




“Integrated financing model in Islamic microfinance institutions for agriculture and fisheries sector”

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INTEGRATED FINANCING MODEL IN ISLAMIC MICROFINANCE INSTITUTIONS FOR AGRICULTURE AND FISHERIES SECTOR

Abstract

The uniqueness of micro, small and medium enterprises (MSMEs) in the agriculture and fisheries sector has led to thoughts of innovation in the microfinance institutions (MFIs) that serve it. Service innovations in the agriculture and fisheries sector have been carried out in various countries to facilitate the development of this sector. This study aims to analyze the financing model of Islamic microfinance institutions (Islamic MFIs) based on the characteristics of the agriculture and fisheries sectors and the reconstruction of Salam contracts of Islamic financial institutions for farmers and fishermen. The research method used is qualitative descriptive analysis. The data were obtained through in-depth interviews with the agriculture and fisheries businesses in Central Java, Indonesia. The result showed that Salam contract constructed according to the characteristics of the fishing community to alleviate it from the shackles of moneylenders and wholesalers, including Islamic MFIs, farmers, and fishers as members of Islamic MFIs, buyers, Islamic banks and Islamic insurance. The output of this research is that farmers and fishermen can form a community to help one another with financial needs and are managed by Islamic MFIs that work in synergy with fisheries and agriculture companies, as well as an integrated Salam contract application system for Islamic MFIs.

Keywords

financial intermediaries, rural development, agriculture
finance, fisheries finance

JEL Classification

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INTRODUCTION

One of the ideals of the proclamation of Indonesian Independence in the preamble of the 1945 Constitution is to realize a just and prosperous society. It can be achieved if rural development succeeds in reaching the majority of people with jobs and primary income from the agriculture and fisheries sectors. Data from the Ministry of Maritime Affairs and Fisheries in 2012 noted that employment absorbed from the fisheries sector reached 60 million or 50% of the workforce, of which 90% were small fishers. However, in 2011, the fishing communities who lived in poverty reached 7.87 million. This figure represents 26.2% of Indonesia's total poor population (Bank Indonesia, 2016).

As a country that has the second longest coastline in the world, Indonesia has a large potential for fisheries to develop. For example, fishery commodities currently contribute 2.31% of GDP. This is because Indonesian fish exports have increased demand. In January 2016, the increase in fish exports reached 155.25% year on year. However, this potential is inversely proportional to the poverty data of people

who are on the coast of Indonesia. Therefore, the empowerment of micro, small and medium enterprises (MSMEs) in coastal areas must be done so that the great potential can lift the dignity and life of coastal communities. According to the data of Coordinating Ministry for the Economy (2018), MSMEs in Indonesia are currently the leading sectors in sustaining the lives of most Indonesian people. The number of MSMEs continues to increase. From 2009 to 2017, the number of MSMEs increased by 52.8 million units so that the number increased to 62.922.617 units. The increasing number of MSMEs can absorb 114.1 workers in 2013, which were originally 120.260.185 million workers in 2017. In addition, MSMEs also contributed 60.34% of the national GDP and contributed to non-oil exports by 14.17%.

The empowerment of MSMEs has been proven to be successful in reducing the poverty and increasing people's income. In all countries, it is very effective if accompanied by the empowerment of microfinance institutions (MFIs). Coastal MSMEs are concentrated in the efforts of capture the fisheries and aquaculture, marine trade, fishing equipment, and aquaculture fish food, food in the coastal areas, and other businesses related to marine products. MFIs have a strategic role in increasing the transaction circulation and awareness of coastal communities in financial management because in general coastal community income depends on the season.

The main problem of developing MSMEs is weak capital. This weakness can be overcome by intermediary institutions that can reach the existence of MSMEs and serve directly (Rahmalia, Affandi, & Murniati, 2016). However, the number of banking services and other financial institutions in the agriculture sector is currently still minimal. Agriculture sector financing is still at a low level of 4% (Nasution, 2016). Meanwhile, Indonesian Financial Services Authority (OJK in Bahasa) found that Islamic banking gives more funding in the agriculture sector at 6% level (OJK, 2017). The fisheries sector has unique specifications among other sectors in MSMEs. The uniqueness is affected by natural factors, sea, and cultural factors of coastal communities.

The uniqueness of MSMEs in the agriculture and fisheries sector has led to thoughts of innovation in the MFIs that serve it. However, MFIs cannot provide the services with the same standards as other business sectors such as trade and small industries because community income or crop yields are not routine due to dependence on seasons, weather, and natural conditions. Therefore, product innovation to serve and meet the needs of the agriculture and fisheries sector must be done so that services can be effective and maximized. History records that the failure of MFIs in the empowerment of the agriculture and fisheries sectors is due to their dependence on government programs. However, historical facts also note that the success of food self-sufficiency is inseparable from the role of MFIs (Suradisastira, 2006). On the other hand, the low funding of the agriculture and fisheries sector which is only 6% (OJK, 2017), shows that banks and MFIs are still not optimally serving this sector. BMT, as a rapidly developing Islamic MFI and recognized by all the society, is demanded and must be challenged to face the community transformation (Nugroho, 2014), and make agriculture and fisheries the reliable sectors in the future with service product innovation.

1. LITERATURE REVIEW

1.1. Financial inclusion

Financial literacy in Indonesia is still relatively low compared to other countries. Bank Indonesia noted that the number of Indonesian population aged over 15 years who have accounts in various financial institutions is only 36.1%. This figure is much lower compared to the average number in the Asia Pacific, which reaches 69%.

Financial inclusion means that individuals and businesses have access to useful and affordable financial products – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way. According to CGAP (Consultative Group to Assist the Poorest), financial inclusion is the ease of accessing the financial services, both savings, credit and other formal and non-formal financial services, with secure, reliable, and sustainable guarantees. The ease of access to finance for all citizens at this time is in-

deed free from various obstacles due to the information technology that is developing at this time. However, poor and backward rural populations continue to experience these obstacles.

