DEVELOPING AN ISLAMIC BUSINESS MODEL: A CASE FOR AGRICULTURAL VALUE CHAIN FINANCE IN AGROBANK, MALAYSIA

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ABSTRACT

Purpose — This study aims to analyse the development of an Islamic business model in the form of an agricultural value chain finance (AVCF) in Agrobank, Malaysia, from 2016 to 2020.

Design/Methodology/Approach — This qualitative research adopted the case study approach, and data were collected by using the interview and document analysis methods. The interviews involved a member of the Shariah committee as well as the Chairperson of the Shariah department in Agrobank. The document analysis involved Agrobank's annual report and its official website (www.agrobank.com.my).

Findings — Findings indicate that Agrobank's business model not only considers how to make profit but also how to practice and propagate Islamic values. Hence, Agrobank has modified the AVCF from trade finance to Sharī'ah finance contracts. This ensures that Agrobank's business does not contradict Sharī'ah principles. However, *mushārakah* (participatory mode of finance) and *muzāra'ah* (temporary sharecropping) contracts, which are appropriately reputed, were not applied by Agrobank for the last five years. Findings show that *qard* (loan), *bay' al-'īnah* (sale and buyback), *bay' bi thaman ājil* (deferred-payment sale), *murābaḥah* (sale with profit disclosure), *tawarruq* (two sale-and-purchase contracts, involving at least three parties, with the intention being to attain liquidity), and *ijārah* (lease) are contracts that positively affect businesses in Agrobank. These contracts provide flexibility for some people who are involved in the value chain.



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Originality/Value — This is an attempt to study the application of AVCF from an Islamic perspective in Agrobank.

Research Limitations/Implications — Discussions in this paper are limited to AVCF as an Islamic business model in Agrobank.

Practical Implications — This study encourages Islamic financial institutions (IFIs) to adopt the Islamic AVCF system through lessons learnt from Agrobank.

Keywords — Agricultural value chain finance (AVCF), Agrobank, Islamic financial contract, Value chain , Value chain business model (VCBM), Value chain finance (VCF)

Article Classification — Research paper

INTRODUCTION

Value chain developed according to the Islamic approach, which could bring a solution for financing agriculture, has encountered problems during its practice in Islamic banks (Saqib *et al.*, 2014; Hussain & Syed Ja'afar Alhabshi, 2016). As mentioned by Webber and Labaste (2010), value chain focuses on value creation—typically via innovative products or processes as well as marketing—and also, on the allocation of incremental value. It could be a suitable business model for developing the agricultural sector, including the area of financing (Miller & Jones, 2010). Keeping in view that the global demand for food is expected to increase by 60 per cent by 2050 when the world's population reaches 9.1 billion, financial support for the agricultural sector would become a dire need (Swamy & Dharani, 2016). However, a study by Larasati *et al.* (2017) and a report by the Indonesia Financial Services Authority (OJK, 2020) show that the amount of Islamic bank financing for the agricultural sector is still low compared to other sectors. Moreover, Islamic banks face an identity crisis that has resulted in the loss of future direction (Muhammad *et al.*, 2016). Thus, agricultural financing based on the Islamic approach by Islamic banks did not materialise as expected because of several obstacles, including a lack of financial support and the challenge of an identity crisis.

The study of the relationship between Islam and value chain has evolved from Islamic business and financing to the Islamic value chain, transitioning from a focus on Islamic business and financing to a broader consideration of Islamic values. This evolution reflects the growing interest in how Islamic principles can intersect with contemporary financial practices, particularly in the realm of value chain. Islamic business differs from the conventional version because the former emphasises Islamic ethics as a basis for its implementation (Abuznaid, 2009; Musa et al., 2020). Islamic business applications can be found in various forms, such as in Islamic financing that oversees Sharī'ah contracts and avoids ribā (Atmeh & Maali, 2017; Suharto, 2018). Additionally, Islamic modes of financing adopt a positive attitude towards profit maximisation and efficiency while encouraging risk sharing (Sairally, 2007). Therefore, Hussain and Sved Ja'afar Alhabshi (2016) assessed that there is a similarity between Sharī'ah financing and the value chain concept as both emphasise the concept of value creation and risk sharing between parties involved in Sharī'ah financing, which is an essence in financial transactions based on the provisions of Islamic law. Furthermore, Hussain and Syed Ja'afar Alhabshi (2016) and Ningrat and Nurzaman (2019) proposed the use of Sharī'ah contracts to formulate value chain finance (VCF) from an Islamic perspective for the development of the agriculture sector.

