# LOAN REPAYMENT AND DISBURSEMENT PATTERN OF AGRICULTURAL DEVELOPMENT BANK IN NEPAL 

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## RECOMMENDATION

This is to certify that the thesis

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has been prepared as approved by the this Department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.

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## VIVA-VOCE SHEET

We have conducted the viva-voce examination of the thesis presented by

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and found the thesis to be the original work of the student written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment for Master's Degree in Business Studies (M.B.S.)

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## DECLARATION

I hereby declare that the work reported in this thesis entitled LOAN REPAYMENT AND DISBURSEMENT PATTERN OF AGRICULTURAL DEVELOPMENT BANK IN NEPAL submitted to the Central Department of Management, Tribhuvan University, is my original work. It is done in the form of partial fulfillment of the requirements for the Master of Business Studies (MBS) under the supervision and guidance of Prof. Dr. Mahananda Chalise, Central Department of Management.

August, 2018

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## ABBREVIATIONS

| C.V. | $=$ Coefficient of Variation |
| :---: | :---: |
| CBs | = Commercial Banks |
| Co. | = Company |
| e.g | = Example |
| FNCCI | $=$ Federation of Nepalese Chamber of Commerce |
| FSRP | = Financial Sector Reform Program |
| FY | = Fiscal Year |
| GON | $=$ Government of Nepal |
| i.e. | $=$ that is |
| IDA | = International Development Agency |
| IMF | = International Monetary Fund |
| LLP | = Loan Loss Provision |
| Ltd. | $=$ Limited |
| NBL | $=$ Nepal Bank Limited |
| NGO | $=$ Non-Government Organization |
| NIBL | = Nepal Investment Bank Limited |
| No. | $=$ Number |
| NPA | $=$ Non Performing Assets |
| NPL | $=$ Non-Performing Loan |
| NRB | = Nepal Rastra Bank |
| S.D. | $=$ Standard Deviation |
| S.N. | = Serial Number |

## CHAPTER-I

## INTRODUCTION

### 1.1 General Background

Management of loans and advances in commercial banks. Lending is one of the principal services provided by the bank. If accepting deposits is the function of one hand, lending is the function of other hand. Lending or advancing loans is one of the two basic functions of the commercial banks. Lending is the profit or revenue earning process of the commercial a bank. Without lending the process of earning profit does not start for the banks. Lending policy of bank is governed by monetary policy of reserve bank of India. The banks lend money out of Deposits received from the customers. Deposits are repayable on date of maturity or on short notice or on demand by customer. Hence, the bank cannot lend money for a longer period out of deposits for short period. A commercial bank is essentially a medium or short term lender. It is clear that a commercial bank cannot lend for long period any substantial part of funds which have been borrowed for short period from depositors. On the basis of past experiences the bank management knows how to use their assets in best possible way. The main profit making activity of commercial banks is advancing loans to its customer (Pandey, 2010).

The primary objective of loan management is to earn income by serving the credit need of the community. A commercial bank generates near about 65 to $70 \%$ of its income through the lending activity. The success of a bank is heavily dependent on its lending programmes. A major part of bank deposits gets blocked in cash reserves and liquid assets to meet CRR (cash reserve ratio) and SLR (statutory liquidity ratio) requirements. The profit earned as interest on lending is used to pay the interest on deposits and to meet the other infrastructural requirements of a bank. The residual funds have to be used very carefully for lending to earn reasonable return. Commercial banks have increased employment opportunities through their lending functions have contributed to mass production, mass distribution and mass consumption. Banks also increase the level of consumption through their consumer loans. Banks provide consumer loans for creating constant demand for consumer goods like houses, furniture, appliances, fixtures etc. bank loans and advances may be used to increase production and employment this will result in higher income and
improve the living standard of the people. Banking lending also plays an important role in the gross earning and net profits of commercial banks. It is the most profitable as well as risky function performed by commercial banks (Sethi and Bhatia, 2017).

As we know, loan disbursement and collection is one of the main functions of every commercial bank and it may be collectively entitled as "loan management". Loans are the risky as well as profitable asset which the bank grants to the person for the temporary use. And management is the way to handle anything for the better use. So loan management can be defined as the management of granted loan in a better manner. Loan management, generally, focused on the management of loan distribution and collection procedures. Loan management is concerned with the activities of lending and recovering the credit so that the bank will not face the problem of fund as the funds are provide from the public deposition. As for maintaining liquidity position of the bank, there should be the proper management of the loan distribution and collection, as the liquidity depends upon the disbursement of the loan.

## A Brief Profile of Agriculture Development Bank Limited

With the main objective of providing institutional credit for enhancing the production and productivity of the agricultural sector in the country, the Agricultural Development Bank, Nepal was established in 1968 under the ADBN Act 1967, as successor to the cooperative Bank. The Land Reform Savings Corporation was merged with ADBN in 1973. Subsequent amendments to the Act empowered the bank to extend credit to small farmers under group liability and expand the scope of financing to promote cottage industries. The amendments also permitted the bank to engage in commercial banking activities for the mobilization of domestic resources (www.adbl.com.np, 2017).

Agricultural Development Bank Limited (ADBL) is an autonomous organization largely owned by Government of Nepal. The bank has been working as a premier rural credit institution since the last three decades, contributing a more than 67 percent of institutional credit supply in the country. Hence, rural finance is the principal operational area of ADBL. Besides, it has also been executing Small Farmer Development Program (SFDP), the major poverty alleviation program launched in the
country. Furthermore, the bank has also been involved in commercial banking operations since 1984.

The agriculture development bank of Nepal was established to fulfill the certain objectives. The prime objectives of the bank was to provide credit to farmers for the development of the farmers through the medium of agricultural sector development. The agricultural development objectives of the bank is the development of agriculture productivity, livestock \& other farming development in the country. The agricultural development is possible by the increase of outputs from agricultural sector for which purpose huge amount of funds is required and it should be fulfill by the bank, viewing over the broad objective of this banks. The main objectives of bank is to provide quality banking \& financial services to clients, adopting market driven strategy and delivering sustained and competitive return on investment (Annual report of ADBL, 2074).

### 1.2 Statement of the Problem

Since Nepal is dominantly an agricultural country, the strengthened the lives of its people is not possible, until the majority of the farmer's are made oriented towards modern agricultural business. In this connection, use of improved seeds, chemical fertilizers modern equipment, pesticides \& irrigation facilities on one hand and increase in productivity \& effective marketing of the product on the other are the most important things which deserve immediate attention .ADBN accepts that most of the farmers of our country are facing hand to mouth existence problem. Under such condition to save for future development efforts or for capital accumulation to invest in agricultural development is a very big problem of our farmers. They may not be able to pay the loan in due time. So this problem creates difficulty in generation of capital to refinance and to provide loan to develop the economy of the farmer. The ADBN is institution which is supposed to break fails to recollect the funds disbursed. It can be concluding that the capital so injected, instead of desired return, was converted into Bad debts. So, how will ADBN disbursed and recollect the capital for the it be continual development of Agricultural practices?

On the basis of this general problem the following problems were raised \& tried to look the answer through the study:-

- What is the position of loan disbursement, repayment and outstanding of Agriculture Development Bank Nepal?
- What is the growth ratio of repayment to loan disbursement \& repayment to outstanding loan?
- What is the relationship between collection, outstanding loan and disbursement of loan?


### 1.3 Objectives of the Study

The main objective of the study is to study on the trend of loan disbursement \& repayment and its patterns which ADBN adopted in all round development of agriculture sector. The specific objectives of the study areas follows:-

- To analyze loan disbursement, repayment \& outstanding of Agriculture Development Bank Nepal.
- To identify the rate of growth of loan disbursement repayment \& outstanding of Agriculture Development Bank Nepal.
- To examine the relationship between principal collection, outstanding loan and disbursed loan.


### 1.4 Importance of the Study

This study mainly fills a research gap on the study of loan disbursement \& repayment patterns of ADBN. Definitely, the study will provide a useful feedback to the policy makers of the bank and also becomes a useful reference for other development bank of Nepal for the formulation of appropriate strategies. The study will contributes to the literature of finance \& will try to make clear about the present situation of ADBN regarding the different aspect of loan disbursement \& repayment. This study work can help to know what is going on with the real financial position of the bank \& also its achievement \& operation. Is it really success in its operation? This study can help to focus on its operational success because the success of any development bank depends not only on the loan disbursement side but also depends to a large extent on repayment of loan.

This study too will help in carrying out the decision for our further studies. As it provides mirror of the deposits as well as the loan aspects of the bank, it will ultimately help to take appropriate decisions \& will further help to provide feedback to their higher authority so that the bank can formulate necessary policies for the improvement of the bank. In addition, this study will help other to generate some ideas and information about ADBN. This study not only warrants necessary action to
be taken to solve the present problems of ADBN but also presents a general overview of the agricultural environment which help in formulating right advancing policy of ADBN to minimize the possibility of defects in the future. At the same time study will be help to the borrowers to know the lending prospects \& determine their opportunities.

