

## THE MAPPING OF MICROFINANCE INSTITUTIONS FOR SUPPORTING SUSTAINABLE AGRICULTURE FINANCING IN PADANG CITY

### *Pemetaan Lembaga Keuangan Mikro Mendukung Pembiayaan Pertanian yang Berkelanjutan di Kota Padang*

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#### ABSTRAK

Lembaga Keuangan Mikro (LKM) merupakan salah satu alternatif pembiayaan bagi. Pemetaan LKM sangat penting untuk menghindari terjadinya tumpang tindih program yang membantu peran LKM. Penelitian ini bertujuan untuk melakukan pemetaan terhadap LKM di Kota Padang dengan GIS dan mendeskripsikan efektivitas pengelolaan LKM di Kota Padang. Data dikumpulkan melalui wawancara dengan setiap institusi LKM dan pihak terkait. Penelitian menghasilkan suatu situs web yang berhubungan dengan LKM di Kota Padang, sehingga hasil dan gambaran pemetaan LKM dapat dilihat di "lkmsubar.org". Lokasi LKM menyebar di sekitar pemukiman nasabah. Manajemen LKM ditinjau dari segi aksesibilitas, ketaatan terhadap peraturan, tingkat kepatuhan terhadap manajemen, tingkat pelayanan, alokasi penggunaan dana kredit, serta manfaat dana kredit. Hasilnya menunjukkan bahwa akses petani terhadap LKM agribisnis cukup baik, sebagaimana dapat dilihat dari kesesuaian antara jumlah kredit yang diajukan dan disetujui. Tingkat kepatuhan anggota terhadap pengurus dan peraturannya cukup bagus. Tingkat layanan pengurus dianggap tidak baik dan tidak efektif dalam meladeni anggota. Dana pinjaman lebih banyak digunakan oleh anggota untuk menambah modal dan sebagian mungkin digunakan untuk memenuhi kebutuhan mendesak rumah tangga.

**Kata kunci:** akses, Lembaga Keuangan Mikro, pembiayaan pertanian, pemetaan

#### ABSTRACT

Microfinance institutions (MFIs) are financing alternatives for farmers. Mapping MFIs is useful to avoid overlapping of the MFIs supporting programs. This study aims to mapping MFIs in Padang City with GIS, and to describe the management effectiveness. Data were collected using in-depth interviews with each micro-credit institution and their related parties. This research produces a website of the MFI mapping as can be seen on "lkmsubar.org". The MFIs locations spread around the settlement of the MFI's clients. The effectiveness of MFI's management is viewed in terms of the member accessibility, level of adherence to the rule of law, level of compliance to the management, management service level, allocation of the use of credit funds, and the benefits of credit funds. The results show that farmers' access to the agribusiness MFI-As is quite good, which can be seen from the consistency between the amount of credit proposed and approved. The members' compliance to the board and the rules is quite good. The service level of the board is not good and not effective in serving the members. The loan is mostly used for business capital and some may be used for funding household urgent needs.

**Keywords:** access, agriculture financing, mapping, microfinance institution

#### INTRODUCTION

Poverty is a very important issue in agricultural development, where poverty is closely related to the welfare of people's lives. Poverty is caused by many factors, such as unemployment, lack of education, low quality of human resources, and lack of access to capital (Pattinama 2009). Various efforts have been done to reduce poverty rate in Indonesia, including in West Sumatra. Improved access to

capital in the agricultural sector is one way to overcome poverty because agricultural sector is the largest sector to absorb labor, especially in West Sumatra.

Studies have shown that farmers' access to credit or formal financing sources is low. According to Bachtiar (2012), farmers and the poor are generally regarded as high-risk borrowers by commercial banks because of the difficulty in assessing the obedience of paying credit. The bank considers the poor have no

collateral to guarantee credit against possible risks. Banks regard the poor as uneconomic and small loan size clients, the unattractive and unprofitable for funding. This makes the poor unable to access the services of financial institutions.

