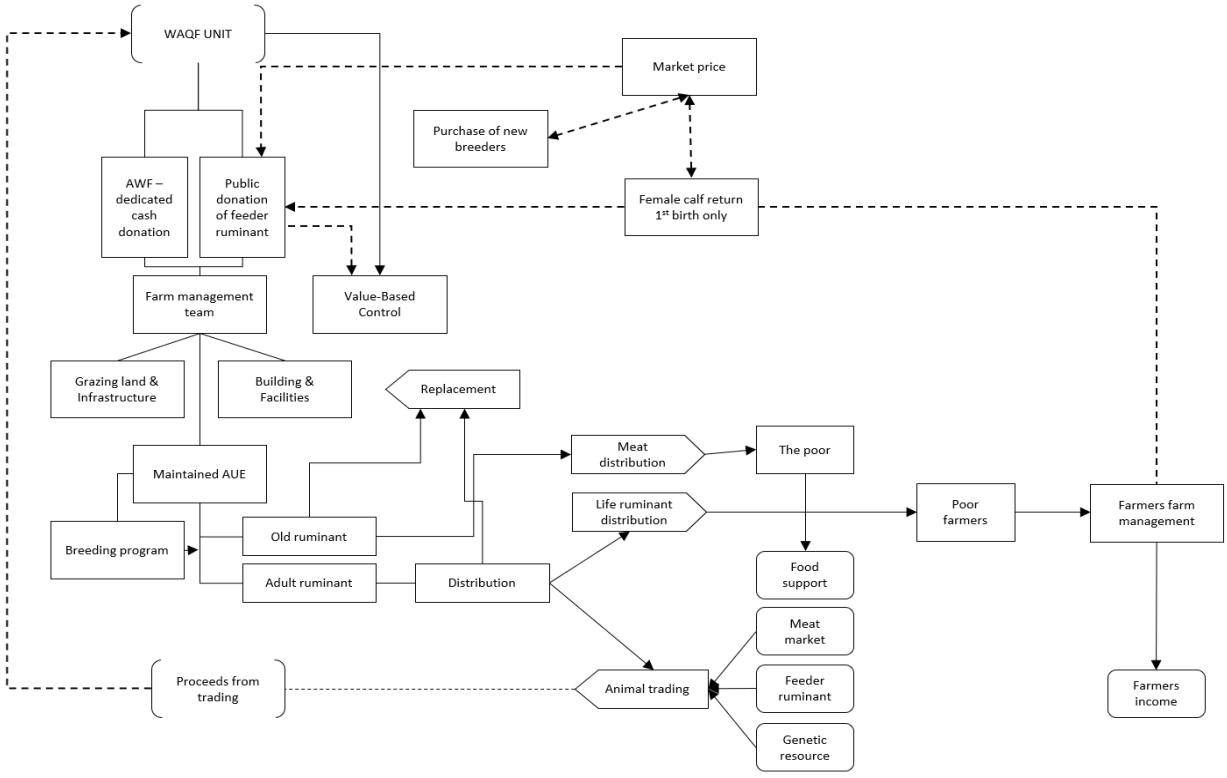


Figure 8: Model Proposed by Mar Iman and Muhammad (2020)