### 1.5 Limitation of the Study

This study is related only with the ADBN with reference to the loan disbursement repayment and outstanding only in detailed form . So, the study deals with financing for agriculture development. It covers all types of loan purpose of loan, terms of loan \& regional loan disbursement \& repayment. For this purpose the time covering is five years.

Of course there are some limitations in my study beyond its analytical nature. It cannot deal each \& every literature and articles which are beyond my access. The following points will determine the certain limitation for this study.

- The research work is focused on loan disbursement \& repayment pattern to the ADBN.
- This study is based on secondary data. Consequently the result depends on the reliability of these secondary data. In some cases primary data are used.
- This study covers only a period of five years (2012/13-2015/16).
- The truth of research result is based upon secondary data.


### 1.6 Organization of the Study

The study will be organized in to five chapters. Which are:-
Chapter I: Introduction: Chapter one deals with introduction, problem of the study, and objective of study, limitation of study, need of the study, research methodology and method of analysis.

Chapter II: Review of Literature: Chapter two consists of review of literature. This chapter is subdivided into various sections such as conceptual framework, review from different studies, review from journal, article and magazine and review from master's thesis for the concerned topic.

Chapter III: Research Methodology: Chapter three present methodologies adopted for the research. It comprises research design, sources of data method of analysis and its descriptive presentation.

Chapter IV: Presentation and Analysis of Data: Chapter four deals with the techniques used in analyzing the collected data and its presentation in the descriptive and analytical manner.

Chapter V: Summary, Conclusions and Recommendations: Chapter five consists of summary, conclusion and recommendation about the topic concerned.

## CHAPTER-II

## REVIEW OF LITERATURE

The review of literature is a crucial aspect because it denotes planning of the study. The main purpose of literature review is to find out what works have been done in the area of the research problem under study and what has not been done in the field of books, repots, journals and research studies published by various institution unpublished dissertations submitted by master level students have been reviewed. It is divided into two headings:

- Conceptual Review
- Review of related studies


### 2.1 Conceptual Review

Conceptual review deals with the evolution of the bank, concept of development bank, Agriculture credit, Role of credit in Agricultural development, Demand \& supply for agricultural credit, Types of loan, Loan transaction of ADBN, Loan disbursement procedure, Repayment procedure, security \& margin requirements, Repayment performance, etc.

### 2.1.1 Evolution of the Bank

Bank is the institution which works in taking \& giving money. Taking \& giving money are financial transaction. So, bank is an institution dealing in financial transactions. Speaking truth , the concept of bank was evolved with commercial idea. The bank which works under commercial functions is commercial bank. According to history, the king of Katmandu "Gun Kam dev" borrowed money to rebuilt his kingdom in 723 AD .Another historical example as the pre-modern banking system is found when Rana prime minister Randip Singh easy administering Nepal in 1880.During his regime one financial institution name by Tijeras was established to give loan facilities to the governmental staff \& to provide loan facilities to the public in general in the term of 5\% interest rate. The year 1994 B.S marks the beginning of a new era in the history of modern banking in Nepal (Khadka and Singh, 2017).

After the down of Democracy in 1951, first development institution Nepal industrial development corporation (NIDC) was evolves in 1959 as a development bank. The first institution credit supply arrangement for agricultural development in Nepal was made in 1963 in the form of co-operatives. In 1964 land reform saving co-operation was established. This corporation was functioning in the field of agricultural financing by providing loan to the needy farmers \& did not have its own share capital. Therefore, Agriculture development bank was evolved in 1968 under the Agriculture Development Act, 1967,'Agriculture development bank has been registered under public company limited in 2006.

The main sources of institutional credit for rural community and for agriculture is ADBN. Later in 1973, the LRSC was merged with ADBN .The bank inherited the assets and liabilities of the co- operative bank, which was established in 1963.ADBN is an autonomous organization under the supervision of the ministry of finance of Nepal government of Nepal and the bank has been working as a premier rural credit institution since three decades contributing more than 80 percent share in meeting institutional credit needs in Nepal. The ADBN has total two billion of an government owns $96.6 \%$. $2.1 \%$;belongs to Nepal Rastra bank and individuals and co-operatives owns $4.3 \%$.The main sources of the ADBN capital are share capital ( $6.5 \%$ ), customer's deposit (61.3\%), External borrowing (61.3\%) and other (14.2\%) (Khadka and Singh, 2017).

### 2.1.2 Concept of Development Bank

The bank organized under the special development bank act with a view to assist directly in the development of country is called development banks. These banks are organized for helping in the development of special areas of the country. The bank established to help in agriculture sector in agriculture development bank.

Development banks are established for the development of particular sector of his country like rural areas, industrial sector \& agriculture sector etc providing financial \& technical assistance. Such banks are established under a special act to perform special functions, such type of banks provides the investment to particular institute to develop particular sector. Nepal industrial development corporation, Agricultural development bank, Rural development bank ,NIC etc are some of the examples of the development bank of Nepal. All development banks are established under
development bank act 2052 in Nepal. But now agriculture development bank has been registered under public limited company in 2006.Under the ADBN act, the bank is entrusted with the responsibilities of initiating effective approaches for the development of agriculture. The bank is committed to raise the economics condition of farmer by availing credit \& a capital input in easy \& smooth manner. Hence, development bank play the role of catalyst. It is an institutional mechanism which functions as an active agent for promoting a balanced \& viable process of economic development.

### 2.1.3 Agriculture Credit

Agriculture credit may be defined as the amount of ingestible funds made available for the purpose of development \& sustenance of farm productivity. Agricultural credit is only one of many factors playing a part in the complicated process of increasing agricultural production. Agricultural credit ceases to be an economic force facilitating agricultural development if it attempts to finance farmers who do not have a potentially adequate economic base. Agricultural credit just being made available cannot promote development of \& when connected with other aspects such as extension, technical assistance, efficient marketing \& supply. It will become one of the most effective tools in bringing about progress in overall development of the country (Gulati, 2011).

Agricultural credit is also one of the most vital inputs in increasing agricultural production. The importance of agricultural credit is fallen not only in increasing agricultural production but also in maintaining the present tempo \& pace. Modernizing Nepalese agriculture requires a massive doze of financial assistance \& the institutionalized credit.

The bulk of the credit requirements of the poor farmer's rural areas would continue to be supplied as usually by the traditional Sources.

The main purpose behind the establishment of the cooperatives bank in 1963 was to finance the cooperative societies in a more systematic way. In order to broaden the working of the cooperatives bank, it was converted in 1968 into the ADB. Along with the ADB the land reform savings corporation established to provide credits to the village committees farmed under to a large number of small farmers all over the
country. The workings of the ward committees as collecting agents for the compulsory savings have provided an important organization at the grass root level. This feature of our land reform is very important in so far as it has enabled Government of Nepal to mobilize rural savings for financing credit needs of the farmers (Khadka and Singh, 2017).

In views of the importance of credit support in any agricultural development programmer, the NRB is also very much concerned in this field and has undertaken the first country wide comprehensive agricultural credit survey.

Why a farmer needs credit?

1) Low income \& small savings because of little tangible assets \& inefficiency.
2) Numerous needs \& wants and his willingness to raise his standard of livings.
3) Long time interval between planting \& harvest.
4) Natural hazards \& unexpected calamities.

### 2.1.4 Role of Credit in Agricultural Development

Agricultural development depends on the availability of capital or .credit and credit becomes an essential factor if an integrated approach to development is to succeed.

Agriculture credit must finance the needs arising from the burgeoning technological revolution in agricultural sectors. It must encourage \& mobilize savings from the incomes generated by the expanding agricultural production. As an important factor of production credit must play a pivotal role in forest ring an equitable distribution of the increasing agricultural income. It must be used to create production employment for absorbing the growing numbers of under-employed in the agricultural sector.

Finance in traditional agriculture is largely used for maintenance as distinct from expansion of agriculture activities, typically, it is provided by traditional money lender, village trader, friends \& relatives. Agriculture credit also play an important role in meeting cash needs of farmers. Modernizing agricultural requires large infusion of credit needs to farmers use of purchased inputs such as fertilizers, improved seeds, insecticides', additional labour etc.

Medium \& long term investment in land clearing irrigation, land leveling etc, also become much more essential for increasing agricultural production. Multiplier effects of a transforming agriculture increase profitability of agro based industries thus
increases demand for capital. Because savings in traditional agriculture tend to be relatively small at initial stages of development, increased demand for working \& fixed capital must largely come from increased supply credit.

