

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF COMMERCE
MASTER OF BANKING AND FINANCE PROGRAMME**

**IMPACT OF CREDIT ACCESSIBILITY ON FARM
PERFORMANCE
DAYDEYE TOWNSHIP, PYAPON DISTRICT
AYEYARWADY DIVISION**

**KHIN MA MA NYEIN
(MBF – 4 th Batch)**

DECEMBER, 2018

**IMPACT OF CREDIT ACCESSIBILITY ON FARM
PERFORMANCE
(Daydaye Township, Pyapon District, Ayeyarwaddy Division)**

A thesis submitted as a partial fulfilment towards the requirements for the
degree of Master of Banking and Finance (MBF)

Supervised By

Dr. Tin Tin Htwe
Professor
Department of Commerce
Yangon University of Economics

Submitted By

Khin Ma Ma Nyein
Roll No. 74
MBF 4th Batch
2017 – 2018

DECEMBER, 2018

ABSTRACT

The study aims to analyse the impact of credit accessibility on farm performance. The purpose of the study was to identify the credit accessibility to farmers in Daydaye Township and to analyse the impact of agricultural credit accessibility on farm performance. The study used both primary and secondary data in order to fulfil the objective of the study. There are 75 farmers are applied to collect the primary data from 5 Villages among 90 Group of village . At the second stage 10% of the total households 749 farmers were randomly selected. the secondary data was collected from the previous studies reports and Ministry of Agriculture through interview and group discussion. This research used descriptive analysis and linear regression method to meet objectives of this study. Concerning of farmer credit access mainly rely on government organization and also others MFI and individual lender. It covered to use input cost such as quality seed, rental fee of farm machinery, hiring labour and land preparation cost. Collateral Requirement and easy loan documentation procedure are related with farm performance at 1% significant level and appropriate loan tenor, affordable interest rate, credit history and sufficient loan amount are 5% significant level. Therefore, the result on positive correlation suggested that increased credit accessibility will improve farm performance.

ACKNOWLEDGEMENTS

First and foremost, I would like to express my sincere gratitude to Master of Banking and Finance Programme Committee, Yangon University of Economics for giving me the opportunity to attend this course. I would like to thank Prof. Dr. Tin Win, Rector of Yangon University of Economics, for his kind support and wisdom granted to MBF students.

My special thanks also go to Prof. Dr. Daw Soe Thu. Programme Director MBF Programme, for her encouragement and guidance throughout the course of my study.

My deepest thanks go to Professor Dr. Daw Tin Tin Htwe, my supervisor for her valuable advice, guidance and support during the preparation of my thesis.

I would also like to specially thank my respected professors and lecturers who imparted their time and valuable knowledge during the course of my study at the Yangon University of Economics and my friends and all persons who contributed in various ways to my study and thesis. My special thanks to the all participants villages and farmers who kind of their supports, providing the data and all of the information needed in this thesis.

Finally, I must express my gratitude and thanks to classmates for providing me with unfailing support and continuous encouragement throughout my years of study.

TABLE OF CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vi
LIST OF ABBREVIATIONS	vii
CHAPTER 1 INTRODUCTION	1
1.1 Rationale of the Study	2
1.2 Objectives of the Study	4
1.3 Scope and Method of the Study	4
1.4 Organization of the Study	4
CHAPTER 2 THEORETICAL BACKGROUND	5
2.1 Importance of Agricultural Financing	5
2.2 Financial Institutions	6
2.3 Impact of Agricultural Credit	7
2.4 Previous Studies	8
2.5 Conceptual Framework	9
CHAPTER 3 OVERVIEW OF AGRICULTURE CREDIT IN MYANMAR	11
3.1 Agricultural Financing in Myanmar	11
3.2 Background Information of Daydaye Township	13

3.3	Financial Institutions in Daydeye Township	15
3.4	Sources of Credit	16
3.5	Credit Accessibility	16
CHAPTER 4	ANALYSIS ON IMPACT OF CREDIT ACCESSIBILITY TO FAMERS	18
4.1	Research Design	18
4.2	Profiles of Respondents	19
4.3	Farming Condition of the Farmers in Daydeye Township	20
4.4	Credit Accessibility of farmers	22
4.5	Regression Analysis on Determinants of Farm Performance	29
CHAPTER 5	CONCLUSION	31
5.1	Findings	31
5.2	Recommendation	33

REFERENCES

APPENDIXES

LIST OF TABLES

Table No.	Title	Page
4.1	Research Design	18
4.2	Profile of Respondents	20
4.3	Cultivated Cultures of Respondents	21
4.4	Average Paddy Yield	21
4.5	Source of Credit and Usage of Credit	22
4.6	Appropriate Loan Tenor	23
4.7	Affordable Interest Rate of loan	24
4.8	Collateral Requirement	25
4.9	Credit History	25
4.10	Easy Loan Documentation Procedure	26
4.11	Loan sufficiency	27
4.12	Farm Improvement	28
4.13	Summary	28
4.14	Model Summary	29
4.15	Relationship between Credit Accessibility and Farm Performance	30

LIST OF FIGURES

Figure No.	Title	Page
2.1	Reference Conceptual Framework	9
2.2	Conceptual Framework of the Study	10
3.1	Map of Daydeye Township	14

LIST OF ABBREVIATIONS

ADB	-	Asia Development Bank
CBM	-	Central Bank of Myanmar
CSO	-	Central Statistical Organization
EUR	-	Euro Dollar
GDP	-	Gross Domestic Product
IFC	-	International Finance cooperation
INGO	-	International Non-Governmental Organization
JICA	-	Japan International Cooperation Agency
MAB	-	Myanmar Apex Bank
MADB	-	Myanmar Agricultural Development Bank
MEB	-	Myanmar Economic Bank
MFI	-	Microfinance Institutions
MIMMU	-	Myanmar Information Management Unit
MMK	-	Myanmar Kyat

CHAPTER I

INTRODUCTION

Credit plays an important role in development. It capitalizes farmers and entrepreneurs to undertake new investments or adopt new technologies. It helps smooth consumption by providing working capital and reduces poverty in the process. Both formal and informal lenders are active. Collateral-free lending, proximity, timely delivery, and flexibility in loan transactions are some of the attractive features of informal credit. Unlike formal finance, informal finance may not be as conducive to development because: (i) it is expensive, (ii) it is short-term and largely used for consumption, and (iii) it is not large enough to spur investment and growth.

With the dismal picture of state-owned rural finance organizations, micro-finance nongovernmental institutions are growing to meet the credit needs of small producers in many countries. Reports indicate that they now meet the credit demand of 8-10 million people in Africa, Asia, and Latin America. Many of these organizations are subsidized not for high loan default costs but for higher transaction costs associated with group-based lending and other social intermediation costs (Khandker 1998). If agricultural credit schemes are to be supported, policymakers must know how much they are subsidized, who receives this subsidy, and whether it helps the borrowers.

Finance is considered as the basic ingredient for each and every economic activity including agriculture. Especially in the economy where agriculture is subsistence this problem is very severe. The government extends institutional credit to those who cannot afford to fully utilize the available technology.

Agricultural credit plays an important role in agricultural development. Agricultural household models suggest that farm credit is not only necessitated by the limitations of self-finance, but also by uncertainty pertaining to the level of output and the time lag between inputs and output. Myanmar has historically been an agrarian society, meaning that the agriculture sector accounts for the majority of the country's economic output. The rural sector plays a pivotal role in the country's economic growth, social and political development. Agricultural and rural development can create jobs and livelihoods for small farmers and the landless, while producing food

and raw materials for the urban economy. The government plans to strengthen farming production, enhance food security, increase exports and improve living standards of the rural population which depends on farming as their first and key source of income. The government is reforming the laws and policy governing the country's agriculture sector to meet the set targets under the economic plan.