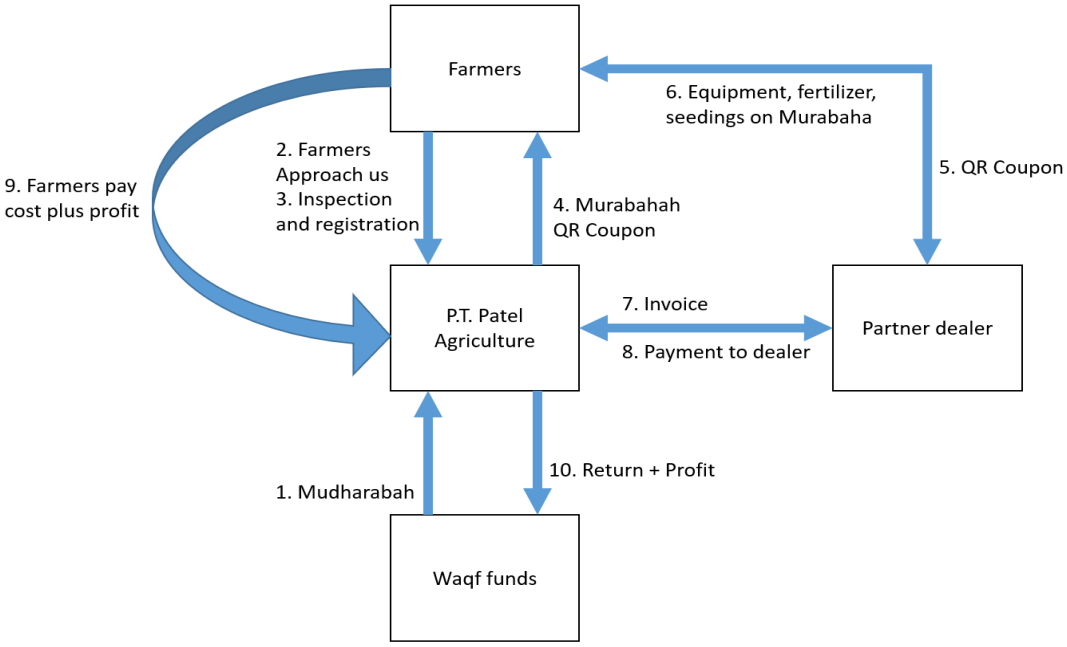


Figure 9: Model Proposed by Bilal Khan *et al.* (2021)

Indonesian farmers confront many obstacles and financial difficulties, which are examined in Bilal Khan *et al.*'s (2021) research. For the agricultural industry, insufficient operating capital, and a lack of access to financing are significant obstacles. The waqf-based Islamic fintech model to finance farmers' long- and short-term initiatives is proposed as a new financing option in Figure 9.

It can be said that the awareness and the motivation to utilize the waqf system to support food needs have existed among scholars. Having examined, past researchers when suggesting the involvement of waqf in models related to food security, only two types of waqf are involved namely cash waqf *(Allah Pitchay et al*. 2018; Babatunde *et al*. 2015) and land waqf (Shafiai *et al*. 2015). There are also past researchers who combine these two types of waqf in one model such as (Mar Iman & Muhammad, 2020; Wildana & Alhabshi, 2018). However, as long as there is no actual practice of the proposed models, there is still room to propose new models regarding waqf for food security. The following section is the waqf model proposed in this study for food security.

3. Methodology

The qualitative technique was used to meet the study's research goal. Interviews with specialists from a variety of related organisations, including regulators and practitioners and Islamic scholars and academics, were done via video conferencing as a semi-structured interview method for this research. These interview sessions were conducted in June and July 2021. By doing this research, we intend to find a better way to promote food security in the Muslim community.

Creswell's (2014) stages for qualitative analysis were followed in this research. They are as follows:

i. Reading the transcripts and making notes is the first step in exploring the data.
ii. Segmenting and labelling the text to encode the data.
iii. Developing themes using coding by grouping several comparable codes
iv. Tying ideas together and linking them

v. Narrative building

A typical selection strategy used to pick the experts was purposive sampling, which involves selecting the interviews depending on the research topic they would answer. Purposive sample sizes are often calculated using theoretical saturation, which refers to the point in data gathering when fresh information no longer adds to the understanding of the study issues. Expert sampling, a kind of purposive sampling, is used in this research. The specialists were chosen based on their educational backgrounds, areas of expertise, and job experience. The experts from different institutions are shown in Table 1.