The sources of the credit programmer will depend on the fulfillment of certain conditions such as 1) an increase in the amount of credit available 2) reduction of cost of credit 3) adjustment of credit term to suit the convenience and repayment capacity of the farmers 4) assistance in applying needed technique \& improvements in farm management. The institutional financial agencies tend to help step into 'lubricate the wheels of production".

### 2.1.5 Demand \& Supply for Agricultural Credit

## 1) Demand of Agricultural Credit

Normally demand for Agricultural credit depends on the cost of credit on hand \& marginal efficiency of capital on the other. With stagnant agriculture where farmer motivations are scatted by low income prospects \& risky situation of demand for credit remains low. When agricultural development coupled with new techniques of production is initiated other determinants of demand becomes meaningful \& the demand shifts high fertility seeds, high level of fertilization, timely plant sanitation measures, new techniques of processing and marketing are farm liquidity determine the quantum of credit resumed $\&$ offered. The actual demand is constrained by the cost of credit \& the marginal efficiency of investment in farm activities. The entire gamut of factors of demand should ultimately depends upon managerial skills, ability \& propensities toward risks in Agriculture. Thus, the demand for agricultural credit varies by farm by region \& overtime. The determinants of demand for credit are liquidity, crop pattern \& cropping intensities ,size of family \& farm lab our, cost of credit \& mode of transactions, degree of risks \& uncertainties involved in production \& marketing inclusive of inventory control \& managerial skills (Khadka and Singh, 2017).

## 2) Supply of Agricultural Credit

The supply of agricultural credit depends upon the level of saving \& capital formation degree of risks \& uncertainties in lending \& perspective of financial institutions. Where assets and liquidity are low money lender seem to dominate the credit market.

Providing appropriate finance for agricultural operation is like ailing agriculture to make its wheels more spiffy \& smoothly. To foster progressive rural economy, making credit available \& ensuring its productive use should therefore form he basis planks of any credit policy (Paudel et al., 2016).

### 2.1.6 Loan Transaction of ADBN

ADBN provides loan for different purpose, which are business loan, industrial loan, overdraft loan, contract loan, demand loan, hire-purchase loan \& service loan.

## Business loan

Business loan is provided for the buying \& selling of commodity such as machinery tools, agriculture equipment, construction material etc .Generally such loan can be renewed till last of the loan period by regularly paying monthly installment .If the loan of more than twenty five thousand is accepted than $1 \%$ service charge is charged of the accepted loan (Paudel et al., 2016).

## Industrial loan

To open and for the establishment of agriculture \& non- agriculture industries such as loan is provided. Industrial loan is provided as fixed capitals \& current capital. Fixed capital is provided till last five years for the purchase of building \& machine, factory, machinery tools \& equipment. In such fixed capital loan the installment of principal should be paid according to mentioned time \& fixed capital loan can't be renewed. In the same way current capital loan is provided for the purchase of needed raw material ,labour, electricity, water etc and also for monthly expenses. Current capital is provided for the period not exceeding 12 months \& such loan can be withdrawn when needed \& an be renewed if monthly interest is paid regularly (CATC, 2073).

## Over draft loan

Generally, overdraft loan can be counted as non productive sector loan. If deposit is more than the loan investment in banks in such situation when transaction of bank may increase then only over draft loan is provided. For overdraft loan there should be at least $50 \%$ collateral as deposit or that persons own family house as collateral. Such loan is provided for the period of 6 month. If monthly interest is paid as per the bank rule this loan can be renewed.

## Contract loan

For the purpose of construction of contract the contract loan is given to institution, Nepal government, public limited company \& private limited company. For repayment of loan, the bank adds 3 months more than the period of contract agreement (CATC, 2073).

## Demand loan

For construction, contract, survey to commerce any walk etc, the businessman may need fund at once. So, the loan is provides in such case which is known as demand loan.

## Hire purchase loan

Such loan is provided for the hire purchase of transport like bus, mini bus, truck, tanker, taxi, tempo etc .This loan is provided for the period of 4 years \& the principal and interest has to be paid within 48 installments.

## Service loan

Service loan is provided for those institution which is established in service motive like for running promotion of tourism, hotels, lodge, resort, trekking travel, rafting etc .On the basis of the nature of farm-business ADBN has categorized 12 purpose of agricultural loan, which are:-

## a) Cereal crops

This loan is provided for the production of grains such as wheat maize \& other cereal crop lies under this purpose. Such type of loan is provided for maximum of 12 months \& within the period the principal \& interest is to be paid.

## b) Cash crop

The loan provided for the production of oil, potato, vegetables, almonds and other cash crop lies under this purpose. Such loan is provided for 18 months and the farmer should pay principal \& interest after selling the cash crops.

## c) Marketing

The loan provided for the marketing of agriculture materials products, stock of recede, oil \& other needs of people \& other marketing lies under this purpose. The loan is provided for 12 months \& should return within the fixed period (CATC, 2073).

## d) Agro tools

The loan is provided for purchasing power teller, agro tools, gravest of grain, tractor for cultivation, horse, bull \& buffalo for transport than such loan lies under agro tools. Such loan is provided for 3 years \& should pay interest for it.

## e) Irrigation

Loan to finance pump set , tube well, boring, well, pond, solar pump, \& other used for irrigation lie under this purpose. Such loan is provided for 5 years.

## f) Livestock

Loan to cow, buffalo, duck, chicken, fish, bee, pig, goat, sheep, rabbit \& for other husbandry lies under this purpose. Such loan is provided for 2 years to 5 years.

## g) Bio-gas

Bio-gas lies under alternatives sources like bio-gas plant, for solar panel connection loan is provided. Such type of loan should be paid within 3 years to 5 years.

## h) Horticulture

The loan provided for gardening, plantation \& cultivation of medical herbs lies under it. Such loan is provided for short, medium, \& long term. The loan is provided for 2 years to 15 years.

## j) Godown \& cold storage

For storage of agro products go down \& cold storage are constructed so the loan provided for such purpose lies under godown \& cold storage loan. The loan is providing for 10 years.

## k) Tea \& coffee

Loan provided to cultivate tea \& coffee lies under this purpose. Such loan is provided for long term that is for 15 years.

## 1) Housing

The loan provided for housing lies under it. Such loan is non productive. So the loan is provided under the supervision of Nepal government. The period of loan so 2 years to 10 years.

### 2.1.7 Interest Rate on Loans of ADBN

The bank charges rate on various kinds of loan which is called interest rate, the bank charges interest rates by providing loan to the customer. So, it is one of the major profit sources of the bank. The loan, which is provided to the customer, is highly affected by the interest rate. There is inverse relationship between the interest rate \& loan \& advances. If the interest rate charged by the bank is very high, the demand for the loans \& advanced will below \& if the interest rate is very low, the demand for the loans \& advances will the high (CATC, 2073).

When the bank charges the interest rate, it should cover;

1. The cost of the fund loan.
2. The cost of service for different kinds of loans.
3. A reasonable margin of profit.

The rate of interest charged by ADBN for different types of loan is fixed by Nepal Rastra bank (NRB) but rate of interest on the overdue loan is fixed by ADBN itself. The rate of interest charged by ADBN varies in accordance cheaper purpose of the loan. Generally, the bank charges cheaper interest rate for co-operatives and small farmers than individuals \& other.

### 2.1.8 Loan disbursement procedure

ADBN advances loans directly to the individual farmers or indirectly through cooperatives. However, in both cases the farmers prepare the project statement before submitting it to the bank (Paudel et al., 2016).

To take loan from ADBN firstly the person who willing to borrow loan should fill up the prescribed loan application, which is supplied by the bank. The application form should be accomplished with the supporting documents such as receipt of land revenue payment \& the certificate of the land ownership. After receiving the application form, bank employee visits the borrower to inspect the project site to make safe adequacy of his security. The visitor examines whether the project is technically feasible \& economically viable or not. After that, the ADB loan sanction committee sanctions the loan.

### 2.1.9 Repayment procedure

The farmers can get some direct \& indirect benefits if they follow the repayment rules \& regulations of the bank. Firstly, the bank helps such farmers by granting necessary additional loan. Secondly, the farmers are supposed to be confidential \& respectable person in the eyes of bank \& society. Thirdly, economic burden of such farmers tends to decrease . Fourthly, their assets increase in near future. Finally if a farmer is able to repay the amount of medium \& long term loan one month earlier than due date, the bank has made a provision to rebate half present interest. On the contrary, if the farmers is unable to repay amount of loan in due date, the farmers is compelled to pay more additional interest as a punishment. Thus, the bank has considered the principal of prize \& penalty. Generally, the laborious \& efficient farmers who neglect their occupation is penalized. As a result, the firstly categorized of farmers will also work in their farm with heart \& soul. The provision of prize \& penalty system leads to competition among the farmers to utilize the amount of loan is most effective manner.