Microfinance institution (MFI) is one alternative of financing sources that are considered more accessible to farmers and poor communities. MFI as an institution that provides a wide range of financial services for low-income people has several characteristics that rooted to farmers because of its versatility, such as the requirements and procedures that are relatively easier (Wijono 2005). Some poverty alleviation programs are implemented in the form of microfinance services. Microfinance institutions are considered capable of meeting the needs of the vulnerable groups that tend to be not bankable by the commercial banking sector. In addition, the MFI can also become an extension of formal financial institutions before the funds are channeled into the community. Forms of institutions that provide microfinance services of various types consisting of formal and informal microfinance institutions as well as government programs.

Microfinance institutions in Indonesia are in various forms. In general, the forms of MFIs can be categorized as Rural Bank (BPR), BRI unit, Credit Union, Village Credit Bank, and others. The rural community in Indonesia has, in the long run, owned "local" or "traditional" financial institutions which are familial and mutual assistance, such as Lumbung Desa, Lumbung Pith Nagari in West Sumatra. In Padang, there are two types of MFI: MFIs that come from local initiatives and MFIs established through government programs. The most fundamental difference associated with these MFIs is the source of initial capital formation. At MFIs that come from local initiative, the initial source of funding comes from the local community, while at the MFIs established through a government program it originally comes from the government.

The information about the existence of MFIs is needed by prospective customers to be able to access capital. The number of MFIs established by the government in each program also requires appropriate spatial governance, so there is no overlapping programs in one certain area. Therefore, mapping of the existing MFIs in a region is necessary to avoid overlapping programs. New programs can be generated by not interrupting or deleting the existing programs in the region. This study aims to illustrate the mapping of microfinance institutions in Padang City and describes the management of microfinance institutions in the city.

## RESEARCH METHOD

### Conceptual Framework

Microfinance institutions are one of the financing source alternatives that are relatively accessible to farmers. However, the effectiveness of MFIs in providing financing to rural communities needs to be studied further. Effectiveness implies the extent to which the achievement of the goals that have been set. The effectiveness of a development program contains the meaning of how far improvement of human welfare can be achieved with the existence of a program. Effectiveness is the measurement in the sense of achieving predetermined goals (Widodo 2014). According to Steers (1985), there are three indicators that can be used to measure the effectiveness of a community empowerment program: achievement, integration, and adaptation. Achievement of goals consists of several factors, namely, time and target-which is a concrete target. Integration is a measure of the level of ability of an organization to hold socialization, consensus development, and communication with various organizations. Adaptation is the organization's ability to adapt to its environment.

Microfinance is a financing that can cover many types of services, including microcredit which is a type of loan that is given to customers who have medium-scale business down and tend to have never been in contact with the banking. Microfinance institution aims to improve the welfare and alleviate the poverty of the household. Law No. 1 of 2013 defines microfinance institution as a specialized financial institution established to provide business development services and community empowerment, either through loans or financing in micro-scale enterprises to members and communities, savings management, as well as providing business development consultancy services not merely for profit. Microfinance institutions were developed based on the spirit to help and facilitate the poor, both for productive activities undertaken by the various activities of the micro, as well as consumptive activities of the poor families. Krishnamurti (2005) stated that there are three essential elements in microfinance, namely (1) providing various types of financial services, (2) serving the poor, and (3) using contextual and flexible procedures and mechanisms.

Financial institutions have an intermediary function in the activities of an economy. If this function runs well, then the activity will result in added value. Economic activity here does not distinguish between the undertakings are large or small, because that distinguishes only the

amount of added value based on business scale. This means that even small businesses will also increase the added value if they utilize financial institutions, so that efforts to increase community's income can be done in a productive way by utilizing the intermediation services of financial institutions, including productive activities undertaken by the poor. Poverty alleviation can be implemented through means and programs in the form of transfer payments from the government (food, health, resettlement, education, family planning, and productive activities such as through loans in the form of microcredit) (Paloma 2013).

The MFI has a function as an institution that provides various financial services for low-income communities and micro-enterprises. According to the Directorate of Financing, the Ministry of Agriculture (2004), MFIs are developed on the basis of spirit to assist and facilitate the poor, both for consumption and productive activities of the poor families. Based on its function, microfinance services implemented by MFIs have a wide variety of loans as well as other financing.