VCF has been used for a long time, and it is continually developing. According to Miller and Jones (2010), value chain-related finance is not something new. For instance, some types of merchant financing have been around for thousands of years; the new one is applied more systematically to agriculture, using innovative or adapted approaches, tools and technologies. In the developing stages, VCF was applied in conventional approaches that pay less attention to Sharīʿah principles (Bank Indonesia, 2015; Chen *et al.*, 2015; Swamy & Dharani, 2016; Mrwebi, 2019). Therefore, several studies (e.g., Saqib *et al.*, 2014; Oladokun *et al.*, 2015; Hussain & Syed Jaʾafar Alhabshi, 2016; Mohʾd *et al.*, 2017; Ningrat & Nurzaman, 2019) have proposed the application of agricultural value chain finance (AVCF) through the adoption of Sharīʿah contracts for developing the agriculture sector. However, existing studies on AVCF from an Islamic perspective mostly tend to be conceptual and have not been verified practically. Hence, this study attempts to complement existing studies by examining AVCF from an Islamic perspective as a business model run by Agrobank in Malaysia. Besides practicing AVCF, Agrobank has also adopted the Sharī'ah system as it has become a full-fledged Islamic bank since 2015 (Agrobank, 2018). Muhammad *et al.* (2016) suggested that being a full-fledged Islamic bank might have a positive impact on its governance framework, such as their employees having a sense of extra responsibility due to the public perception they carry. This study specifically aims to analyse the Islamic business model for AVCF in Agrobank during the 2016–2020 period. The following three main questions are asked:

- 1. How was the value chain business model (VCBM) implemented in Agrobank from 2016 to 2020?
- 2. To what extent is the Sharī ah system operational in Agrobank?
- 3. How is the relationship between value chain and Sharī'ah contracts developed by Agrobank?

This paper is based on the argument that the AVCF business model with a Sharī'ah principle approach in banking not only replaces conventional contracts with Sharī'ah contracts but also requires adaptations that accommodate business interests and adjustments to Sharī'ah principles. Efficiency is a business interest that applies to both conventional and Islamic banks (Hassan *et al.*, 2009). Ahmed (2014) also stated that there are economic factors that overshadow Sharī'ah's requirements for Islamic banks. Musa *et al.* (2020) insisted that Islamic banks seem worried about their impact on society and put ethics on a superior pedestal compared to profit maximisation. In summary, Islahi (2010) suggests two important values that need to be developed by Islamic banks, namely efficiency and equity. Thus, the AVCF business model that incorporates Sharī'ah principles in Islamic banks faces new challenges and requires adaptation. True to its name, Islamic finance needs to continuously carve its own branding and distinctiveness to provide wholesome value propositions (BNM, 2018).

This current research is divided into six sections. The first section explains the urgent need for a study of the AVCF business model adopted by Agrobank. The following section elaborates on literature related to this research regarding the VCBM and AVCF concepts as well as their implementation, and Sharī'ah financing for the agriculture sector. The subsequent section explains the case study methodology used in the research. Sections four and five sequentially portray the results and discussions of this study, starting from AVCF as a business model in Agrobank until the analysis of the lessons learnt from the findings. The last section synthesises the results and discussions of the study.

RELATED LITERATURE

Previous studies have shown that at least three discussions can be found, namely on the VCBM and AVCF concepts and their implementation, as well as Sharī'ah financing in the agriculture sector.

The VCBM Concept

Miller and Jones (2010) stated that the term 'business model' for an enterprise refers to the way it creates and captures value within a market network of producers, suppliers and consumers, or,

in short, 'what a company does and how it makes money from doing it'. Furthermore, they classified four typical organisational models for VCBM based on the main drivers, namely producer-driven value chain models, buyer-driven value chain models, facilitated value chain models and integrated value chain models. **Table 1** shows the types of value chain models, the drivers of an organisation and the rationale for each driver.

Model	Driver of the Organisation	Rationale
Producer-driven	• Small-scale producers, especially in the form of	• Access new market
(Association)	groups such as associations or cooperatives	• Obtain higher market price
	• Large-scale farmers	• Stabilise and secure market position
Buyer-driven	Processors	• Assure supply
	• Exporters	 Increase supply volumes
	• Retailers	• Supply more discerning customers,
	• Traders	meeting market niches and interests
	• Wholesalers and other traditional market actors	
Facilitator-driven	 NGOs and other support agencies 	• Make markets work for the poor
	 National and local governments 	 Regional and local development
Integrated	• Lead firms	• New and higher value-markets
	• Supermarkets	• Low prices for good quality
	Multinationals	 Market monopolies

Table 1: Typical Organisational Models for VCBM

Source: Adapted from Miller and Jones (2010)

Hence, VCBM has been proven to be a suitable tool for developing the agriculture sector in certain areas in several countries (Briones, 2014; Kilelu *et al.*, 2017; Hassan *et al.*, 2019). Based on a survey of small tobacco farmers in the Philippines, Briones (2014) confirmed that the supply chain linking agribusiness with smallholders through contract schemes is a viable model for value-added and inclusive growth in the region. Kilelu *et al.* (2017) also analysed the integration of a small-scale dairy development programme in Tanzania through a case study. The study suggested that while multi-stakeholder processes are an important mechanism that catalyses the collaboration needed to support smallholder inclusion, its effects are largely tied to the existing value chain structure.

Based on an action research on the potato value chain in Pakistan, Hassan *et al.* (2019) claimed that there was significant potential for decreasing costs, as well as increasing yields and overall profitability by using existing processes with improvements. This is consistent with Jones (2011), who stated that value chain development can identify and overcome sector-specific barriers that hinder an industry's development, including the agriculture industry. Various value chain-related factors that need to be considered include the character of the intervention (Hainzer *et al.*, 2019), the chain actor's attitude (Dung *et al.*, 2020), farmers' participation (Nguyen *et al.*, 2020), quality and volume of the information that provides adequate linkages between chain actors (Watabaji *et al.*, 2016), use of technology (Jnr, 2019) and value chain resilience (Linkov *et al.*, 2020). However, Donovan *et al.* (2015) stated that the need for guidance on value chain development from a specific context, regardless of the context, has significant implications for intervention design and the whole chain's success.