### 2.1.10 Security \& margin requirements

Bank wants its loans to individual creditors are adequately secured. It requires a liquidable mortgagee on lands buildings \& fixed securities. Loans are secured by fixed securities \& assets of individual borrowers. The volume of such security is determined by the bank according to the prevailing market prices \& keeps a minimum margin of thirty ( $40 \%$ ) is satisfied as security. The policy of ADBN is admirable but the demand for loans by the (agricultural field) peasant is not satisfactory. So, the margin of the bank has taken the landlords \& riches. Even the margin of thirty present on medium \& long term loan is justifiable because the prices of security may go ups \& downs (during the loans period) within the repayment period. The short term
production loans with a margin of forty percent as security is high in margin because the prices of security may not change suddenly (Khadka and Singh, 2017).

### 2.1.11 Terms \& conditions to disbursement loan

There are few reasons for inquiring various terms \& condition in extending loan to any project or farmers in order to keep their loan safe \& to be repaid in time. Different financial institutions have different terms \& conditions to suit their own situation, which fulfill the purpose in the prevailing economics, social, political, \& other environment.

However, safety, liquidity \& profitability are the prime considerations for bankers to formulate advance policy. With this view in mind, different banks impose following terms \& conditions.

## Amortization period

Every loan does have certain amortization period. Any sort of loan extended by development banks should be repaid with in a stipulated time. The borrower has to repay the loan with in the amortization period. Bank takes some sort of action, if borrower delays the repayment for a longer period of time. The fixation of amortization period is very crucial task. Mistake in fixation of this period create so many problems in making loan repayment. Therefore, while performing this delicate and vital task the special attention should be taken by development bank (Paudel et al., 2016).

However, the amortization period is fixed on the basic of expected earnings capacity of the project as revealed by the financial statements like, cost, sales \& profitability statements.

## Interest rate

As much as loan delays in making repayment of principle dues so much will be movement, the longer the delay in making repayment of principle dues, the higher will be the movement in the total amount of interest to be paid along with the principal amount. And, so if the borrower can repay the loan earlier, the amount of interest to be paid will be decreased. Thus, in such situation we can not take the
interest rate as a stimulant of facilitating quick \& timely repayment. Of course, it can be in some extent (Paudel et al., 2016).

Be it for the purpose of meeting various expenditure of the bank or to meet shareholders obligations or to motivate quick repayment, interest rates should be set in accordance with cost of capital and not at artificial levels where high rate impede development, the low rate of interest can breed uneconomic projects that are viable only when they are subsidized.

## Installment dues of principal \& interest

Usually, most development banks facilitate to make repayment in several installment dues. Such installment gaps generally range from 6 months to 1 year or more. The amounts to be paid on each installment are fixed on equal basis. The larger the amount of loan, the greater will be the instatement figure \& vice versa. In case of interest, also it has to be paid in the same manner.

## Security

In the words of Mr. Saxena "The first thing, which these banks generally look into is the safety of their loans". And in this most banks insist upon adequate security for the loans they provide.

But security is not the only thing to go or rigidity the development banks, should satisfy with various technical managerial, economic \& social factors of the project. Because if the project, financial on the basis of security \& not with proper care about above mentioned factors, fails to run \& default the loan no doubt that the lender or development finance company can realize the loan amount by selling the securities.

## Legal authority to borrow

Such requirement will of course avoid unsound, unproductive \& uneconomic project to come up. The breading of uneconomic \& unsound project can be minimized by the way of legal authority to borrow from the related department of ministry of government. But the lengthy \& tedious process might also create uneasiness on the part of the borrower to come up with genuine project.

## Soundness of the project

Technically, managerially \& economically sound projects are those which deserve special interest of the development by finance companies to the extent of necessary financial help. No development bank wishes to waste outs resources in an unsound project. It is always as a condition that any agricultural or industrial venture applying for loan with the development banks must be sound enough to contribute to the economic development. Every development or financial institution or company looks at the managerially \& economically sound. That makes easy for the timely loan repayment (Sethi and Bhatia, 2017).

## Repayment capacity

Repayment capacity can be taken as a condition for extending loans. It is considered that the repayment of loan is the ultimate evidence of the right allocation of fund by development bank \& the sources of agricultural or industrial venture. So the development bank always thinks about the repayment capacity of the borrower before granting loan.

In this way, we see that the development banks of any country impose several terms \& conditions in order to keep their loan safe to make it properly utilized \& ultimately to get them reserved in time.

### 2.1.12 Repayment performance

The problem of loan delinquency may be studied conveniently as an issue of repayment performance. Although there are numerous causes of non repayment of farm credit. They could be grouped into two major categorized based on.

1) Ability to repay \&
2) The willingness of repay

Repayment ability is considered to be affected by the size of farm, the farm productivity, the extend of modernization of the form economy, the non farm receipt \& the proportion or farm house hold cash expenditure to income.

The willingness to repay loans on the other hand, is influenced by institutional leg, loan (supervision, analytic of loan service etc) social \& political factors (Chandra, 2006).

## 1) Ability to repay

## a) Farm size

It has been shown that repay performance varies by farm size. In Latin America, it is often found that the repayment performances of small holders are generally poorer than those of large farmers.

However, in a number of countries, the spring review revealed that it is the large farmers who create the principal default problem. This was found to be the case in Columbia, Bolivia, Bangladesh, Costa Rica, Ethiopia, shrilanka, \& else where.

According to garden Daniel "in credit for small farmers in developing countries the percentage of repaying form families to borrow farm families in 22 districts of Nepal for large, medium, \& small farms were found to be 6.9. 9.00 \& 14.2 percentage respectively ".Small farmers setting their debts in about two times that of large farmers\& more than half times that of medium farmers. Therefore small farmer performance is better than the other two groups.

## b) Gross receipts per hector

It is possible that the return to investment will affect the farms repayment performance. Theoretically, the higher the return the greater the surplus available for repayment when improve feeds, chemical fertilizers, insecticides \& pesticide are used properly other things remaining the same, land productivity would increase.

If the market situation doesn't off set the increase in farms production farm income would also increase. The use of improved inputs \& practices often made available by credit is through to enable the farmer to increase his farm productivity \& income enough to exceed the farm expenditures including the required repayment of farm credit.

Where price fluctuations are more subjective to increase or decrease in production, output increases through the adaptation of new technology might intensity the delinquency problem for example, in Nicaragua's credit program tied with new technology significantly increased earn yields, resulting in a $50 \%$ drop in the price a harvest which caused repayment problem.

## c) Productive use of credit

Very often it is also alleged that productive use of credit results in the problem or delinquaner \& defaults. For examples, in India, it was found that a large part of institutional credit was used for consumption purposes mainly due to the high propensity to consume.

However, productive use of credit might not necessarily improve the repayment rate of the farm. Kim has empirically found that the productive use of credit although having a positive correlation with the repayment rate does not show any significance in the repayment rate.

## d) Monetization of the farm economy

The degree of monetization of the farm economy may improve the repayment rate to a great extent. This is because most loans are settled in cash. The Nepal Rasta bank survey reports reveals that $77.5 \%$ of repayment was done in cash farm in Dhanus, Nepal during 2003/4 Kim has shown that the exact of the sale of farm produce is positively correlated with the repayment performance of farmers. This positive relationship between the extend of sale of farm produce \& repayment performance is proved to be stinger in the cash of small farmer. This is the probably because most all longer farmers have a minimum cash income sufficient to repay loans if they are willing (CATC, 2073).

## e) Non farms receipts

Generally as total income increases no matter form what sources, the ability to repay loans increases. Therefore, income form non-farm sources also add to the cumulative effect of income on the repayment performance Kim however found that non-farm receipts had a significant relationship with repayment performance. According to him, this might be due to the dependence of Korean farmers on non-farms receipts.

## f) Farm household cash expenditures

Generally as consumption expenditures increases, less income will be left over for the repayment of loans. Kim found the factor more prominent in affecting the repayment rate of small subsistence's farms than the other types of farms.

## g) Cost of credit

In their study of Bolivia, Headman, found that the relatively in expensive cost of borrowing of farmers to use credit where the expected rate of return is less than the opportunity cost of the funds in the market, thus, making themselves (farmers) less able to repay loans. The problem of loan repayment become worse when funds diverted in non-agricultural pursuits, specially.

Imperial studies of the interest rate \& its relationship to repayment performance shows that the higher the nominal rate of interest, the better is the repayment performance especially for large \& small subsistence farms (Kim, 1979).

