

## Waqf based Islamic Fintech Model for Agriculture Sector of Indonesia

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**Abstract:** This study addresses major challenges and financial problems faced by Indonesian farmers. Inadequate level of working capital and inability to access funding sources constitute major constraints to the agricultural sector. It proposes a new financing solution: the waqf based Islamic fintech model to fund farmers' long-term and short-term projects. The study is based on a qualitative approach. The study concludes to important recommendations. The adoption of an integrated Waqf based Islamic fintech model, which provides halal financing alleviates Indonesian farmers' problems in rural areas.

**Keywords:** Fintech; Waqf; Mudharabah; Murabahah; Salam; Agriculture; Indonesia.

**Type:** Research paper



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## 1. Introduction

When there is limited farming due to certain difficulties and non-adequate facilities available to the farmers, they leave farming and move to the urban areas for other work. Since the demand for food will remain the same or increase with time, the government then has to import most of the essential food items from other countries at higher prices which affects the trade balance of the country negatively and hence hinder its economic growth. Many times governments have to provide subsidies on imported essential food items, such as grains, rice, and wheat because they are the basic and essential food items required by people of a country. This increases the expenses of a government leading a country's economy into a fiscal deficit.

### 1.1 Farming Scene of Indonesia

Indonesia is indeed the largest archipelago in the world. The nation's total land area is around 190 million hectares (ha), of which some 55 million ha is agricultural, and 129

million ha is forest. Of the agricultural land, 24 million ha consist of arable land, with 20 million ha under permanent crops. Some 7 million ha, or 30% of the total arable land, are irrigated. Indonesia is the world's fourth most populous country. The population is estimated to increase up to 288 million in 2050 from about 245 million in 2013. Around 58% of people live on the island of Java (Quincieu, 2015; Mohammed, et. al., 2020).

In Indonesia according to the latest statistics, around 32% of the population is employed in the Agriculture sector. Agriculture contributes 13.6% to the total GDP of Indonesia. (Sanrego & Rusydiana, 2009) have explained the important roles of the agricultural sector to Indonesia's economic development: (1) The agricultural sector provides the Indonesian population with food and nutrient sources (2) At the beginning of 2017, the labor percentage in the sector was 31.86%. (3) At the end of 2016, agriculture contributes about 13% to the GDP, and (4) Industrial raw materials and export goods are agricultural productions. Agricultural production may also be a source of foreign exchange. However, most of the poor people in the country work in the agricultural sector. Although the farming sector is a major contributor to the national economy, unfortunately, many farmers still live below the poverty line.(Utama, Suwarsi, & Listiono, 2019; Alsuwaigh et al., 2020; Al Azemi, et. al., 2020).

Regarding the banking industry in Indonesia, it is still dominated by corporate financing and consumer financing. The bank finance policy also does not support the agricultural sector, which is one of the main pillars of the Indonesian economy (Utama et al., 2019). At the end of 2016, the total agricultural credit provided to farmers' amounts to just 14.85% of the total bank loans. Despite the lack of capital, farming and agriculture are still reluctant to involve banks in meeting financing needs. Farmers prefer informal financing, such as landlords and families, rather than financing their agricultural plans through banks. Such funding alternatives are driven by farmers' way to eliminate the complicated bureaucracies of banks and their high-interest rates. (Meutia, Adam, & Vegirawati, 2017). One of the reasons why banks have not provided intensive financing to agricultural entrepreneurs is an agricultural risk. The bad weather causes crop prices to fluctuate, so farmers often pay late or even refuse to pay the bank's instalment against debt. The 3.32 non-performing loan from the agricultural industry is higher than the 3.18 NPL of the banking sector. (Meutia et al., 2017; Alazemi and Al Omari, 2020).