Globally, there are estimated 500 million smallholder farming households – representing 2.5 billion people – relying, to varying degrees, on agricultural production for their livelihoods. The benefits of agriculture credit include the growing income of farmers, agricultural SMEs through commercialization and access to better technologies, increasing resilience through climate smart production, risk diversification and access to financial tools, and smoothing the transition of non-commercial farmers out of agriculture and facilitating the consolidation of farms. In Myanmar, 70% of the country's population live in rural areas depending on farmland and forests as their livelihoods drives agriculture sector an important growth engine of rural development. Various kind of credit accessibilities are made for multiple impact of positively improvement in their agribusiness and loan utilized to be increased capital for farm investment. Generally, credit accessibility is important for improvement of quality and quantity of farm performance.

1.1 Rationale of the Study

Agriculture is the most important sector of the Myanmar's economy. Most of total population of the country lives in the rural areas and agriculture is main source of their livelihood. Agricultural development requires timely and adequate supplies of essential farm inputs. Investment capacity of majority of our farmers is low as they are poor and they cannot afford to meet increased demand for the purchase of improved seeds, recommended dose of fertilizer, hiring farm machinery etc; so lack of finance is one of the main reasons for low productivity in our agriculture.

The rural sector plays a pivotal role in the country's economic growth, social and political development. In Myanmar, rural sector is 64.7% and 35.3% is urban sector. Agriculture sector accounted for 36% of GDP. Poverty alleviation is one of the most important objectives of developing countries. It is concluded that poor people in rural areas especially in under developing countries are in immense need of credits so microfinance programs must make available this credit needs and motivate the poor

people to increase their standard of living. When it comes to rural development, with the growth of the credit infrastructure, credit flow to the poor and especially to poor women, remained near to the ground. Agricultural credit is one of the most important factors to develop rural areas in developing countries. Agricultural finance and credit are strategically important for eradicating extreme poverty and boosting shared prosperity. It is not only for financial credit but also for improving economic well-being and living standard.

The introduction of easy and cheap credit is the quickest way for boosting agricultural production. Payment of bank credit is a way of financing. In fact, facilitation of access to credit can raise amount of productive investment. Credit is not regarded as an input but rather as an engine of growth. Myanmar is agriculture country with a certain number of farmers in rural area. Financial resource is one of inputs that has basic role for other inputs and the production of agricultural products, which typically producers in providing it are faced with direct and indirect constraints. Credit has a crucial role for elimination of farmer`s financial constraints to invest in farm activities, increasing productivity and improving technologies. One of the financial institutes has an important role in financing agriculture sector is agricultural bank. This bank can direct agricultural credit flow such that helps general economic policies of government. Thus, duty of agricultural bank is financing of farmers and related industries and participation in activities that private sector can also invest in it. The payment of credit with low interest rate to farmers can support them against some results of development policies that threat their welfare. Therefore, with limited access to credit, the budget balance becomes a constraint, where expenditures have to remain less or equal to the sum of revenues during the period, accumulated savings and credit availability. Hence, credit constraint limits the optimum production or consumption choices.

This study examined the impact of credit accessibility on farm performance of farmer. The research area for this study is farmers from Daydeye Township, Ayeyarwaddy division which area was experiencing the need of agricultural financing. Delta area`s mainly crop is rice and rice is 2/3 of the cultivated area in Myanmar. This is one of the largest farming area township in Ayeyarwaddy division and most of the people from Daydeye Township are farmers.

1.2 Objectives of the Study

Two main objectives are as follows:

- (i) To identify the credit accessibility to farmers in Daydeye township, and
- (ii) To analyse the impact of agricultural credit accessibility on farm performance in Daydeye Township.

1.3 Scope and Method of the Study

This research focuses on the agricultural credit accessibility and impact on farm performance of farmer in Daydeye Township. In the first stage, the data were collected from 5 Villages among 90 Group of Villages by randomly selected. And then in the second stage sampling, a total of 75 households are selected from the selected village. The sample sizes of selected households are 10% of the total 749 household in 5 villages by using sample random method. The study used both primary and secondary data in order to fulfil the objective of the study. As the primary data collection, there are 75 respondents who were face to face interviewed by using structured questionnaire. Then the secondary data was collected from the previous studies reports and Ministry of Agriculture through interview and group discussion. This research used descriptive analysis and linear regression method to meet objectives of this study.

1.4 Organization of the Study

This study is organized with five chapters. Chapter one presents a general description of the study, including the rationale, objectives, method, scope and organization of the study. Chapter two presented the related conceptual framework. This is followed by the groups of financial sources, nature and the credit accessibility of farmers in Daydeye Area by Chapter three. Chapter four is dedicated to the data analysis and discussion of findings from the primary data gathered from the survey in Daydeye area. Chapter five captures the summary of findings, conclusion and recommendations arising from the study paper.

CHAPTER II

THEORETICAL BACKGROUND OF THE STUDY

This chapter covers the conceptual framework for the study and literature review on the sources of credit accessibility and impact on agricultural credit. The study so far conducted regarding farm attributes, perceived economic return, perceived package appropriateness, use of multiple information communication methods and access to credit. However, it begins with emergence of agricultural credit and lending methodologies.

2.1 Importance of Agricultural Financing

Agricultural credit plays an important role in agricultural development. Agricultural household models suggest that farm credit is not only necessitated by the limitations of self-finance, but also by uncertainty pertaining to the level of output and the time lag between inputs and output (De Janvry and Sadoulet, 1995).

Agricultural financing is one of the most important factors to develop rural areas in developing countries. Payment of bank credit is a way of financing. In fact, facilitation of access to credit can raise amount of productive investment. Credit has a crucial role for elimination of farmer`s financial constraints to invest in farm activities, increasing productivity and improving technologies. Generally, credit accessibility is important for improvement of quality and quantity of farm products so, that it can increase farmer`s income and avoid from rural migration. On the other hand, some policy makers believe that payment of credit with low interest rate to farmers can support them against some results of development policies that threat their welfare (Ghorbani, 2005). Therefore, with limited access to credit, the budget balance becomes a constraint, where expenditures have to remain less or equal to the sum of revenues during the period, accumulated savings and credit availability.

Hence, credit constraint limits the optimum production or consumption choices (De Janvry and Sadoulet, 1995). In other words, if a producer faces an infinite supply of liquidity at a given price, the production decisions will be independent of consumption decisions. When credit is rationed, some borrowers cannot obtain the amount of credit they desire at the prevailing interest rate, nor can they secure more credit by offering to pay a higher interest rate. In such circumstances, liquidity can become a binding constraint on many farmers` operations. Facing such a situation,

households have to choose how to invest and what inputs to buy, depending on the level of credit they receive.

2.2 Financial Institutions

One of the credit accessibility has an important role in farm performance in agriculture sector is agricultural bank. This bank can direct agricultural credit flow such that helps general economic policies of government. So, duty of agricultural bank is financing of farmers and related industries and participation in activities that private sector can't invest in it. In fact, access to credit for farmers is accompanied with some problems (Ghorbani, 2005). Farmers with credit access problems will invest less in capital assets and their land. Credit rationed farmers will not be able to smooth their expenses over time implying that they will not make long-term investments, especially those which entail sunk costs.

Because of the ability of microfinance to reduce poverty alleviation and enhance economic development by providing credit and savings services to those people earning low incomes. The attention has seen development of different definitions to microfinance. Independent of the definition provided to microfinance it is a general agreement in the economic field that micro financing alleviates economic development. The money or funds that are provided by microfinance institutions in terms of credit and micro loans enables those who are poor to invest into productive activities that are bound to earn them income helping them boost their economic level and alleviate poverty in the entire economy.