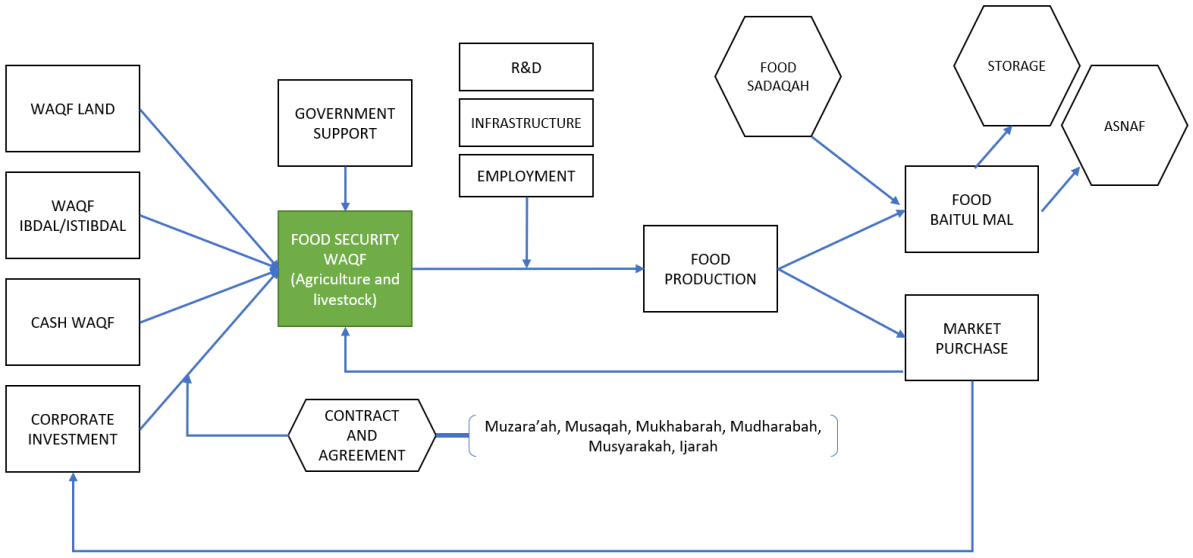
Table 1: Profile of the interviewees

No	Institutions	Position	Codes
1	Yayasan Wakaf Malaysia	Chief Executive Officer	A1
2	Universiti Sains Islam Malaysia	Senior Lecturer	A2
3	Pejabat Mufti negeri Sabah	Islamic Affairs Officer	A3
4	WAZAN UPM	Director	A4
5	Universiti Utara Malaysia	Associate Professor	A5

The research used Dworkin's (2012) recommendation of six participants for qualitative investigations in selecting the number of chosen respondents. Typically, the number of participants is determined by using the saturation principle (the point at which no new information or themes are observed in the data from the participants). Other studies, such as Summerville, Campbell, Flantroy, and Shelton (2021) and Thaker and Thaker (2015), have used a sample size of below five respondents. Research is done with a modest sample size, which in their opinion, has been adequate to meet the study's goals.

Field notes were taken during the interviews, and the information was transcribed and examined thematically. A thematic analysis, as defined by Braun and Clarke (2006), is a technique for finding patterns (themes) in large amounts of data and summarising the results. The following are the benefits of using theme analysis in this investigation: a) capacity to summarise essential characteristics of vast amounts of data; b) emphasising the similarities and contrasts across data sets; and c) utility in conducting policy-relevant research and development.

This research utilises several Guest, MacQueen, and Namey (2012) proposed thematic analysis procedures, including data selection, simplification, and categorization into common themes.



Source: Figure created by the author

Figure 10: Food Security-waqf Model

4. The Empowering Food Security through the Waqf Model

This article proposes a new model of waqf to empower food security which we call the Food Security-Waqf Model (FSWM). The FSWM are a model which provides a framework of waqf for financing and empowering food security. This model is supposed to involve participation from the public, farmers and ranchers, corporate companies, Baitul Mal and the government. The full model is illustrated in Figure 11, FSMW is divided into four phases namely 1) fundraising, 2) production, 3) distribution and 4) profit and regeneration.

4.1 Phase 1: Fundraising

In the first phase, the primary mission of FSMW is to raise as many funds and assets as possible for agriculture and livestock waqf. waqf land, waqf *ibdal*/*istibdal* (exchange/substitution), cash waqf, government support, and corporate investment are the funding sources identified. Agriculture or livestock, both of these activities require an area of land to be used as a project site. Furthermore, in Malaysia, the percentage of idle and undeveloped waqf land is excessive (Abd Jalil et al., 2019). The State Islamic Religious Council (SIRC) as the sole trustee of waqf in Malaysia should take this opportunity to utilize these idle assets by applying waqf *ibdal* or waqf *istibdal*. Most of the waqf land in Malaysia is to build a mosque and cemeteries. These waqf purposes can be changed by the concept of *ibdal* or *istibdal*.