However, the multitude and variety of microfinance institutions and the types of microfinance services in Indonesia have made mapping, monitoring, and evaluating financial services difficult. The overlapping of rules, authority, and wide range of services of MFIs also contributes to the difficulty of implementing appropriate development strategies for the MFIs. This situation causes the sustainability level of the MFIs or microfinance programs to be low. Only some MFIs are able to survive and compete well with other MFIs as well as more modern types of banking services (Baskara 2013).

Most MFIs like government-owned MFIs, project MFIs, and MFI-NGOs face concerns about the sustainability of their activities. This is caused by the inability to safeguard their sustainability which can range from dependence on government and donor support, only temporally designed projects, lack of adequate microfinance systems, to inability to adapt to existing microfinance market situations (Ismawan 2002).

The effectiveness of MFIs is seen from the extent to which the MFIs can serve farmers and rural communities, the involvement of agencies in providing services, and the benefits of financing provided to farmers and rural communities. The effectiveness of MFIs in this study is seen in terms of accessibility of members or customers, the level of compliance to the board, the level of service board, the level of compliance to the rule

of law, the allocation of credit funds, and the benefits of credit funds to borrowing customers.

### Data Collection

This research was conducted in Padang City which was selected purposively due to its persistent strong culture so that MFIs in rural area are still exist. West Sumatera is also a recipient of PUAP assistance which has its own initiative to establish an Agribusiness Micro-finance Institution (MFI-A) to manage PUAP funds. The idea came from the Office of Food Crops and Horticulture of West Sumatra. This research was conducted during September– November 2016.

The data used in this research are primary and secondary data. Primary data were obtained through direct interviews with key informants from MFI managers, and MFI members as well as those related to MFIs, in addition to MFI location point data taken in the field. The data collected in this study include borrower characteristics consisting of age, education level, type of business, membership period, level of understanding of MFI, level of compliance to a leader, and attitude toward poverty. The role of MFI officers consists of the intensity of socialization, assistance, and effectiveness of rule enforcement. Environmental factors consist of external support, support from chairmen, and support of group members. The accuracy of MFI services can be seen from the accuracy of the target, the suitability of the use of funds, and smooth payments.

For the first objective, three sub-districts were taken as the sample points of the region. The three sub-districts were selected purposively with a consideration that they have a relatively large number of MFIs which are still active. To answer the second objective, this study sampled the MFIs. Samples from MFIs are also selected based on the division of the three areas. Data were collected using in-depth interviews of each microcredit institution in the village as well as related parties.

The variables observed in this research are as follows:

- a. institutions: structure, management and administration, procedures and distribution mechanisms, cost management procedures, service type, age, and the reach of MFIs;
- b. financial: source of funding, interest rate, type of credit, collateral, income and profit, rate of return;
- c. participants: participant characteristics, borrower repayment rate, welfare.

## Data Analysis

To answer the first objective, the Geographic Information System (GIS) method was used to illustrate the mapping of microfinance institutions in Padang City. The second objective, to describe the management of microfinance institutions in the city, was achieved by employing descriptive analysis.

## RESULTS AND DISCUSSION

### Profile of Microfinance Institution in Padang City

Microfinance institutions in Padang City spread over eleven sub-districts and reside in the corresponding sub-districts. MFIs in this study include MFI groups established through government programs, namely (a) Agribusiness Microfinance Institutions (MFI-A), (b) Sharia Baitul Mal Tamwil Financial Cooperative (KJKS BMT), and (c) Lending and Village Unit Cooperatives.

The existence of MFIs is very close to the community. This can be seen from the location and address of MFIs which in general are in the village outposts, not located near the main road, but closer to the residential population. The ease of access to funding sources makes this MFI grow rapidly in the midst of society. The purpose of MFI-A is to improve the ease of access of the small community in fulfilling the capital and business financing needs. The types of MFIs examined in this study indicate that there are different target markets and financing products offered to customers who will use the financial services provided by the MFIs. MFI-A is a financial institution formed from the allocation of funds PUAP in 2008 which is more specialized in the provision of venture capital in the agricultural sector. Funds provided in the initial stage is Rp100,000,000 for each Gapoktan by grant, then cast for capital development in MFI-A. The principles used in the MFI-A consist of conventional interest systems, as well as sharia-based systems of contractual principles. The number of MFI-A in Padang City is 51 which are spreading all over sub-districts. On average, asset growth for 8 years is 23.61%. The number of active MFI-As is about 72%, while the inactive ones are about 28%. As much as 31% of MFI-A has an NPL of 100, which means that the MFI-A loan repayments are stuck at 100%. Only 6% of MFI-A have an NPL of 0%.