AVCF and Its Implementation

AVCF is a finance mechanism focusing on the flow of funds to and among the various links in a value chain to develop agriculture. Ningrat and Nurzaman (2019) stated that it has been widely used to develop and improve business processes in the agriculture sector. Furthermore, Miller and Jones (2010) found that the most frequently used form of VCF is trade-related financing. One is pre-financed sales, which is commonly provided by vendors who sell agriculture inputs to farmers. The other is advance payment, which is ordinarily provided by buyers who buy agricultural products.

AVCF can be adopted by both financial institutions (Swamy & Dharani, 2016) and banks (Chen et al., 2015; Bank Indonesia, 2015; Mrwebi, 2019), especially with various opportunities and challenges. Swamy and Dharani (2016), in their dual case study approach in India, argued that financial institutions that endeavoured to develop chain expertise, share knowledge and provide financing to support services not only benefited clients but also expanded lending opportunities and reduced risks. Meanwhile, based on research in Indonesia, Bank Indonesia (2015) also found that AVCF can reduce risk by better understanding the nature of agricultural products. In addition, Mrwebi (2019) carried out a qualitative study concerning the banking industry in developing countries and found that value chain had a positive impact on customer satisfaction, namely the improvement of their relationship and loyalty, as well as a reduction in delivery time. Cuevas and Pagura (2016) also showed that AVCF presents a compelling business case because it reduces information asymmetry and lowers transaction costs. Thus, if implemented wisely, it can become a profitable line of business for commercial banks. However, based on the literature review of the lessons learnt from AVCF models in China and India, Chen et al. (2015) found that VCF offered by commercial banks and other financial institutions is limited and mainly concerns tripartite agreements between financing institutions, lead companies and farmers. Hence, it is imperative for the bank to ensure that the intent, strategy and performance of their financial businesses are premised on the underpinning thrusts of valuebased intermediation (VBI) that will eventually create values for the stakeholders (BNM, 2018).

Islamic Financing for Agricultural Purposes

The principle of Islamic financing for the agriculture sector is in accordance with the values of the Qur'ān and Sunnah that include being ethical, sustainable, responsible, transparent, green and equitable (BNM, 2021a, 2021b). Studies on Islamic financing aimed at developing the agriculture sector have been carried out, both practically (Obaidullah, 2015) and conceptually (Saqib *et al.*, 2014; Oladokun *et al.*, 2015; Hussain & Syed Ja'afar Alhabshi, 2016; Moh'd *et al.*, 2017; Ningrat & Nurzaman, 2019; Gundogdu, 2020). To introduce the reader to the basic principles of Islamic microfinance applied in the agriculture and rural sectors, Obaidullah (2015) carried out a case study on Islamic microfinance institutions (IsMFIs) in Muslim-majority countries such as Indonesia, Pakistan and Sudan. Results show that Islamic agricultural finance for the rural poor involved various modes, mechanisms and institutional structures. Modes based on credit and profit-sharing were running well in certain conditions, but no single model provides a solution that fits all the circumstances and needs of the rural poor.

Similar findings can also be seen in some conceptual studies (Hussain & Syed Ja'afar Alhabshi, 2016; Ningrat & Nurzaman, 2019) that encouraged the combination of various modes

of contract-based Sharī'ah financing. Thus, by conducting a critical analysis on farmers' financing problems in Kashmir, Hussain and Syed Ja'afar Alhabshi (2016) found that Islamic finance contracts as well as the VCF concept contain the element of risk sharing. These contracts include participatory profit-and-loss contracts (*mushārakah*, with its variant forms, such as *musāwamah*, *muzāra'ah* and *mudārabah* contracts), exchange-based contracts (*salam*, *murābaḥah* and *istiṣnā'*), charity contracts (*qard ḥasan*) and lease contracts (*ijārah* and its variant forms). Meanwhile, another case study on public and private companies by Ningrat and Nurzaman (2019) proposed that Sharī'ah financing with fintech integrates all actors related to the agriculture sector into Sharī'ah-compliant VCF. It is proposed that schemes based on *murābaḥah*, *salam*, *istiṣnā'*, *mushārakah* contracts and others can bridge funds between investors and farmers.

These findings are slightly different from some conceptual studies (Saqib *et al.*, 2014; Oladokun *et al.*, 2015; Moh'd *et al.*, 2017) that tend to propose certain modes based on the Sharī ah finance contracts. Moh'd *et al.* (2017) have identified a suitable model for addressing financial challenges in the clove farming sector in Zanzibar. The authors reviewed some of the financial models and proposed suitable Sharī ah finance schemes. The study found failures in various programmes and policies related to the dwindling clove production there. Therefore, they proposed a *waqf-muzāra ah* supply chain model to address the financial challenges related to clove farming. According to an expert survey, Oladokun *et al.* (2015) also suggested the *muzāra ah* model and the supply chain mechanism complemented each other. Meanwhile, a literature review study by Saqib *et al.* (2014) proposed the implementation of *mushārakah* contracts for the agriculture sector, especially for the locals, for both crop and non-crop activities.

