

## DESIGNING A WAQF-BASED AGRICULTURAL FINANCING MODEL

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### ABSTRACT

Limited access to financing, followed by the difficulty in the absorption of crop yields, is still a fundamental problem for farmers. This study proposes an integrated agricultural low-cost financing model based on cash waqf along with its parameters and risk mitigation. The proposed model is developed from a literature review underpinned by in-depth interviews with 17 experts (regulators, academia, and practitioners), followed by a Focus Group Discussion, and finally validated by the key experts. Findings reveal that cash waqf fund could be used as a low-cost financing with several risk mitigation procedures to finance farmers who have hardship accessing financing. Through institutional engineering, a nazhir (overseer) will involve a specialist vehicle in developing a value chain to facilitate off-takers ready to buy farmers' crops at competitive prices. The proposed model employs Mudharaba-Salam and Ijara schemes. The associated risks can be mitigated by a comprehensive feasibility study, using takaful/guarantee or reserve funds and financial restructuring. This model is expected to improve farmer welfare and national food security and deepen inclusive Islamic financial products in the agricultural sector.

*Keywords:* Agricultural financing, Waqf, Institutional engineering, Food security.

**JEL classification:** D25; D64; G32; Q14.

#### *Article history:*

Received : February 1, 2023

Revised : April 4, 2023

Accepted : August 31, 2023

Available online : September 29, 2023

<https://doi.org/10.21098/jimf.v9i3.1686>

## I. INTRODUCTION

Limited access to capital is a vicious circle that results in farmers' low productivity growth and welfare (Ammani, 2012; Ministry of Agriculture, 2020). Ease of access to financial services is a crucial driving factor for all activities in the value chain in the agricultural sector. Fulfillment of access to financial services is also a significant factor determining the success of the production process through increasing access to inputs such as fertilizers and superior seeds. This bears important implications for eliminating barriers to participating in the market and contributing to poverty alleviation (Appiah-Twumasi, Donkoh, & Ansah, 2020).

In reality, there are many small farmers in rural areas still hampered by financing access due to complicated and time-consuming administrative requirements as well as the need for additional guarantees as they are unbankable by formal financial institutions (Ministry of Agriculture, 2015, 2020; Moh'd, Omar Mohammed, & Saiti, 2017). Other factors that need attention are related to financing schemes/patterns that would improve welfare and remove farmers from the poverty chain. These factors are certainty in the absorption of crop yields and price stability. The risk of crop failure followed by price fluctuations (especially at harvest) or low market prices are also factors that drive farmers to be burdened by increasing debts (Ridlwan, 2016).

This situation ultimately disperses the preference of farmers to concentrate on one particular commodity. In addition, the impact is that farmers cannot enjoy the revenues/benefits from additional production (Bantacut, 2014), especially amid the high-interest expense that must be met (Ashari & Saptana, 2016). Moreover, from a sharia perspective, the application of the interest system in debt-receivable transactions substantially is not in line with sharia principles that uphold the value of fairness and equal rights and obligations in terms of risk coverage (Ashari & Saptana, 2016).

Meanwhile, Islamic finance, which consists of commercial and social finance, has tremendous potential to be optimized and become an alternative that benefits all parties to improve the welfare of farmers, namely through cash waqf instruments as a source of cheap financing. As a social and financial instrument, waqf has been widely studied and applied in various economic sectors. Waqf has a strategic role as a tool to achieve financial inclusivity and the fulfillment of socio-economic justice (Shaikh et al., 2017; Zauro et al., 2020) which can be seen from the strategic role of waqf in various fields.

In the agricultural sector, waqf assets in the form of land can also be managed with a muzara'ah, musaqah, or other production sharing schemes as an alternative solution for converting agricultural land as proposed in many studies (Ali Azizan, Muhamat, Syed Alwi, Ali, & Abdullah, 2022; Majid, 2021; Moh'd et al., 2017). More specifically, Ahmad (2018), Azganin, Kassim, & Adam (2021), Khan, Ghafoorzai, Patel, & Shehbaz (2021), Majid (2021a), Moh'd et al. (2017), Ningrat & Nurzaman (2019), and Olaniyi, Thaker, Thaker, & Pitchay (2014) design waqf-based agricultural financing models, which are integrated with crowdfunding and microfinancing, as an initial capital and a means to procure equipment and machines used in the production process.

However, the previous research is generally limited to a conceptual model without any validation by experts such as academics, regulators, and practitioners.

Previous research has not been able to holistically solve the problems of access to financing and the procurement of agricultural infrastructure through formal Islamic financial institutions as well as the associated risks, especially in terms of efforts to maintain the integrity of the cash waqf principal. In addition, the proposed financing model remains unclear with regards to the involvement of parties and their roles. Thus, this study fills the gap by designing a robust agricultural financing model using cash waqf instruments by conducting a thorough literature review strengthened by input from relevant experts so that the proposed model is inclusive and integrated with sharia-compliant contracts to overcome the problems of limited financing and of financing risk.

This paper consists of five sections. The first section depicts the background, research gap, objective, and novelty. The following section reviews the background theory and related literature. The third section discusses data and research methods, and the remaining sections present results, discussions, conclusions, and recommendations.

## II. LITERATURE REVIEW

### 2.1. The Concept of Cash Waqf and Its Permissibility

Waqf is an Arabic term which means to restrain or to hinder (AAOIFI, 2017). Waqf is a jariyah deed that provides a steady and permanent flow of benefits to beneficiaries (Obaidullah, 2015). Many scholars state that the pillars of waqf consist of four components, namely wakif (people who do waqf), mauquf (objects that are donated), mauquf 'alaihi (beneficiaries of waqf), and shighah (ijab-kabul). A wakif must be intelligent, mature, waqf of his own accord, and have independent status as the owner of the waqf property. Mauquf is an object that can be used according to sharia (maal mutaqaawwim), an object that does not move, can be handed over; the object is clearly known and is the perfect property of the wakif. *Mauquf 'alaihi* is the beneficiary of the results of waqf management which is required to be party-oriented to goodness and does not aim at immortality (Rozalinda, 2015).

In its development in the contemporary era, waqf assets are not only limited to property that is not easily damaged, such as fixed property, land, or buildings, but has also been applied to other objects known as cash waqf, share/stock waqf, sukuk waqf, takaful waqf, and other waqf scheme and instruments. Cash waqf itself is a cash waqf fund that is managed productively to support services to humans (as *mauquf 'alaihi*) in the name of Allah to get a reward or charity (Indonesian Waqf Board, 2020; Mafaza, Umam, Arief, & Lahuri, 2020). The permissibility of cash waqf is approved by several fiqh institutions and Islamic financial institutions that issue sharia standards with a global scope. *Accounting and Auditing Organization For Islamic Financial Institution* (AAOIFI) in the sharia standards No. 33 concerning to waqf year 2007 in the article "The Waqf Property" No. 3/4/3/2 states that waqf is allowed in the form of money. The profits generated from the management of the waqf principal (in the form of money) can be distributed to the public, while the principal is maintained.