Microfinance institutions therefore are an opportunity for sustainable development. The extent opportunities available to generate income and the ability of citizens to respond to the available opportunities are to a large extent determined by the degree or ability to access financial services that are affordable. Microfinance being able to provide such financial services is being pursued by every economy worldwide. Initially microfinance aimed at providing donor finances and financing experimental projects. This has developed to financial institutions that provide a wide range of services and several routes to opportunities that are significant for economic development and expansion (Khan, 2005: 131-142).

2.3 Impact of Agricultural Credit

Agriculture remains critical to economic growth and development and has therefore ultimately remained the largest platform from which growth could be stimulated especially for developing countries. Agricultural credit and rural finance play important role in the recovery and growth of transitional countries. A positive impact of agricultural loans to agriculture causes a positive effect on the exports, that is, increases exports and therefore reducing agricultural imports. This is a positive effect on the country's economy when compared to the economies of other nations. An increase in agricultural loans may cause such effect. This increased loan is accompanied by good management of the loans such that they are effectively offered, utilized and repaid. Agriculture has been the backbone of the economies of most developing nations and therefore greatly affects both micro and macro-economic variables. An effect on the agricultural factors also affects the economy, either positively or negatively (World Bank, 2013)

Agricultural production is based on proper and timely use of inputs timely, for usage of inputs the capital is very important so those farmers who do not have capital they could not use inputs timely and reduces agricultural production. Here the agricultural finance plays a vital role for purchase of inputs and its use on time to get high agricultural production and revenue.

Capital is an important factor for the production of any commodity to get good production, for best agricultural production it is very necessary to use of inputs on time as crops required, poor farmers mostly do not have capital to fulfill the crop inputs requirement on time, so the agricultural financing is very good source to help the farmers for fulfilling crop requirements on time, but the many of farmers do getting help from that source, it is due to many problems in getting agricultural credit such as Documentation and lengthy process of Institutional sources of credit, High interest rate, not easy to access of finance. For sustainable agricultural and rural development government and other organization should take steps for help of farmers such as easily access to agricultural financing with less interest rate. Agricultural financing helps farmers to enhance the agricultural productivity by timely use of inputs. Farmer's friendly agricultural credit services should be provided to improve agricultural and rural development.

2.4 Previous Studies

There are several studies regarding access credit of farmers. Among the various studies, Jumare (2006) assess the impact of credit on agricultural production with specific objectives to determine its effect on farm size, cost of labour, cost of production, quantity of inputs as well as output among small scale farmers in Makarfi Local Government Area of Kaduna State, Ghana. Structured questionnaires were administered to borrowers and non-borrowers, who had been selected using the stratified random sampling technique, and the data obtained were summarized into percentages. The Analysis of Means technique was used to determine if there were statistically significant differences between the two groups. The independent variables; loan amount, farm size, and inputs reasonably explained the variation in the total value of output of the farmers. The study shows therefore, that access to microcredit over a long period of time impacts positively on agricultural production. Government and the organized private sector should regular and timely credit to farmers.

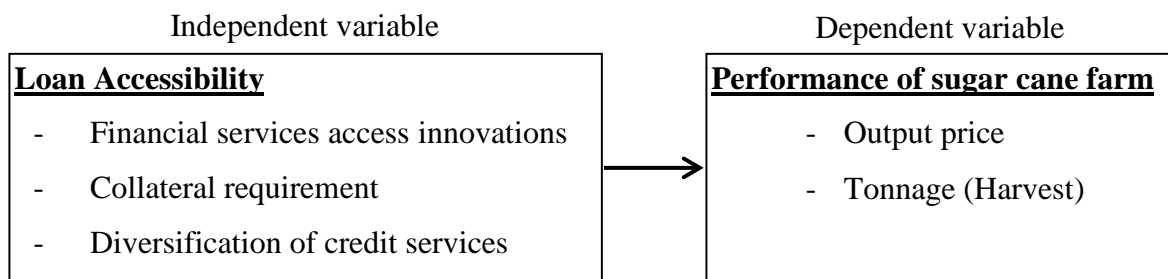
Byaruhanga (2013) examined the credit terms, credit accessibility and performance of agricultural in Rwanda. That study observed that there was a significant positive relationship between credit terms, credit accessibility and performance of agricultural cooperatives and showed that the combination of credit terms and credit accessibility has an impact on the performance of agricultural cooperatives. The study found that relationship between credit accessibility and the performance of agricultural farmers in Rwanda through their cooperative society. A random sample of 196 active agricultural cooperatives was obtained from various districts in the southern province. The findings revealed a positive and significant relationship between credit accessibility and the performance of agricultural cooperatives. The study reveals that credit accessibility is the most significant determinant of the performance of agricultural cooperatives.

Wanjawa (2017) analyzed contribution of agricultural loan accessibility to performance of small holder sugarcane farmers in Kakamega County, Kenya. That study was concluded that there is significant effect of loan accessibility on performance of smallholder sugar cane farmers based on the conceptual framework which has showed in figure (2.1). The effect of agricultural loans on performance was found to be moderate. The repayment period for various agricultural loans differs which gives sugar cane farmers easy time to service their loans while at

the same time increasing the annual returns through increase in tonnage of harvesting. The study was stated that, agricultural loans have significant effect on the performance small holder cane farmers in Kenya. This is driven by their accessibility which has resulted to increase in farms size under sugar cane cultivation, output level in the production and annual returns through increase in tonnage.

Agricultural loans have been used as independent variable under a construct-accessibility; dependent variable which is performance of sugar farm was conceptualized as pricing of the sugarcane and tonnage. Since most farmers are categorized under informal sector, their accessibility to loan is limited. This is also affected by the climatic changes which adversely affects yield from the farm. Sugar cane farmers in Kakamega County are basically small scale as such many banks find it difficult to give them loans. This accessibility to loan affects their farm produce since they cannot invest in getting good cane suckers, fertilizer as well as labor to weed their farms. In this study, accessibility of loan was operationalized in form of flexibility of loan delivery, diversification of the loans and the innovative financial delivery services.

Figure (2.1) Reference Conceptual Framework



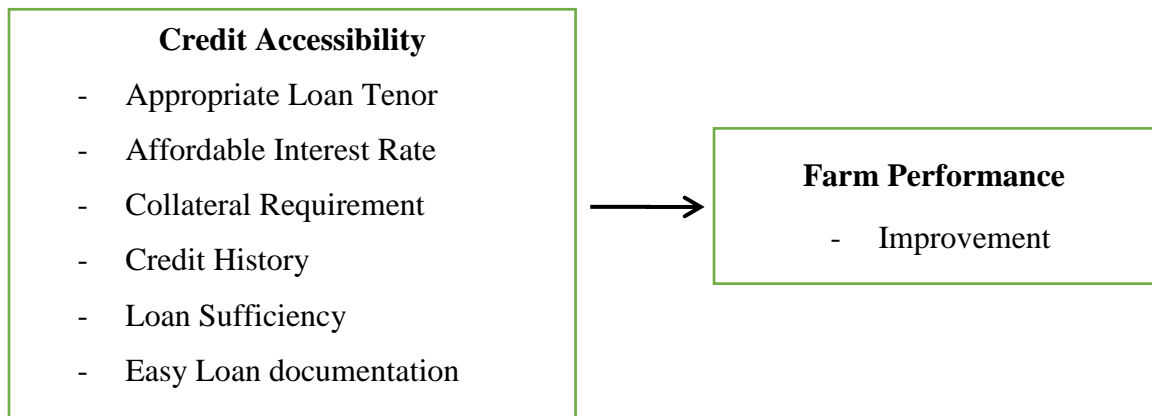
Source: Wanjawa, D. S. (2017) Contribution of Agricultural Loans Accessibility to Performance of Small Holder Sugar Cane Farmers in Kakamega County, Kenya

2.5 Conceptual Framework

Research designs are used to determine the causal relationship between one variable and another. The cause and impact relationship between credit accessibility and farm performance of farmers in Daydeye is consistent with the study's objective which is to determine the impact of agricultural loan accessibility, agricultural loan

disbursement, sufficient loan amount and agricultural loan interest on the performance of farmer.