According to (Young-kon, n.d.), The natural resources, the vast and fertile lands are not sufficient to make farmers successful. They still need seeds, fertilizers, pesticides, and agricultural machinery as inputs for growing agricultural produce. However, Farmers do not have strong capital until the harvest time comes, to fund all the farming project activities. The yield of last year's harvest is one of the key sources of farmer's capital. Farmers usually have to sell their crops as soon as possible to earn cash, so crops are most often sold at a low price. Moreover, farmers do not earn sufficient money to support their households or to increase their agricultural production. (A. Ahmed, H. M. Faki, & Hussein, 2012).

## **1.2 Waqf**

Waqf is an Arabic origin word the meaning of which is to stop or suspend or hold. In Islamic law, it means creating Waqf of a specific property in the way of Allah (SWT) for good objectives (Saad et.al., 2017). Importantly, Islam strongly recommends socio-economic well-being and welfare-friendly practices such as sadaqah and Zakah. Waqf is another such Islamic model that the main objective is to eliminate the deprivation from

society, by establishing education centers, healthcare, etc. while enhancing access to tangible resources, amenities, and employment (Ali, 2019)

Though Waqf is not mentioned in the Quran explicitly, there are meanings in its favor and can be utilized in several ways. Allah says: "Righteousness is not that you turn your faces towards the east or the west, but righteous is the one who believes in Allah, the Last Day, the angels, the Book, and the prophets and donates wealth, despite the love for it, to relatives, orphans, the needy, the traveler, those who ask, and for freeing slaves; establishes prayer and gives Zakat ..." (Al-Quran, 02:177).

### **1.3 Problem Statements**

#### **1.3.1 Farmers have insufficient funds**

Independent small-scale farmers manage about 30% of the farmland in Indonesia which is a significant number. These farmers are linked to economic challenges, such as low productivity and crop quality, as well as environmental and social challenges, such as deforestation, fires and haze, and social conflict. One of the main reasons for these challenges is due to lack of funds. (Peter Warr, 2018)

#### **1.3.2 Problem of working capital due to limited access to banks**

Indonesian farmers are largely excluded from formal financial services which are evident, as only 5% of lending goes to a sector that contributes 13.6% to the GDP, and most of this goes to larger commercial plantations. Wherever bank credit is available, it generally requires collateral and this is a common problem faced by almost 90% of Indonesian smallholders who do not have formal title to their land. Limited access to resources and credit is a key hindrance for smallholders in Indonesia to improve their productivity and net income. Further complicating rural credit is the small farm size (around one hectare on average), and the lack of strong farmer groups that can help channel fertilizers, credit, and market produce. (Peter Warr, 2018).

#### **1.3.3. Current agricultural fundings are not shariah compliant**

Many of the financial institutions' set up to provide funding for agriculture like TaniFund are based on the Conventional method which involves interest. There are very limited institutions that provide funds to farmers that are also Shari'ah compliant. (Authors 2020).

#### **1.3.4 Mismanagement of Waqf funds**

Hasanah (2003) points out that the non-utilization of waqf assets is due to the lack of skill of the Mutawalli. Prihatna (2005) agrees that the failure of waqf in solving many problems in Indonesia is not because of the reduction in, or lack of, waqf assets; but rather due to the improper management and unskilled Mutawalli. (Musta'in, 2017).

## **2. Literature Review**

### **2.1 The Target Market**

For Indonesia, agriculture and fisheries are important markets, whereas the people who work these jobs are among the poorest in the country. According to Dondi Hananto, a partner of Patamar Capital, a venture capital company focused on companies with a social impact, but many well-intentioned steps to boost living standards remain unchanged. He furthermore said "These businesses are not easily digitally converted. High physical activity and high maintenance costs are required for agriculture and fisheries."

Agriculture, which absorbs work and drives other sectors within the national economy, is of key importance to the economy of Indonesia. According to 2018 data collected by the Central Statistical Bureau, Indonesia has more than 33 million farmers, not counting

people whose jobs are linked indirectly to agriculture. Many of them are in the low-income or well on the poverty line.