## 1) Willingness to repay

Besides the factor mentioned so far, there are also several other factor arising from institutional, social \& political systems which affects the repayment performance. It often argued that the repayment of institutional credit is a kind of moral obligation. Most farmer, however don't considered such repayment is a kind of moral obligation. The lack of willingness \& discipline to repay is a major factor is explaining the default problem. The following are some factor affecting the willingness.

## a) Supervision

Lack of effective supervision by the lending agencies may be taken as an indicators by the supervision that to take loan repayment seriously. Adequate supervision can help to minimize the default rate. With supervision, the lenders can understand the farms household, situation more clearly \& borrowers can be made more oligarchy to the repayments of loans. The degree of supervision employed varies widely. It range from a single supervision of crop information to the specialization of farm input to be bought with the credit, the checking of loans misuse \& the most complex central of farm operators by supervising officers (Khadka and Singh, 2017).

Supervision is also done with a view to improve the behavior patterns of the clients which might eventually reduce the necessary of frequent inputs \& save costs.

## b) Services \& sanctions

High repayment rate appears to be closely associated with the high quality of loan service. Some loans are not paid simply because borrower anticipates changes in the
policies of the credit agencies and because they have lack of confidence, in the lending agencies ability to provide credit in the following year.

There are some borrowers who do not repay loan even through they are able to do so. Lack of strong enforcements e.g., force closure of property against such defaulter, is seen as reason for the accentuation of the default problem.

## c) Social \& political factors

The poor repayment performance among the rich farmers is not due to their capability to milk a credit institution for a series of uncollectible direct loans by exerting social \& political pressures on the lending institutions, However, this would required a bit of artistry e.g. admixture of repayment part repayments \& bribes or other favors administered overtime. These be done \& their existence supplies another reason why their small farm neighbors also shown their ruefulness to repay, farmers also postpone repaying due loans just because poor repayment could also rebuilt form the political upheavals' and the electioneering practices of the politicians.

## d) Group loans

Typically group are small (5 to 30) and seldom have legal status. Loans are advance to the group under the joint liability system. The defaulting members are warned and penalized by the group members themselves until they repay the loans. This makes the lending agencies feel more secure and less costly to make groups loans as compared to the handling a numerous small individual loans. There are mixed reports of repayment performance of group lending programmers. Group lending programmed in Malawi has experienced a relatively higher rate of repayment than that from the individual lending system. But in the Philippines, where farmed little or no obligation to each other, joint liability has been a mirage.

### 2.2 Review of Previous Studies

Research review is related to the literature on various studies to the present study. This helps to achieve clarity in the discussion that follows and guides to adopt the precise measurement of variables studies.

### 2.2.1 Review of Articles

An article written by Regmi (2012) entitled as "The negative impact bore by selling collateral for loan recovery" in NRB annual publication has stated that it is important for bank to know the necessity of loan. Before accepting the loan proposal, the bank should analyses the loan demander's intentions, capacity of loan utilization and loan payment, awareness of interest payment, possession of cash flow statement, and submission of necessary papers along with loan schedules etc. Banks have to decide whether or not to grant loan by analyzing the risk associated with loan. And also bank have to seek legal ways if loan cannot be recovered in time. The author has mentioned the several reasons behind the failure in loan recovery, such as, lack of quality investment procedures, standard collateral evaluation system, political pressure in loan disbursement, lack of proper law and implementation, centralization of loan etc.

Further he has added that right person, firm and project have to be chosen by evaluating the collateral. Political interference has to be controlled and professionalism should be introduced in lending process. Proper inspection of the project progress should be conducted in interval basis and proper action should be taken as per the report of the inspection. For the proper utilization of the collateral, additional help should be taken from the administration and the bank should be actively converting such collateral into cash.

He has also suggested that while extending the loan, the bank should scrutinize the genuine and need of loan. Bank should emphasize on the repayment of loan rather than accumulating the non-banking assets by accessing the actual problem of loan takers and rescheduling of the loan. Has advised that with the collective effort of customers, bank, government and central bank as constructive roles, the unnecessary hurdles can be avoided in the process of loan recovery and standard norms set by regulating body can be applied to make proper loan utilization. Finally, the employees and the management of the bank should also be honest in their duties and responsibilities.

Shrestha (2013) in an article "A study on deposit and credit of commercial bank in Nepal" has concluded that credit deposit ratio would be $51.30 \%$, other thing remain same. In Nepal that percentage was lowest under the period of review. Therefore, he
has suggested strongly that joint venture banks should try to give more credit entering new field as far as possible otherwise they might not be able to absorb even the total expenses.

In another article written by Poudyal (2014), entitled as "Facts of bank credit in Nepalese money market", given the view about loan management stating that bank need to earn enough revenue by sustaining their huge overhead cost, for which they offer maximum possible facilities to their potential clients. Loan management includes credit policy of respective financial institution, its loan approval process, documentation, and stipulation of the disbursement, procedure of disbursement, project appraisal system, additional collateral, loan monitoring and follow up etc. This process begins after the project is conceptualized and the application lodged. But the application may or may not reveal the required information to the bank. So technicalities of credit appraisal demands that every aspect of the project is examined value of mortgage evaluated.

He has further added that as the bank reveal the information after approval of the loan, the bank strive for the early disbursement because revenue is generated from the very date of disbursement. That's why earlier the disbursement, the better. Similarly, it becomes necessary for the bank to reasonably plan the installment of disbursement.

In the article by Bista (2015) "Issues in ADBL reform" the writer has presented his views that there are some issues that need to be taken care of while carrying out the reform programs. These issues broadly classified into external or structural and internal or operational like as shifting and replication of all bank head offices from the present regional offices to other viable and business centre which will automatically help in reducing the overstaffing and posting problem in all offices and help them to achieve sound working condition. It is very helpful for loan disbursement and collection department of the bank. Due to this, the staff can get direct connection with client of the bank in the market which will help in management of loan.

In the article by Pradhan (2015) on "Importance of loan information center and its activities" the writer has forwarded his view that there raised some malpractices in credit investment between the banks along with the increment in the establishment of banks and financial institutions. For e.g., misuse of loan due to lack of continual monitoring and supervision of projects, lack of following rules and procedures in loan
processing, borrowing loan from various banks frequently by single borrower, lack of coordination between banks and financial institution, etc. Due to all these problems, the condition of non-performing loan arises and as a result of which negative impact is shown in financial capability of banks and economy of the country. Hence keeping these things in consideration, loan information center was established with the active participation of Nepal Rastra Bank in Jestha 1, 2071. Loan information center under Nepal Bankers' Association is regarded as loan information center established by bank until next provision.

The writer has put forward the views that the loan information center has not worked as effectively applied in real field as expected, so he has suggested all banks and financial institutions to make full utilization of information obtained from the center following the directives of NRB so that the activities of the center can be made effective.

### 2.2.2 Review of Dissertations

There are various researches held on lending or loan practices of commercial bank. In past years, many researches had done study on lending practices of commercial banks and also on loan collection and disbursement of commercial banks. Here, some of the similar dissertations written in past have been reviewed which are close to the topic under study;

Pandey (2010), in his study, has revealed that has loan recovery is found lower in case of individual borrowers, so bank must take loan outstanding in consideration at time of loan disbursement. He has also stated that the bank should examine the past repayment records in case of borrowers who are unable to repay loan back and take corrective action immediately. He has figured out that weak supervision, high interest rate and other charges charged by the bank, political interferences and poor liquidity of borrowers are the poor recovery. Hence he has suggested that the bank must provide strict supervision during loan utilization, supervisor need to visit field to make fair eyes on the borrower's loan utilization for the concerned purpose and motivate the borrower to make full utilization of loan amount.

Since bank's loan supervision is seemed very weak, so he has recommended institution of special cell in the bank as well as outside the bank to correctly monitor
the progress of post loan supervision to appropriate authorities and create an atmosphere of strict financial discipline both in the borrower as well as in the bank.

Bhattarai (2012), in the study, has viewed the effectiveness of lending policy of commercial banks. She has made a conclusion from the study that the resources utilization is more important than the collection of the deposit. So, she has recommended that the bank should concentrated on the lending schemes or utilization of resources, so that it helps in promoting the flow of funds from banking sector to different other sectors. She has further added that for the perfect supervision of resource utilization, the bank should formulate an adequate provision so that the misuse of the lending amount can be controlled.

Sharma (2014), in his study, has showed the importance of role of agricultural investment in the economic development of Nepal. Agricultural credit is one of the most vital factors for increasing agricultural production. He recommended that the amount of bank loan disbursement is largely depending upon the amount of loan repayment in each year and the bank should provide the facilities of supervision for the effective utilization of resources.