The second microfinance institution being the subject of this research is KJKS BMT with sharia principles. The development of Islamic financial

institutions is relatively fast and one reason is that of a strong belief among the Muslim community that conventional banking contains elements of usury that is prohibited by Islam (Sudarsono 2003).

Baitul Mal Wattamwil (BMT) consists of two terms, namely baitul maal and baitul tamwil. Baitul maal is more directed to the efforts of collection and distribution of non-profit funds, such as infaq, zakat, and shadaqah; while baitul tamwil serves as a business collection and distribution of commercial funds. BMT target consists of micro business actors, both in agriculture sector (agribusiness and agro industry), craftsmen in small industry, retailers in trade sector, and small-scale transportation sector. BMT is under the Dinas Koperasi Kota Padang, where the group includes the Sharia Financial Services Cooperative (KJKS) which until July 2016 amounted to 105 units of BMT with an active status.

The cooperatives studied in this research are groups of village unit cooperatives and saving and loan cooperatives. Based on data obtained from the Office of Cooperatives and SMEs, as of July 2016, there were 12 KUDs residing in the city of Padang, in which 10 KUDs were active and 2 KUDs were not active. Koperasi Simpan Pinjam (KSP) comprised 34 KUDs, in which 33 KUDs were active and only 1 KUD was inactive.

### Mapping of Microfinance Institutions in Padang City

Geographic Information System (GIS) was selected in this study as a tool to generate an MFI's mapping. In the last decade the use of geographic information has grown rapidly (Budiyanto 2002). Currently, the use of GIS has been highly integrated into everyday life. Spatial geo-technology that works behind the scenes of various programs such as increased energy, agricultural production, and more. GIS is a computer system used for capturing, storing, checking, integrating, manipulating, analyzing, and displaying data related to positions on the earth's surface (Prahasta 2002).

Mapping of MFIs conducted in this study is in the form of coordinate points of the location of each MFI sampled. Using Google maps then the coordinate points that have been sent via the "Send location" feature in the Whatsapp application when in the field, were translated through computer media into longitude and latitude points. Next, they were inputted into Google maps and displayed on the webpage "lkmsubar.org".

Microfinance institutions sampled in this study consist of MFIs located in three sub-districts, namely (a) Kecamatan Lubuk Kilangan, (b) Kecamatan Pauh, and (c) Kecamatan Kuranji. The number of MFIs mapped in this study was 20 MFIs, consisting of 7 MFI-A, 12 KJKS BMT, and 1 cooperative. The details can be seen in Table 1.

Mapping results of MFIs can be opened at the website "Ikmsubar.org". On this page, you will see a page with a content named "Map of Microfinance Institutions in Padang City". This name is based on the general name for MFI database as a whole, so users will be easy to see any MFI in Padang City. Labeling with the word in "Padang City" is different from its web address "Ikmsubar.org", which means that in this study the MFIs studied are still at Padang City level. Further research will be designed to provide MFI information located in West Sumatra as a whole.

In the left corner, there is a title of "MFI database". Underneath, there are tools map location and map view, which can be seen in two forms: "Map" and "Satellite". There is an admin account under the heading "MFI database", and below it says "Dashboard" and "Location" page website that has been accessed earlier, then click "Select location" to display a list of MFIs that have been entered in the data portal (database).

On the admin page, a display will appear in Figure 3 below. There is a menu "Add data" which serves as a tool used to add database from MFI data to be added to the "Ikmsubar.org" website. The addition of the next data will automatically go into the tools "Dashboard" or on the menu "Choose the location". In the tools "+ Add data" there are the "Delete" and "Update" buttons. "Delete" means to delete the unexpected MFI file or incomplete data or there is data input error. If this button is pressed then the data of the LKM name that has been entered will be deleted automatically. Whereas, the "Update" tools intended to update the information obtained and then uploaded into the system.