Thus, the paper has explained the basics of VCBM, AVCF and its implementation in financial institutions, or more specifically, in banks. Previous studies have also shown that the VCBM for the agriculture sector plays an important role in several countries. However, existing studies tend to use a conventional approach, which is potentially inconsistent with Sharī'ah principles. Meanwhile, existing studies on AVCF using the Sharī'ah approach tend to be conceptual. Empirical studies on VCBM that incorporate Sharī'ah principles, based on the experience of specific institutions, are rarely found. Therefore, this study examines the AVCF business model adopted by Agrobank, where the Sharī'ah system is operational.

RESEARCH METHODOLOGY

This qualitative study used the case study approach with the VBI framework. Creswell (2014) mentioned that the case study approach is a research strategy whereby researchers carefully investigate a programme, event, process, or group of individuals. This strategy was chosen to obtain in-depth information related to the AVCF business model developed by Agrobank during the 2016–2020 period. As for the framework, BNM (2021b) explains that VBI provides a catalyst for Islamic banks to deliver the outcomes of Sharī'ah through practices, conduct and offerings that produce positive and sustainable impacts to the economy, community and environment. This research refers to VBI, which proposes four underpinning thrusts, namely:

entrepreneurial mindset, community empowerment, good self-governance and best conduct (BNM, 2018).

There are two procedures for data collection in this research, namely interviews and document analysis. The interview component involved face-to-face interviews with informants, which comprised semi-structured and open-ended questions. Semi-structured means certain questions are designed before the interview, but it does not rule out the possibility of additional questions being posed during the interview to obtain additional information. Meanwhile, open-ended means that the questions posed provide an opportunity for the informant to provide answers openly, without being limited by choices provided by the researcher. The open-ended questions include three data fields, namely data related to the VCBM developed by Agrobank, data regarding operations of the Sharīʿah system practised by Agrobank, and Agrobank's experience in combining value chain strategies with the Sharīʿah system.

The interview involved two participants who were familiar with the business practices of Agrobank, namely P1, a member of the Agrobank Shariah committee (employed since 2016–present) and P2, the Chairman of the Agrobank Shariah department (employed since 2012–present). Apart from being knowledgeable about the aspects of the business model developed by Agrobank, they are also familiar with the aspects of the Sharīʿah system it was practicing. The interview with P1 was conducted on 13 July 2020 at APIUM, University Malaya, Petaling Jaya. The interview with P2 took place on 29 July 2020 at the Sharīʿah department, Agrobank Head Office, Kuala Lumpur.

Document analysis is a data collection method that is related to the search for documents containing pertinent information. In this study, the documents came from two sources, namely Agrobank's annual reports and Agrobank's website. Agrobank's annual reports from 2016-2019 were used to explain relevant information about the value chain business model. Meanwhile, the website (www.agrobank.com.my) provided the latest information on products and system developments that were practised by Agrobank.

Data analysis in this research, as mentioned by Creswell (2014), comprised three stages: understanding data, presenting data and interpreting data. Understanding data involved reading the comprehensive information based on the focus of the study. Information regarding VCBM, AVCF and the Sharī ah operational system at Agrobank was reviewed thoroughly, resulting in a deep understanding of the subject matter. Data presentation stages were carried out by describing the data through the manual grouping of themes, namely themes related to AVCF as a business model practised by Agrobank, implementation of the Sharī ah operation system, and the relationship between value chain and Sharī ah contracts. Data description was also carried out through restatements concerning document excerpts and interview results. Meanwhile, the data interpretation stage was carried out by elucidating the data more broadly, namely by connecting the findings with those from previous studies. Besides, data interpretation was also carried out by asking the question, 'What lessons can be learned from the findings?'. These three stages are the basis for making research conclusions. Data sourced from interviews are mutually reinforcing in comparison with data sourced from the document analysis.

RESULTS

The AVCF business model, from an Islamic perspective, was applied by Agrobank during the 2016–2020 period. Historically, Agrobank was initially known as Bank Pertanian Malaysia (BPM) in 1967. It became wholly owned by the Ministry of Finance in 2008 and became a full-fledged Islamic bank in 2015. Since that time, Agrobank started the Sharī'ah-based AVCF business model. Changes in Agrobank's operational system, from conventional to Sharī'ah, resulted in various modifications, such as the introduction of AVCF as a business model, implementation of a Sharī'ah operations system, and creating a relationship between the value chain and Sharī'ah contracts.

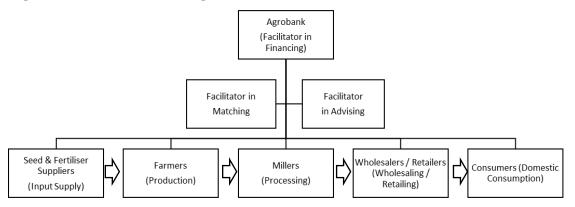
AVCF as a Business Model in Agrobank

Agrobank emphasises on AVCF as a business model that involves numerous players working together in the agriculture sector. P1 said that Agrobank's business model is slightly different from commercial banks because it is categorised as a Development Financial Institution (DFI). Banks on the DFI list focus on different sectors in Malaysia. Agrobank is a bank that focuses on the agriculture sector. Hence, to run its business, Agrobank adopted the value chain approach. In its annual report (Agrobank, 2018), the value chain concept is said to allow integration of various players in agricultural production, processing and marketing, and the report defines the role of each of these players. In other words, and according to P2, the point is that Agrobank provides financing to producers, exporters, and distributors so that the producers can export their commodities.