Compared to developed countries Indonesian agriculture has unique challenges. There's a long chain of intermediaries between farmers and consumers, which tends to boost the price of consumers and reduce farmers' income. Farmers, particularly those who live in rural areas, have little access to knowledge and industrial methods for successful and efficient farming, making it difficult for them to increase productivity. These well-known concerns have inspired "agrotech" startups to arise. Some have had modest successes, contrary to odds. (Mulia, 2019)

## **2.2 The Target Customers**

### **2.2.1 Farmers**

The majority of farmers in Indonesia face an uphill battle to access credit, leaving them unable to modernize, boost yields, diversify into new crops, or stay afloat when hit by extreme weather fuelled by climate change.

The Waqf fund will be used to provide credit to farmers which will help them to grow and produce a better yield.

### **2.2.2 Consumer Market**

Indonesia's household consumption ranks ahead of its regional neighbours, with its total household expenditure amounting to US\$0.6 trillion as of 2018E. This attributes to an estimated 42% of the total household expenditure of ASEAN6. Looking into 2030F, it is expected to grow to 44%, with total expenditure doubling to US\$1.2 trillion – representing an immense opportunity for companies.

Food consumption accounted for 51.4% of Indonesia's total household consumption expenditure in 2010. With income growth, that has dropped to 49.5% in 2018. Food Consumptions makes up almost half of the consumer market which shows there is a constant demand for food items. (DBS, 2019).

## **2.3 Mudharabah contract**

In Arabic, 'al-Mudharabah' means travel, taken from the word *darb fi al-ard*. This is so due to the long journey taken by business traders in order to obtain goods, profits, and the likes (Zain et al., 2014). The concept of Mudharabah refers to a mutual agreement between the two parties, and one is a capital provider (*sahib al-mal*) and the other an entrepreneur or a business operator (*Mudharib*), to enable the business operator to continue the project on the basis of profit-sharing with the ratio agreed upon. However, in the event of a loss, it will be fully borne by the capital provider (Bank Negara Malaysia, 2010). It is important therefore to understand that the contract functions effectively when both parties are ready and willing to be transparent. This involves the disclosure of all aspects of the businesses they have agreed to. Such a contract is strongly linked to moral hazard, particularly in the context of asymmetric information that is likely to be unavoidable in the Mudharabah contract. (Muhammad & Akhyar, 2007).

Although Mudharabah is not authenticated by explicit text of the Qur'an, it is substantiated by Sunnah (sayings of the prophet PBUH) and scholarly consensus (*ijma'*). Jurists unanimously accept that the legal validity of the Mudharabah contract is derived from the Prophet's (PBUH) customary practice. There are numerous traditions that attribute its practice to the Prophet (PBUH), before his prophethood, and to his leading companions (Rahman, 2018). In addition, Abdullah Bin Mas'ud a prominent companion of the prophet, and al-Abbas Bin Abd al-Muttalib, the uncle of the prophet involved in Mudharabah contracts, the latter having obtained the prophet's (PBUH) consent for the

conditions he imposed upon his agent (manager or Mudarib) to whom he entrusted his money (Ibn-Ishaq, n.d.). Based on these accounts, Muslim jurists agreed unanimously that the Mudarabah contract is permitted. According to the jurists, one of the major reasons for its acceptance is the resulting ease and efficiency achieved in the functioning of the economic system. In this regard, al-Sarakshi said that Mudarabah is permissible on the basis of Istihsan (Rahman, 2018).

Many studies reveal that Mudharabah supports financing. According to (Karim, 2002), Mudarabah and Musharakah financing fit small and medium business enterprises, provided that incentive-compatible constraint mechanisms are applied. These include: (1) the setting up of capital proportion or the collateral contributed by the Mudarib (2) a minimum operational business risk (3) the project should be ready with financial statements, and (4) the project has a relatively low overwhelming expense.