Bank Indonesia (2014) states that the development of inclusive finance aims at economic efficiency, stability of the financial system, preventing shadow banking and irresponsible finance, creating new banking market potentials, enhancing Indonesia's HDI (Human Development Index), preventing the inequalities due to low-income traps, and alleviating the poverty. To realize the national financial inclusion, Bank Indonesia, as the regulator of the national banking system, makes a strategy consisting of six pillars, including financial education, public financial facilities, financial information mapping, supporting policies or regulations, intermediation facilities and distribution channels, and consumer protection.

1.2. Islamic microfinance institutions in Indonesia

Conventional MFIs have existed since the beginning of Indonesian Independence Day until today such as the BRI Unit, Rural Banks (BPR), and Cooperatives. In the 1990s, the Islamic microfinance institution, which was incorporated as a Cooperative, was a phenomenal entity because of its rapid development and growth to date. The Islamic MFIs are known as Baitul Maal Wat Tamwil (BMT), which operates based on Islamic principles. Now this institution is similar to banking, in which it has similar agreements and service products. However, the difference in segmentation and characteristics makes BMT better known as a microfinance institution for the lower classes. The existence of this institution has also been recognized by the Financial Services Authority (OJK) as an intermediary institution and as an effective institution in community empowerment, especially for traders, farmers, fishers, and small industry players (OJK, 2017). The Islamic MFIs are also developing rapidly in other Muslim countries such as Pakistan (Shaikh, 2016).

BMT service products are usually focused on the Wadiah (Deposit) and Mudharabah contracts (a contract of participation, a partnership where capital is provided in cash or assets by one party

and labor is provided by the other party) for fundraising, and Murabahah, Ijarah, Mudharabah, and Musyarakah for financing. The contracts are made equal for all sectors and business fields in urban and rural areas. The agriculture and fisheries sectors are unique compared to other business sectors with a higher risk (Rahmalia, Affandi, & Murniati, 2016).

1.3. Microfinance institutions (MFIs) model for community development and poverty alleviation in various countries

Social phenomena that develop in the community can be analyzed, such as symptoms, impacts, and predictions of its development direction, so that the parties concerned can control them in accordance with its objectives (Ekananda, 2015). There are several forms of economic modeling, such as the verbal or logic model; physical models; geometry models; mathematical models and econometric models (Greene, 2012; Wooldridge, 2013). These models are currently the basis of microeconomic and macroeconomic theories. They are designed complex issues to simplify and understandable to all parties, i.e., the characteristics of agricultural and fisheries MSMEs that have high risk.

For the banking world, high operational costs are due to low population density, geographical distance from the economic center, inadequate infrastructure. The distance traveled for monitoring the agriculture and fisheries sectors is far and season dependent, so both of these sectors have high operational costs. In addition, credit risk from these sectors is also high due to the risk of crop failure, season-dependent cash flow, uncertainty of credit returns due to uncertainty of income sources from the harvest, individual credit that is difficult to assess, limited access to markets, risk of falling prices in the harvest season, the lack of government policies that protect farmers or fishers.

At present, the MFI service model has experienced the development in various countries. The most dominant model adopted by MFIs around the world, including in Indonesia, is the Grameen Bank model developed by Prof. Muhamad Yunus from Bangladesh. For example, the development

of financing for farmers and fishers in Pakistan adopts a conventional funding model developed in Bangladesh and India (M. T. Kalhor, Mu, Shah, Noman, M. A. Kalhor, Pavase, & Soomro, 2017). The same model was developed in African countries such as Nigeria and other countries in Asia, Europe, and Latin America (Filli, Onu, Adebayo, & Tizhe, 2015). Roy (2012) argues that MFIs serving as agricultural finance have a higher Return on Assets (ROA) of 9.43% compared to the national average of ROA of 1.40 during 2008–2010. Mago and Hofisi (2014) argue that microfinance plays an important role in the agricultural sector and is successful in creating new ideas in agriculture and accelerating rural economic development in Africa. This was also confirmed by the results of research in Tanzania (Girabi, 2013), Ethiopia (Ayele & Goshu, 2018), Ghana (Sulemana & Adjei, 2015), China (Wang, 2015), and Indonesia (Dompas, 2012). An example of an MFIs financing model for coffee commodity development in Brazil is a model that has been developed by COPUCAS MFIs (Incofin Investment Management, 2016).

1.4. Financing model of Islamic microfinance institutions for farmers and fishers

Since the World Summit in Social Development was held in 1995 in Copenhagen, participating countries, including Indonesia, have moved to overcome the poverty and empower the communities through MFIs. Social inequality that occurs in the community can be overcome by building the foundation of the national distribution system with the integration of state-owned enterprises (SOEs) and MFIs as a “trading house.” It is done by creating a broad domestic market for future economic development.

Community independence must be fostered by the developing MSMEs. This is important because it has positive values rather than encouraging people to become the workers. With the development of MSMEs, the workforce absorbed will be far greater than the development of large-scale businesses. The only way to develop an effective MSME is through the development of MFIs, although there are still weaknesses to MFIs, such as the small role of government in the aspects of regulation and funding, less professional human resources, capital, and other institutional issues.

The low bank financing in the agriculture and fisheries sectors (OJK, 2017) is caused by the fear of the banking world to bear high risks in these sectors (Ehsan & Shahzad, 2015). This should trigger even more financial sector players to make a breakthrough. OJK as a bank regulator in Indonesia has published a book on Islamic finance for the agriculture sector, especially organic agriculture. The book is the Action Pro Salam handbook (Access to Indonesian Islamic Finance for Harmonious, Natural and Trustworthy Organic Agriculture).