AVCF for Agrobank is not only a business model but also represents a core business area that was developed to build all aspects of the agricultural value chain. As a core business entity, Agrobank empowers and supports the entire aspect of the agricultural value chain so that the sector can continue to thrive and bring about a positive impact on the real economy. Agrobank recognises the interconnectedness and impact of each aspect of the value chain in efforts to achieve agricultural productivity, and ultimately, elevate the socio-economic development of the community. To effectively do this, Agrobank focuses on making a positive impact via three core areas, namely economic development, social empowerment and environmental sustainability. These have become its guiding objectives towards building greater sustainability along the entire value chain of this sector (Agrobank, 2018).

Hence, Agrobank plays an essential role in AVCF for these enterprises. According to P2, the primary role played by Agrobank in AVCF is to be a facilitator in several fields, as shown in **Figure 1.** Notably, Agrobank acts as a facilitator in providing financing to customers, which indirectly provides benefits to enterprises; matching and connecting sellers and buyers with customers, which is a supplementary role played by Agrobank to support the main role; and providing advice by educating customers in running an agriculture business. There is also an additional role played by Agrobank to strengthen the two previous roles. Thus, the three roles played by Agrobank are interrelated and provide facilities to enterprises. They include seed and fertiliser suppliers, farmers, millers, wholesalers or retailers, and customers. These can be seen in four types of value chain models classified by Miller and Jones (2010); hence, what Agrobank does tends to follow the facilitated value chain model.

Figure 1: AVCF Model in Agrobank



Source: Adapted from interviews and Annual Reports (Agrobank, 2018)

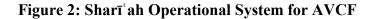
Provided the AVCF model is applied, it has a positive impact on both Agrobank and customers, especially in supporting an entrepreneurial mindset and community empowerment through cooperation and mutual trust (BNM, 2018). Based on the annual report (Agrobank, 2018), when every part of the agricultural value chain is nurtured, industry players are well-positioned to reduce costs and face financial risk, as well as reach out to smallholder farmers. This ensures a win-win collaborative model for adequate supply of products and guaranteed purchases by identified buyers, thereby assuring farmers of a steady stream of income. Another benefit of the AVCF model is that it has helped develop and establish mutual trust between customers and Agrobank, thereby encouraging flexibility in providing collaterals. As stated by P2:

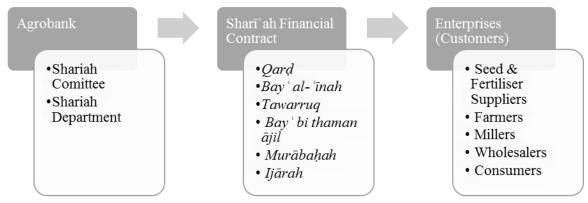
If the customer is established, qualified, capable and reliable, there is no need for collateral. However, if this customer is new and unknown, then a guarantee is needed to ensure that he can run the project well.

Implementation of the Sharī'ah Operational System

Agrobank, which was previously operating under a conventional system, began operating under the Sharī'ah system from 2016. P1 stated that Agrobank gradually attempted to switch from the conventional to the Islamic system; and eventually, adopted the full-fledged Islamic bank model in 2015. He also emphasised that as a full-fledged Islamic bank, products issued by Agrobank, besides being subject to Bank Negara Malaysia regulations, also needed to be certified by the Sharī'ah committee. Every product issued or offered by Agrobank must comply with Sharī'ah principles. This drove the implementation of Sharī'ah financial contracts in Islamic banking, as mentioned in various studies (Obaidullah, 2015; Hussain & Syed Ja'afar Alhabshi, 2016; Ningrat & Nurzaman, 2019).

Agrobank's implementation of the Sharī'ah operational system for AVCF is demonstrated through three different components compared to the previous conventional system. The three components are institutional structure, Sharī'ah financial contracts, and the type of customer. The explanation for each component is presented in **Figure 2**.





Source: Authors' own

First is the institutional structure. One of the components that distinguishes the current Sharī'ah system from the previous conventional system at Agrobank is the institutional structure. Implementation of the Sharī'ah system requires Agrobank to form two new institutional structures, namely the Shariah committee and Shariah department, with different functions. The Shariah committee's function, according to P1, is to put more emphasis on supervision in the field of Sharī'ah. Therefore, parties who man this institution come from outside the bank. Meanwhile the Shariah department, according to P2, functions more towards implementing Sharī'ah principles. Furthermore, he mentioned the three roles of the Shariah department, which is to ensure that products offered by Agrobank comply with Sharī'ah principles, to identify or suggest an original product, and advise on some issues related to the products that are offered to the public.

Second is the Sharī'ah financial contract, which is also a component that emerged when Agrobank implemented the Sharī'ah system. **Table 2** shows the types of Sharī'ah financial contracts used by Agrobank during 2016–2020 with examples of products from these contracts.