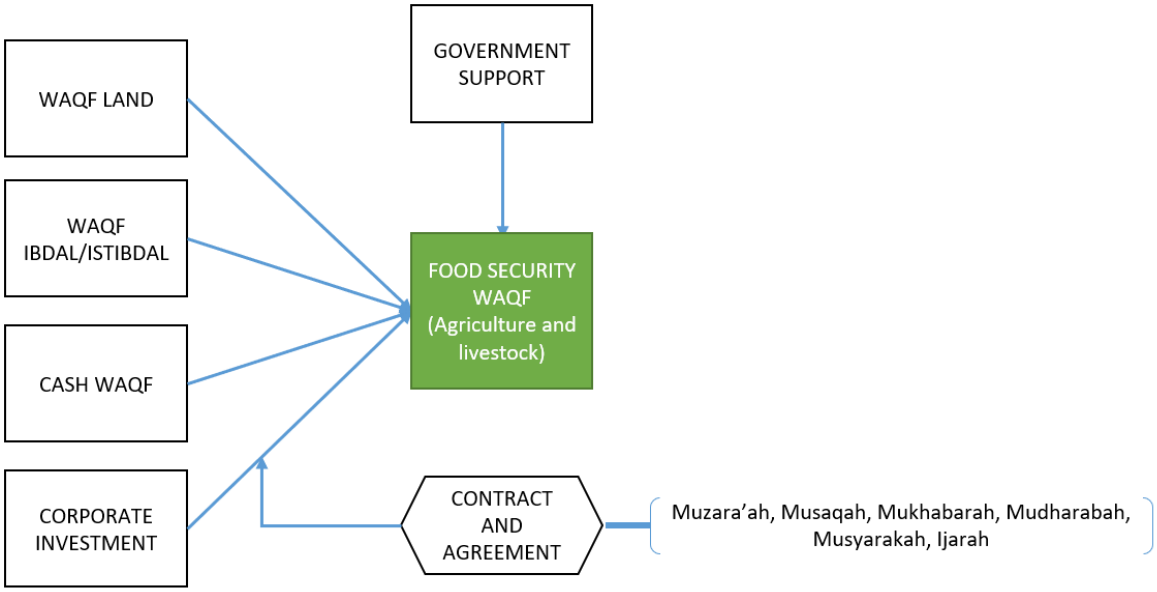


Figure 11: FSWM Phase 1: Fundraising

Cash inflows through cash waqf will be used for infrastructure construction and the purchase of agricultural and livestock equipment. Corporate investment is a bonus to the waqf agriculture project. Corporate involvement in this project can not only help financially but also contribute in terms of expertise. We suggest that the corporate investment can follow the contracts proposed by (Shafiai *et al*. 2015), which are *al-Muzara'a* and *al-Musaqa* and other alternative contracts such as *mukhabarah, mudharabah, musyarakah, and ijarah*. Government support on the other hand is always vital in terms of funding and attention.

4.2 Phase 2: Production

In the second phase, as shown in Figure 12, after we have enough funds to start the project, the second primary mission is to produce the food. Along with the ever-evolving advancement of science and technology, science in agriculture is also not left behind. With the latest scientific discoveries, agricultural production is expected to be better than traditional methods. Water irrigation, land development, agricultural roads and other transportation infrastructure, agricultural equipment, machinery, information systems, building, energy production for/from agriculture, and institutional infrastructure are examples of infrastructures commonly involved in agriculture and livestock. This project will undoubtedly offer employment opportunities to the locals.

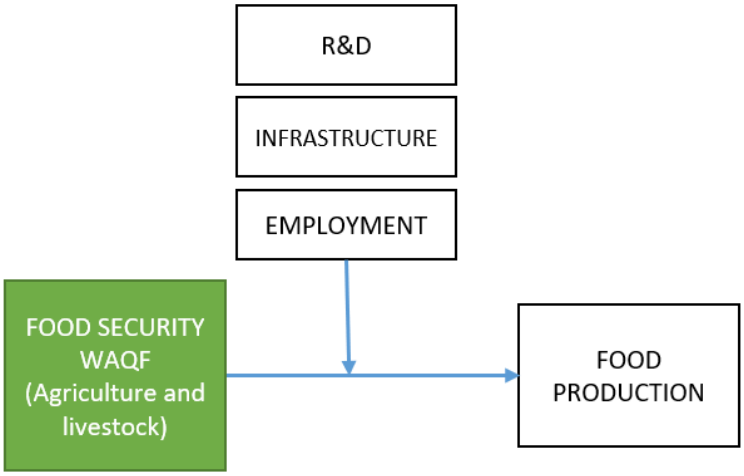


Figure 12: FSWM Phase 2: Production

4.3 Phase 3: Distribution

Figure 13 below shows the third phase of FSWM which is the distribution of food that has been produced.