Some financing schemes can be used as guidelines for making a financing model for Islamic MFIs to be adjusted to the community's needs and modified according to the circumstances and risks faced by them (Bacha, 1999; Dau-Schmidt, 2012; Nazir, Chauhan, Khati, & Arya, 2018). The scheme of financing the organic agriculture sector that has been issued by OJK (2017) includes Salam financing, Musyarakah/Mudharabah financing, channeling patterns with Salam contracts.

Salam contracts are widely known as contracts aimed at the agribusiness sector, such as agriculture and fisheries (Ehsan & Shahzad, 2015). Gumilang (2017) mentions that the agricultural sector financing model can be classified according to the intended use of funds, such as providing raw materials using the contracts of Murabahah, Salam, Musawwamah, and agricultural machinery using Ijarah Mumtariah Bit Tamlik (IMBT), Murabahah and others.

2. METHOD

This research is qualitative field research, where the role of researchers in forming and constructing the knowledge is the main figure; therefore, the relationship between researchers and research objects is so deep. The type of research is grounded theory. The stages of this research are analysis and mapping of needs, analyzing ideal new concepts, developing and testing new concepts. To obtain the information about social phenomena, the researchers conducted direct observations and in-depth interviews with farmers, fishers, their families, local community leaders, and MFIs in the Regency of Jepara, Demak, and Pati, Central Java, Indonesia. Literature studies are also carried out

intensively to obtain the models that have been tested in various regions and countries and that have successfully replicated the MFIs from their experience in other countries.

3. RESULTS

3.1. Characteristics of agriculture and fisheries sectors

Based on field observations and depth interviews with fishers, boat owners, salt farmers, Islamic MFIs managers, and people living in coastal areas in Jepara, Demak, and Pati Regency, fishers actually have high average income when the weather is good and the sea waves are not high. It was as stated by Sokib (the Cooperative Chairman of Mina Barokah Kedung, Jepara Regency): "In fact, the income of fishers here is high during the dry season. In the dry season, fishers here mostly process salt. Currently, fishers are familiar with geo-membrane technology for salt processing. With geo-membrane technology, yields have increased significantly, with better salt quality. However, when the peak harvest season arrives, the price of salt falls from the average price of Rp 700/kg to under Rp 200/kg. Salt farmers cannot do anything because they cannot store salt in warehouses for sale at high prices. This is due to their obligation to support their families every day. However, for large landowners, they will do it. That is when it is not at the salt season from around January to April."

Microfinance institutions have an important role in maintaining the price stability by providing the loans to fishers. However, with limited capital, the MFIs cannot meet all the needs of its members. Only a small number of members can be supported by MFIs. It was as stated by Mr. Faizan (a member of the fishers cooperative in Demak Regency): "If the Cooperative can lend the farmers, then they do not need to sell the salt at the peak of the harvest. Farmers can store it in a warehouse and sell it when prices are high. However, those who get loans from cooperatives are few and the same person. Those who have collateral take precedence over those of us who do not have it. So we were forced to sell salt to wholesalers at a low price, even not cash. They take the goods first, and the goods are paid a week or a few weeks later."

The same thing was expressed by Mr. Tamin, a fishing vessel worker in Pati Regency: "Usually in good seasons (small waves and not rain), fishing workers can earn up to Rp 5 million per month, but that income runs out right away. When he was asked why not set aside his income to save. With a laugh, Mr. Tamin answered: "People like us are not used to saving money. The amount of money we get is equal to the amount we spent."

The low level of education is an obstacle to inclusive financial education among fishers. High income in the harvest season runs out only for useless needs, such as buying cigarettes, for a motorcycle down payment. Not a few of them even use their money for damaging things, such as drinking beverages or spending time watching local music concerts (Dangdut in Bahasa). Darso (a young fishers) revealed: "When can we feel happy life if not at harvest time? Should we have to live a hard life over and over? Occasionally we feel good life."

The harvest time usually happens during the dry season in June, July, August, and September. In these months, the income of fishers and salt farmers could reach 5 million rupiah or more. However, during high waves, especially at the height of the rainy season, they usually cannot work so they have no income at all. The cycle is depicted in the following table.

From Table 1, it can be seen that the income of coastal communities in Jepara, Demak, and Pati Regencies in January, February, and March is very small because they cannot go out to sea and catch fish. Salt farmers cannot produce salt and fish farmers cannot catch fish because of the weather, wind, and high sea waves. The fishers hardly carry out the productive activities. Their average income is only 150 thousand Rp to 350 thousand Rp in one month. Fishers can start producing in May, at the beginning of the dry season. Their income in May began to increase to an average of 2.5 million per month, then increase again in June to an average of 4 million. In July, August, and September, there is the harvest season for fishers and salt farmers because the weather is good. Their average income can reach Rp 5 million and even more. Fisher's income declined again in October, November, and December, at the start of the rainy season.

Table 1. The cycle of fisher's income and consumption in Jepara, Demak, and Pati Regencies (000 Rp)

Information	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Income	200	150	350	500	2.500	4.000	5.000	5.000	5.000	4.000	3.500	1.000	2.600
Basic consumption	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500
Non-staple consumption	0	0	0	150	400	2.000	2.500	2.500	2.500	2.000	1.500	500	1.171
Total consumption	1.500	1.500	1.500	1.650	1.900	3.500	4.000	4.000	4.000	3.500	3.000	2.000	2.671
Savings	-1.300	-1.350	-1.150	-1.150	600	500	1.000	1.000	1.000	500	500	-1.000	-71

3.2. The reconstruction of Salam contract of Islamic MFIs for farmers and fishers

Salam contract is known as a contract for the agriculture or agribusiness sector. This contract is effective in eliminating Usury, Maysir and Gharar in the agricultural sector with bonded practices that are mostly carried out by commodity traders. Islamic Banking Statistics issued by OJK (2017) does not even record a single digit of the Salam contract. It means that all Islamic banking in Indonesia does not use a single Salam contract in its financial transactions. This is an irony in an agrarian country like Indonesia. Indeed, funding for the agriculture and fisheries sector does not have to use Salam contract. However, with the zero figures, it indicates the low level of seriousness of the banking world in developing the agriculture and marine resources as a business potential.