According to (Muhammad & Akhyar, 2007) who conducted research on Mudarabah BMT (Baitul Maal wa Tamwil) found that project attributes, Mudharib compliance, and financing prerequisites, have a significant role in the increasing Mudarabah contract between the BMTs and their customers.

However, Islamic economics emphasizes the importance of the real sector rather than the financial, or in the words of (Ahmad, 2000), "moving from a debt-based to an equity-based or stake-taking economy. Most Islamic bank managers are accustomed to the risk-averse, rather than the risk-taking approach. This implies that Mudarabah has been perceived as a risky product. The risk is related to agency issues associated with external factors, where the honesty, transparency, and trustworthiness of the consumers cannot be guaranteed. (Muhammad & Akhyar, 2007) reported that in Indonesia, Mudarabah contributes only 14.33 percent. Therefore, the Islamic banking industry should have focused its operations on products such as Mudarabah and Musharakah since these two products are closer to the equity-based economy.

#### **2.4 Murabahah contract**

Murabaha is one of the most commonly used modes of financing by Islamic financial institutions. There are various definitions of Murabaha. According to AAOIFI "Murabaha is selling a commodity as per the purchasing price with a defined and agreed profit mark-up. This mark-up may be a percentage of the selling price or a lump sum" (AAOIFI, 2012).

However (Puspitasari<sup>1</sup>, Hidayat, & Kusmawati, 2019) defines Murabaha as a sale and purchase transaction of an item in the amount of the cost of goods plus a margin agreed upon by the parties, where the seller informs the acquisition price in advance.

The contemporary practice of Murabaha is, two parties enter into a contract where one party agrees to buy certain identified goods on behalf of the other and then sell it to the other party on a cost-plus profit basis on deferred payment terms. This transaction is based on a promise by the purchase orderer, normally the customer of the financial institution, given to the institution that he will purchase the goods or commodities from the financial institution as soon as the financial institution purchases the same goods or commodities and the ownership risks transfers to the institution (Ebrahim & Sultan, 2012).



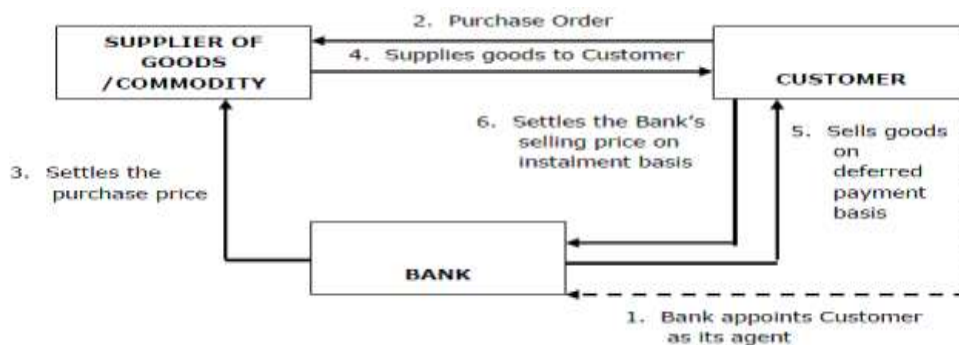


Fig1: Muarabaha (MPO) flow of transaction

Murabaha financing was allowed by the Prophet as part of Shariah's public policy. The key reason for Murabaha funding was to benefit small-scale farmers (poor farmers) and traders who lack funds to support and sell crops. (Hassan et al., 2012). (Siddiqi, 2006) revealed that in order to improve agricultural production, modern Islamic financial institutions used Murabaha finance. Agriculture remains a productive enterprise that supports and provides the public with opportunities to obtain food safety, income, and employment directly or indirectly.