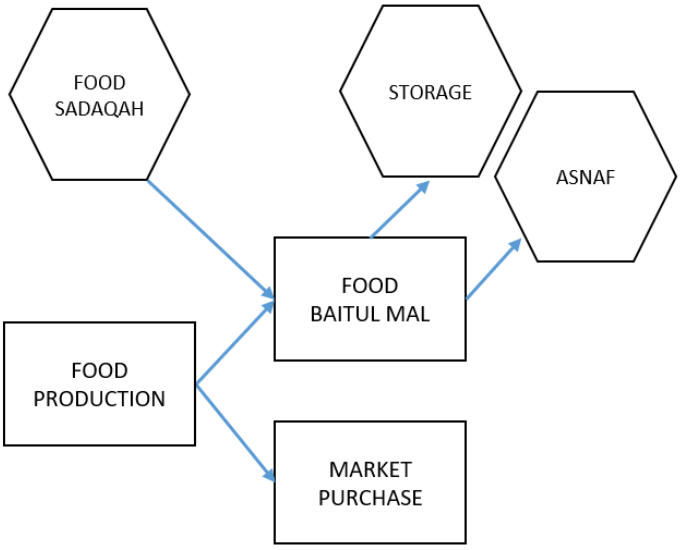


Figure 13: FSWM Phase 3: Distribution

At this phase, we divide our food to Baitul Mal and market. The ratio of division depends on the volume of the food produced and its necessity. Since food is not suitable for waqf due to its substance of not perpetuity, we accept food in the concept of *sadaqah*. At the Baitul Mal, the food will be stored for stock and distributed to the *asnaf*, while at the market, we can act as suppliers, wholesalers or retailers depending on our capability.

4.4 Phase 4: Profit and Regeneration

In the final phase of FSMW (Figure 14), the profits generated by the sale at the market will be channelled back to the waqf funds and the corporate investment. The proportion of investment return will be based on the contract. The project also always opens new cash waqf coming in to further develop the project.

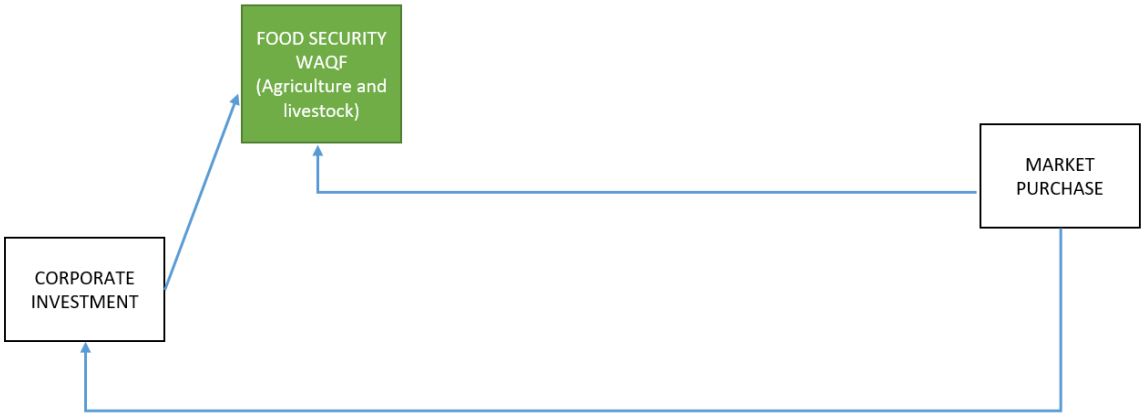


Figure 14: FSWM Phase 4: Profit and Regeneration

5. Result and Discussion

For this study, 5 questions were asked to a panel of selected experts for the validity of the FSWM model. The questions are shown in Table 2 below.

Table 2: Categorical Themes and Interview Question

	Themes	Questions
1	Suitability	Is the concept of waqf suitable to help food security?
2	Legal compliance	Is FSWM compliant with the law of waqf?
3	Feasibility	Is this model feasible?
4	Suggestion	Are there any improvements you would like to suggest?
5	Support	Will you support the use of this model?