Islamic MFIs in Indonesia are currently not familiar with the use of the Salam contract. Observations in all BMTs that were the object of the study showed that none of the BMTs used the Salam contract for the agriculture and fisheries sector or other sectors. This is because BMTs as Islamic MFIs still minimally serve the agriculture and fisheries sector because of the high risks that must be borne by them.

Salam contract, which has been applied so far, is the one that has not been modified, so it has not been adjusted to the needs and characteristics of the community as customers whom they will serve (Al Fijawi, 2016). The Salam contract model in this study is the one that is constructed according to the characteristics of the fishing community to alleviate them from the moneylender and middleman's snares that have been shackling them.

The roles, tasks, and functions of each parties in the scheme are described prior to elaborating the parties, and their functions and tasks.

1. Islamic microfinance institutions
 - a) Islamic MFI is cooperation owned by the members, i.e., farmers and/or fishers, which is managed independently from, by, and for the members;
 - b) Islamic MFI identifies the problems, educates family financial management, and fulfills the members' financial needs according to the season cycle, in order to make them not get into debt with moneylenders and wholesalers;
 - c) Islamic MFIs records the production results of its members in one period (one year), and then makes a mapping of markets, prices, and other information related to commodities produced by them;
 - d) Islamic MFIs functions as a connector between buyers, members, and market information at the local, national, and international levels to make the wholesalers not easily manipulate the prices so that the bargaining power of farmers and fishers can be lifted;
 - e) Islamic MFIs empowers women to process the harvests into products that have added value so that they can reduce plummeting prices and improve the welfare of farmers' and fishers families;
 - f) Salam contract is conducted between Islamic banks and Islamic MFIs to fund the members' needs in the short, medium, and long term. This is done so that commodity price stability can be maintained, members as farmers and

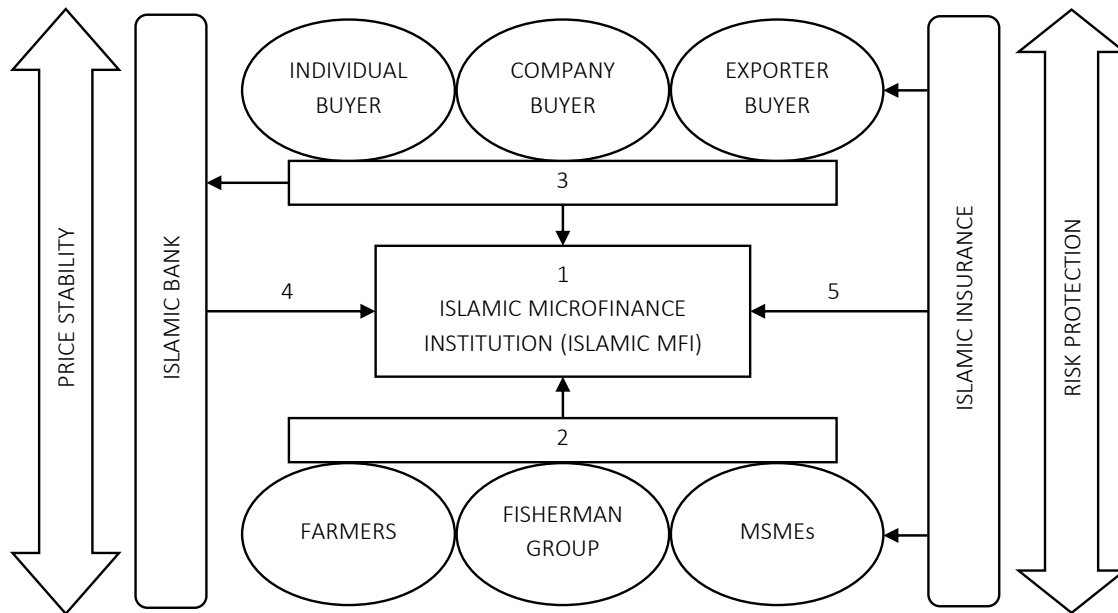


Figure 1. The model of reconstructing Salam for farmers and fishers

fishers do not experience losses due to abundant production and falling commodity prices.

2. Farmers and fishers as the members of Islamic MFIs

Farmers and fishers as the members of Islamic MFIs have rights and responsibilities as follows:

- a) ensuring the quantity and quality of commodities based on the desired standard of local, national, and international buyers;
- b) continuously improving the product quality so that the price guarantee that has been fought for by Islamic MFIs can be maintained or even improved;
- c) ensuring that the production or harvest period does not miss the agreed time with Islamic MFIs, Islamic banks, and buyers; and
- d) getting price certainty and funding guarantee for commodities and loans for business needs as well as personal and household needs.

3. Buyers

Buyers are the party that has the strongest bargaining position in the trading system of agriculture

and fisheries commodities. With the strength, the relationship between buyers and farmers or fishers becomes a patron-client relationship. Therefore, in this scheme, the buyers can utilize Islamic MFIs as a source of information on prices, production, and quality of commodities produced by farmers or fishers. Islamic MFIs guarantee the product availability, time, quality, and quantity of agriculture or fisheries products from the members.