If the addition of data is done, it will appear some Tools data that can be filled: (a) address, (b) date of establishment, (c) background of MFI establishment, (d) vision and mission, (e) objectives of the MFI, (f) the amount of initial capital, (g) the initial capital source, (h) the current capital amount, (i) the arc coordinates, (j) the latitude coordinates, (k) the number of initial members standing, (l) the category of the MFI. After all data are entered, it will automatically be added to the system.

In the sub-district choose menu, select districts that will enter the data. In the portal there are 11 districts available in the Padang City that

Table 1. Microfinance institutions spreading over three districts in Padang City

No.	Sub-district	Type of microfinance institution	Name of microfinance institutions
1.	Lubuk Kilangan	MFI-A	Jaya Sayo
2.			Saiyo Sakato
3.		BMT	Kapalo Koto
4.			Padang Besi
5.			Baringin
6.			Indarung
7.		Koperasi	Keluarga Besar Semen Padang
8.	Pauh	MFI-A	Kapalo Koto
9.		BMT	Koto Lua
10.			Cupak Tengah
11.	Kuranji	MFI-A	Anduring
12.			Sungai Sapih Jaya
13.			Sarik Sati
14.			Rimbun Sejati
15.		BMT	Ampang
16.			Sungai Sapih
17.			Anduring
18.			Lubuk Lintah
19.			Kalumbuak
20.			Pasar Ambacang

Source: Primary data (2016)