5.1 Suitability

The experts were asked about their views on the suitability of the concept of waqf for food security. The results of interviews with all panels of experts found that all panels (n=5) are positive that the concept of waqf is suitable to be used to achieve food security objectives. Listed below are a few of the interviewees' responses:

> *"I think it is very beautiful, you use the concept of waqf to address a critical problem in our country, which is the problem of food supply. […] Yes, I think it's right, this waqf concept can help the food supply in Malaysia. […] Moreover, we have a lot of abandoned waqf lands that can be used for agriculture and livestock" (A1)*

> *"Looking at the benefits and advantages, it is appropriate, especially concerning things that can be endowed, the benefits are large and lasting. […] Most of this food comes from the land, and land is an asset that is required to be waqf" (A3)*

> *"In terms of food waqf, we do not have an issue, in fact, there are hadiths that support food waqf. waqf and food are closely related" (A4)*

By the inductive research method, the results of this study are seen to be in line with the results of the Wildana and Kafabih (2021) study. According to Wildana and Kafabih (2021), waqf is present as one of the supporting institutions that support food security. If viewed from history, Yousri (2021) has proved in his article that waqf is suitable for food development and supply. Therefore, it can be concluded from the opinion of the expert panel and the findings of previous studies that the concept of waqf is suitable to support food security.

5.2 Legal Compliance

Next, the expert panel members were asked about their views concerning compliance with the FSWM model from the legal aspect of waqf. This is an essential concern because, no matter how excellent and efficient a waqf model is, if it does not comply with Islamic waqf legislation, the model cannot be implemented.

> *"I don't see any issue with fiqh law. After I saw and heard the description of this model, I liked it, because it gives a whole new look to move waqf cash. […] Among the advantages of this model is that this model has considered the end-user, namely the distribution of food from the Baitul mal to the asnaf." (A1)*

> *"In general, it is fulfilling […], because it involves real estate, which is permanent. The function of this soil has also been mentioned in the Quran in chapter Yusuf. […] The model presented in my opinion coincides with the fiqh of waqf." (A3)*

> *"For this model, we see that people giving waqf are clear, the property endowed is clear, the parties involved are clear, and the beneficiaries are also clear. So, I say this model is according to Islamic law." (A4)*

According to the findings of interviews with all the panel of experts, all panels (n=5) believe that the model complies with Islamic waqf regulations. Some of the interviewees' replies are included above. This model could be categorised under the waqf for public service from the viewpoint of Islamic scholars (Abbasi, 2012). According to this model, land and all agricultural equipment which is inexhaustible when used are valid waqf assets. According to Abbasi (2012) if the food is waqf, then this model is not valid according to Islamic *fiqh*.

5.3 Feasibility

The third question asked to the expert panel was about the feasibility of the FSWM. Although a model may be appropriate and legal in some cases, it is not always feasible. The results of interviews with all expert panels revealed that all of them (n=5) believe the FSWM is feasible to implement. The following are some of the responses from the interviewees:

> *"I see this model as complete because it covers the fundraising level up to the distribution level. Yes, God willing, this model is feasible." (A1)*

> *"In my opinion, […] I strongly agree and think this model is feasible because according to its description, this model is seen to be structured." (A3)*

> *"Yes, a general view, I see this model won't have any problem and feasible with*

waqf for food security." (A4)

Among the reasons the expert panels felt that FSWM was feasible was because this model was complete from fundraising to food distribution. This can be seen from A1's comment stating that FSMW is "complete because it covers the fundraising level up to the distribution level". Panel A3 asserts that this FSWM is feasible because the model appears to be well-structured and organised. As a result, it is possible to conclude that this FSWM is feasible.

5.4 Suggestion for Improvement

The experts were asked about their opinion or suggestion for FSWM improvement. In broad, the expert panels did not make any recommendations regarding the reduction or addition of significant variables in the FSWM model. Nonetheless, there are suggestions and recommendations from a panel of experts on how FSWM should function in the future when it is put into practice. Comments and suggestions from the interview session provided are as follows.