The management of cash waqf can be channeled in the form of loans without usury or in the form of *mudharaba* investments where the profits from the investment are channeled to the *mauquf 'alaihi* (AAOIFI, 2017). The international

fatwa institution Majma Fiqh Al-Islamy in the 15th session of 1425H held in Muscat, Oman, also agreed on a decision regarding the permissibility of cash waqf (Hamza, 2017). Specifically in Indonesia, the permissibility of cash waqf has been formally legalized considering the great benefit that other objects do not have through a fatwa issued by the Fatwa Commission of the Indonesian Ulema Council (MUI) on May 11, 2002 (Komisi Fatwa MUI, 2002).

## **2.2. General Portrait of Agricultural Financing in Indonesia**

As an agricultural country, Indonesia has an excellent opportunity to achieve self-sufficiency in food (rice), as is also the strategic plan of the ministry of agriculture for 2020-2024 (The Central Bureau of Statistics, 2020; Ministry of Agriculture, 2020). One of the fundamental problems contributing to the effort to fulfill food self-sufficiency is the availability of access to financing for rice farmers. Farmers are more likely to choose the services of moneylenders (lenders) to get capital quickly, even though they have to pay back at a high-interest rate (Ashari & Saptana, 2016; Supriatna, 2009). Most agricultural sector business financing comes from credit institutions, which are already in operations in rural areas (Ashari & Saptana, 2016).

Supriatna (2008, 2009) in his research concludes that there are two types of micro-scale credit markets at the rural level, namely (1) formal credit markets consisting of (a) non-program or commercial loans such as BRI Village Units, Credit Banks People (BPR), cooperatives and pawnshops; and (b) credit programs such as Farmer Business Credit (KUT) and Food Security Credit (KKP) from APBN funds and (2) informal credit markets such as services provided by moneylenders, production input/output traders, and rice mills. Each of the credit providers above has a unique pattern of service in terms of the characteristics of the credit provided, starting from the target, application rules, types and times of repayment, as well as the availability of supervision and business development facilities run by farmers as the majority of customers (Ashari & Saptana, 2016; Supriatna, 2008, 2009).

### **1) Non-Program Financing Institutions (Commercial)**

Eligibility standards in lending are formally determined where the credit interest is commercial. Institutions included in this type of financing category are those run by BRI Village Units or BPRs at the village level, multi-purpose cooperatives (KSU) or village unit cooperatives (KUD), and pawnshops (Supriatna, 2009). These institutions are expected to support the agricultural sector by procuring production inputs, farming tools and equipment, and marketing agricultural products with low-interest rates. Even so, the accessibility of farmers to these institutions is still relatively low due to a collateral requirement in the forms of land and building certificates (Supriatna, 2009).

### **2) Programmed Credit Financing Institutions**

Under the programmed Credit Financing Institutions, credit is specifically intended to support a program that the government usually finances. Usually, government agencies are directly involved in providing credit to farmers as program implementers. This type of credit combines the advantages of formal institutions (low-interest rates) with informal institutions (using land

certificates belonging to group administrators as collateral). The general credit characteristic is to apply a low-interest rate (3-18% a year) to spur growth in the agricultural sector while at the same time encouraging rural economic growth (Ashari & Saptana, 2016). Concerning tenure, this loan uses a seasonal repayment scheme, which ranges from 6 to 24 months. The source of credit funds comes from the liquidity funds of the Central bank, so the risks that arise are the responsibility of the government (Supriatna, 2009).

### 3) Informal Financing Institutions

Informal financing institution have been in existence in rural areas long before formal institutions. Most of these informal credit services are provided by lenders (money lenders), generally wealthy farmers, moneylenders, production input traders, crop traders, agricultural production traders, rice millers, and economic actors in rural areas (Ashari & Saptana, 2016; Supriatna, 2009). The general characteristic of this credit service is that it applies a much higher interest rate than formal credit institutions do (Ashari & Saptana, 2016), but the credit requirements are relatively less stringent as there would be no collateral or would be based on trust (Supriatna, 2009). The informal credit institutions are generally more attractive to farmers than formal credit institutions based on the trust built between creditors and farmers as debtors (Supriatna, 2009).

## 2.3. Previous Studies

Cash waqf is a potential source of low-cost financing that can be disbursed in the form of social or commercial transactions based on the conditions and needs of farmers, such as in the context of fulfilling pre-production initial capital, procuring seeds, using tractors to plow rice fields, rice milling equipment, and provision of other agricultural infrastructure. Furthermore, Shafiai, Moi, & Ahmad (2015) recommend cash waqf to finance farmers using the concept of muzara'a and musaqa. The same model is also developed by Moh'd et al. (2017) in financing Clove farmers in Nigeria. In this model, a waqf institution provides waqf land as a means of production using a *muzara'a* scheme to farmers as well as provides logistics (supply chain) and other needs such as seeds, agricultural chemical equipment, storage facilities, machinery and transportation as well as support from relevant experts. More comprehensively, after reviewing the failure of prevailing financing models provided to farmers, which have been generally interest-based, Olaniyi, Thaker, Thaker, & Pitchay (2014) design a Waqf-Muzara'ah-Supply Chain model (WMSCM) scheme to provide solutions in the form of financing of the agricultural sector in Nigeria.

As regard to cash waqf, Ahmad (2018) develops a model using a temporary cash waqf integrated with the *Salam* contract in the context of financing rice farmers in Indonesia. Furthermore, to take advantage of the development of technology and information, Khan et al. (2021) design a waqf-FinTech-based farmer financing scheme to finance short-term and long-term projects of farmers. Meanwhile, Ningrat & Nurzaman (2019) develop a sharia-compliant community-based financing model using a sharia FinTech platform and integrate it with all actors in the agricultural value chain. The same is also proposed by Azganin, Kassim,

& Adam (2021) through a farmer financing model using the waqf crowdfunding model (WCM) in collaboration with waqf institutions for investment in agricultural projects initially proposed by farmers.

Majid (2021) designs a financing model that integrates commercial finance (with *Salam* and *Muzara'a* contracts) and social finance (with cash waqf and waqf land), where farmers who do not own land can farm on waqf land managed by Nazhir. Meanwhile, the surplus cash waqf fund managed by BMT, which also acts as nazhir of cash waqf, is distributed to poor farmers as additional income and a means of risk mitigation in the event of crop failure or delays in the delivery of commodities purchased from farmers using *Salam* contracts.