4. Islamic bank

Islamic bank functions as Islamic MFIs fund supplier for the members' needs and buyers' demands and ensures the installment payment of the members. Islamic bank as the owner of the funds bears the high risk of the agriculture and fisheries sectors. The risks can be reduced by the emergence of Islamic MFIs as an institution empowering its members. Members' finance can be managed well with the empowerment carried out by Islamic MFIs.

5. Islamic insurance

The presence of Islamic insurance will further ensure the risks faced by Islamic banks, Islamic MFIs and buyers because Islamic MFIs have established a good financial management system and educate their members in managing the household financ-

es. Thus, the certainty of price, quality, quantity, and time, as well as risk mitigation, can be carried out in accordance with the objectives of MFIs, the Islamic bank, the buyers or the Islamic insurance.

4. DISCUSSION

The agriculture and fisheries sectors have different characteristics from other sectors, such as trade or small industries. Agents in the agriculture sector are generally referred to as farmers, while those in the fisheries sector are referred to as fishers. Income of people who live in this sector is greatly affected by seasonality, crop yields, commodity prices, and weather conditions. For fishing communities, the height of the sea waves influences on their fish catch. Therefore, in certain months, especially during the peak of the rainy season, fishers sometimes take a day off to sea because the height of the sea waves makes it impossible for them to fish. Ministry of PPN/BAPENAS (2010) identifies the problems in the agricultural sector that cannot be separated from infrastructure, land ownership, water availability, capital, hatcheries, agricultural support sectors that are not yet integrated, and other fundamental problems. Thus, the financial innovation of the agriculture and fisheries sector must be carried out by Islamic MFIs in order to benefit both parties with measured risks to maintain their viability.

In Pakistan, the development of MFIs in the agriculture and fisheries sector is mainly carried out to mitigate high risks (Kalhor et al., 2017), facilitate MFI access with easy bureaucracy and access to credit in Nigeria and African countries (Emefesi & Yusuf, 2014; Abunyuwah & Blay, 2013; Jacob & Christianah, 2011). MFIs operating in this sector actually have high profitability in various countries such as Africa (Roy, 2012), India (Rasheed, Xia, Ishaq, Mukhtar, & Waseem, 2016; Vipinkumar & Lekshmi, 2012), Tanzania (Girabi, 2013), and other countries.

Empowerment of farmers' and fishers' communities through MFIs has shown success in various countries and continents. In Africa, research conducted by Mago and Hofisi (2014) shows that MFIs are proven to help the agricultural sector and en-

hance the communities' economic development. The results of the study conducted by Filli, Onu, Adebayo, and Tizhe (2015) in Adamawa State, Nigeria showed that the ease of credit by fishers had increased motivation, as well as strengthened and increased the productivity. In Ethiopia, Ayele and Goshu (2018) mention that MFIs have a role in educating the farming communities to increase their incomes. Recognition of the success of MFIs has also been carried out by UN Food Organization (Tietze & Villareal, 2003); which exemplifies that MFIs in the Philippines and Vietnam have successfully empowered the communities, especially women, in poverty alleviation and community nutrition improvement.

The high income of fishers is not only in Jepara, Pati, and Demak Regencies, but is also shown by Nasution, Sihombing, and Hasyim (n.d). In addition, fishers in Aceh earn more than the regional minimum wage (Dahen, 2016); fishers in West Sumatra have a significant income level using equipment and technology; Siskawati, Rizal, and Prihadi (2016) elaborate the high income of fishers in the Province of Bangka Belitung.

The consumption patterns of coastal communities are also interesting to observe. This is because those with high incomes during the peak of the dry season also have high consumption styles. They usually buy things beyond their needs. Therefore, it is not wondering that from July to September, there are many new motorbikes in the fishing village.

Finally, the question arises on how the fishers meet their daily needs. A surprising answer was found based on observations and in-depth interviews with various parties around the coast. For fishers who have fishing boats or have large salt fields, their consumption lifestyle is not a problem for them because they are a high-income community group. But for fishers or salt farmers who do not have land or have narrow land, to fulfill their daily needs at the peak of the rainy season is to owe money to wholesalers who buy their commodities.

The role of wholesalers in the structure of coastal communities is quite strategic. This is not because of their deviant behavior but rather the opposite. The wholesalers become the saviors when fishers need it. They easily give loans to small fish-

ers to meet their needs. This bonding relationship has become a tradition in fishing communities. Consequently, when the harvest arrives, and commodities overflow, then the law of economy in the economy textbooks is valid. According to the law of demand and supply, the price decreases if the demand increases and vice versa. If the amount of goods is abundant, the demand for these goods will be low, resulting in falling prices. When prices fall, the wholesalers utilize this condition to get the goods at low prices. Fishers do not have a bargaining position because they are already bound by loans they have obtained when they cannot work or are unable to produce fish.

Based on the characteristics and problems of the fishing communities mentioned above, the

MFI as an intermediary institution must make innovations to its products and services to alleviate poverty and provide the solutions to the fishers problems. MFIs in the agriculture and fisheries sector nowadays are still constrained by human resources, technology, capital and the lack of modern financial literacy in services to their members. This is in line with Situmorang and Sijabat (2011) who criticize the existence of cooperatives as MFIs that the large number of cooperatives has not been clearly connected to alleviating poverty in Indonesia. Rahmalia, Affandi, and Murniati (2016) also revealed the inability of MFIs to mitigate the high risk of the agribusiness sector. Meanwhile, Handayati (2015) questioned the commitment of MFIs in empowering the MSMEs.