Murabaha is also an Islamic mode of a transaction aimed at helping traders and farmers to develop socioeconomically as regards buying and selling production input and output. (Khaleequzzaman, 2012). In Murabaha finance, the customer knows the actual prices of the products and the profit margin in sales and is agreed on them. Islamic banking used Murabaha products to finance agriculture and to enhance the trade in agricultural input and production. This indicated that Murabaha financing helps farmers (poor farmers) to boost their socio-economic status through agricultural development. (Aziz & Mohammed, 2018).

Several studies have discussed the application of Murabaha contracts in the agricultural sector of Indonesia. (Rodiana, Nuryartono, & El Ayyubi, 2014) examined the effectiveness of postharvest payment applications on the return of financing for rice farming Murabaha contracts. The results showed respondents were more likely to prefer postharvest payments because this suits their ability to pay. The payment by the postharvest application on the return of financing for rice farming Murabaha contracts at As-Salam BMT has been effective in all stages of financing and has a positive impact on the members of BMT.

(Puspitasari<sup>1</sup> et al., 2019) interviewed 5 informants and the informants were the managers and members of the IFSC Al-Hikmah. IFSC Al-Hikmah was established in 2012 for the welfare of farmers, which provides fertilizer, seeds, and agricultural medicines so that farmers do not have to go to the nearest city. The purchasing of fertilizer, seeds, and the drug uses the Murabaha contract. Furthermore, Alim (2017) analyzed the implementation of agricultural financing based on Ijarah and Murabaha contracts. The results showed Murabaha contracts were used to fulfill goods or stocks, purchase cattle, buy farming equipment, production plants, and production facilities for livestock.

### 2.5 Salam contract

Salam is an Islamic commercial contract that allows for deferred sale. It is a contractual agreement between two parties (buyer and seller) whereby the full payment of a predetermined price (salam price) is made at the beginning of the contract by the buyer

for deferred delivery of goods at the maturity of the contract. The simple structure on the salam contract can be shown as follow:

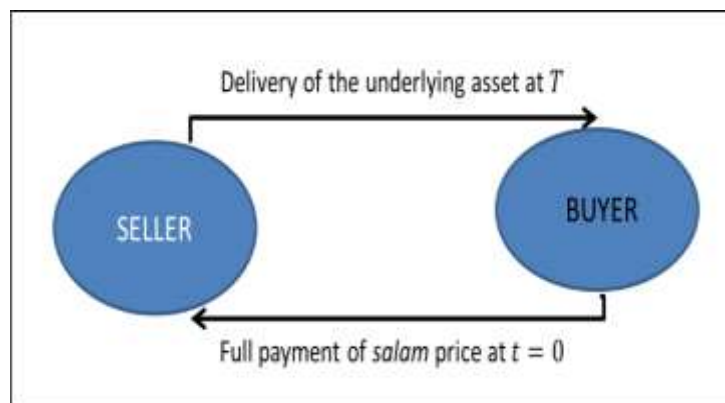


Fig2: Salam contract (Forward sale)

The legitimacy of the Salam contract is based on the hadith narrated by Imam Bukhari, Ibn Abbas has reported to have said: The Prophet peace be upon him came to Medina and found that people were selling dates for deferred delivery after a duration of one or two years on a Salam basis. The Prophet peace be upon him ordained: whoever pays for dates on a deferred delivery basis (salam) should do so on the basis of a specified scale and weight (Sahih Al Bukhari, 2/781). The hadith clarifies that the Salam contract is permissible in Islam as long as the price, quality, quantity, and maturity of the contract are clearly classified at the beginning of the contract. Basically, the mechanism of the Salam contract is quite similar to forwards despite the full salam payment is done upfront in the salam contract agreement. The condition of full salam payment at the beginning of the contract will eliminate the element of Maysir (speculation) in the Salam contract since it reduces the potential of the speculator to speculate the underlying asset price (Hisham & Maheran Mohd Jaffar, 2017).

### 3. Methodology

This paper uses a qualitative method of study. It involves the proposition of a Waqf based Islamic Fintech model for resolving financial difficulties in the agriculture sector of Indonesia along with content analysis which is done to highlight the current agriculture scenario of Indonesia along with capturing the problems that are faced by the farmers.