Khanal (2015), in his study, has focused on the efficiency and effectiveness of loan recovery of the bank. He has suggested that banker must always keep the goal of loan workout firmly mind to maximize the bank's chances of full recovery of its funds. Further he has added that since the borrower of the bank are individual borrower, so the bank has to examine the past record and corrective action by scrutinizing the cause of inability of due loan. The author has forwarded the view that the poor recovery is due to weak supervision, so the bank must follow the strict supervisory process and try to make field supervision so that the proper utilization of loan amount can be made. Since bank's interest rate and service charges also play an important role in loan recovery, the bank must review its interest rate and other charges.

The writer also included the view that the bank have to formulate the special policy for loan recovery taking in consideration the geographic and infrastructural development within the country and he has recommended that a study group must be set up to look into the issue in all aspects and increase in loan recovery.

Gautam (2016), in her study, has focused on the loan recovery of the commercial bank. She has included that the loan disbursement and collection pattern of the bank has been improving in recent in respect to past years. In her study fluctuating trend of
the loan recovery has been seen due to mismanagement of nonperforming loan. She has recommended that the bank should give attention to the reason behind the fluctuation so that the bank can overcome the problem. The write has put forward that the bank's management have to introduce the strategy that concentrate on the recovery of non-performing loan. In the term of writer, although the bank has fulfilled the criteria of central bank, i.e. Nepal Rastra Bank in respect of lending to deprived sector, the percentage of loan extended is quite low, hence she has suggested to increase the percentage of lending in dispossessed sector so that it will help to support the economic growth of the country. In final word, the writer has recommended that the bank should not only concentrate on providing credit to business sector.

Khadgi (2016) in her dissertation has evaluated the investment practices of Nabil bank ltd and has suggested the measures to improve the investment policy of the bank. The writer has performed the various analyses of the financial indicators of the bank like as liquidity, profitability, risk, growth, etc. After making various financial and correlation analysis, she has made a conclusion that the bank has to make an improvement in the fund mobilization by utilizing the resources in productive sector. She has put forward the view that not only deposit is necessary for any financial institution but also the investment of that deposit is necessary to compete in the market. So she has recommended that the bank has to follow the liberal policy when sanctioning the loan and advances with sufficient guarantee and also implement the sound credit collection policy. Further the writer has mentioned that the bank has to concentrate on using its working fund in productive sector so that the bank can make income from it.

### 2.3 Research Gap

The studies focused on the loan disbursement repayment and outstanding loan in different sector, region, terms and borrowers. Past studies of the ADBN dealt on ADBN provided loan to the farmers. This study is different from the past studies. On the sense that it has drawn the least squares trend lines. Therefore, it helps the bank to forecast the amount of disbursed loan, repayment of loan and outstanding loan for the coming years.

Further, similar research on a specific area could be done in the micro level. Some dissertation focused only deposit collection is also important for the service sector business like commercial banking business. These studies can not show the loan disbursement of the commercial banking business . Nowsday bank have emphasized
for application of term wise, region wise, \& purpose wise as an important tools of loan disbursement to improve competitiveness \& performance in the time of globalization .So, this study has played important role to fulfill the gap between previous study had done \& research need to be done on the loan disbursement \& repayment of bank. This study would be different vales as it focuses on loan disbursement \& repayment of agricultural development bank limited. It examines the current practices of loan disbursement \& repayment of ADBL as important tools to improve the performance of the bank in the context of Nepal.

## CHAPTER - THREE

## RESEARCH METHODOLOGY

As we know research involves certain methodology for the systematic analysis of the related topic. So research methodology includes some steps or process which helps to make complete and essential analysis. It contains sequential steps which a researcher applied during the research study for fulfilling its objectives. With the help of logical evidences and various statistical tools, the predetermined objectives of the research study can be analyzed and related problem can be solved.

### 3.1 Research Design

The research design constitutes the blue prints of the collection, measurement and analysis of data. So a research design is the arrangement of conditions for collection and analysis of data in manner that aims to combine relevance to research purpose with economy in procedure. However, the design is made in simple form but it covers the main apprehension of the study.

Since, the study is based on certain research design. This study emphasizes on descriptive and analytical study of collected data over a period of time and it gives suggestion on the improvement. So the study based on descriptive and analytical research design.

### 3.2 Population and Sample

Altogether there are 28 commercial banks performing their financial activities to the public through various branches throughout Nepal and most of their stock are traded in stock market. Due to the time limitation and unavailability of relevant data, the study is confined on only one bank. So, all commercial banks are considered as population and bank under study, i.e., Agricultural development bank limited contributes as sample. Agricultural development bank limited commenced its operation from 1986. For secondary data analysis, loan disbursement and collection of ADBL from fiscal year 2011/12 to 2015/16 is taken as sample.

### 3.3 Nature and sources of data

Generally the necessary data for every research study are collected from both sources primary and secondary. But the study is mainly based on secondary source of data.

The main sources of information are concerned bank and its published documents, NRB and its published documents, newspaper, journals, books and dissertation. So, following are secondary data sources which have been considered in the study:

- Annual report and financial statement of ADBL
- Different laws, guidelines and directives of NRB and also ADBL.
- Text books published on subject matter
- Articles related to topic published in newspaper, journal, magazine, etc.
- Unpublished thesis and research paper related to subject matter.
- Websites of related fields.

According to need and objectives, all secondary data are compiled, processed and tabulated in time series in order to judge the reliability of data provided by bank. Formal and informal talks and interviews of concerned head, experts are also helpful to obtain the plus information about related topic.

### 3.4 Data collection technique

Both primary and secondary data are collected from its corporate office. Secondary data are collected from annual reports of ADBL from FY 2011/12 to FY 2015/16. Some data have been obtained from annual publication of NRB, bank journal, and website of bank. Other valuable information is collected from personal interaction with employees of ADBL.

Data are collected to draw inferences and conclusions for the research. A comprehensive method is followed to get $100 \%$ data from primary and secondary sources. Both quantitative and qualitative techniques are used to find out the necessary data.

### 3.5 Data Presentation and Tools for Analysis

In the whole research study, data analysis and presentation represent focal part of study. After data collection, they processed for analysis by using various financial and statistical tools to achieve the objectives of study. The data extracted from annual reports, financial statement and other sources are processed and tabulated in various tables and charts under different headings according to their nature .the processed data are set for analysis according to their availability. Various financial and statistical tools such as graph, percentage, coefficient of correlation, trend analysis, etc. are used for analysis. So with the help of both statistical and financial tools, the analysis can be more effective and genuine. Financial tools help to make judgment about the
operating performance of bank and statistical tools help to find out the trend of credit position of bank.

### 3.6 Statistical Tools

Statistical tools used in this research help to see current trend of loan investment and collection. To analyze the relationship, Karl Pearson's coefficient of correlation, percentage, T-test are used to find out ADBL's loan investment and collection and to see the type of relation exist among the various variables and draw the inferences and recommendation. Following are the statistical tools used in the study:

### 3.6.1 K arl Pearson's Coefficient of Correlation

$\mathrm{r}=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum y^{2}}}}$
Where, $\mathrm{r}=$ correlation coefficient lies between +1 to -1
$\mathrm{X}=$ independent variable
$\mathrm{Y}=$ dependent variable
Following table is considered to describe the relationship between variable. If $r$ is

| -1 | -0.7 | -0.3 | 0 | +0.3 | +0.7 | +1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Perfect <br> negative | Strong <br> negative | Weak <br> negative | Perfect <br> independence | Weak <br> positive | Strong <br> positive | Perfect <br> positive |

### 3.6.2 Coefficient of Determination

Coefficient of determination is denoted by r2 which indicates total variation independent variable $(\mathrm{Y})$ is explained by independent variable( X )

### 3.6.3 Hypothesis Testing

## T-test

T-test is used for testing the significance of a single mean, variance being unknown and also testing the significance of the difference between two independent means, variances being equal but unknown. It is also used for testing the significance of correlation coefficient.

## Hypothesis test - 1

Null hypothesis (H0) $\mu 1=\mu 2$
There is no significant difference between the mean ratio of targeted loan disbursement and actual loan disbursement

## Alternative hypothesis (H1) $\boldsymbol{\mu} \mathbf{1 \neq \mu 2}$

There is significant difference between the mean ratio of targeted loan disbursement and actual loan disbursement

## Hypothesis test-2

Null hypothesis (H0) $\mu 1=\mu 2$
There is no significant difference between the mean ratio of targeted loan collection and actual loan collection.

## Alternative hypothesis (H1) $\boldsymbol{\mu} \mathbf{1 \neq \mu 2}$

There is significant difference between the mean ratio of targeted loan collection and actual loan collection.