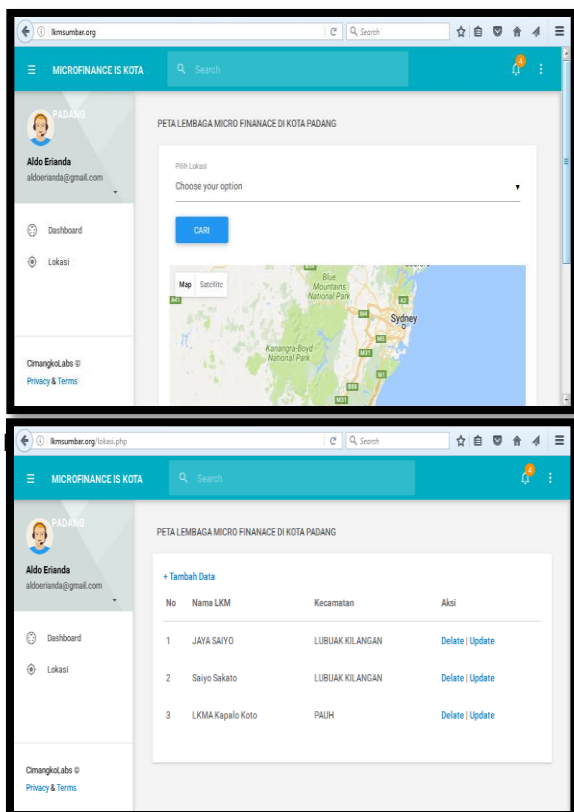


Figure 3. Menu "+ Add data" in view by website admin

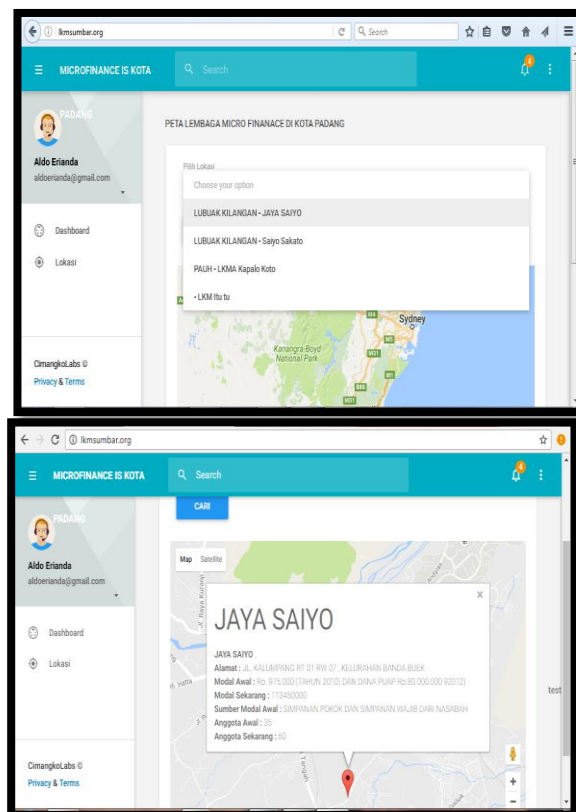


Figure 4. Display search results using Ikmsubar.org

has been entered previously. Next step, select the desired MFI name, then click "Search" button. Figure 4 shows an MFI in Sub Kilangan, namely Lubuk Jaya Saiyo. The system will search the ordinate point on the map in the form of "Map" or "Satellite". Users can change the look with the satellite model if needed, otherwise it can zoom and zoom the map by pressing the "+" or "-" menu. The folder will follow the command, and display additional information, such as street names, buildings, and more. All the information makes it easy for users to get a clear address from the selected MFI.

### Effectiveness of Agribusiness Microfinance Institution in Padang City

#### *Characteristics of Respondents of Agribusiness Microfinance Institutions*

On average, the MFI-A member-respondents age was 47 years. Out of 39 MFI-A member-respondents, 3 respondents or 8% were ranging from 15 to 30 years old; 26 respondents or 67% were more than 30 years to 55 years old, and the rest 10 respondents or 26% were 55 years old. These indicate that the MFI-A members were generally at productive age.

Education level of majority of MFI-A member-respondents was senior high school level (49%), followed by primary school level (26%), and junior

high school level (21%). The education level will affect the knowledge and understanding of farmer-members against MFI-A. Farmer-members with higher education level are expected to have a better understanding of their role in MFI-A. Most of the respondents interviewed were females, i.e., 29 persons or 74.35%, whereas the rest 25.64% were males. The main job of majority of the respondents was housewife at 48.65%, followed by farmers at 29.72%, and traders at 10.81%. Majority of respondents have no side job, which accounted for 60.23%.

On average, the number of household members of MFI-A member-respondents is four persons with the number of children attending school as many as four persons. The number of household members as well as the number of children attending school will affect household expenditure. The more the number of household members and children attending school, the greater the family expenditure.

Majority of MFI-A member-respondents have revenues ranging from Rp1,000,000 up to Rp2,500,000 per month (51%), followed by respondents with revenues bigger than Rp2,500,000 per month (26%), and respondents with income below Rp1,000,000 per month (23%). Compared to the regional minimum wage of West Sumatra in 2016 as much as

Rp1,800,725 per month, it seems that the income of respondents was relatively low.

Characteristics of farmer-members of MFIs affect accessibility to the institutions. According to Azriani (2014), accessibility of small-scale enterprises to credit or financing sources is determined by socio-economic condition of the entrepreneur, characteristics of the business, availability of information, networking owned by the entrepreneur, and characteristics of loan or credit. Chakraborty et al. (2010) also found that the characteristics of the owner can be the most important determinant of bank credit decisions on small businesses. The socio-economic conditions of entrepreneurs affecting accessibility to financing sources are age, sex, and education of entrepreneurs (Diagne et al. 2000; Nkuah et al. 2013; Nguyen and Luu 2013).

**Accessibility and Understanding of Financing Resources (MFI)**

Most respondents became MFI-A members in 2011, which was 31%, followed by 2014 at 26%, and 2010 at 23%. This indicates that most respondents have been members of MFI-A for five years. Borrowing duration of the respondents in general is almost the same as their membership period in MFI-A. There were only three respondents with borrowing duration 1–2 years as a member of MFI-A.

Table 2. Membership period of MFI-A members

Year of entry	Amount (person)	Percentage (%)
2010	9	23
2011	12	31
2012	2	5
2013	2	5
2014	10	26
2015	4	10
Total	39	100

Source: Primary data (2016)

Residence of MFI-A member-respondents is spreading around MFI-A office. The distance of respondent residence with MFI-A office is ranging from 80 meter to 3 km. The distance of MFIs from farmers residence may affect farmers' access to MFI-A. Farmers with residence locations closer to MFIs and their managers would have greater access to MFI-A. Most respondents had borrowing period about 3–4 years, i.e., 19 people or 49%, while those with borrowing period less than a year to 2 years was 28%, and those with borrowing period more than 4 years to 6 years was 23%.