### 4. Findings and Discussion

#### Explanation of the Model:

In this chapter, different aspects related to the model will be explained in detail such as the raising of fund from Waqf and how different contracts are implemented in the model for fulfilling different needs of the farmers. How the proposed model differ from the competition will also be discussed in this chapter towards the end?

#### 4.1 Raising Funds from Waqf Institutions

To start with this business model, waqf institutions will be approached through the explanation of the model. Once they have agreed with the mentioned model, the underlying contract between both parties will be the Mudharabah contract which works on the principle of profit-sharing and loss bearing. What is Mudharabah and how it would be applied in this case is explained as follows;

#### 4.2 Application of Mudharabah in the model

Waqf institution will act as capital provider or “Rabb-ul-Maal” and the company (P.T. Patel Agriculture) will be working as entrepreneur/manager or Mudharib whereby the profit will be shared among the parties according to the profit-sharing ratio (PSR) which will be determined at the time of the inception of the contract. On the contrary, in the event of loss, the loss will be borne solely by Waqf institution as per the rule of Mudharabah contract, and Mudharib (which in this case is the company) will be losing only the time and efforts (non -financial loss) that they have made. However, if the loss occurs because of the negligence or misconduct of the company then the company must also bear the loss.

##### 4.2.1 How can the farmers benefit from this Model?

Once the fund has been raised from Waqf institution, the company is going to assist the farmers under the following Islamic contracts which are Murabaha and Salam.

#### 4.3 Application of Murabahah contract in the model

Fintech Model for Murabahah QR Coupon

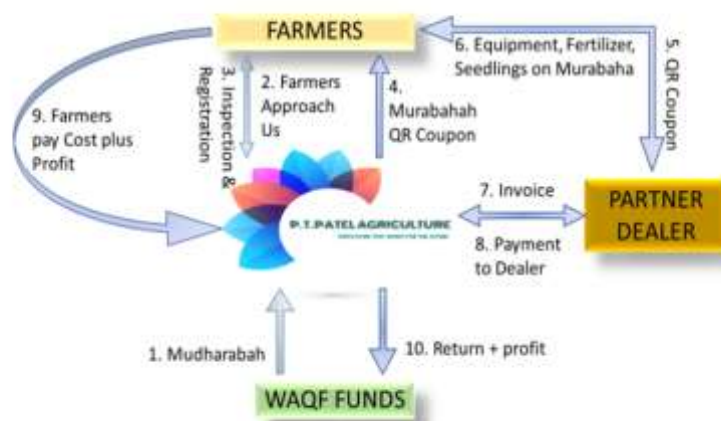


Fig3: Murabaha QR coupon flow of transaction  
Source: Authors (2020)

It is evident that farmers face a lot of difficulties and problems as well as most of them are living under the poverty line and have an insufficient amount of money, even they are incapable to fulfil their daily needs. Therefore, Murabaha contract will enable them to procure the instruments that are needed by them in their farming such as seeds, fertilizers, tractor, combined, irrigation technology etc. When a farmer approaches the company to facilitate him in this regard then a verification team will check the farmer's background as well as the need for the instruments he applied for. Once it is approved that the farmer actually needs those instruments then the company will enter with the farmer in Murabaha contract, in which the company will disclose the cost and profit margin for the asset that will be provided to the farmer as per his request. Thereafter, the company will give him a Murabahah QR coupon. In addition, through this Murabahah QR coupon, the farmer will be able to get the equipment that he needs from the traders that are in partnership with the company in different parts of the country. Moreover, the payment can be either in monthly installments or bullet payment at the maturity of the contract which will include cost plus profit.