Figure (2.2) Conceptual Framework of the Study



Source: Wanjawa, D. S. (2017)

The conceptual framework shows how the independent variable assess to credit which was measured in terms of loan tenor, interest rate, collateral, credit history, sufficient loan amount and loan documentation procedure impact the performance of agricultural business. It is posted that credit terms influence credit accessibility, and access to credit improves the farm performance of farmers.

Agricultural loans have been used as independent variable under a construct-accessibility, dependent variable which is performance of farmer as selecting quality seeds, adoption relevant farm technology and higher productivity.

CHAPTER III

OVERVIEW OF AGRICULTURE CREDIT IN MYANMAR

The main purpose of the study is to study the impact of agricultural credit on Daydaye Township. The survey was conducted in the months of December; 2018. This chapter consists of discussion on agricultural finance of village group, of the overview on Daydaye Township.

3.1 Agricultural Financing in Myanmar

Economy in Myanmar, in the past and present, has been heavily depending in agricultural sector. GDP of agricultural sector occupies 47.9% of national GDP in 2009. Considering that 68% of working population is engaged in agricultural sector, the agricultural sector has strong influence to national economy as basic industry of the country.

Myanmar has historically been an agrarian society, meaning that agriculture the agriculture sector accounts for the majority of the country's economic output. The 2003 Myanmar Agricultural Census showed that there were about 3.46 million farm families, cultivating about 8.7 million hectares of land. Myanmar's farming systems are diversified. Most farms produce paddy rice during the monsoon season, mainly due to high humidity, which is better suited to wet rice production than cultivation of Myanmar's other main cash crops. Rice is the most important agricultural commodity of Myanmar. Other main crops include beans, sesame, groundnuts, pulses, sugarcane.

Myanmar's agricultural potential is enormous, given the country's resource endowments as well as its favourable geographic location which places Myanmar advantageously between two huge markets, India and China. Despite these advantages, however, Myanmar's agriculture has underperformed over a long period of time. Today, two-thirds of the population of Myanmar is primarily engaged in agriculture but about one quarter of the population still falls below the national poverty line. The government has a long-term goal to help farmers and agribusinesses to develop with improved financing more than in the past to provide financial support to the agriculture sector. The state-owned Myanmar Agriculture Development Bank (MADB) is increasing the amount in crop loans it provides to

farmers to help them cover the cost of production from K50,000 per acre to K100,000 per acre.

MADB provides loans for crops such as rice, various kinds of beans, cotton, and corn to help farmers cover some of the costs to grow crops for the harvesting season. In 2016, the bank increased the loans it provided to rice farmers from K 100,000 per acre to K 150,000. According to the bank, it released K 1.600 trillion in loans to farmers from 2015 to 2016. This increased to K 1.7 trillion last year. So far this year, the bank has provided loans totaling K 1.3 trillion to some two million farmers.

Myanmar's economy performed better in 2017/18 with a modest growth acceleration that partially reversed the deterioration experienced in 2016/17. While the outlook remains positive, risks have intensified. The economy experienced a broad-based increase in real GDP growth to 6.4% in 2017/18 from 5.9% in 2016/17. Inflation moderated from 7% in 2016/17 to 5.5% in 2017/18. The exchange rate was stable and appreciated slightly towards the end of the year, the current account deficit narrowed slightly on strong export growth, and the fiscal deficit also narrowed in the first three quarters of the fiscal year. While performance remains strong and the macroeconomic outlook is positive, there are concerns that the slow pace of reforms, vulnerabilities in the financial sector, and limited progress in addressing the humanitarian crisis in Rakhine are starting to affect business sentiment and could weaken performance. External risks from uncertainty in global trade policy and in commodity prices intensify the downside risks to the growth outlook.

Higher levels of investment and access to credit are essential for the development of Myanmar's agriculture sector to reach its full potential, according to experts. Agriculture continues to be the mainstay of Myanmar's economy, despite the increase in industrial and mining activity over recent years. It is estimated that the sector accounts for around 45% of GDP, while providing employment for 70% of the workforce. However, returns to farmers remain extremely low. Per capita agricultural income is the lowest in Asia, according to a report issued by the Organisation for Economic Co-operation and Development (OECD), currently standing at around K202,000 (\$200) a year. This compares to a national GDP per capita of K1.1 million (\$1,100). Rural income levels can be improved only by modernising the sector and raising output, according to the report, released in January.

Although Myanmar's agriculture sector has potential for expansion – thanks to its fertile land and water resources – reforms need to be enacted for these advantages to be fully capitalised on, said the OECD. A key recommendation of the report is the expansion of the value-added components of the sector, such as processing, transportation, technical assistance, marketing and logistics, as well as building links to complementary non-agricultural activities.

3.2 Background Information of Daydaye Township

Ayeyarwady Region, also known as the Delta region, is a coastal region between the Bay of Bengal to the west, and the Andaman Sea to the east. The capital city is Patheingyi. Sharing a border with Rakhine, Bago, and Yangon, Ayeyarwady Region consists of 26 townships, covering a total of 35,964 km². Ayeyarwady is Myanmar's most populated state with an estimated population of 6.32 million (2011 HMIS data) and population density of 176 people per square kilometre. Ayeyarwady is the region with the greatest percentage of people living in rural areas (88%) relative to urban areas (12%) living in urban areas. This area was severely affected by Cyclone Nargis in 2008.

Ayeyarwady Division is a region of Myanmar, occupying the delta region of the Ayeyarwady River. Large areas have been cleared for paddy cultivation, leading to its preeminent position as the main rice producer in the country, a position it has retained into the 21st century. Daydaye Township is a township of Pyawbwe District in the Ayeyarwady Region of Myanmar. The region occupies the delta area of Ayeyarwady River. Daydaye Township is included in top 10 list of highly developed system of agriculture area in delta area zone due to many cultivated area and high rate of rice production.

3.2.1 Geographic Characteristics

The Altitude of Daydaye township is 8.3 feet and it is between North latitude 16 degree 38 minutes and 16 degree 05 minutes, East longitude 95 degree 40 minutes and 96 degree 05 minutes. It is 401.714 square mile area and bounded on gulf of Mottama in east and south, Kyaukse Township and Pyawbwe Township in west and

KawMu Township in North. It has temperate climate zone and between (21°C and 34°C). Map of Daydaye Township has been showed in figure 3.1.

Figure (3.1) Map of Daydaye Township



3.2.2 Demographic Characteristics

The majority of the people in the Township live in rural areas with only (7.5%) living in urban areas. The population density of Daydaye Township is 195 persons per square kilometre. There are 4.1 persons living in each household in Daydaye Township. This is slightly lower than the Union average of 4.4 persons. The proportion of productive working population between 15 to 64 years of age in Daydaye Township is 64.0 per cent. The proportions of children aged 14 and below together with the proportion of the elderly aged 65 and over are less than the proportion of the working age group population. Fewer proportions of children and elderly reduce the dependency of those age groups on the working age population.