> *"The most important thing in this model is who the executor is supposed to implement this model project and what criteria should be set to the executor of this model project" (A1)*
>
> *"I suggest, we must run a small-scale pilot project so that we can evaluate the effectiveness of this model before we implement it on a large scale". (A1)*
>
> *"Third, I feel there needs to be a reporting element in this model. This is because the waqfs want to know the results and where the property they have waqf is spent". (A1)*
>
> *"Ok, […] about the model presented earlier, it starts with the land, then the process, […] then it produces results and benefits to those involved, especially to Muslims. […] Only, there needs to be a standard operating procedure at each level so that the work is more orderly". (A3)*
>
> *"At each of those phases, there needs to be we put or explain in detail, […] who or what party is responsible for managing each variable in this model". (A4)*

According to the A1 expert panel, the most important aspect of this model is the selection of a Mutawalli (trustee) or project manager for the project. The selection of the most qualified project manager is critical because it has the potential to determine the success or failure of a project. While the A2 panel discussed management issues as well, only the A4 panel placed a greater emphasis on management during each phase. Although this model appears to be straightforward, in reality, each phase necessitates a different approach to management.

The A2 expert panel, on the other hand, expressed the opinion that small-scale pilot projects should be carried out before being applied to large-scale projects. This pilot project is critical in determining the effectiveness of the FSWM model, and it should be completed as soon as possible. In addition, the pilot project allows the project manager to assess any deficiencies that occur during the FSWM project.

The third suggestion came from the A3 expert panel, which stated that a transparent and effective reporting system is required to optimise every activity that takes place within the FSWM project. The recommendations of this expert panel are consistent with the findings of previous studies, such as Azmi and Hanifa (2015) and Mansor, Jamil, and Bahari (2017), which found that the reporting system is an

extremely important component of the practice of waqf management in the workplace.

The final suggestion came from the A5 expert panel, who suggested that at each stage of the process, there should be a standard operating procedure. This recommendation is appropriate to ensure that production operations are carried out consistently to maintain quality control of processes and finished products.

5.5 Support

Finally, the expert panels were asked about their willingness to support the implementation of FSWM. All expert panels stated that they supported FSWM to be implemented. The results of this feedback can mean that the probability of this FSWM will also be supported by others, especially policymakers are high. Such an expectation is important because no matter how good a model is but if it is not supported to be implemented, then a model is only useful theoretically but not practically.

> *"Yes, I strongly support this model to be implemented. I want to ask you to present this model again at Yayasan Wakaf Malaysia because we are interested in adopting this model for our agricultural projects" (A1)*
>
> *"We can ensure that our food supply is guaranteed in terms of cleanliness, halal status, and we no longer have to rely on food suppliers from outside" (A3)*
>
> *"Yes, […] and with the proper human resources and management" (A4)*

The above statement is part of a transcript of the answers from the panel of experts recorded during the interview session. Panel A1 has asked the author to present the FSWM to the waqf officers in his department for adoption. As for the A2 panel, projects and models like FSWM are very much awaited because food sources are guaranteed in terms of cleanliness, *and halal* status, and we no longer have to rely on food suppliers from outside.

Table 3 below shows the summary of study findings based on the categorical theme which was built early by the author. Five questions have been asked to the expert panel to measure the legitimacy of the Food Security Waqf Model suggested. Although the goal of this study is only to propose a waqf model that can help strengthen food security, the proposed model must be validated by expert panels. Overall, the proposed FSWM model is endorsed by a panel of experts in terms of suitability, legal compliance, and feasibility.

Table 3: Summary of Study Findings based on Categorical Theme

	Themes	Questions
1	Suitability	The concept of waqf is suitable to help food security
2	Legal compliance	The FSWM is compliant with the law of waqf
3	Feasibility	The FSWM model is feasible
4	Suggestion	There are no changes suggested by the expert panel.
5	Support	All expert panels supported the FSWM model for use.

* FSWM is Food Security

6 Research Implications

Numerous ramifications flow from these findings. Theoretically, in the first place, the model proposed in this study has the potential to contribute to and fill a gap in the fields of food and agriculture waqf. This study will be able to assist waqf researchers in the future by allowing them to update their literature highlights with the most recent and most up-to-date studies. Furthermore, the concept of improvement

derived from this research model will help to broaden the scope of existing studies' by increasing their diversity. Considering the requirement that researchers refer to articles that are no more than 5 years old, this study is certain to provide a sigh of relief to future researchers.

Secondly, the model proposed in this study can be used as a guide for waqf trustees who wish to engage in the production of food products, as demonstrated in the findings. In its entirety, this FSWM model addresses all aspects of waqf-based food production, from the beginning of fundraising to the completion of production and distribution to the conclusion of re-fundraising. Due to its general nature, this FSWM model can also be used in a wider expanse. By current suitability, project managers can include any sections they believe are necessary.