CONCLUSION

The agriculture and fisheries sectors have unique characteristics that are different from other business units. This is because community income and crop yields in the agriculture and fisheries sector are highly dependent on the season, weather, and natural conditions and are not routine. This uniqueness brings ideas up to make some innovations by creating an appropriate model for agriculture and fisheries sectors – farmers and fishers. The Salam contract has traditionally been the basis for a contract for the agribusiness sector, but Islamic banks have not yet applied it at all. This is related to the high risk of the agriculture and fisheries sectors. Salam contract reconstruction is expected to mitigate the risks of the agriculture and fisheries sectors, empower the farmers and fishers, expand and create new markets, release farmers and fishers from the shackles the chains of wholesalers and moneylenders, and alleviate the farmers and fishers from poverty lines.

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REFERENCES

1. Abunyuwah, I., & Blay, J. K. (2013). Accessibility Constraints Of Small-Scale Fish Farmers To Formal Credit In The Nzema East Municipality. *Journal of Economics and Sustainable Development*, 4(1), 128-132. Retrieved from <https://www.iiste.org/Journals/index.php/JEDS/article/view/4106>
2. Adu-Gyamfi, E., & Ampofo, K. A. (2014). A Study of Effects of Microfinance Credit on Community Farmers in Upper Denkyira East Municipality of Ghana. *Journal of Agriculture and Environmental Sciences*, 3(1), 67-88. Retrieved from http://jaesnet.com/vol-3-no-1-march-2014-abstract-6-jaes#j_menu
3. al-Fijawi, M. F. (2016). Salam (Forward Sale) And Istiṣnāʾ (Manufacture Contract) In Modern Applications: A Maqāwīd Al-Sharīʿah Perspective. *International Journal of Business, Economics and Law*, 9(5), 65-73. Retrieved from https://www.ijbel.com/wp-content/uploads/2016/06/KLiISC_23-29062016.pdf
4. Ashar, K. (2011). Analisis Terhadap Kesenambungan Lembaga Pembiayaan Pedesaan Dalam Endukung Usaha Mikro, Kecil Dan Menengah. *Journal of Indonesian Applied Economics*, 5(1), 57-67. Retrieved from

- <https://jiae.ub.ac.id/index.php/jiae/article/view/112>
5. Ayele, A., & Goshu, D. (2018). Determinants of microfinance loan utilization by smallholder farmers: The case of Omo Microfinance in Lemo District of Hadiya Zone, Southern Ethiopia. *Journal of Development and Agricultural Economics*, 10(7), 246-252. Retrieved from <https://www.iiste.org/Journals/index.php/JEDS/article/view/43407>
 6. Bacha, O. I. (1999). Derivative Instruments And Islamic Finance: Some Thoughts For A Reconsideration. *International Journal Of Islamic Financial Services*, 1(1), 9-25. Retrieved from <https://mp.ra.ub.uni-muenchen.de/12752/>
 7. Bakar, A. (2012). Agama Dan Kemiskinan Budaya Kerja Masyarakat Petani Di Pedesaan Di Provinsi Riau. *Jurnal Sosial Budaya*, 9(2), 212-230. Retrieved from <http://ejournal.uin-suska.ac.id/index.php/SosialBudaya/article/view/384>
 8. Bank Indonesia. (2014). *Booklet Keuangan Inklusif*. Jakarta: Departemen Pengembangan Akses Keuangan dan UMKM.
 9. Bank Indonesia. (2016). *Kajian Potensi Keuangan Unbanked People Pada Sektor Perikanan*. Jakarta: Bank Indonesia. Retrieved from <https://www.bi.go.id/id/umkm/penelitian/nasional/kajian/Pages/Kajian-Potensi-Kuangan-Unbanked-People-pada-Sektor-Perikanan.aspx>
 10. Creswell, J. W. (1994). *Research Design Qualitative and Quantitative Approaches*. California: Sage Publication, Inc.
 11. Dahlen, L. D. (2016). Analisis Pendapatan Nelayan Pemilik Payang Di Kecamatan Koto Tangah Kota Padang. *Economica Journal of Economic and Economic Education*, 5(1), 47-57. <http://dx.doi.org/10.22202/economica.2016.v5.i1.891>
 12. Dau-Schmidt, N. C. (2012). Forward Contracts - Prohibitions on Risk and Speculation Under Islamic Law. *Indiana Journal of Global Legal Studies*, 19(2), 533-553. Retrieved from <http://www.repository.law.indiana.edu/ijgls/vol19/iss2/8>
 13. Dhakal, C. P., & Nepal, G. (2016). Contribution of Micro-Finance on Socio-Economic Development of Rural Community. *Journal Of Advanced Academic Research (JAAR)*, 3(1), 134-141. <https://doi.org/10.3126/jaar.v3i1.16623>
 14. Dompas, V. (2012). *Membangun Koperasi Berbasis Anggota Dalam Rangka Pengembangan Ekonomi Rakyat*. Retrieved from <http://ejournal.unklab.ac.id/index.php/jbe/article/view/74>
 15. Ehsan, A., & Shahzad, M. A. (2015). Bay Salam: A Proposed Model for Shari'ah Compliant Agriculture Financing. *Business & Economic Review*, 7(1), 67-80. Retrieved from <https://ssrn.com/abstract=2876034>
 16. Ekananda, M. (2015). *Ekonometrika Dasar*. Jakarta: Mitra Wacana Media.
 17. Emefesi, B., & Yusuf, B. (2014). Access and impact of micro credit on poverty alleviation among farmers in kirfi local government area of Bauchi State. *IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)*, 7(11), 30-35. <https://doi.org/10.9790/2380-071113035>
 18. Filli, F., Onu, J., Adebayo, E., & Tizhe, I. (2015). Factors Influencing Credits Access among Small Scale Fish Farmers in Adamawa State Nigeria. *Journal of Agricultural Economics, Environment and Social Sciences*, 1(1), 46-55. Retrieved from <http://www.unimaid.edu.ng/Journals/Agriculture/JAEISS%20-%20Agric%20Econs/6.pdf>
 19. Fuad, I. Z., Aenurofik, & Rosyid, A. (2015). Belunggu tengkulak atas petani pembudidaya lele: Relasi Patron-Klien Budidaya Lele Di Wonotunggal Jawa Tengah. *Jurnal Hukum Islam (JHI)*, 13(2), 88-98. <https://doi.org/10.28918/jhi.v13i2.488>
 20. Girabi, F. (2013). Impact of Microfinance on Smallholder Farm Productivity in Tanzania: The Case of Iramba District. *Asian Economic and Financial Review*, 3(2), 227-242. Retrieved from <https://ideas.repec.org/a/asia/aeafjr/2013p227-242.html>
 21. Greene, W. H. (2012). *Econometric Analysis* (7th ed.). New York: Prentice Hall.
 22. Gumilang, R. R. (2017). Model Pembiayaan Syariah Bank Muamalat Untuk Sektor Pertanian. *Coopetition*, VIII(2), 119-128. Retrieved from <http://garuda.ristekdikti.go.id/documents/detail/754140>
 23. Handayati, P. (2015). The Development Model of Microfinance Institution to Reduce Poverty in Rural Areas in East Java. *International Journal of Business and Social Science*, 6(12), 85-95. Retrieved from <http://ijbss-net.com/journal/index/3373>
 24. Hidayat, Y. S. (2011). Strategi Pengembangan Lembaga Keuangan Mikro Mendukung Pengentasan Kemiskinan Di Perdesaan. *MEDIAGRO Jurnal Ilmu-ilmu Pertanian*, 7(1), 66-81. <http://dx.doi.org/10.31942/md.v7i1.569>
 25. Hilmy, H. A. (2013). *Introducing Salam as an alternative financing tool for paddy field cultivation in Sri Lanka*. Oluvil, Sri Lanka: Proceedings of the Third International Symposium, SEUSL. Retrieved from <http://ir.lib.seu.ac.lk/handle/123456789/414>
 26. Imron, M. (2003). Kemiskinan Dalam Masyarakat Nelayan. *Jurnal Masyarakat dan Budaya*, 5(1), 63-82. Retrieved from <https://www.semanticscholar.org/paper/KEMISKINAN-DALAM-MASYARAKAT-NELAYAN-Imron/e0be743f-93869caff892744f5b2b3c5d-8da3c1df>
 27. Incofin Investment Management, the Inter-American Development Bank. (2016). *Successful Models For Financing The Rural And Agricultural Sectors. The Rural Finance Partnership for Latin America and the Caribbean*. Retrieved from <http://www.incofin.com/successful-models-for-financing-the-rural-and-agricultural-sector/>