3.2.3 Economic Characteristics

In Daydaye Township, there is a population of 228,485 in this region and 90 village tracts. Agriculture is main economic of this region and total farm land area is 193,976 Acre and it included farm 185,447 Acres. The main output product of

Daydaye Township is paddy and cultivated crops for long term are beans, coconut, palm, bitter leave. The output of paddy is 90 Tin per acre in rainy season and 120 Tin per acre in cold season. There are few of livestock such as pig farming and aqua farming. Not only the progress of agriculture sector but also other economic progress is slow and least development.

3.3 Financial Institutions in Daydaye Township

Financial services are provided by financial institutions chartered by the government and subject to banking regulations and supervision, semi-formal financial services are not regulated by banking authorities but are usually licensed and supervised by other government agencies. Informal financial services are provided outside the structure of government regulation and supervision.

According to the general cropping season in the areas, most farmers prepare their farmland between April and July. Indeed, most of the sample farmers borrow money during this period. The agriculture sector is the backbone of Myanmar's economy and employs 70 percent of the country's labor force. Many farmers have little to no access to credible lenders. This drives them to borrowing from informal moneylenders with high interest rate. In this regard Myanmar Agricultural Development Bank is authorized by government to advance credit to farmers at lower interest rates through different organization. However, most of the studies show that majority of the farmers, more than 90 percent get their credit from informal sector. There are basically two types of agricultural Loans for farmers these are non-institutional and institutional sources of credit.

In Daydaye Township, MADB is the main lender of agricultural credit and 100 % of farmer borrows from MADB to cultivate their paddy and seasonal crops. MADB loan interest rate is most affordable to farmer and receive maximum amount of loan. MADB lend to farmer two times in a year which are May and November to cultivate the rainy crops and winter crops. Mya Sein Yaung is also one affordable source of loan and they provide low interest rate loan to farmer in twice a year. And also other microfinance organizations introduce their products to famer for loan but mostly are high interest rate.

Currently, the repayment time of agricultural loan is harvest time for both MADB and MFIs. At the harvest time, the rice price is at its lowest. From the farmer's side, he or she wants to hold the rice and continue to borrow microfinance money until the rice price is stable.

3.4 Sources of Credit

Financial services may be provided by a variety of financial intermediaries that are part of the financial system. A distinction is made between formal and informal providers of financial services, which is based primarily on whether there is a legal infrastructure that provides recourse to lenders and protection to depositors.

Formal financial services are provided by financial institutions chartered by the government and subject to banking regulations and supervision, semi-formal financial services are not regulated by banking authorities but are usually licensed and supervised by other government agencies. Informal financial services are provided outside the structure of government regulation and supervision. Informal credit market includes friends, relatives, village shopkeepers, traders, commission agents and many more. These sources of funds are for short period of time and charge a higher interest rate or can be determined by mutual agreement. These loans are made available for consumption as well as for the purchase of agricultural inputs

The largest number of farmers borrowed in June or July. Meanwhile, repayment is done in the months of December to February. Farmers usually harvest and sell their agricultural products during this period in all areas. It is important to note that these schedules are not the same in every year since the rainfall pattern is different every year. From this point of view, it is important for farmers to secure money as soon as possible when they need to start cultivation. It is easier for them to borrow money from private lenders than to borrow money from MADB. Although farmers have to pay high interest rates to private lenders compared to MADB, they borrow money from private lenders as well. This is same for farmers in all areas and all farm size categories as per JICA report.

3.5 Credit Accessibility

Historically, the Myanma Agricultural Development Bank (MADB) has played the central role in agriculture financing in Myanmar. The MADB dominates the agricultural financing market in Myanmar, while its loan market share is estimated to be approximately 74% in a total market of 736 billion kyat in 2012. At the same time, given the situation that the major industry is the agriculture sector in Myanmar, commercial banks and financial institutions have recently seemed to focus on financing for agribusinesses in Myanmar.

For the improvement of farmer's access to financial services, the Government allowed them to avail loans by providing their farmland as collateral under the Farm Land Law in March 2011. The Government increased MADB's maximum loan amount from 20,000 kyat/acre to 100,000 kyat/acre, as compensation for abolishing governmental subsidies on the purchase of seeds and fertilizers. However, the volume of agricultural financing is still limited and insufficient against the huge needs for finance in the agricultural sector, even though people working in the sector account for more than 68% of the total economic population of the country. This can be also observed on the Farm Household Economy Survey executed during the study that an average production cost of paddy in the three study areas is 189,244 kyat/acre for monsoon paddy and 185,866 kyat/acre for summer paddy, while MADB's maximum loan amount for paddy farmers was only 100,000 kyat/acre (Source by JICA report).

CHAPTER IV

ANALYSIS ON IMPACT OF CREDIT ACCESSIBILITY ON FARM PERFORMANCE

This chapter analyse the result of the fieldwork by the researcher. The first section states the profiles of the respondents of farmers of Daydeye Township. It is followed by Analysis on Impact of credit accessibility of the Farmer of Daydeye Township. The goal of this research was to look into influence of credit accessibility on impact of farm performance.

4.1 Research Design

This study measures the impact of the agriculture credit has been measured towards the farmers of the Daydeye Township. It was answered with the help of a questionnaire in which all the important variables are included. Since the study is related to the impact of agriculture credit of the customer so the targeted population in order to collect the data, is the farmers of Daydeye Township of studied area. For the ease of respondents, the questionnaire was personally administered where the respondents completed the questionnaire. Using personally administered questionnaires has different advantages such as it reduces the biasness of the respondent, it is reasonably brief and economical and lastly it allows the respondent to give an open response.

Descriptive statistics is used based on primary data. Primary data were collected using questionnaire and systematic sampling method from sample farmer.

Table (4.1) Research Design

Village	Population of Household	Sample of Household
Gone Min Kwin	160	14
Ah kal Yaw Ma	68	6
Kone Tan lay	257	32
Ya Kyaw	120	11
Kyone Hmaw	144	12
Total	749	75

Source: Survey data, 2018

4.2 Profiles of Respondents

Characteristics of the borrowers may have an important bearing on the receipt of loan from the institutional sources. Therefore, an attempt has been made here to investigate into some of important as well as relevant socio-economic characteristics of the sampled borrowers. These are Gender, Marital status, Age, Family size, Land ownership, education level, type of crops, etc. 75 sample farmers from Daydeye township is selected for this study. The majority of the respondents were male as shown by 76% while 24% were female. This shows that majority of the small-scale farmers in the study area are male.

On the age of the respondents, the study found that the majority of the respondents were between 46- 65 years (57%),28% were aged between 26-45years, and 11% were aged over 66 years. These shows that majority of the small-scale farmers are middle age. With regard to the education level of the respondents, 48% of the respondents indicated that middle school was their highest level of education. With regard to the farm size, 57% of the respondents own up to 10 acre of farm land, 31% of the respondent own from 11 acres to 20 acres of farm land and 4% of the respondents own above 20 acre of farm land. The average farm size of the study area is between 30% and 60%.

Table 4.2 Profile of Respondents

Particular	Number of respondent	Percentage
Gender		
-Male	57	76%
-Female	18	24%
Marital Status		
-Single	12	16%
-Married	63	84%
Age (Year)		
18 to 25	3	4%
26 to 45	21	28%
46 to 65	43	57%
66 to 85	8	11%
Education		
- Primary School	-	-
- Middle School	36	48%
- High School	22	29%
- Under Graduate	11	15%
- Graduate	6	8%
Number of land (acres)		
1 – 5	6	8%
6 – 10	43	57%
11- 20	23	31%
21- 30	3	4%
31- 50	0	0%

Source: Survey data, 2018

4.3 Farming Condition of the Farmers in Daydeye Township

Farmer usually cultivates the crops in two times which are monsoon and winter. The main crop is paddy and it include many type of paddy .The average output of the

paddy is between 70 Bushels and 100 Bushels. Most of the farmer cultivated paddy according to market demand which type of paddy can get higher price in market and Sin Thu Kha is the best rate of high yield that farmers want to cultivate for increase their income. Farmers accept Hnan Kar and Ma Naw Phyu is first rate of resistance paddy type due to their knowledge and farming experience.