Table 3 shows that amount of loans borrowed by respondents at MFI-A. The amount of credit borrowed by MFI-A member respondents in general is less than Rp5 million, accounting for 24 people or 62%, while the amount of credit between Rp5 million to Rp10 million of 10 people or 26%, and large loans borrowed above Rp10 million is only 13%. This indicates that the credit provided and provided by MFI-A is a microcredit. According to Azriani (2014), Demand for credit influenced by income per capita, and wealth of member.

Table 3. Amount of loans borrowed by respondents from MFIs, 2016

Amount of credit borrowed	Number of people	Percentage (%)
<5 million	24	62
5–10 million	10	26
>10 million	5	13
Total	39	100

Source: Primary data (2016)

Services provided by each MFI-A can be either savings or capital lending assistance. Terms to make loans are almost uniform in each MFI-A. In general, the terms of borrowing consist of (1) being a member of a farmer group, (2) paying principal savings and mandatory savings, and (3) must have a citizen identification card, a copy of the family card, and only a few require vehicle BPKP guarantees. The details of payments made by the respondent consist of monthly principal and interest installments, social money, savings, and mandatory contributions. Monthly interest rate or profit rate ranges from 1% to 1.5%. In the event of delay in credit payment, MFI-A will collect directly to the member-creditors' house, or apply a fine of Rp1,000 per day after the deadline of payment. Another sanction is that the board comes to the customer to pay the credit. Factors affecting the amount of credit borrowed from MFI-A is the smoothness of returns, the existence of loan assistance from the government through the MFI-A to farmer community.

Information about MFI-A credits generally comes from members of MFI-A itself, which was 54%, followed by information from friends at 36%, and from MFI-A managers or managers alone at 10%. A large percentage of credit information comes from members themselves as members engage in farmer group activities that are part of MFI-A. The number of respondents who save in MFI-A with those who do not save was the same, that is equal to 50%. This means that while there are some respondents saving in MFI-A, some others are not saving, just borrowing only credit.

The average loan repayment period borrowed is 9.2 months with the average monthly installment paid per month of Rp323,609. This indicates that this credit includes short-term credit. The time period for credit application and credit disbursement time ranges from 1 to 7 days. In general, respondents will apply for a new loan after the previous loan is paid, i.e., 21 respondents or 53.84%. The lending times of respondents ranged from 2 to 7 times. In general, the loan amount of each respondent had increased each lending time, in which 70% of respondents experienced an increase in lending amount every time borrowing, and only about 30% who borrowed in a fixed amount each period.

### **Degree of Compliance with Organizations/ Leaders**

The average value of each indicator indicating compliance with the organization/ leader is 3. This indicates that MFI-A member respondents often follow the organizational requirements and what the leader recommends and says, as well as the sanctions imposed by the organization. It also shows that each MFI-A member has a fairly good level of compliance to the organization/ leader as well as the organization requirements. This is a very good capital in running MFI-A in the future.

### **Role of MFI-A Officers**

The role of MFI-A officers can be seen from the intensity of socialization conducted, the intensity of mentoring, and the intensity of law enforcement/rules. In terms of intensity of socialization conducted, it can be seen that the board or officers of MFI-A had done a socialization before saving and loan began. All respondents followed the introductory activities.

Some of the topics presented in the introductory activities were rules of loan repayment, obligations of members, types of services, and sanctions imposed if a member commits an offense. All respondents answered

that all activities were carried out by the management or MFI-A officers in socialization activities. In terms of the intensity of facilitation, most respondents answered that the board did not routinely perform assistance to MFI-A members. A total of 21 people or 53.84% of respondents answered that the board does not regularly visit and accompany MFI-A members.

Service activities asked to the respondents were about the service of the board to member household problems, member financial problem, installment problem, and business problem of MFI-A members. Approximately 60% of respondents answered that the board never performed such service activities; only about 25–30% of respondents answered that the board sometimes performed the activity; and about 2.6–17.9% of respondents answered that the board seldom did the service activities.