The financing model for the waqf-based agricultural sector in the previous researches, is based on the well-known *Muzara'ah* and *Musaqa* contract schemes as profit-sharing schemes in agricultural land management. A profit sharing scheme for the management of agricultural land is generally used if the nazhir provides waqf land as agricultural land. On the other hand, if the type of waqf used is cash waqf, the *Salam* contract is the most preferred because it is considered capable of responding to the farmers' need for initial capital as well as being a solution to the purchase of farmers' crops. Meanwhile, some studies above have not yet explained in detail how the role of nazhir/mutawalli in collaborating with off-takers is related to harvest absorption. In addition, what is proposed by Azganin et al. (2021), Khan et al. (2021), Moh'd et al. (2017), Olaniyi et al. (2014), and Shafiai et al., (2015) are still not corroborated by primary data in the form of in-depth interviews based on experts' opinions. Thus, the model from previous studies remains quite simple and has not been equipped with risk mitigation efforts. On this basis, this study fills the gap by proposing a more detailed financing model with its risk mitigation based on a literature review and the experts' views.

### III. METHODOLOGY

#### 3.1. Research Methodology

This paper analyses existing documents ranging from personal archives to online records, including journals, books, and reports, official documents, and print media (McCulloch, 2004, p. ii) with the aims of making them more understandable, describing and discovering phenomena, and generating theories (Ali Azizan et al., 2022). In this research, the authors focus on Indonesia and on the potential of cash waqf for low-cost financing for the agricultural sector by developing an integrative financing model. To strengthen the analysis, the researchers conduct in-depth interviews with experts (Creswell, 2014) consisting of regulators, practitioners, and academics in waqf and agriculture. Besides, the expertise of each respondent also becomes an input for designing the proposed model (Yin, 1989).

#### 3.2. Data Types, Data Collection and Data Analysis

This study uses primary data and secondary data. The primary data in this study come from in-depth interviews with experts/respondents consisting of regulators, academics, and practitioners involved in waqf and agriculture in Indonesia. Cobern & Adams (2020) in their research recommend that the number



of respondents between 15-20 is a number that is quite representative for an in-depth interview. In addition, O. Nyumba, Wilson, Derrick, & Mukherjee (2018) also suggest the number of participants in the in-depth interview/Focus Group Discussion is a minimum of 3 and a maximum of 21 with a median of 10. Based on this, in this study, the authors select 17 experts. Five (R1 to R5) among the 17 experts are appointed as representatives of all experts to validate the proposed model.

**Table 1.**  
**List of Experts**

No	Respondent Initial	Institutions/Expertises
1	AR	Head of Sharia Compliance and Sharia Research in several Islamic Financial Institutions.
2	GSM	General Chairperson of the Indonesian Farmers & Fishermen Association (Intani), practitioner and consultant in waqf empowerment and financing.
3	HT	Head of Nazhir Empowerment & Management Division Indonesian Waqf Board (BWI)
4	ISB	Head of Center for Digital Research and Transformation BWI
5	BM	Chairman of the Productive Waqf Forum
6	NH	The Commissioner of BWI
7	ITS	Vice Chairman I BWI, Sharia Business Practitioner, expert in Islamic banking and finance
8	F	Professor at Economics, Researchers at the Center for Tropical Horticultural Studies of IPB (PKHT IPB), WTO Expert Team for Agriculture
9	AM	Millennial Farmer (CEO of Kebun Berkah)
10	A	CEO of AgroWakaf
11	WNA	Senior Staff/Implementator of Productive Rice Waqf Program (WSP) Global Wakaf
12	PW	Lecturer in Department of Management, expertise in microfinance, BMT, and Islamic social finance.
13	JA	Expertise in Microfinance, BMT, social finance, Financial Technology.
14	RAL	General Manager of Wakaf Al-Azhar
15	MW	Ambassador of Millennial Farmers Ministry of Agriculture (South Sulawesi Province)
16	WS	Head of Sub-directorate of Education, Innovation, and Cooperation of Zakat and Waqf, Directorate of Zakat and Waqf Empowerment, Directorate General of Islamic Community Guidance, Ministry of Religion, Republic of Indonesia
17	MG	CEO of Goolive and Founder of Wakaf Tani Foundation

The authors also use secondary data from reputable International and National journal articles, official documents in the form of roadmaps or strategic plans of the Ministry of Agriculture and the Indonesian Waqf Board, official statistics, books, reports, and other legal rules/regulations issued by relevant stakeholders. All data collected are then analyzed with qualitative content analysis to provide knowledge and understanding of the problem under study (Hsieh & Shannon, 2005). Researchers use data/sources and method triangulation techniques to

strengthen the analysis. Triangulation of data/sources is carried out using several data sources so that weaknesses in other data can be compensated for by the strengths of additional data to increase the validity and reliability of the results (Rugg, 2010, p. 14-15). In this study, the data obtained through documentation will be cross-checked using the results of direct, in-depth interviews with expert respondents and vice versa. Meanwhile, the triangulation is carried out by cross-checking between documentary results in previous journals/studies that need to be reviewed more deeply from the implementation side in the field, compared to data from in-depth interviews involving academics, regulators, and practitioners. Thus, this in-depth interview method can cover the weaknesses of library research methods so that it is hoped that the analysis to answer the problem formulation can be more valid and feasible to be reviewed from an academic and practical side.

### **3.3. Research Steps**

To strengthen the analysis to be more valid and robust, the researchers conduct in-depth interviews with experts who are qualified to answer the problems raised. The results of in-depth interviews and literature reviews are then used to propose a model, which is then validated by representative experts (Yin, 1989).

Furthermore, the validated model is then passed to nazhir of cash waqf (as the leading actor in the proposed model) and then tested to the public who have interest in agricultural financing using waqf instruments. In the next stage, suggestions, input, and or criticism obtained are accommodated to improve the proposed model while continuing to conduct in-depth interviews (regularly) with expert respondents to keep the finalization of the proposed model to be in line with sharia and legal reviews as well as to be a profitable business embedded with farmers' empowerment.

## **IV. RESULTS AND ANALYSIS**

### **4.1. Waqf and The Characteristics of Agricultural Financing**

The proposed model in this study is based on the characteristics of the financing needed by farmers (rice crops), which is adjusted to the characteristics of cash waqf based on the literature, suggestions, and input from expert respondents in the scope of agriculture and waqf at the national level. The following table summarizes the characteristics of agricultural financing that can be accommodated by cash waqf as a means of low-cost financing.