### 4.3.1 How does the Murabaha QR coupon works?

Once the details given by the farmer after his registration are verified, Patel Agriculture (company) will issue a QR coupon code to the farmer which contains all the details of the equipment he needs, and the funds allocated to him along with all other details belonging to the farmer as well all the details regarding the contract. As the company's partner dealer scans the QR code with the app developed by Patel Agriculture, all the relevant information of the contract between the company and the farmer will appear before the dealer. Required equipment is delivered by the partner dealer directly to the farmer. The dealer then send the invoice for which the company will make the payment directly to the dealer and the farmer will pay Patel Agriculture later according to the agreed contract terms of Murabahah.

### 4.4 Application of Salam contract in the model

#### Fintech Model for Salam Contract

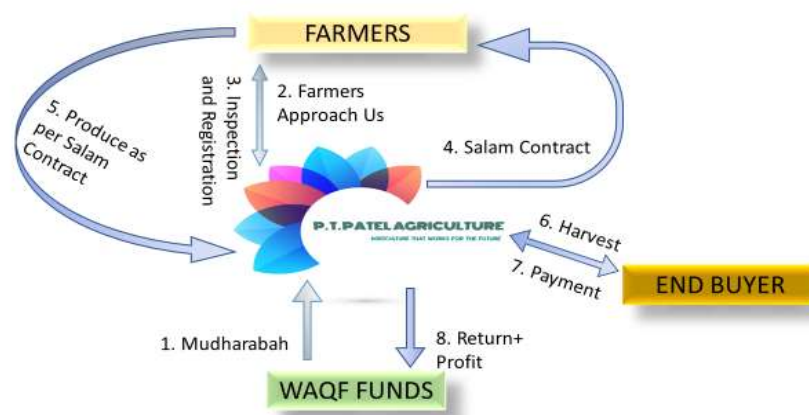


Fig4: Salam Contract flow in the model

Source: Authors (2020)

Under the Salam contract, the farmer will be provided financial assistance in the form of advance payment, which will be directly credited into his bank account or given as cash upfront for the value of estimated produce that he will be returning to Patel Agriculture at a later date in future. As it is known that Salam is a forward sales contract so the price will be paid in advance for the estimated produce to be delivered later at a future stipulated date. Therefore, shariah allows the buyer to negotiate on the amount of goods. The profit under the Salam contract will be the difference between the amount paid to the farmer up front and the amount for which the goods will be sold to the end buyer on the market price.

As a measure of security, the crop that is promised to be delivered later by the farmer can be insured under Agro-takaful cover, to provide an extra layer of security from loss caused due to any unexpected peril such as flood or drought. The cost of takaful will be compensated for the advance payment made to the farmer for the crop.

### 4.5 How the fund will be raised?

To start any business or to implement any business model or idea one of the basic elements to focus on is the source of funds. Therefore, for this model, the fund will be raised from the waqf institution. Waqf can be referred to as the dedication of privately-owned property

(movable or immovable) and/or its benefit and usufruct in perpetuity for the well-being of the society. Immovable waqf such as land and buildings were popular in Islam as a means of benefiting the Ummah. However, movable waqf such as cash waqf is growing in popularity as a result of the dire need in Islam to reduce the gap between the rich and the poor. Hence, once the model is presented to the Waqf body and they approve it and provide the fund, then the raised fund will be used to assist the farmers for various purposes such as their need for working capital, equipment, infrastructure development etc.

#### **4.6 Legality of Cash Waqf in Islamic Finance**

The legality for approval of cash waqf can be found in the Qur'an and Sunnah. All Muslim schools of jurisprudence (Hanafi, Maliki, Shafa'i, and Hanbali) agree on the use of both immovable and movable assets for waqf. The evidence for the use of cash waqf in Islam can be traced to many verses in Qur'an as well as Hadith. Some of them are quoted below: "Ye will not attain unto piety until ye spend of that which ye love. And whatsoever ye spend, Allah is Aware thereof".