In terms of intensity of law enforcement, it can be seen that (1) if MFI-A members are unable to attend regular meetings, most respondents answered that the committee reprimanded MFI-A members (51%), and others answered that the board also allowed the members to be absent at regular meetings (49%); (2) if there are MFI-A members who do not pay the installments on time, the board is largely admonished (51%) and some of their record and sanction members who do not repay on time (49%); (3) if there is a congestion in the credit repayment, then most of the board will reprimand MFI-A members (51%), and then the board record and sanction the member (49%); and (4) if there are MFI-A officers who misappropriated funds, then what they do is reprimand (51%), and let alone by 49%. The data from Table 4 shows that the intensity of law enforcement and rules in every MFI-A is still low and less.

### **Effectiveness of MFI-A Services**

The effectiveness of MFI-A services can be seen from the accuracy of the use of credit, and credit benefits for MFI-A members. Credit

Table 4. Intensity of law enforcement at MFI-A, 2016

Intensity of law enforcement	Left		Be reprovred		Recorded and sanctioned	
		%		%		%
1. What an MFI officer does if one is unable to attend regular meetings	19	49	20	51	0	0
2. Which the MFI officer does if one does not pay the mortgage on time	0	0	20	51	19	49
3. Which the MFI officer does if someone is experiencing bad debt	0	0	20	51	19	49
4. By the board, if any MFI officer misappropriates the funds	19	49	20	51	0	0

Source: Primary data (2016)



benefits can be seen from the fulfillment of household needs and the fulfillment of business needs for MFI-A members. The condition of MFI-A member households before borrowing shows that households have been able to meet their needs. Table 5 shows that all respondents answered that the loans granted by MFI-A provide benefits to the fulfillment of the purposes of the household after borrowing to MFI, the fulfillment of business capital after borrowing in MFI-A, the business has developed after borrowing to MFI-A, and benefit by taking credit in MFI-A.

Tabel 5. Effectiveness of MFI-A service to member activities

Effectiveness of MFI-A service	Answer yes	%
The fulfillment of household needs after borrowing to the MFI	39	100
The fulfillment of business capital after borrowing in the MFI	39	100
Business develops after borrowing to the MFI	39	100

Source: Primary data (2016)

This indicates that MFI-A can provide credit services to its members well. Benefits from borrowing from MFI-A to MFI-A member respondents include increased business profits, increased business capital as well as fulfilled household needs and educational needs for their children. It also shows that the allocation of credit usage is not only to meet the needs of business capital, but also to meet the household needs of MFI-A members.

## CONCLUSION AND RECOMMENDATION

From the above description of MFI mapping and MFI management in Padang City, several conclusions can be drawn as follows. Microfinance institutions mapped in this research are limited to three sub-districts in Padang City: Pauh, Kuranji, and Lubuk Kilangan sub-districts. MFIs being mapped using GIS were MFI-A and KJKS BMT located in the three districts. This research produces a website that deals with MFIs in Padang City, so that the results and overview of the MFI's mapping can be seen on "Ikmsambar.org". The resulting web can be a source of information for the users involved, such as government, NGOs, and the community itself. The location of each MFI-A and KJKS BMT

spread in the settlement and adjacent to the location of the MFI's customers.

Effectiveness of MFIs in this study is seen in terms of accessibility of members or customers, level of compliance to the board, level of service board, level of compliance to the rule of law, allocation of credit funds, and benefits of credit funds to borrowing customers. MFI-A farmers' access was good enough which can be seen from the correspondence between the amount of credit that was submitted and approved, as well as ease in obtaining credit. The level of compliance of members or customers to the board and the rules were quite good, which can be seen from the average of respondents' answer, namely, 3.4, indicating that members often follow the rules and provisions of the board and MFI-A. The level of service board was considered as not good and not effective in serving members, both in terms of household member financial and member businesses and related to the problem of credit repayment. The allocation of the use of loan funds by members has been more for additional business capital, but there are also loan allocation for urgent needs of households, such as the needs of school children and food needs. In terms of the accuracy of the benefits of MFI-A, it can be seen that MFI-A loan funds are beneficial to boost business capital, increase sales volume, and business profits, and to meet the needs of member households.

Research on LKMA mapping that has been done is still in small scope, only including MFI-As in three sub-districts in Padang City. Therefore, research in larger scope needs to be done to provide complete information about the existence of MFI-A in West Sumatra. In addition, MFI-A management resources need to be improved such as through training on organizational management improvement so that the MFI-A services to the members will be better.

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