**Table 2.**  
**Proposed Model Components**

Components	Statement of Experts	Supporting Researches
Waqif and source of fund	<i>"Wakif can come from individuals, the private sector, entrepreneurs, corporations, government institutions" (ITS).</i>	(Saiti, Afghan, & Noordin, 2018)
	<i>"The source of waqf funds can come from National Company CSR, corporations related to the agricultural supply chain, banks, local governments, etc" (ITS).</i>	
	<i>"This can be (from) waqf, infaq, or CSR. Not everything has to come from waqf. In the implementation of the program, everything can come from any funds, which is important according to its designation". (RAL).</i>	
The Funding methods	<i>"Offline and online via digital platform" (ITS).</i>	(Saiti et al., 2018; M. A. B. M. T. Thaker, 2018; M. T. M. A. Thaker, Thaker, & Pitchay, 2018)
Object of invesment to gain return	<i>"Several things must be considered in food crop agriculture when investing in cash waqf. If the return is evident, for example, from fertilizer and equipment, it can be calculated" (ISB).</i>	(Ali Azizan et al., 2022; Majid, 2021; Supriatna, 2008, 2009)
Schemes of Akad/Contract	<i>"Contracts to farmers still use tijarah (commercial) contracts, depending on the financing pattern you want to implement. To purchase crops, you can use Murabaha or share working capital with musharaka or mudharaba contracts, harvest purchase contracts (with salam contracts), etc. " (ITS)</i>	(Ahmad, 2018; Azganin et al., 2021; Ali Azizan et al., 2022; Hossain, Muhammad, Jibril, & Kaitibie, 2019; Khan et al., 2021; Majid, 2021; Saiti et al., 2018)
	<i>"Regarding this Salam contract, it's good. Because we are making a close-loop program, the point is to ensure there is an off-taker at the time of planting so that it is harvest time" (F).</i>	
	<i>"It can also be done by buying and selling or renting seeds/fertilizers or SAPRODI. Or, it could be by using a Salam contract, where Nazhir buys the farmers' crops with a Salam (the 2<sup>nd</sup> salam) contract. Previously Nazhir already had an end user who was ready to buy what Nazhir was selling" (AR)</i>	
Financing Channeling	<i>"The existence of the group can help minimize the risk of untrustworthiness, fraud, a way of encouragement when difficulties occur, so it is a forum for exchanging ideas. And here there must also be assistance" (ISB).</i>	(Supriatna, 2008, 2009)
Refund Scheme	<i>"So when it comes to financing, the farmers are most happy with the YARNEN (pay for harvest) scheme. So they get a loan in the form of money (not in kind, production input) and then return it at harvest time" (F).</i>	(Supriatna, 2008, 2009)
	<i>"Because it's called agriculture, usually the system is YARNEN, so you pay at the time of harvest." (PW).</i>	
	<i>"Look, the challenge in agriculture is that they have to wait until the harvest, so if it is three months, they will produce it without getting anything. So the production costs continue, without getting anything. For example, chilies that produce four months of production, so during those four months they will tend to continue to spend their savings funds" (AM).</i>	

**Table 2.**  
**Proposed Model Components (Continued)**

Components	Statement of Experts	Supporting Researches
Vehicle of nazhir	<i>"This Saprodi shop is very worthy of being a business. So open a shop that is a business built from waqf funds. Some of it is for operations and production, so here it is playing again. In my opinion, this is more sustainable" (AM).</i>	(Azganin et al., 2021; Ali Azizan et al., 2022)
	<i>"Then, the advantage is relatively easy for them to take seeds or fertilizer at the farmer's shop, because the farmer shop knows, without the farmer's shop doing an assessment directly in the field, they already know that the transactions of these people (farmers) are like what? he owns the land, then he can ask people around him, so access to information is easy. So, for seeds and other matters, in some areas, it is quite easy because of access to farmer's shops" (MW).</i>	
Assistance to Farmers community	<i>"In the context of agriculture, assistance can be provided (for example) by Amil Zakat Institutions (for example, LAZ Al-Azhar), which also assists farmer-assisted groups. The more parties involved here, the more farmers feel supervised and responsible for using waqf funds" (AR).</i>	(Ali Azizan et al., 2022; Supriatna, 2008, 2009)
Scoup of financing in Value Chain	<i>"Margin for food crop agriculture (rice), the margin is relatively limited. Except, when these farmers can produce added value from their products" (ISB).</i>	(Ali Azizan et al., 2022; Miller & Jones, 2010)
	<i>"But, if you use cash waqf, then the financing is, I suggest if possible, the farmer should not stop at the harvest in the form of grain. However, the investment must go to the packaging" (ISB).</i>	
Value added of product	<i>"Perhaps you have heard of how (sorry I said) when Dompot Dhuafa developed "Sai" rice. This is very high-quality rice. These institutions have ties to the campus, which have competence in this field. Learn from here. What does it mean? It is possible to develop. Here, you can collaborate with IPB Univ. It was using a cooperation scheme (musharaka)" (NH).</i>	(Ali Azizan et al., 2022; Miller & Jones, 2010)
	<i>"So, if the waqf can be financed up to the market level, marketing, and packaging level, the margin can be shared more comfortably between farmers and nazhir. Why?. Due to the domestic rice production capacity, today's demand is still greater; What does it mean? The market will absorb any lousy rice. From production to marketing, entry to there, ensuring that the product is delivered to the market" (ISB).</i>	
	<i>"In the meantime, it is left to the market mechanism. The advantage here is that it uses a Salam contract, so it's more fixed in terms of price fluctuations. Then from the distribution side, we pack it up then deposit it in the warehouse. There is added value here" (RAL).</i>	

Table 2.  
Proposed Model Components (Continued)

Components	Statement of Experts	Supporting Researches
Harvest absorption	<i>"In my opinion, farmers need a financing model; we can be sure that the price (selling) is good—for example, KUR BRI. Here, firstly, BRI cannot ensure that the goods will be taken; secondly, the price taken is a good price. This is why farmers want to owe money to middlemen, because the goods have been taken whatever the price. Middlemen will always follow market prices. Why do so many go to middlemen? Because the middleman has already solved the first problem, the goods must be taken, regardless of the amount. That has solved the first problem" (AM).</i>	
	<i>"Finally, on the market side, how to ensure that waqf institutions can absorb farmers' crops. That way, farmers will be more attached emotionally. Why are they tied to middlemen? Because the middleman ensures that the farmers will take the results. If we have an institution that ensures the harvest will be taken, that would be even better. These institutions are still lacking in us" (AM).</i>	(Ali Azizan et al., 2022; Miller & Jones, 2010)
	<i>The second problem is that the middleman cannot be sure. They only follow the market benchmark price, whether there is a standard. However, in the first case, farmers will benefit because regardless of the yield, the quality will be whatever; good or bad, the middleman must take it, the difference will be in the price" (AM).</i>	
Use of Insurance	<i>"How to mitigate the risk so that the waqf principal remains? The second way out is with insurance, or other guarantee schemes" (ITS).</i>	(AAOIFI, 2017; Azganin et al., 2021;
	<i>Well, one of the risk mitigations is insurance" (F).</i>	Badan Wakaf Indonesia, 2020)

Source: Processed by researchers based on the results of literature reviews and in-depth interviews with expert respondents (regulators, academics, and practitioners)

4.2. Institutional Engineering and Risk Control

An institutional engineering mechanism is needed to harmonize and regulate each component, which is the criteria for waqf-based agricultural financing suggested by expert respondents in an alternative proposed model. This institutional engineering is intended to determine the parties involved, their roles, and their interactions in the proposed financing scheme under the components that constitute the financing criteria. This is because, in managing cash waqf (productive), especially in the agricultural sector, Nazhir cannot stand alone but needs to collaborate, involving relevant stakeholders to achieve the sustainability of the intended financing and empowerment program.