Third is the type of customer. This component is more directed at the will of the customer. In principle, there is no change between agrobank customers when adopting a conventional financial system and after switching to a Sharī'ah financial system. They comprise seed and fertiliser suppliers, farmers, millers, wholesalers, and consumers. However, when the Sharī'ah system was applied, Agrobank considered customers who were willing to adhere to the Sharī'ah values. Those who had intentions that were contrary to the Sharī'ah would not obtain financing from Agrobank. In other words, customers' conformity with Sharī'ah principles was a pre-requisite when determining finances for them. P2 highlighted the following in the case of tobacco financing for cigarettes:

In the context of this change, we need to see that our customers are diverse. In the past, some customers grew tobacco to make cigarettes. As we have now become Sharī ah compliant, we will not process such applications.

Therefore, the implementation of the Sharī'ah operational system for AVCF by Agrobank ensued the putting in place of independent governance and good conduct, as proposed by BNM (2018).

Table 2: Type of Sharī`ah Financial Contracts and Examples of Products Offered by Agrobank					
Sharīʿah Financial	Operational Definition at	Example of Financial Products			
Contract	Agrobank				
Qard	Giving a property to a party who will	Program Pembangunan Rakyat			
	benefit from it and who will	Termiskin-i (PPRT-i) / The Poorest			
	subsequently return an equivalent	People's Development Program			
	replacement.				
Bayʻal-ʻīnah	Refers to a transaction that involves	AgroCash-i			
	the sale and buyback of an asset by				
	the seller.				
Tawarruq	Consists of two purchase contracts.	AgroCash-i, AgroCash line-i, Hartani-i,			
	The first involves the sale of an asset	Working Capital Financing-i (WCF-i),			
	by a seller to a purchaser on a	Modal Usahawan 1 Malaysia (MUS1M-			
	deferred basis. Subsequently, the	i), Paddy-i, PaddyCash-i, Term			
	purchaser of the first sale sells the	Financing-i, SAFIA-i, SALF-i, SAWIT-i,			
	same asset to a third party on a spot	Kredit Mikro, Program Agropreneur			
	cash basis.	Muda (PAM)			
Bayʻ bi thaman ājil	Refers to a sales contract based on	Machinery & Equipment Financing-i			
	deferred payment at a certain price	(MAEF-i), SAWIT-i,			
Murāba <u>h</u> ah	Refers to a sales contract with a	Machinery & Equipment Financing-i			
	disclosure of the asset cost price and	(MAEF-i), Trade Working Capital			
	profit margin to the purchaser.	Financing-i (TWCF-i), Murabahah Trust			
		Receipt (MTR), Letter of Credit-i (LC-i)			
Ijārah	Refers to a lease or service contract	Safe Deposit Box-i (SDB-i)			
	that involves benefit/usufruct of				
	certain assets or work for an agreed				
	payment or commission within an				
	agreed period.				
	Sharī'ah Financial Contract Qard Bayʿal-ʿīnah Tawarruq Bayʿbi thaman ājil Murābaḥah	Shart'ah Financial ContractOperational Definition at AgrobankQardGiving a property to a party who will benefit from it and who will subsequently return an equivalent 			

 Table 2: Type of Sharīʿah Financial Contracts and Examples of Products Offered by Agrobank

Source: Adapted from www.agrobank.com.my

Relationship Between Value Chain and Sharīʿah Contracts

The interview results show that Sharī'ah contracts ensured that VCF functions according to Sharī'ah principles. Therefore, the change in Agrobank's status to a full-fledged Islamic bank is an effort to improve existing procedures, processes and systems. It is in line with P1's statement that AVCF was applied before Agrobank became an Islamic bank and even after. Agrobank reaps benefits from AVCF under the Sharī'ah operational system just as it used to under the conventional system. P2 emphasised that the operational changes in Agrobank to a Sharī'ah system did not mean abandoning all conventional processes, including AVCF. As long as the processes, systems and procedures did not conflict with Sharī'ah principles, they were maintained at Agrobank. P2 opined that Islam justifies *muʿāmalāt* (commercial) transactions as long as the case does not conflict with Sharī'ah principles. Agrobank chose to explore procedures, processes and systems that were not contradictory.

Adoption of Sharīʿah contracts also ensured that VCFs that contradicted Islamic principles were avoided. P2 stated that in the past during the conventional system period, Agrobank was allowed to provide loans or financing to customers who wanted to produce non-Islamic products, such as tobacco farming for cigarettes, pig farming and crocodile rearing for human consumption. However, when AVCF with the Sharīʿah operational system was implemented, Agrobank could no longer provide financial services for these products because

they contradicted Sharī'ah values. This fact was also emphasised by P1, notably that the methods, products, processes, and all matters related to Agrobank activities must comply with Sharī'ah principles.

However, not all types of Sharīʿah contracts offered by Agrobank were suitable for business applications. Therefore, Agrobank has stipulated several types of Islamic financing to run the AVCF. Based on the 2016–2019 annual reports, Agrobank was involved in six types of Sharīʿah contracts for AVCF. **Figure 3** shows the types of Sharīʿah financing contracts for AVCF along with the amount of financing for each type of contract offered by Agrobank during the 2016–2019 period.