Normally, Farmer cultivates the paddy two times in a year but some of the farmer cannot cultivate in winter due to their soil condition. They plant other crops such as bean, chili and coconut and palm during wither season. The following table shown in cultivated nature of respondents.

Table 4.3 Cultivated Cultures of Respondents

Seasonal Crop & Paddy	Number of Farmer	Percentage
Monsoon Paddy	7	9
Monsoon Paddy & Winter Paddy	65	87
Monsoon Paddy & Other Crops	3	4
Total	75	100

Source: Survey data, 2018

In research area, the average of paddy yield is 80 bushels and above. Farmer cultivated with crop rotation and seed selection methods and this method increase productivity and improves farm output. The average paddy yield status is shown in Table 4.4.

Table 4.4 Average Paddy Yield

Paddy Yield (Bushels)	Number of Farmer	Percentage
40 – 60	3	4
61 – 80	14	19
81 and above	58	77
Total	75	100

Source: Survey data, 2018

4.4 Credit Accessibility of Farmers

A logical questionnaire is used for data collection. The research instruction is developed by the researchers themselves. A total of 16 questionnaires were filled completely and useable. The questionnaire has variables which have its separate questions which are used to record individual response. The variable which has the questions is about the credit accessibility on farmer, such as loan documentation procedure, credit history, respondent perception on term of loan, collateral and interest and also questions which are for information whether after using the loan, their income and productivity increased or decreased. This questionnaire is not basically on the likert scale and converted into likert scale with the dummy questionnaire for data analysis. That the scale of 5 in which 5 show the highest value and 1 show the lowest value

In research area, most of the farmers borrow agricultural credit from institutional source that they prefer to borrow from MADB due to lower interest rate than other institutions. Some farmer did not receive sufficient fund from MADB for their full cultivated area and they try to receive other source of loan from microfinance firm with fair interest rate. Farmer who cannot provide collateral (Form 7) borrows from microfinance firms and other individual lender with high interest rate. The sample size of farmers 75 from five villages of Daydeye Township for borrows agricultural credit sources and uses of credit information are as follow;

Table 4.5 Source of Credit and Usage of Credit

Source of Credit	Number of Farmer	Percentage
MADB	33	44
MFI	14	19
Both MFI& MADB	21	28
Others Lender	7	9

Source: Survey data, 2018

Credit accessibility of farmers are depended on loan tenor, Interest rate, collateral, credit history, sufficient loan amount and loan documentation procedure. This accessibility to loan affects their farm produce since they cannot invest in getting good seeds, fertilizer as well as labour to weed their farms.

4.4.1 Perception on Appropriate Loan Tenor

Farmers are depended on term of loan which is appropriate for respective crop season, Farmer are willing to pay and able to repay on time, crop can be sold easily when loan is due. Table (4.6) states the Farmers' perception on those statements.

Table 4.6 Appropriate Loan Tenor

Description	Mean	Standard Deviation
Farmer can repay on time	4.89	.657
Farmer receive loan in right time (in the beginning of season)	4.94	.524
Respective loan term is appropriate for respective crop season	3.82	.735
Crop can be sold easily when loan is due	4.79	.498
Overall mean	4.61	

Source: Survey data, 2018

Respondents strongly agreed that receiving loan in right time (in the beginning of season) and able to repay on time. Respondents also agreed on respective loan is appropriate for respective crop season (Mean=3.82) and crop can be sold easily when loan is due, mean value is only 4.79, most respondents agreed on that statement and few farmers neither agreed nor disagree on that. The overall satisfaction of respondents is 4.61 and the results show strongly agreed due to mean scores of them are between 4 and 5.

4.4.2 Affordable Interest Rate of loan

One of the facts that loan interest rate is the main consideration for the credit accessible to farmer .To analyse the loan interest rate which is affordable to farmers, the questions in table (4.7) are prepared as follow.

Table (4.7) Affordable Interest rate of loan

Description	Mean	Standard Deviation
MADB Loan interest rate is affordable to farmer	3.74	.675
Micro Finance interest rate is fair to farmer	3.40	.489
Farmer get rid of higher interest rate loan of other institution	3.45	.547
Farmer can avoid burden of Interest payment	3.65	.762
Overall Mean	3.56	

Source: Survey data, 2018

Table 4.8 indicate that loan interest rate is whether workable or not, almost all respondents agreed that MADB Loan interest rate is affordable and its mean value is 3.74 and also Micro Finance interest rate is fair, the mean scores of them are mean value cut off 3.40. Moreover, Farmer get rid of higher interest rate loan of other institutions (Mean = 3.45) and Farmer can avoid burden of interest payment (Mean = 3.65) most of the respondents agree them. The average satisfaction of respondents with loan interest question is 3.56.

4.4.3 Collateral Requirement to Access Loan

Based on the likert scale between 1-5 the respondents were asked to indicate their level of agreement on the aspect of collateral. From the results presented in Table 4.9, most farmers strongly agreed that they have FORM 7 to get credit access and it's easy to apply upon their farm land as per respective result (Mean=4.75 , Mean=4.34). Farmers agreed that they don't need to pay other owned property as collateral except farm land .Most of the Farmers apply loan from MADB with FORM 7 as collateral. The overall mean is 4.37 for the question about collateral .its stated that respondents strongly agreed for the current requirement of collateral to get loan access.

Table (4.8) Collateral Requirement

Description	Mean	Standard Deviation
Farmer own collateral as FORM 7 to get credit	4.75	.554
Farmer can easily to apply FORM 7 upon their farm land	4.34	.589
Farmer don't need to pay own property except farmland as collateral	4.67	.762
Farmer willing to pay FORM 7 as collateral for their credit	3.72	.496
Overall mean	4.37	

Source: Survey data, 2018

4.4.4 Credit History

In determination of credit accessibility is based on the credit history of the farmers. As per results from Table (4.9), Farmers strongly agreed that clear previous credit history of MADB and other financial institutions its show mean result are 4.89 and 4.78 respectively. Farmers can manage to repayment in time for every seasonal loan (Mean=4.90) and their loan portfolio. The overall mean result on credit history is 4.80.

Table (4.9) Credit history

Description	Mean	Standard Deviation
Farmer cleared previous credit history of MADB	4.89	.493
Farmer repayment in time every seasonal loan	4.90	.645
Farmer cleared previous credit history of microfinance and others institution	4.78	.745
Farmer can manage their loan portfolio	4.63	.578
Overall Mean	4.80	

Source: Survey data, 2018

4.4.5 Easy Loan Documentation Procedure for Credit Accessibility

Analysis of perception on loan documentation is per shown in Table (4.10), Respondents strongly agreed that perception on loan documentation is easy and quickest way to farmer while they do loan application. The results show strongly agreed due to mean scores of them are between 4 and 5. Respondents also agreed on satisfaction of loan officer and staff's performance that financial institution's staff explained their product and related information they need. The overall perception on loan documentation procedure is high due to average mean score is 4.33 that all respondents agreed on them.