## Test statistic

$\mathrm{t}=\frac{\bar{X}_{1}-\bar{X}_{2}}{\sqrt{S^{2}\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}}$

## Trend analysis

The arrangement of the statistical data chronologically (according to the occurrence of time) is known as time series and the statistical analysis of these chronological variations is termed as time series analysis. It is one of the statistical tools, which indicates the improvement or decrement of the financial situation. It helps to determine the future of the variables. The way from which the maximum information can be drawn from the figure collected is known as the analysis of time series. The future value can be calculated by using following equation;
$Y=a+b X$
Where,

$$
\mathrm{Y}=\quad \text { trend value }
$$

$\mathrm{a}=\mathrm{y}$-intercept
$\mathrm{b}=$ slope of trend line of amount change in y -variable that is associated with change in one unit in $x$-variable.
$\mathrm{X}=\quad$ time variable.

### 3.7 Diagrammatic and graphical presentation

Presentation of statistical data through the use of diagram is known as diagrammatic representation. Data presented through diagrams and graphs provide information at glance. Picture speaks itself, no need to explain. They show visual indication of magnitude, strengths trends and patterns of presented data. Diagrams generally provide fixed information about data where graphs provide more precise and accurate information (such as slope, rate, and future predicted value) than diagrams

### 3.8 Financial Tools

Financial tools basically help to analyze the strength and weakness of firm, i.e., financial position of the bank. Financial statements such as balance sheet and income statements can be analyzed to assess the financial health and contribution of interest of loan disbursement by the bank.

### 3.8.1 Balance Sheet

Balance sheet is a classified summary of all assets and liabilities balance as well as all liabilities and credit balance after balance pertaining to profit and loss account have been collected together in a separate account. It is a financial statement used to summarize the financial position of a company on a given date. A quick look at the balance sheet shows the financial health of the company. Therefore, investors, lenders, bankers and creditors like to see the balance sheet of the company before making any financial deals so that they can know the financial worthiness of the company.

### 3.8.2 Profit and Loss Account

As profit and loss account is the second part of trading and profit and loss account, it is prepared after preparing the trading account for ascertainment of gross profit or loss. It is an account which is designed to highlight the net profit earned or net loss incurred by the company from its business transactions during accounting period.

## CHAPTER - FOUR

## PRESENTATION AND ANALYSIS OF DATA

### 4.1 Introduction

The main purpose of analyzing the data is to change it from an unprocessed form to an understandable presentation. Analysis of data comes prior to interpretation. The facts and the figures collected are to be processed with a view to reducing them to manageable proportions. The analysis of data consists of organizing, tabulating and performing statistical and financial analysis. Analysis of data means study the tabulated material in order to determine inherent facts or meaning. Interpretation is the search for the broader meaning of the research finding. Analysis is not complete without interpretation and interpretation cannot proceed without analysis. Different types of data require different method of presentation and analysis which can be used to simplify the data. So for simplicity, the data are presented in tables and diagrams to analyze them. Summarizing the data in a tabular form and displaying them in diagram sets a base for drawing out conclusions and making important recommendations.

Data is analyzed by using proper statistical tools such as correlation coefficient, regression, t -test and financial tools such as balance sheet and income statement to fulfill the research objectives. To test the significance and insignificance of correlation coefficient, t -test is used. On the basis of several data regarding ADBL's loan disbursement and collection, it focuses to present an overall disbursement and collection situation of loan granted by ADBL. In this study, it is tried to analyze whether the actual disbursement, collection and outstanding is in increasing or decreasing trend, whether the actual and targeted loan disbursement, outstanding and collection is differ or not. For this purpose, all the available data of five period (F.Y.2011/12 to F.Y.2015/16) are presented and analyzed with the help of various tools

### 4.2 Deposit Collection and Loan Disbursement

The main function of the commercial bank is to collect dispersed money from the public in the form of deposit. The bank takes various types of deposits from individuals, business organizations and other different types of institutions. Until and unless the bank collects deposits from public, it can not mobilize deposits in the form of loan to the needy. Hence, the disbursement of loan is the mobilization of deposit, which depends upon the collection of deposit. Hence, the trend of deposit collection has been analyzed in order to analyze the trend of loan disbursement Deposit collection and loan disbursement of ADBL is increasing day by day. Following table presents the percentage of loan disbursement

Table 4.1: Deposit collection and Loan disbursement (in '000')

| Fiscal year | Total <br> deposit <br> collection | Growth <br> rate\% | Loan <br> disbursement | Growth rate <br> $\%$ | \% of loan <br> disbursement <br> to deposit |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $2011 / 12$ | 26244145 | - | 24385023 | - | 92.92 |
| $2012 / 13$ | 27223046 | 3.60 | 28255509 | 15.87 | 103.82 |
| $2013 / 14$ | 29631817 | 8.13 | 30613889 | 7.70 | 103.31 |
| $2014 / 15$ | 32416358 | 8.59 | 29285522 | -4.54 | 90.34 |
| $2015 / 16$ | 32553827 | 0.42 | 36335966 | 19.40 | 111.62 |

(Source: Annual reports of ADBL)
Growth $\%=\frac{\text { Ending amount }- \text { Beginning amount }}{\text { Beginning amount }}$

Figure 4.1: Loan Disbursement to Total Deposit


In the figure 4.1, deposit collection is increasing in regular trend. In FY 2011/12, the deposit collection is lowest i.e., Rs. 26244145 thousand and the highest deposit collection is Rs. 32553827 thousand in FY 2015/16. So, the lowest deposit collection growth rate is 0.42 in fiscal year 2015/16 and highest is 8.59 in fiscal year 2014/15.

Likewise, total loan disbursement is also found in increasing trend. The lowest loan disbursement is Rs. 24385023 thousand in FY 2011/12 and in FY 2015/16, the total loan disbursement is highest, i.e. 36335966 thousand. So, the lowest growth rate of loan disbursement is 4.54 in FY 2014/15 and the highest is 19.40 in FY 2015/16.

The percentage of loan disbursement to total deposit collection is fluctuating trend, i.e. 92.92 \%, $103.82 \%, 103.31 \%, 90.34 \%$ and $111.62 \%$ from F.Y.2011/12 to FY 2015/16. The correlation coefficient value calculated between total deposit collection and total loan disbursement is +0.79 , which show the positive correlation. The coefficient of determination $\left(\mathrm{r}^{2}\right)$ is 0.62 , which indicates that $62 \%$ of total variation in dependent variable (loan disbursement) is explained by independent variable (deposit collection). The tabulated critical value of $t$ at $5 \%$ level of significance for two tailed test at 3 degree of freedom is 3.182 , which is greater than calculated value of 2.232 . Therefore the coefficient of correlation shows insignificant relationship between actual loan disbursement and collection.

### 4.3 Actual Loan Disbursement and Loan Collection

Success of a bank does not depend only on the mobilization of deposit and loan disbursement but also the recovery of loan i.e. loan collection. Hence, the timely recovery of all extended credit is also equally important. ADBL has presented the actual loan disbursement and its collection in each and every year annual operation of business.

Table 4.2 : Actual loan investment and collection (Rs. in 000)

| Fiscal year | Loan <br> disbursement | Growth \% | Loan <br> collection | Growth \% | \% of <br> collection to <br> disbursement |
| :--- | ---: | :--- | :--- | :--- | :--- |
| $2011 / 12$ | 24385023 | - | 21773974 | - | 89.29 |
| $2012 / 13$ | 28255509 | 15.87 | 26289750 | 20.74 | 93.04 |
| $2013 / 14$ | 30613889 | 7.70 | 28612217 | 8.83 | 93.46 |
| $2014 / 15$ | 29285522 | -4.54 | 28155899 | -1.59 | 96.14 |
| $2015 / 16$ | 36335966 | 19.40 | 34171617 | 17.60 | 94.04 |

(Source: Annual reports of ADBL)
Growth $\%=\frac{\text { Ending amount }- \text { Beginning amount }}{\text { Beginning amount }}$
Figure 4.2 : Loan Collection to Disbursement


In table 4.2, total loan disbursement is also found in increasing trend. The lowest loan disbursement is Rs. 24385023 thousand in FY 2011/12 and in FY 2015/16, the total loan disbursement is highest, i.e. 36335966 thousand. So, the lowest growth rate of loan disbursement is $4.54 \%$ in F.Y .2014/15 and the highest is 19.40\% in FY 2015/16.

Likewise the actual loan collection is also increased day by day in each year. The lowest actual loan collection amount is Rs. 21773974 thousand in F.Y .2011/12 and the highest actual collection amount is Rs. 34171617 thousand in FY 2015/16. The lowest growth rate on actual collection is 1.59 in FY 2014/15 and highest is 20.74 \% in FY 2011/12.

The percentage of loan collection to disbursement is increased thoroughly in each fiscal year from 2011/12 to 2015/16. The value of coefficient of correlation between actual loan disbursement and actual loan collection is +0.993 , which show the positive correlation between them. The coefficient of determination ( $r^{2}$ ) is 0.986 , which indicates that $98.6 \%$ of total variation in actual loan collection is explained by the actual loan disbursement.