*Nazhir left it to the experts. Indeed (generally), there are three parties. This condition is identical to the concept of the Zam-zam tower. Nazhir handed over to contractors, then contractors to tenants. So, the communication will be there later" (NH).*

*"If the risk is high and cannot be transferred, eg by making institutional engineering first by forming a farmer group so that they can be jointly and severally borne, or there is an offtaker of the harvest so that there is certainty, or there is a guarantee institution scheme" (ITS).*

In more detail, this institutional engineering also facilitates the proposed model from the technical side of financing distribution to farmers whose aim is to

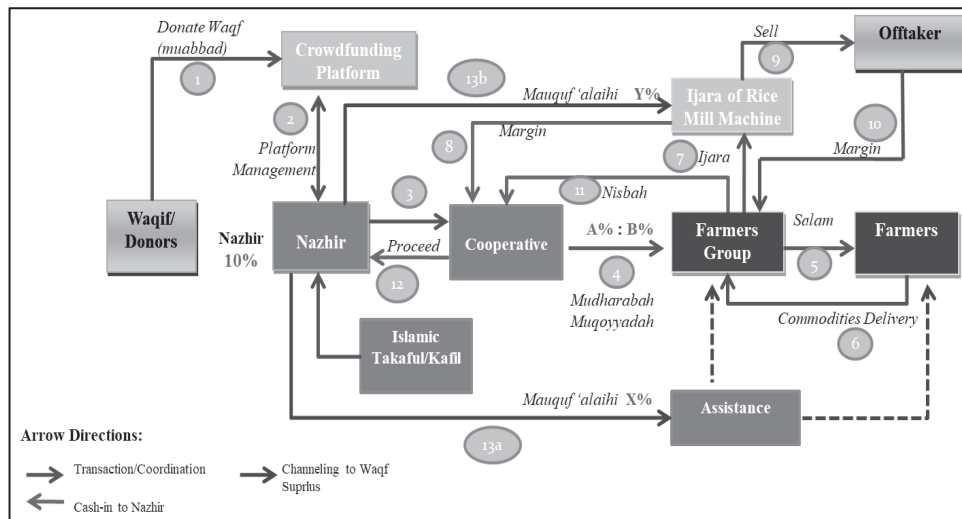
minimize the risk of moral hazard to maintain the integrity of the principal cash waqf managed by Nazhir.

*“The existence of the farmer group can help minimize the risk of untrustworthiness, fraud, a way of encouragement when difficulties occur, so it is a forum for exchanging ideas. And here there must also be assistance” (ISB).*

*“Farmers are not financed individually, but in groups. The relationship with farmers who are financed in groups can get financing not only for planting capital (initial) but also in the process of milling the harvest. So if, for example, the farmer sells it to the market, the model cannot be individual. It must be institutional). That’s why now there is a farmer’s cooperative/GAPOKTAN/Farmers’ corporation, that’s why it’s through there, not through individuals” (F).*

#### 4.3. The Proposed Model: Mudharaba-Salam and Ijara (MSI) Model

Based on the literature review as well as input from expert in in-depth interviews, we conduct an analysis to design an alternative model of waqf-based agricultural financing that accommodates the characteristics of agricultural financing. The following is a proposed model adapted from the financing model of Ali Azizan et al. (2022), Hossain et al. (2019), Majid (2021a), also the model implemented by al-Azhar waqf which has been adjusted by the opinion of several experts in the in-depth interview.



Source: Integration of Literature Review, Expert Judgements and Author Analysis

**Figure 1.**  
**The Proposed Model**

#### Descriptions:

- 1) Wakif (individual, institution, or government) donate their cash waqf to nazhir through a crowdfunding platform.
- 2) Funds collected are then forwarded to Nazhir. Nazhir, in this case, is the one who can manage cash waqf funds professionally in the agricultural sector.

- 3) Nazhir conducts self-management (as an entrepreneur) by forming a business wing in the form of a shop or cooperative that sells agricultural facilities and infrastructure (Saprodi Cooperative). This shop/cooperative has three business units:

- (1) Providing capital with a sharia-compliant scheme;
- (2) Conducting buying and selling or leasing of agricultural inputs;
- (3) Conducting leasing of milling machines to groups of farmers/farmers.

The Agricultural Saprodi shop/cooperative will act as a specialist vehicle that generates profit to maintain the integrity of the waqf principal and distribute the benefits/surplus of waqf to the mauquf' alaihi. In addition, this specialist vehicle will form a network of farmers' supply chains by building good relationships to find the right party to act as an off-taker for farmers' harvests. Under certain conditions, this specialist vehicle can act as a standby buyer, ready to absorb farmers' crops and then sell them to the market. Dompot Dhuafa does this in its farmer empowerment scheme, where Social Asset Management (SAM) is formed to play the same role.

*"In certain contexts, SAM is a standby buyer/off-taker with a record that SAM can enter the marketing network so that we can apply for this position confidently and absorb farmers' rice prices better than middlemen. So here, the production process is assisted, we also buy the products" (BM).*

The existing models proposed by Hossain et al. (2019; Majid (2021b) and Shafiai et al. (2015) do not explain the nazhir mechanism in managing cash waqf received. As for the proposed model, the authors develop the need for a specialist vehicle that will act on behalf of Nazhir to finance, monitor, and assist farming businesses.

- 4) Agricultural Saprodi Shops/Cooperatives cooperate with farmer groups to absorb farmers' crops (grain) by using the mudharaba muqoyyada scheme, namely cooperation with business objects that have been determined by the owner of the funds (shahibul maal). In this case, the agricultural production shop/cooperative acts as the shahibul maal, and the farmer group acts as the fund manager (mudharib).
- 5) Farmer groups buy farmers' crops using the Salam contract, namely purchases with 100% cash payments in advance for certain goods with detailed and precise specifications (no gharar/uncertainty). At the same time, according to the agreement, Salam objects (the agricultural commodities ordered) will be delivered in the future. Here, it is agreed that the goods will be delivered during the harvest season. By using the Salam scheme, farmers will get certainty on the absorption of their harvest (grain) as well as get an upfront payment which can be used not only for pre-production needs (Usmani, 2012) but also for meeting family needs until harvest time (Majid, 2021).