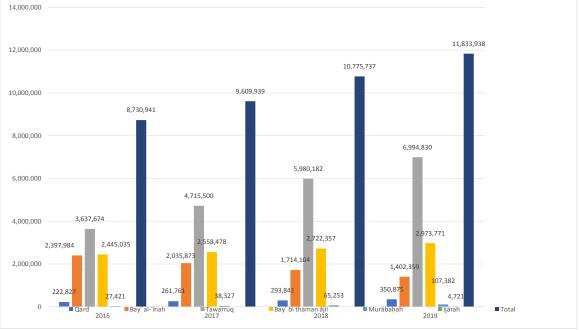


Figure 3: Sharī'ah Financing Contracts for AVCF in Agrobank (MYR '000)

Source: Adapted from Agrobank Annual Reports (2016-2019)

Figure 3 shows that total Sharī'ah financing contracts disbursed by Agrobank increased from 2016 to 2019. In more detail, there was an increasing or decreasing trend in total financing for specific types of Sharī'ah contracts. The increase in Sharī'ah financing occurred in *qard, tawarruq, bay' bi thaman ājil, murābaḥah* and *ijārah* contracts. In addition to having the highest amount of Sharī'ah financing, *tawarruq* contracts also experienced a significant increase from one period to the next. This contract is very different from the *qard, murābaḥah* and *ijārah* contracts, which had slightly increased, and the financing amount was relatively smaller than *tawarruq*. Meanwhile, although *bay' bi thaman ājil* experienced a slight increase, the amount of financing by this type of contract was relatively large. On the contrary, a decrease in Sharī'ah financing only involved *bay' al-'īnah*.

However, other Sharī ah financing contracts, such as *muzāra ah*, *musāqāh* and *mushārakah* were not offered by Agrobank due to several reasons. According to P2, *muzāra ah*

and *musāqāh* cannot be implemented because the two contracts have specific criteria. Customers have numerous specific desires, whereas Agrobank cannot draft personalised contracts only for a small number of clients. In addition, this specific criterion also precludes financing related to agriculture, such as the construction of roads and waterways. Thus, it would be difficult for Agrobank as well as the customers. In addition, Agrobank cannot provide the *mushārakah* contract because of risks and accounting problems (P1) as well as the customer's attitude or character, such as being lazy, etc. (P2).

DISCUSSION

This study indicates that Agrobank has tried to develop an AVCF business model according to Sharī'ah principles. The results of this study are summarised in **Table 3**.

AVCF as a Business Model in	Implementation of the Sharīʿah	Relationship between Value		
Agrobank	Operational System	Chain and Sharīʿah Contracts		
Agrobank emphasises on AVCF	During the 2016 to 2020 period, Agrobank	The Sharī ah contract ensures that		
as a business model that involves	was operating under the Sharīʿah system	VCF works under Sharīʿah		
numerous players working	as a full-fledged Islamic bank. Previously,	principles. For Agrobank, the		
together in the agriculture sector.	Agrobank was operating under a	change in status to a full-fledged		
It is also a core business that was	conventional system.	Islamic bank is an effort to		
developed to build all aspects of		improve existing procedures,		
the agricultural value chain.		processes and systems.		
Agrobank acts as a facilitator by	Implementation of the Sharī ah operating	Sharīʿah contracts also ensure that		
encouraging customers to be	system for AVCF at Agrobank has three	VCF products that contradict		
involved in the value chain. In	different components from the previous	Islamic principles are avoided.		
relation to AVCF, it not only	conventional system, namely institutional	Agrobank has six modes of		
plays a financing facilitator role	structure, Sharīʿah financial contract, and	Sharīʿah financing contracts,		
but also acts as a matching and	type of customer.	namely qard, bay' al-'īnah,		
advising facilitator.		tawarruq, bay' bi thaman ājil,		
		<i>murābaḥah</i> and <i>ijārah</i> .		
The VCF model positively	Implementation of the Sharī ah system has	Other Sharīʿah financing		
impacts banks and customers by,	altered the institutional structure by the	contracts such as muzāraʿah,		
for instance, reducing costs and	addition of the Shariah committee and	musāqāh and mushārakah have		
risks, extending outreach to	Shariah department; conventional	not been applied by Agrobank		
smallholders, and encouraging	financing contracts have been replaced by	due to specific criteria regarding		
flexibility in collaterals.	Sharī ah-based ones; and selection of	risk problems, accounting and		
	customer type has changed.	customer attitudes.		
Source: Authors' own				

 Table 3: Summary Findings of AVCF Islamic Business Model in Agrobank

Source: Authors' own

Table 3 shows that what Agrobank does is a significant development for the VCBM concept since the model is usually applied based on conventional systems. Agrobank has developed the VCBM concept from an Islamic perspective. For Agrobank, the business is not only concerned with how a company makes money (Miller & Jones, 2010) but also how it practises and propagates Islamic values, including supporting sustainable development (BNM, 2018, 2021a, 2021b). Hence, Agrobank modified AVCF using Sharīʿah principles. AVCF uses trade-related financing (Miller & Jones, 2010), modified by Agrobank through Sharīʿah financing contracts. It ensures that the business carried out does not contradict Islamic values. Through AVCF based on

Sharī'ah principles, Agrobank has demonstrated its contribution to building the agriculture sector with a focus on economic growth, community empowerment and environmental sustainability (BNM, 2018, 2021a, 2021b). From a Sharī'ah perspective, they are part of what is called *maṣlaḥah 'āmmah* (public benefit). Thus, these findings have also proven that VCBM, from an Islamic perspective, is suitable for the agricultural sector's development (Briones, 2014; Kilelu *et al.*, 2017; Hassan *et al.*, 2019).