Table (4.10) Easy Loan documentation procedure

Description	Mean	Standard Deviation
Loan documentation is easy and quickest way to farmer	4.35	.643
Satisfaction of loan officer and staff's performance	4.03	.576
location of credit institutions are convenience to farmers	4.54	.667
Easy to understand the term and condition of loan	4.40	.523
Overall mean	4.33	

Source: Survey data, 2018

4.4.6 Sufficient Loan Amount on farm performance

The main subheads of the input cost on farming as considered in the present study are purchase of seed, pesticides and fertilizer as raw material and also operation cost such as rental fee of farm machinery and hiring labour. The important thing is land preparation cost to maintain land for good farming condition. The following table (4.11) showed the result for perception on sufficient loan amount for farmers.

Table (4.11) loan sufficiency

Description	Mean	Standard Deviation
Loan amount is enough for input cost (seed, fertilizer, pesticide)	4.82	.682
Loan amount is enough for rental fee of farm machinery	4.60	.754
Loan amount is enough for Hiring labour	3.89	.583
Loan amount is enough for land preparation cost	4.81	.826
Overall Mean	4.53	

Source: Survey data, 2018

Regarding the sufficient loan, each respondent was asked to rate on a likert scale ranking from 1 to 5. Loan amount is enough for agriculture input cost that were ranked as strongly agreed (Mean=4.82) and also mean result is 4.60 for the question of whether loan is enough for rental fee of farm machinery. The other two questions for whether loan amount is enough for hiring labour and land preparation cost are showed as a mean result are 3.89 and 4.81 respectively. The overall mean result for perception on sufficient loan amount is 4.53 and respondents strongly agreed on it.

4.5.7 Farm Performance

Farmer access to credit and effectively utilize of loan to improve farm performance. It can be proved for improvement with higher productivity as higher paddy yield by selection of quality seed for farm, adoption relevant farm technology early and effectively. By choosing quality seed, adoption farm technology effectively, farmer can manage to choose suitable rice harvesting time and selling with higher price in market. Four statements are included in questionnaire whether respondents' productivity through the Agriculture loan. That comes to reflecting opinion of income.

Table (4.12) Farm Improvement

Description	Mean	Standard Deviation
Higher Productivity	4.93	.453
Farmer can select quality seed for farm	4.89	.785
Farmer can adoption relevant farm Technology	4.85	.534
Farmer can get competitive market price from their farm output	4.83	.639
Overall Mean	4.88	

Source: Survey data, 2018

According to Table 4.12, it was founded that high yield can cause improve farm performance through Agriculture loan; all respondents agreed that Utilization of high quality input such as selection quality seed for farm (Mean=4.89.) and mean value 4.85 and 4.83 show that the respondents agree for the statement of adoption relevant farming methods and choosing suitable rice harvesting time for getting competitive market price are higher than mean value 4 .According per average mean result , respondents strongly agreed that improve high yield and improve farm performance by accessibility of agricultural loan.

Accessibility of agricultural loans is one of crucial determinants of performance of farmers in Dayeye. To measure credit accessibility, a set of six statements were formulated. The respondents were asked to indicate the extent of agreement with each of the loan accessibility statements. The summary results are presented in Table 4.13

Table (4.13) Summary

	Mean	Standard Deviation
Farm performance	4.88	.327
Appropriate Loan Tenor	4.61	.590
Affordable Interest Rate	3.56	.526
Collateral requirement	4.37	.731
Credit History	4.80	.403
Sufficient Loan Amount	4.53	.622
Easy Loan Documentation Procedure	4.33	.827

4.5 Regression Analysis on Determinants of Farm Performance

This section focuses on estimating how the independent variables influence the dependent variable. In this study, regression analysis is applied in order to analyse the impact on improvement of farm performance. In this analysis, the dependent variables improvement of farm performance such as paddy yield and the independent variables are appropriate loan term, affordable interest rate of loan, Collateral requirement, Credit history, sufficient loan amount, and easy loan documentation procedure.

Model Summary (Table 4.14) showed that a linear relationship between the predictor variables and dependent variable. The value of adjusted R^2 is 0.344 that reveals 34% of total variation in improvement of farm performance such as paddy yield per acre is explained by appropriate loan term, affordable interest rate of loan, Collateral requirement, Credit history, sufficient loan amount, and easy loan documentation procedure.

Table (4.14) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.630 ^a	0.397	0.344	0.265

a. Predictors: (Constant), Loan Documentation Procedure, Loan Tenor, Collateral, Credit History, Interest Rate, Sufficient Loan Amount

The results on the regression coefficients of individual predictor are showed in Table 4.15 and the regression model is statistically significant with improvement of farm performance.

The regression coefficient of appropriate loan tenor increase one unit, the improvement of farm performance such as paddy yield will be increased by 0.126 units if other independent variables are remained unchanged. The regression coefficient of affordable interest rate of loan increase one unit, the improvement of farm performance such as paddy yield will be increased by 0.135 units if other independent variables are remained unchanged. The regression coefficient of

collateral requirement for loan increase one unit, the improvement of farm performance such as paddy yield will be increased by 0.118 units if other independent variables are reminded unchanged.

The regression coefficient of credit history for loan access increase one unit, the improvement of farm performance such as paddy yield will be increased by 0.178 units if other independent variables are reminded unchanged. The regression coefficient of sufficient loan amount increase one unit, the improvement of farm performance such as paddy yield will be increased by 0.139 units if other independent variables are reminded unchanged. The regression coefficient of easy loan documentation procedure increase one unit, the improvement of farm performance such as paddy yield will be increased by 0.117 units if other independent variables are reminded unchanged.

Collateral Requirement and easy loan documentation procedure are related with farm performance at 1% significant level and appropriate loan tenor, affordable interest rate, credit history and sufficient loan amount are 5% significant level. Therefore, the result on positive correlation suggested that increased credit accessibility will improve fare performance.

Table 4.15 Relationship between Credit Accessibility and Farm Performance

Variables		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	1.312	.584		2.246	.028
	Appropriate Loan Tenor	.126	.054	.227	2.348	.022
	Affordable Interest Rate	.135	.060	.218	2.240	.028
	Collateral Requirement	.118	.043	.263	2.722	.008
	Credit History	.178	.080	.220	2.233	.029
	Sufficient Loan Amount	.139	.052	.264	2.654	.010
	Easy Loan Documentation Procedure	.117	.039	.295	3.026	.003

Note: (***) - 1% level of significance)

CHAPTER V

CONCLUSION

This chapter provides the summary of the study, findings and conclusion made in relation to the findings. The chapter also provides the recommendations based on the findings of the study,

5.1 Summary of Majors Findings

This section covers the summary of the research findings which was done based on the study objective. The agriculture sector is the backbone of Myanmar's economy and employs 70 percent of the country's labor force. The state-owned Myanmar Agriculture Development Bank (MADB) is increasing the amount in crop loans it provides to farmers to help them cover the cost of production. MADB provides loans for crops such as rice, various kinds of beans, cotton, and corn to help farmers cover some of the costs to grow crops for the harvesting season. .

The present study is concerned with the farmers taken credit accessibility from MADB, other microfinance institution and money lender and utilization of agricultural loan. The study area covers farmers from Daydeye Township. Concerning of impact on credit accessibility mainly rely on government organization (MADB) and it is cover clients' financial needs for input cost such as choosing quality seed, adoption farm technology effectively, other than their owned capital. Majority of respondents confessed to have applied loan(s) from financial institutions to operate their production activities of agriculture. In addition, the respondents who had ever accessed credit from financial institutions confirmed that the services offered by credit facilities were effective.