*"Regarding this Salam contract, it's good. Because they are making a close-loop program, the point is to ensure there is an off-taker at the time of planting so that it is harvest time. He is no longer confused about where to sell his commodities (he doesn't have a market). If, for example, the Salam contract can be made, of course, this is very good" (F).*

The consequence of using the Salam contract is, namely, the nazhir must be able to find parties ready to buy farmers' crops. In this case, Nazhir has

positioned the farmer group as a stand-by buyer, which has previously been tied up with a mudharaba muqoyyada contract (point 4), so that there is a win-win solution that benefits all parties. Meanwhile, the farmer groups, in coordination with nazhir can also prepare second-off-takers or potential buyers such as supermarkets or markets (Majid, 2021).

*“An important point that must be considered if Nazhir uses a salam (or parallel salam) scheme is that it is necessary to prepare the end-user (buyer) who is ready to buy farmers’ produce. In this case, we can collaborate with FinTech or village officials” (AR).*

- 6) During the harvest season, the farmer submits/sends the Salam object (which is ordered) according to the specifications requested (at the beginning of the contract) to the farmer group.
- 7) To process farmers’ crops which are still in the form of grain, into rice to get value-added products, the Agricultural Saprodi Shop/Cooperative provides milling machine rental services at competitive prices to farmers through farmer groups.
- 8) Margin on milling machine rental is forwarded to the Agricultural Saprodi Shop/Cooperative.
- 9) Farmers’ groups sell unhulled rice to standby buyers/off-takers who are partners from Nazhir’s link/network in the form of Islamic boarding schools, SME traders, or supermarkets in the agricultural sector.
- 10) Standby buyers/off-takers pay a margin on the rice they buy from farmer groups.
- 11) The sales proceeds received are then deducted by all operating expenses, and net profit is obtained. This net profit is divided into X% for agricultural production cooperatives, while farmer groups get Y%, based on the previous agreement.
- 12) The total margin from the results of (1) milling machine rental and (2) profit sharing on business management by farmer groups is then forwarded by the agricultural production shop/cooperative to Nazhir. In this case, all profits are passed on to Nazhir because the agricultural production shop/cooperative only acts as a vehicle or business operator.
- 13) Margin, a net profit is the benefit/surplus of waqf proceeds that must be distributed to the mauquf ‘alaihi (beneficiary). In this case, Nazhir is entitled to a maximum of 10% of the surplus waqf by the mandate of Law no. 41 of 2004 concerning waqf. The remaining Z% of the surplus cash waqf managed is forwarded by Nazhir through mentoring/cultivation to farmer groups, including scholarships to farmers’ children (13a).

In addition, Y% of the surplus cash waqf managed to be distributed to poor farmers who do not have access to use (rent) milling machines. Poor farmers will be given a grant, and the money can be used to rent a milling machine provided by the Agricultural Saprodi Shop/Cooperative (13b). Apart from that, Nazhir will set aside a maximum of 50% of the surplus waqf to be reinvested in the form of financing distribution following the core business run by this agricultural production shop/cooperative.



### 4.3. The Risk Mitigation for Proposed Model

Risk Mitigation can be done via the followings.

#### 1) Feasibility Study

The basic step that needs to be taken as an effort to mitigate risk before the distribution of financing is to conduct an initial screening in the form of a feasibility study, in terms of business performance and from the sharia side, namely the readiness of farmers to use product operations and transactions that are not violating sharia provisions.

*“Nazhir must create a program that substantially becomes a source of economic capital, a work program that provides direct benefits, Nazhir has a project that is attractive to collaborate with individual partners, corporations, institutions, for example, Islamic banking, companies, whether it’s a business partnership or CSR, to generate income, business generators, creating revenue streams, so that there are many benefits for the mauquf’ alaihi. Nazhir must also have business projections, business projections, to provide a clear picture, so that it is feasible to finance” (WS).*

Next, Nazhir needs to appoint internal and external sharia committees (supervisory boards) who are responsible for business feasibility, checks and reviews of fundraising procedures and sources of cash waqf funds received, determining what model and contracts are appropriate to use, ensuring transactions in accordance with sharia guidelines, as well as conducting supervision and evaluation from the financial side, and all transactions that will be carried out to be in line with sharia principles (Azganin et al., 2021).

*“How to mitigate the risk so that the waqf principal remains? 1st way out ensuring that the object being financed is feasible, starting from economies of scale, production efficiency, marketing guarantees, etc.” (ITS).*

#### 2) Use of Islamic Insurance/Kafil (Guarantor)

Another risk mitigation effort that can be done is using sharia insurance/guarantee. In this case, Nazhir must prioritize the protection of the cash waqf principal as the primary goal by collaborating with related parties to ensure the integrity of the cash waqf principal used in financing (Azganin et al., 2021). This is in line with what is required in BWI regulation no. 1 of 2020 concerning Guidelines for the Management and Development of Waqf Assets, suggested by AAOIFI and supported by all respondents.

*“How to mitigate the risk so that the waqf principal remains? The 2nd way out is with insurance, or other guarantee schemes” (ITS).*

*“Yes, the easiest thing is insurance, right?” (RAL)*

*“Well, one of the risk mitigation is insurance” (F)*

*“5/2/11 Using solidarity insurance to safeguard the Waqf assets, whenever possible” (AAOIFI, 2017).*

#### 3) Gradual Reserve Fund

Risk mitigation efforts through reserve funds can be carried out by two actors in the financing scheme: nazhir and farmers. In this case, Nazhir, each with PBWI No. 1 year 2020, can reserve funds from cash waqf surplus a maximum of 40%. This is done as an emergency fund in case of force majeure or price fluctuations when using Salam contract (Majid, 2021).

This has been practiced by the Central Bank of Bahrain, which has issued a regulation in the form of a reserve fund of 15% of the net price position of each commodity plus 3% of the estimated gross price (Wahyudi, Rosmanita, Prasetyo, & Putri, 2015).

*"Nazhir is obliged to form a reserve with a certain amount that is accumulated (saved) gradually, from the surplus obtained so that the minimum recovery rate can be guaranteed again, in addition to external guarantee schemes such as via insurance" (ITS).*

Meanwhile, concerning farmers, the provision of funds can be made from the profits obtained from the previous harvest or a specific percentage allowance for the Salam price (commodity payment) received at the beginning.

*"Farmers have reserve funds. Usually, if they collect 100, they will save 20-30 for emergency funds, while 70 are managed" (AM).*

#### 4) Restructuring of Financing and Use of Zakat, Infaq, and Alms Funds

In the event of crop failure and or a decrease in selling prices, causing farmers to find it difficult to make installment payments on delayed purchases and or leases on agricultural equipment, they can get access to deferral of payments (restructuring/rescheduling) without any additional nominal debt. Of course, per institutional engineering, there will be ongoing assistance for farmers in this effort to repay the installments.