28. Jacob, O. O., & Christianah, O. O. (2011). Economic Viability for the Use of Microfinance Bank Loan on Aquaculture Development in Ogun State, Nigeria. *World Journal of Agricultural Sciences*, 7(6), 672-677. Retrieved from <https://unaab.edu.ng/economic-viability-for-the-use-of-microfinance-bank-loan-on-aquaculture-development-in-ogun-state-nigeria/>
29. Kalhor, M. T., Mu, Y., Shah, S. B., Noman, M., Kalhor, M. A., Pavase, T. R., & Soomro, M. A. (2017). Microfinance for Fisheries and Aquaculture, Lessons for Pakistan from Regional Asian Countries. *Lasbela, U. J.Sci.Techl.*, VI, 312-222. Retrieved from https://www.researchgate.net/publication/322961414_Microfinance_for_Fisheries_and_Aquaculture_Lessons_for_Pakistan_from_Regional_Asian_Countries
30. Kemenko Perekonomian. (2018). *Kumpulan Peraturan Kredit Usaha Rakyat (KUR)*. Jakarta: Kemenko Perekonomian.
31. Kementerian PPN/BAPENAS. (2010). *Kajian Evaluasi Revitalisasi Pertanian Dalam Rangka Peningkatan Kesejahteraan Petani* (Laporan Akhir ed.). Jakarta: Direktorat Evaluasi Kinerja Pembangunan Sektor Kementerian PPN/BAPENAS.
32. Llanto, G. M. (n.d.). Overcoming Obstacles to Agricultural Microfinance: Looking at Broader Issues. *Asian Journal of Agriculture and Development*, 4(2), 23-40. Retrieved from <https://ajad.searca.org/read-articles/13-view-article?aid=47>
33. Mago, S., & Hofisi, C. (2014). Conceptualizing Microfinance For Effective Smallholder Farming In Africa. *International Business & Economics Research Journal*, 13(6), 1437-1446. <https://doi.org/10.19030/iber.v13i6.8932>
34. Nasution, P. S., Sihombing, L., & Hasyim, H. (n.d.). *Analisis Pendapatan Nelayan Tradisional Dibandingkan Dengan Upah Minimum Regional Di Kecamatan Meulaboh, Kabupaten Aceh Barat*. Medan: Program Studi Agribisnis Fakultas Pertanian Universitas.
35. Nasution, Z. (2016). Model Pembiayaan Syariah Untuk Sektor Pertanian. *Iqtishadia*, 3(2), 324-343. <http://dx.doi.org/10.19105/iqtishadia.v3i2.1081>
36. Nazir, I., Chauhan, R., Khatri, A., & Arya, P. (2018). Role of credit for the upliftment of the fisheries sector. *International Journal of Fisheries and Aquatic Studies*, 6(2), 1-4. Retrieved from <http://www.fisheriesjournal.com/archives/?year=2018&vol=6&issue=2&part=A&ArticleId=1480>
37. Nugroho, L. (2014). The Challenges of Islamic Microfinance (Indonesia Evidence). *EJIF – European Journal of Islamic Finance*, 1, 1-7. <http://dx.doi.org/10.13135/2421-2172/793>
38. OJK. (2017). *Aksi Pro Salam (Akses Keuangan Syariah Indonesia untuk Pertanian Organik yang Selaras, Alami, dan Amanah)* (Pola Pembiayaan Syariah Untuk Pertanian Organik ed.). Jakarta: Departemen Perbankan Syariah OJK.
39. OJK. (2017). *Statistik Perbankan Syariah (SPS)*. Jakarta: Departemen Perizinan dan Informasi Perbankan, Otoritas Jasa Keuangan (OJK).
40. Rahmalia, D., Affandi, M. I., & Murniati, K. (2016). *Strategi Pengembangan Pembiayaan Agribisnis Pada Koperasi Simpan Pinjam Pola Syariah Di Lampung Tengah*. Bogor: Prosiding Seminar Nasional Hasil-Hasil PPM IPB. Retrieved from <http://lppm.ipb.ac.id/wp-content/uploads/2017/06/B506.pdf>
41. Rasheed, R., Xia, L. C., Ishaq, M. N., Mukhtar, M., & Waseem, M. (2016). Determinants Influencing The Demand Of Microfinance In Agriculture Production And Estimation Of Constraint Factors: A Case From South Region Of Punjab Province, Pakistan. *International Journal of Agricultural Extension and Rural Development Studies*, 3(4), 45-58. Retrieved from https://www.researchgate.net/publication/313726338_DETERMINANTS_INFLUENCING_THE_DEMAND_OF_MICROFINANCE_IN_AGRICULTURE_PRODUCTION_AND_ESTIMATION_OF_CONSTRAINT_FACTORS_A_CASE_FROM_SOUTH_REGION_OF_PUNJAB_PROVINCE_PAKISTAN
42. Roy, A. (2012). Agricultural Finance Vs. Profitability Of Microfinance Institutions – A Case Study Of The Mfis Of Assam. *Asia Pacific Journal of Marketing & Management Review*, 1(3), 1-17. Retrieved from <http://indianresearchjournals.com/pdf/APJMMR/2012/November/1.pdf>
43. Shaikh, S. A. (2016, January 11). *Towards a Sustainable Islamic Microfinance Model in Pakistan* (MPRA Paper No. 68748) (18 p.). Retrieved from <https://mpra.ub.uni-muenchen.de/id/eprint/68748>
44. Siskawati, D., Rizal, A., & Prihadi, D. J. (2016). Analisis Pendapatan Nelayan Jaring Insang Tetap Dan Bubu Di Kecamatan Membalong Kabupaten Belitung. *Jurnal Perikanan Kelautan*, 7(2), 9-13. Retrieved from <http://jurnal.unpad.ac.id/jpk/article/view/11354>
45. Situmorang, J. W., & Sijabat, S. (2011). Koperasi Dan Penanggulangan Kemiskinan Di Indonesia: Tinjauan Probabilitas Tingkat Anggota Koperasi Dan Kemiskinan Propinsi. *Jurnal Volume*, 6, 43-69.
46. Sulemana, A., & Adjei, S. A. (2015). Microfinance Impact On Agricultural Production In Developing Countries – A Study Of The Pru District In Ghana. *International Journal of Academic Research and Reflection*, 3(3), 26-44. Retrieved from <https://www.idpublications.org/wp-content/uploads/2015/02/MICROFINANCE-IMPACT-ON-AGRICULTURAL-PRODUCTION-IN-DEVELOPING-COUNTRIES.pdf>
47. Suradisastra, K. (2006). *Agricultural Cooperative In Indonesia*. Seoul: FFTC-NACF International Seminar on Agricultural Cooperatives in Asia: Innovations and Opportunities in the 21st Century.