According to analysis of the respondent's characteristics, distribution of land shows that small farmers constituted 76 percent of all farmers surveyed and medium farmers who constituted 24 percent of the total farm households were found in two farm size groups. According to the results, the respondent's social characteristics show that the average age of the respondents is age between 45 and 65 years old. Mostly are married male. The result mentions that education levels in the study area

are fair, mostly are middle school level. Farmers from Dayeye Township mostly grow Paddy in both Monsoon and Winter season.

As regard of the impact of credit accessibility and loan utilization is analyzed and measured in terms of their impact on loan utilization by Farmer's Perception on Loan Tenor, Loan Interest rate for Farmers, Collateral to get loan access, Credit history, Loan documentation procedure for credit accessibility, Perception on sufficient loan amount and improvement of farm. The result was conducted by using these variables. The analysis of this study resulted in the following summary of findings.

Regarding to the impact on credit accessibility, almost all respondents used the loan in utilization of agriculture input cost and it is not used for purchase of farming machinery. However, a few respondents answered that loan is used for purchase of household property and expense and reported that it is utilized to settle loan from others. Although most of surveyed famers from studied area utilized loan productivity, few farmers are not well manage to utilized loan.

The results from analysis of respondent's perception on sufficient loan show that many respondents reported loan amount is enough for agriculture input cost. Some respondents' responses are that loan amount is not enough .Therefore the required money for input cost is borrowed from other financial institutions or private. This indicates that some farmers have utilized the credit for increasing the crop production and it may impact higher cost to farmers by borrowing from money lender with high interest rate.

According to the review of loan documentation procedure, most of the respondents answered that they well known term and condition of loan, requirements and application process. As per result, most Farmers have well knowledge about credit history and also manage to clear previous credit history. However, there are very few farmers have issue on their loan portfolio.

The results from respondent's perception on term of loan showed that most of respondents agreed and satisfied except that crop can be sold easily when loan term is due. It may affect the ability of repayment on time. Currently, the repayment time of agricultural loan is harvest time for both MADB and MFIs. At the harvest time, the rice price is at its lowest. From the farmer's side, they prefer hold the rice and

continue to borrow microfinance money until the rice price is stable. Therefore, Farmers want to get longer term for agricultural loan for profitability.

According per average mean result of perception of fare improvement, respondents strongly agreed that improve high yield and improve farm performance by accessibility of agricultural loan. The finding revealed that high yield can cause improve farm performance through Agriculture loan. It is therefore evident that the combination of credit terms and credit accessibility has an impact on the improvement of farm.

5.2 Recommendation

It is recommended that financial institutions offering agricultural loans should make them more accessible to farmers. This can be done by offering various loan products which are in line with the ability of the farmers. This would enable the farmers to pick loan products they are comfortable with. It is also recommended that there is need to diversify the mode of loan disbursement such as releasing fund through mobile money so that farmers can buy farm input at the right time in order to realise high yields and providing long term loan to increase in farms size and higher selling price.

The recommendations which need attention of both governmental agencies and financial institution to utilize the agricultural credit in an efficient way so that farmers may get maximum profits and their living standard be improved. The other things are loan tenor should be adjustable in case of any natural calamity or failure of crop, the period of repayment should be extended at the convenience of borrower and also the procedure for obtaining loan should be made simple in terms of time, acceptance of security, documentation and disbursement of loan so that farmers feel easy and may avail it. Financial institution need to develop sound tracking and monitoring system to do regular supervision and monitoring such as regular visit to the farmer's field so that the credit be used for the right purpose. Further, there is need to increase the volume of loan disbursed. The disbursement should adequately meet the need of the farmers for increase in yield. All financial institutions should consider providing loan without collateral in order to promote the farming business for both who start up a farming business and for who are running an existing one can

be steep. Agriculture loans are geared toward helping farmers makes the leap into the world of farming, or taking their existing farm to the next level. MADB should work together with other related organization such as Agricultural developing organization to educate farmers to use funds wisely, and soon it will be a great impact on farming industry.

REFERENCES

1. D. S. Wanjawa (2017). Contribution of Agricultural Loans Accessibility to Performance of Small Holder Sugar Cane Farmers in Kakamega County, Kenya
2. De Janvry, A. and E. Sadoulet (1995). Rural poverty and differentiated rural development programs (in Spanish)
3. Ghorbani, M. (2005). The role of credit institutions in rural investment development in agricultural sector.
4. Hussein, Mohamed Hassan. (2015). The relationship between credit accessibility and growth of small and micro enterprise in Langata Constituency.
5. Ismael, Byaruhanga (2013). Credit Terms, credit accessibility and performance of agricultural cooperatives in Rwanda.
6. Japan International Cooperation Agency (JICA) (2014). Preparatory survey on two-step loan project for agriculture and rural development in the Republic of the Union of Myanmar
7. Jumare. (2006). Evaluation of Agricultural Credit Facility in Agricultural Production and Rural Development
8. Khan, B.H. (2005). Microfinance awareness and Impact in Kenya: A case of Nairobi County
9. Lu Min Lwin and Khun Moe Htun. (2016). Credit access and utilization in agriculture and aquaculture in the Ayeyarwady Delta.
10. Pitt, Mark M. and Shahidur R. Khandke, (1998). The Impact of Group Based Credit Programs on Poor Households in Bangladesh.
11. Zin Mar Oo. (2017). Effectiveness of agriculture loan provided by Maha Agriculture Microfinance Institution on Farmers in Nattalin Township.

APPENDIX A

Impact of Credit Accessibility to Farm Performance of Farmer

Questionnaires

Section I Profiles of Respondents

1 Name -----

2 Male / Female -----

3 Single (or) Married -----

4 Age

18-25

26-45

46-65

66-85

5 Education

Primary School

Middle School

High School

Under Graduate

Graduate

Post Graduate

6 Size of Family

2

3

4

5 and above

7 Agricultural Land Acre

1-5 Acres

6-10 Acres

11-20 Acres

21-30 Acres

31-50 Acres

Analysis on Impact of credit accessibility to Farm Performance in Daydeye Township

5 Points Likert Scale Measurement

5 = Strongly Agree, 4 = Agree, 3 Neutral, 2 = Disagree, 1 = Strongly Disagree

No	Appropriate Loan Tenor	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Farmer can repay on time					
2	Farmer receive loan in right time (in the beginning of season)					
3	Respective loan term is appropriate for respective crop season					
4	Crop can be sold easily when loan is due					

No	Affordable Interest Rate	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	MADB Loan interest rate is affordable to farmer					
2	Micro Finance interest rate is fair to farmer					
3	Farmer get ride of higher interest rate loan of other institution					
4	Farmer can avoid burden of Interest payment					

No	Collateral Requirement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Farmer own collateral as FORM 7 to get credit					
2	Farmer can easily to apply FORM 7 upon their farm land					
3	Farmer don't need to pay own property except farmland as collateral					
4	Farmer willing to pay FORM 7 as collateral for their credit					

No	Easy Loan Documentation Procedure	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Loan documentation is easy and quickest way to farmer					
2	Satisfaction of loan officer and staff's performance					
3	location of credit institutions are convenience to farmers					
4	Easy to understand the term and condition of loan					

No	Credit History	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Farmer cleared previous credit history of MADB					
2	Farmer repayment in time every seasonal loan					
3	Farmer cleared previous credit history of microfinance and others institution					
4	Farmer can manage their loan portfoily					

No	Loan Sufficiency	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Loan amount is enough for input cost (seed, fertilizer, pesticide)					
2	Loan amount is enough for rental fee of farm machinery					
3	Loan amount is enough for Hiring labour					
4	Loan amount is enough for land preparation cost					

No.	Farm Improvement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Higher Productivity (high yield)					
2	Farmer can select quality seed for farm					
3	Farmer can adoption relevant farm Technology					
4	Farmer can get competitive market price from their farm output					