Although AVCF practised by Agrobank has been modified according to Sharī'ah principles, this does not mean that all conventional considerations have been abandoned altogether. The results of this study confirm previous findings that understanding the value chain structure can reduce risk (Miller & Jones, 2010; Bank Indonesia, 2015; Swamy & Dharani, 2016) and the hesitation of financial intermediaries to finance the agriculture sector (Miller & Jones, 2010). Agrobank's annual report mentions reduction of costs and risks in financing areas. The report also declares that the requirement of collateral in finance is not a pre-requisite. The VCBM developed by Agrobank, according to the theory (Miller & Jones, 2010), tends to facilitate the value chain model, in which Agrobank acts as a facilitator. Agrobank is a financing facilitator, matching facilitator, and advisory facilitator for agriculture sector customers. This study also confirms the findings by Cuevas and Pagura (2016), which state that value chain strategies could reduce information asymmetry. It shows how Agrobank evaluates customers before providing financing and how Agrobank supervises customers in running projects and maintaining value chain relationships. This study's results also corroborate the findings of Kilelu et al., (2017), which state that value chain limits processes and product improvement. It also indicates the criteria that farmers must meet to produce some products according to the processor's wishes (interdependence between levels of the chain); hence, farmers' actions are limited to the agreed procedures and results.

Furthermore, although almost all Sharī'ah contracts have similar features for each VCF stage (Hussain & Syed Ja'afar Alhabshi, 2016), not all Sharī'ah contracts can be directly applied to optimise AVCF. The findings of this study differ from those of previous studies which aver that various profit-and-loss sharing contracts are suitable for the value chain model; for example, muzāra 'ah (Oladokun et al., 2015; Moh'd et al., 2017), and musāqāh and mushārakah contracts (Saqib et al., 2014). Although musāqāh, muzāra 'ah, and mushārakah are long-standing Sharī' ah contracts, their application by Agrobank for financing purposes still faces several obstacles. The study found that *musāqāh* and *muzāra* ah contracts have specific criteria, making them difficult for Agrobank and its customers, who both need flexibility in doing business. Meanwhile, the mushārakah contract has a high potential for risk, especially if this contract is used for large financing. As an alternative, Agrobank prefers qard, bay' al-'īnah, tawarruq, bay' bi thaman *ājil, murābahah* and *ijārah* contracts to implement AVCF. Thus, this study's findings tend to corroborate the findings of Obaidullah (2015), which states that mushārakah-based financing works well only under certain conditions. This study also reinforces the findings that financing through Sharī'ah contracts does contribute to all value chain actors, including Agrobank, as a source of funds, similar to the findings by Ningrat and Nurzaman (2019).

Thus, the development of Sharī'ah-based AVCF, as carried out by Agrobank, is an indication of future Islamic banking development. Amidst an uncertain economic situation caused by the pandemic, food security needs to be protected for survival purposes. Sharī'ah-

based value chain offers a business strategy for collaborating with fellow humans and links humans to the Creator, who has provided resources to meet their needs. However, Sharī'ah-based AVCF also has potential for further improvements. So far, AVCF only accommodates buying and selling contracts (*qard, bay' al-'īnah, tawarruq, bay' bi thaman ājil, murābaḥah* and *ijārah*), while ignoring profit-sharing contracts (*mushārakah* and *muzāra'ah*), meaning that changing the conventional system to the Sharī'ah system could possibly be limited just to replacing the term 'interest' with 'profit'. Consequently, Islamic banks will always face an identity crisis resulting in a loss of direction in the future (Muhammad *et al.*, 2016). However, AVCF has offered collaboration between fellow VC actors based on the principles of openness and mutual trust, thus, enabling Sharī'ah contracts in the form of profit-sharing to run concurrently.

CONCLUSION

Following an assessment of the appropriateness of using *muzāra* 'ah, *musāqāh* and *mushārakah* contracts for AVCF, Agrobank decided not to include them in its business model during the 2016–2020 period. Based on this research, these contracts are too specific and highly risky, making them difficult for the value chain parties. However, according to this study, the *qard*, *bay* '*al*-'*īnah*, *tawarruq*, *bay* '*bi thaman ājil*, *murābaḥah* and *ijārah* contracts have demonstrated their effectiveness in business applications over the past five years at Agrobank, as they provide flexibility for those involved in the value chain. Regardless of the type of Sharī 'ah contracts used, the objectivity desired by customers involved in the value chain is a significant consideration for Agrobank rather than introducing the Sharī 'ah contract by itself.

Thus far, the AVCF business model has been applied together with the conventional approach. According to this study, this approach does not consider Sharī'ah values, so there is a possibility of contradiction with Sharī'ah principles although Sharī'ah principles are the basis for Islamic banking operations. This research has shown that Sharī'ah-based AVCF can comply with and encourage the achievement of Sharī'ah principles while at the same time providing benefits for parties involved in the value chain. However, discussions in this paper are limited to AVCF as an Islamic business model in Agrobank from 2016 to 2020. Therefore, further studies in other financial institutions need to be carried out to get a global idea of AVCF based on an Islamic perspective. Practically, this study encourages Islamic financial institutions to adopt the Islamic AVCF system through lessons learned from Agrobank. Furthermore, this study also recommends that Agrobank review and establish policies regarding the adoption of sharing contracts such as *mushārakah, muzāra 'ah* and *musāqāh* for AVCF in the future.

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