It was also narrated from Abu Hurairah that the Messenger of Allah (S.A.W.) said: "When a man dies all his good deeds come to an end except three: Ongoing charity (Sadaqah Jariyah), beneficial knowledge and a righteous son who prays for him.

From the above evidences, using cash waqf in Islam is an important part of Islam, as recommended by Allah and His messenger. As a result, cash waqf can be used together with other Islamic financial mechanisms such as the Mudarabah contract in order to provide employment opportunities.

#### **4.8 Profit making of the model explained**

This model makes money in two ways:

1) Under the Murabahah contract; in this contract, once the details of the farmers are verified and the farmer is registered, Patel Agriculture will issue a Murabahah QR coupon to the farmer.

Famer can take this coupon to any of our partner dealers and buy the things he needs as per the contracted amount.

The farmer will have two options to make the payment; a) one is to pay in monthly installments including cost plus mark-up disclosed to the farmer at the time of contract, b) he can pay in one go, the whole amount as a bullet payment at the maturity of the contract, which will also include cost + profit.

2) Under the salam contract; in this contract, the farmer will be paid in advance the cost of his estimated produce, that he will return to P.T Patel Agriculture at the maturity of the contract or before that.

The product will be sold to the end buyer at the market price. The return from sale proceeds is to be shared with the waqf as per the pre-agreed ratio.

#### **4.9 Use of Fintech for Transparency and Ease of Data Transfer**

- P.T. Patel Agriculture (PA) will provide an app that works on the QR code, as the dealer scans the unique QR code given to the farmer, all the details registered with PA will reflect in the app that will be maintained by us.
- PA will be using a central data tracking app for keeping transparency in the transactions between Waqf and Patel agriculture, where every transaction or contract with a farmer is given a unique code.
- As the Waqf officials enter the code in the tracking app, all the details related to the contract will be displayed, along with the contract maturity date.

#### 4.10 Difference between P.T. Patel Agriculture (proposed model) and current market players

Entrepreneurs wishing to begin their agricultural projects in brief 'Agro projects' would require some financing for the purchasing of necessary materials and their financial capital for the projects. Though the competitors such as Tani Group, P.T. Crowded, and iGrow are providing e-commerce platforms and agencies to entrepreneurs in agro projects in Indonesia, but the contracts used by them are not sharia-compliant. It is very important for Muslim agro-enterprises to benefit from funding their projects with Shariah-compliant finance, banking products, and services, not only because the halal result can be guaranteed, but also because the entrepreneurs' work and effort will be an acceptable ibadah in their lives. PT Patel agriculture offers multiple types of Fiqh Muamalat contracts and uses waqf funds suited for agro-businessmen to finance agro-projects, which may also be beneficial to them. Shariah-compliant instruments will also ensure the results of the projects are genuinely halal (permissible) without any involvement of Haram (non-permissible) elements, such as usury and interest.

#### 5. Conclusion

Looking at the problems faced by farmers in Indonesia, it is clear that the farmers have a tough job at their hand and what makes it even tougher are the challenges faced by them in their everyday farming activities such as lack of working capital, lack of equipment due to the shortage of funds and many more. There is no doubt that due to the various serious problems, more and more of the new generation look for more industrial type jobs rather than farming-related jobs as they see it as low paying and more labor intensive work. If these problems continue to rise on the current scale, there is little doubt that the number of farmers in the country will decrease, eventually creating a shortage of manpower in the agricultural sector and hence lower agricultural produce.

To counter the biggest problems of shortage of working capital and lack of technology in the agricultural sector, it is important to take some serious innovative and technologically advanced steps to equip farmers with the same agility and speed as other sectors in order to keep them competitive and the agriculture sector of Indonesia alive and strong.

Therefore, the waqf based model for the agriculture sector of Indonesia presented in this paper, targets the core problems and aims to facilitate farmers by fulfilling their various needs, be it working capital or farming equipment or fertilizer, etc. and at the same time involves moderate use of technology to maintain transparency and agility in the whole process.

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