It is also anticipated that this study will be able to contribute to the formulation of government policy and the identification of those responsible. In fact, before the publication of this research paper, one of the members of the expert panel expressed interest in the proposed model and requested that the author present it at the level of the relevant government department. The proposed FSWM can serve as a foundation for government agricultural projects involving waqf, as described in more detail below.

6.1 Limitations and future research directions

The limitation is something that the authors did not intend and is therefore out of their control. Finally, it would be interesting to see if an efficiency study on FSWM is carried out after it has been put into effect. Studies like this will undoubtedly help to correct any shortcomings in FSWM that are not yet apparent to the public at large. The study has several limitations. First, the panel of experts selected to be interviewed were only the clergy, academics, and officials in the religious department. For future studies, the panel of experts that should be involved are traders or agricultural project managers who have long been involved in the world of agriculture and livestock. Opinions from them may improve this model from an implementation context. Second, the proposed FSWM model is general. The FSWM in this article is indeed intentionally constructed with a plain model. This is to enable any party to use FSWM and improve the model according to their needs. In the future, improvements can be made by adding management variables to the FSWM as suggested by expert panels. Third, it would be interesting to see if the findings of this study involve the views of the public. While the public is not involved in terms of management, at least they are the ones who will fill the project fund. Last but not least, it will be informative to see if FSWM undergoes an efficiency study following its implementation. Studies like this will certainly improve on any shortcomings in FSWM that are not realized at this time.

7. Conclusion

The primary goal of this research is to create and propose the waqf model for food security. After reviewing and researching waqf legislation and waqf models for livestock and agriculture published by previous researchers, the Food Security waqf Model (FSWM) was developed. To demonstrate that the proposed FSWM is a good and practicable model, expert panels comprised of academics, clerics, and religious officials were interviewed. As a result, all expert panels agreed that FSWM is practicable, compliant with waqf legislation, and feasible in general. They are also enthusiastic about the implementation of FSWM. Overall, all expert panels were satisfied with the proposed FSWM model until there were no suggestions for additions or reductions to the model. Nevertheless, the expert panels were concerned and stressed the efficiency of project management as it was implemented.

We believe that this research paper can have a positive and significant impact on the development of knowledge and practice for food security via waqf. Because it has been checked for Sharia legitimacy and

feasibility, this food safety model based on the waqf method is ready to be tested for its effectiveness at the field level. As a result, the model we recommend has the potential to have a significant impact on the implementers and makers of national food safety policy.

Terminologies used

Al-Musaqa	:	A contract in which the owner of the garden shares its produce with another person in a pre-determined ratio in return for the latter's services in irrigating the garden.
Al-Muzara'a	:	Share-cropping; is an agreement between two parties in which one agrees to allow a portion of his land to be used by the other in return for a part of the produce of the land.
Al-Qur'an	:	The sacred scripture of Islam
Asnaf	:	The eligible group of zakat
Bahīmatul An'ām	:	common four-leg livestock animals
Baitul-Mal	:	A financial institution responsible for the administration of taxes in Islamic states, particularly in the early Islamic Caliphate
Fiqh	:	The theory or philosophy of Islamic law is based on the teachings of the Koran and the traditions of the Prophet.
FSWM	:	Food Security Waqf Model
Halal	:	Permissible
Ibdal	:	Exchange
Ijarah	:	Rental
Istibdal	:	Substitution
Jawi	:	Malay writing that uses the Arabic alphabet
Mudharabah	:	A partnership where one party provides the capital while the other provides labour and both share in the profits
Mukhabarah	:	It is a type of agreement in which the worker (farmer) supplies seeds, in addition to his labour and expertise, and the landlord provides, through lease (ijarah), the plot of land to be ploughed in preparation for sowing seed and growing crops
Musyarakah	:	A joint enterprise or partnership structure in Islamic finance in which partners share in the profits and losses of an enterprise.
Ruma Well	:	The Well of Uthman ibn Affan
Sadaqah	:	Voluntary offering, whose amount is at the will of the "benefactor
Salam	:	A contract in which advance payment is made for goods to be delivered at a future date
SIRC	:	State Islamic Religious Council
Sultan	:	A Muslim sovereign
Waqf	:	An inalienable charitable endowment under Islamic law.
Zakat	:	Payment made annually under Islamic law on certain kinds of property and used for charitable and religious purposes, one of the Five Pillars of Islam

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