*"If the farmer is late in paying, then they are given convenience in payment in the form of restructuring (delay)" (AR).*

*"(The obligation for) financing (received by farmers) still has to be returned, but the time is extended, either one year or two years. Or, if the next harvest is successful, it can be returned. But, if you are still experiencing the same thing, that's okay. We will reconstruct the funds; basically, the funds will be returned without any interest" (WNA).*

However, if the farmers have not been able to repay their obligations, the last option that can be sought is to cooperate with the Zakat, infaq, and alms (ZIS) institutions so that the farmers' obligations can be covered with these sources of funds. Then, in the case of using the Salam contract, the delay in delivery can also be treated as a time delay. Meanwhile, a crop failure can be circumvented by confirming the exchange with other commodities as approved and needed by Nazhir. Lastly, if there is no other option, the farmers can return the Salam price that has been paid (AAOIFI, 2017; Majid, 2021).

*5/8 In case all or part of al-Muslam Fihi is not available to the on the due date, the buyer shall have the following options:*

*5/8/1 To wait until al-Muslam Fihi is available.*

*5/8/2 To cancel the contract and recover the paid capital. It is also permissible for the parties to agree to replacement of al-Muslam Fihi by other goods. (AAOIFI, 2017).*

## V. CONCLUSION AND RECOMMENDATION

### 5.1. Conclusion

The contracts used in the proposed model combine various commercial contracts, namely *mudharaba*, *salam* and *ijara* in one scheme using cash waqf fund. In terms of implementing a model that accommodates the characteristics of agricultural financing needed by farmers, an institutional engineering mechanism is required by establishing a vehicle represented by nazhir, off-takers/standby buyers, and farmer groups who act as risk control efforts. To maintain the integrity of the principal of cash waqf, risk mitigation that can be carried out is by conducting a comprehensive feasibility study, using Islamic insurance/guarantor, gradual provisioning of reserve funds, and implementing interest-free financing restructuring involving the use of zakat, infaq, and alms funds. It is hoped that the design of the proposed model will help the Government (Ministry of Agriculture) to encourage and increase inclusive agricultural financing (rice crops), enhance farmers' welfare, and contribute to food security. In addition, this proposed model is expected to encourage and spur innovation and deepen Islamic financial products that integrate commercial and social aspects by waqf institutions and other Islamic financial institutions at the micro level for the agricultural sector in particular and other real sectors.

### 5.2. Implication and Policy Recommendations

#### 1) Government

The Ministry of Agriculture can collaborate with National Planning and Development Agency (BAPPENAS) for national development by initiating cash waqf fund as an alternative to agricultural financing (especially rice crops). In addition, the government can also be the initiator to synergize with relevant stakeholders to generate an Islamic agricultural insurance scheme that covers crop failure.

#### 2) Ministry of Religious Affairs (MRA) and Indonesian Waqf Board (BWI)

As the regulator, the MRA can synergize with BWI in issuing regulations regarding cash waqf financing in the agricultural sector. In particular, BWI is expected to continue encouraging innovation and empowering productive waqf, especially in the agricultural sector, as a vital sector. In addition, nazhir training and mentoring efforts, especially those that play a role in financing and agricultural empowerment can also be initiated specifically through collaboration with the Productive Waqf Forum, micro entrepreneurs and related associations in the agricultural sector, *Baitul Maal wat Tamwil* (BMT), and related stakeholders.

#### 3) Nazhir

Nazhir can design a 'collaborative project' to finance micro and small farmers who are vulnerable and have limited access to sharia-compliant financing by adopting this proposed model. With it, nazhir's capacity building in managing cash waqf in the real sector also needs attention. Nazhir, who has overgrown and has business units in one business ecosystem, can be an example for a new nazhir who is still developing. It is because the model implementation is expected to start from upstream to downstream.

- 4) Farmer's Group and Associations  
Farmers' associations must collaborate with waqf institutions (mainly) and ZIS to jointly design inclusive empowerment farmework for small and poor farmers. In addition, farmer associations in existing agricultural institutions must also arrange for an appropriate party to act as an off-taker/standby buyer.
- 5) Islamic Micro Finance Institutions (IMFI)  
BMTs in Indonesia, which also act as nazhir of cash waqf, with suitable coverage and characteristics for micro and small business financing, can adopt this model to be applied as an inclusive financing product that integrates Islamic commercial and social financial products.

### 5.3. Research Limitations

Future research can integrate efforts to finance and empower agriculture by using cash and asset waqf (land/paddy fields) in one model. In addition, to test the proposed model so that it is much more applicable in the area, further research is needed especially on the technical implementation of the model by undertaking a simulation of the designed financing scheme as well as a comparison of financing between the proposed model and existing agricultural financing schemes. Based on this further research, it is highly recommended to directly involve expert respondents who come from representatives of the Ministry of Agriculture in the financing and or procurement of agricultural facilities and infrastructure.

### REFERENCES

- AAOIFI. (2017). *Shari'ah Standards (Full Text of Sharia'ah Standards for Islamic Financial Institutions As at Safar 1439 A.H - November 2017 A.D)*. Manama: The Accounting and Auditing Organization for Islamic Financial.
- Ahmad, M. (2018). A proposed integrated temporary cash waqf and salam for agri-financing for rice farmers in Indonesia. *International Journal of Islamic Economics and Finance Research*, 1(2), 31–43.
- Ali Azizan, N., Muhamat, A. A., Syed Alwi, S. F., Ali, H., & Abdullah, A. Q. C. (2022). Revitalising waqf (endowment) lands for agribusiness: Potentials of the anchor company models. *Journal of Agribusiness in Developing and Emerging Economies*, 12(3), 345–370.
- Ammani, A. A. (2012). An investigation into the relationship between agricultural production and formal credit supply in Nigeria. *International Journal of Agriculture and Forestry*, 2(1), 46–52.
- Appiah-Twumasi, M., Donkoh, S. A., & Ansah, I. G. K. (2020). Farmer innovations in financing smallholder maize production in Northern Ghana. *Agriculture Finance Review*, 80(3), 421–436.
- Ashari, A., & Saptana, S. (2016). Prospek pembiayaan syariah untuk sektor pertanian [Prospects for Sharia-compliant agricultural funding]. *Forum Penelitian Agro Ekonomi*, 23(2), 132–147.
- Azganin, H., Kassim, S., & Adam, A. (2021). Proposed waqf crowdfunding models for small farmers and the required parameters for their application. *Islamic Economic Studies*, 29(1), 2–17.