48. Sutrisno, E. (2014). Implementasi Pengelolaan Wilayah Pesisir Secara Terpadu Untuk Kesejahteraan Nelayan (Studi di Kota Cirebon). *Jurnal Dinamika Hukum*, 14(1), 1-12. http://dx.doi.org/10.20884/1.jdh.2014.14.1.272_
49. Tietze, U., & Villareal, L. V. (2003). *Microfinance in fisheries and aquaculture: guidelines and case studies* (FAO Fisheries Technical Paper. No. 440) (114 p.). Rome, FAO.
50. Tjakrawerdaja, S. (2008). Tantangan dan Peluang LKM Indonesia. *Gemari Edisi 95/Tahun IX/Desember 2008, Tahun IX* (Forum Kita).
51. Vipinkumar, V. P., & Lekshmi, P. S. (2012). A Study On Impact Of Microfinance Institutions On The Coastal Indebtedness In Marine Fisheries Sector Of Karnataka. *Global Journal of Biology, Agriculture and Health Sciences*, 1(2), 18-27. Retrieved from <http://eprints.cmfri.org.in/id/eprint/9186>
52. Vipinkumar, V., Johnson, B., Swathilekshmi, P., & Ramachandran, C. (2013). Coastal rural indebtedness and impact of microfinance in marine fisheries sector of Tamil Nadu. *Journal of the Marine Biological Association of India*, 55(1), 79-85. <http://dx.doi.org/10.6024/jmbai.2013.55.1.01752-13>
53. Wang, X. (2015). Microfinance in Fisheries in China. *Open Journal of Social Sciences*, 3, 1-4. https://doi.org/10.4236/jss.2015.35001_
54. Wooldridge, J. M. (2013). *Introductory Econometrics: A Modern Approach* (5th ed.). USA: South Western.
55. World Bank. (2014). *Rural and Agriculture Microfinance*. International Finance Corporation (World Bank Group).
56. World Bank. (2018). *Overview*. Retrieved from <http://www.worldbank.org/en/topic/financialinclusion/overview>