- Badan Pusat Statistik. (2020). *Analisis Produktivitas Padi di Indonesia 2020 (Hasil Survei Ubinan)* [Rice Productivity in Indonesia in 2020] (Vol. 2020; P. Direktorat Statistik Tanaman Pangan, Hortikultura, dan, ed.). Jakarta: Badan Pusat Statistik.
- Badan Wakaf Indonesia. (2020). *Peraturan Badan Wakaf Indonesia No. 1 Tahun 2020 tentang Pedoman Pengelolaan dan Pengembangan Harta Benda Wakaf* [Indonesian Waqf Board Regulation No. 1 of 2020 on Guidelines for Waqf Asset Management and Development]. Jakarta.
- Bantacut, T. (2014). Agenda pembangunan pertanian dan ketahanan pangan 2014-2019. *Pangan*, 23(3), 278–295.
- Cobern, W. W., & Adams, B. A. (2020). When interviewing: How many is enough? *International Journal of Assessment Tools in Education*, 7(1), 73–79.
- Creswell, J. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed). New York, NY: SAGE Publications.
- Hamza, S. (2017). Al haikalah al maliyyah lilwaqfi al naqdi [The financial structure of cash Waqf]. *Journal of University King Abdul Aziz*, 30(3), 123–141.
- Hossain, I., Muhammad, A. D., Jibril, B. T., & Kaitibie, S. (2019). Support for smallholder farmers through Islamic instruments: The case of Bangladesh and lessons for Nigeria. *International Journal of Islamic and Middle Eastern Finance and Management*, 12(2), 154–168.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288.
- Kementerian Pertanian. (2015). *Rencana Strategis Kementerian Pertanian Tahun 2015-2019* [Strategic Plan for Agriculture 2015-2019]. Jakarta: Kementerian Pertanian Republik Indonesia.
- Kementerian Pertanian. (2020). *Rencana Strategis Kementerian Pertanian 2020-2024* [Strategic Plan for Agriculture 2020-2024]. Jakarta: Kementerian Pertanian Republik Indonesia.
- Khan, B. M., Ghafoorzai, A. S., Patel, I., & Shehbaz, M. D. (2021). Waqf based Islamic fintech model for agriculture sector of Indonesia. *International Journal of Business Ethics and Governance*, 4(1), 73–85.
- Komisi Fatwa MUI. (2002). Wakaf uang [Cash waqf]. In *Himpunan Fatwa Majelis Ulama Indonesia* (pp. 404–411). Jakarta: Majelis Ulama Indonesia.
- Mafaza, S. A., Umam, K., Arief, S., & Lahuri, S. (2020). Financing models based on cash waqf through investment. *TIFBR Tazkia Islamic Finance and Business Review*, 14(2), 164–180.
- Majid, R. (2021). Designing salam-muzara'ah linked waqf to financing agricultural sector. *Journal of Islamic Monetary Economics and Finance*, 7(3), 503–526.
- McCulloch. (2004). *Documentary research in education, history and the social sciences*. London: Taylor & Francis Group.
- Miller, C., & Jones, L. (2010). *Agricultural value chain finance: Tools and lessons*. Warwickshire, CV23 9QZ, UK: Food and Agriculture Organization of the United Nations and Practical Action Publishing.
- Moh'd, I. S., Omar Mohammed, M., & Saiti, B. (2017). The problems facing agricultural sector in Zanzibar and the prospects of Waqf-Muzar'ah-supply chain model: The case of clove industry. *Humanomics*, 33(2), 189–210.



- Ningrat, G., & Nurzaman, M. S. (2019). Developing fintech and Islamic finance products in agricultural value chain. *Journal of Islamic Monetary Economics and Finance*, 5(3), 491–516.
- O.Nyumba, T., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, 9(1), 20–32.
- Obaidullah, M. (2015). Enhancing food security with Islamic microfinance: Insights from some recent experiments. *Agricultural Finance Review*, 75(2), 142–168.
- Olaniyi, O. N., Thaker, M. A. B. M. T., Thaker, H. M. T., & Pitchay, A. A. (2014). The financing problems facing the agricultural sector in Nigeria and the prospect of waqf-muzara'ah-supply chain model (WMSCM). *Global Review of Islamic Economics and Business*, 2(1), 1–14.
- Ridlwani, A. A. (2016). Implementation akad muzara'ah in Islamic bank: Alternative to access capital agricultural sector. *Iqtishoduna*, 7(1), 34–48.
- Rozalinda. (2015). *Manajemen wakaf produktif* (1st ed.). Jakarta: PT RajaGrafindo Persada.
- Rugg, D. (2010). *An introduction to triangulation*. Geneva: UNAIDS Monitoring and Evaluation Fundamentals.
- Saiti, B., Afghan, M., & Noordin, N. H. (2018). Financing agricultural activities in Afghanistan: A proposed salam-based crowdfunding structure. *ISRA International Journal of Islamic Finance*, 10(1), 52–61.
- Shafiai, M. H. M., Moi, M. R., & Ahmad, R. (2015). The potential of waqf in activating idle agricultural land. *Jurnal Pengurusan*, 44(2015), 141–147.
- Shaikh, S. A., Ismail, A. G., & Mohd Shafiai, M. H. (2017). Application of waqf for social and development finance. *ISRA International Journal of Islamic Finance*, 9(1), 5–14.
- Supriatna, A. (2008). Aksesibilitas petani kecil pada sumber kredit pertanian di tingkat desa: Studi kasus petani padi di Nusa Tenggara Barat. *Jurnal Sosio Ekonomi Pertanian dan Agribisnis*, 8(2), 134–139.
- Supriatna, A. (2009). Pola pelayanan pembiayaan sistem kredit mikro usaha tani di tingkat pedesaan. *Jurnal Litbang Pertanian*, 28(10), 111–118.
- Thaker, M. A. B. M. T. (2018). Factors influencing the adoption of the crowdfunding-waqf model (CWM) in the waqf land development. *Journal of Islamic Marketing*, 9(3), 578–597.
- Thaker, M. T. M. A., Thaker, M. T. H., & Pitchay, A. A. (2018). Modeling crowdfunders' behavioral intention to adopt the crowdfunding-waqf model (CWM) in Malaysia: The theory of the technology acceptance model. *International Journal of Islamic and Middle Eastern Finance and Management*, 11(2), 231–249.
- Usmani, M. M. T. (2012). *An introduction to Islamic finance*. Netherlands: Kluwer Law International.
- Wahyudi, I., Rosmanita, F., Prasetyo, M. B., & Putri, N. I. (2015). *Risk management for islamic banks: Recent developments from asia and the Middle East*. Singapore: John Wiley & Sons Singapore Pte. Ltd.
- Yin, R. K. (1989). *Case study research: Design and methods*. London: SAGE Publications Ltd.



Zauro, N. A., Saad, R. A. J., Ahmi, A., & Mohd Hussin, M. Y. (2020). Integration of Waqf towards enhancing financial inclusion and socio-economic justice in Nigeria. *International Journal of Ethics and Systems*, 36(4), 491–505.

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