The tabulated critical value of $t$ at $5 \%$ level of significance for two tailed test at 3 degree of freedom is 3.182 , which is less than calculated value of 14.56 . Therefore the coefficient of correlation shows significant relationship between actual loan disbursement and collection.

### 4.4 Actual Loan Outstanding and Collection

Bank also provides the outstanding loan, which indicates the amount of loan remains to recovery in that fiscal year. ADBL collects loan amount regularly but its outstanding is increasing day-by-day because of market outreach as well as over due loan.

Table 4.3: Actual loan outstanding and collection (Rs. in 000)

| Fiscal year | Loan <br> Outstanding | Growth \% | Loan <br> collection | Growth \% | \% of <br> collection to <br> Outstanding |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 29343315 | - | 21773974 | - | 74.20 |
| $2012 / 13$ | 31309074 | 6.70 | 26289750 | 20.74 | 83.97 |
| $2013 / 14$ | 33310746 | 6.40 | 28612217 | 8.83 | 85.90 |
| $2014 / 15$ | 34440369 | 3.40 | 28155899 | -1.59 | 81.75 |
| $2015 / 16$ | 36604718 | 6.28 | 34171617 | 17.60 | 93.35 |

(Source: Annual reports of ADBL)

Growth $\%=\frac{\text { Ending amount }- \text { Beginning amount }}{\text { Beginning amount }}$
Figure 4.3: Loan Outstanding to Loan Collection


In the figure 4.3, loan outstanding increased each and every year. The lowest loan outstanding amount is Rs. 29343315 thousand in the F/Y 2011/12. The lowest growth rate on actual loan outstanding is 3.40 in F/Y 2014/15 and the highest is 6.70 in F/Y 2012/13. It is better for ADBL to be the loan outstanding in a decreasing trend but the decreasing percentage is very low. ADBL has to reduce loan outstanding up to certain level.

Actual loan collection amount is also increased each year except in FY 2014/15. The lowest actual loan collection amount is Rs. 21773974 thousand in FY 2011/12 and highest actual loan collection amount is Rs. 34171617 thousand on the FY 2015/16. The lowest growth rate on actual collection is 1.59 in FY 2014/15 and the highest is 20.74 in FY 2012/13.The growth rate on actual loan collection is also fluctuating year after year.

The percentage of actual collection to outstanding is in increasing trend except FY 2014/15 but in a slow rate. The lowest percentage of actual loan collection to outstanding is 81.75 in FY 2014/15 and highest is 93.35 in FY 2015/16.

The coefficient of correlation value calculated loan outstanding and collection is 0.964 , which is highly positively correlated. Coefficient of determination ( $\mathrm{r}^{2}$ ) is 0.929 which indicates that $92.9 \%$ of the total variation in actual loan collection is explained by the actual loan outstanding.

The tabulated critical value at $\mathrm{t} 5 \%$ level of significance for two failed test at 3 degree of freedom is 3.182 which is less than the calculated value of $t^{*} 6.317$. Therefore, the coefficient of correlation is significant or shows significant relationship between actual loan outstanding and collection.

### 4.5 Comparative analysis of Loan Collection with respect to Total Loan Disbursement and Total Loan Outstanding

Although ADBL disburse loan on the basis of deposit, the loan collection is made on the basis of loan disbursement and outstanding so that the position of recovery can be analyzed. Here, the below table shows the comparative analysis of total loan collection with respect to total loan disbursement and outstanding.

Table 4.4 : T otal loan disbursement, collection and outstanding (R s. in ' 000 ')

| Fiscal <br> Year | Total Loan <br> disbursement | Growth <br> $\%$ | Total Loan <br> Collection | Growth <br> $\%$ | Total Loan <br> outstanding | Growth <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 24418321 | - | 26350782 | - | 29343315 | - |
| $2012 / 13$ | 28255509 | 15.87 | 26289750 | 20.74 | 31309074 | 6.7 |
| $2013 / 14$ | 30613889 | 7.7 | 28612217 | 8.83 | 33310746 | 6.4 |
| $2014 / 15$ | 29285522 | -4.54 | 28155899 | -1.59 | 34440369 | 3.4 |
| $2015 / 16$ | 36335966 | 19.4 | 34171617 | 17.6 | 36604718 | 6.28 |

(Source: Annual reports of ADBL)
As shown by table 4.4, there is fluctuating trend of loan collection and loan disbursement, while the trend of outstanding loan is decreasing. Although the amount figures of loan outstanding show the increasing trend, the growth percentage figures indicate the decreasing movement. Here, in FY 2011/12, there is high rate of loan disbursement, collection and outstanding and in FY 2014/15, the rate decreases symmetrically in all three components. And again in FY 2015/16, the rate moves upward. The whole movement of loan collection with respect to loan disbursement and loan outstanding is summarized in below bar diagram:

Figure 4.4: Disbursement, Collection and Outstanding


### 4.6 Trend analysis of Total deposit collection, Total loan disbursement, Total loan collection and Total loan outstanding

There is various fluctuation occur in the amount of all entities i.e. total deposit collection, total loan disbursement, total loan collection and total loan outstanding. So, following table is presented for analyzing the trend of up and down of all entities individually up to FY 2020/21.

Table 4.5: Trend analysis of deposit collection loan disbursement, collection and outstanding (Rs. in billion)

| Fiscal <br> Year | Deposit <br> Collection | Loan <br> Disbursement | Loan <br> Collection | Loan <br> Outstanding |
| :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 26.24 | 24.39 | 21.77 | 29.34 |
| $2012 / 13$ | 27.22 | 28.26 | 26.29 | 31.31 |
| $2013 / 14$ | 29.63 | 30.61 | 28.61 | 33.31 |
| $2014 / 15$ | 32.42 | 29.29 | 28.16 | 34.44 |
| $2015 / 16$ | 32.55 | 36.34 | 34.17 | 36.60 |
| $2016 / 17$ | 31.95 | 37.25 | 35.80 | 38.30 |
| $2017 / 18$ | 36.73 | 39.75 | 38.47 | 40.06 |
| $2018 / 19$ | 38.51 | 42.24 | 41.13 | 41.83 |
| $2019 / 20$ | 40.29 | 44.73 | 43.80 | 43.59 |
| $2020 / 21$ | 42.07 | 47.23 | 46.46 | 45.36 |

(See Appendix -2)

### 4.6.1 Trend of Total Deposit collection

The trend of total deposit collection in upcoming years is analyzed using the trend analysis technique. The calculation of trend forecast has been presented in appendix-2 (a). The trend line of projection of deposit collection of ADBL up to 2020/21 is presented as below:

Figure: 4.5 : Trend of Total Deposit Collection


The trend line shows the increasing movement after FY 2018/19 and indicates the upward movement in the near future.

### 4.6.2 Trend of Total loan disbursement

The trend of total loan disbursement in upcoming years is analyzed using the trend analysis technique. The calculation of trend forecast has been presented in appendix. 2 (b). The trend line of projection of deposit collection of ADBL up to 2020/21 is presented as below

Figure 4.6: Total Disbursement


The trend line shows the increasing movement after FY 2015/16 and indicates the upward movement in the near future

### 4.6.3 Trend of Total loan collection

The trend of total loan collection in upcoming years is analyzed using the trend analysis technique. The calculation of trend forecast has been presented in appendix. 2
(c). The trend line of projection of deposit collection of ADBL up to 2020/21 is presented as below

Figure 4.7: Total Loan Collection


The trend line shows the increasing movement after FY 2015/16 and indicates the upward movement in the near future.

### 4.6.4 Trend of Total Loan Outstanding

The trend of total loan outstanding in upcoming years is analyzed using the trend analysis technique. The calculation of trend forecast has been presented in appendix. 2 (d). The trend line of projection of deposit collection of ADBL up to 2020/21 is presented as below

Figure 4.8: Total Outstanding


The trend line shows the increasing movement in future years if everything is expected to be constant. But it is not so good for the financial health of bank.

### 4.7 Achievement of Purposewise Loan Disbursement, Outstanding \& Collection

ADBL has invested various types of loan as development as well as commercial credit to uplift the life standard of public involved in various sector of economy such as agricultural, industry, trade, commerce and also deprived sector and service business. Following tables are drawn for presenting the yearly disbursement, outstanding and collection of loan.

### 6.7.1 Purpose-wise Loan Disbursement

Table 4.6 : Purpose wise Loan Disbursement (Amount in '000')

| Loan <br> Purpose | Fiscal Year |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2011 / 12$ | $2012 / 13$ | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ |  |
| Agriculture | 3855893 | 3874121 | 5629288 | 5296964 | 4776100 | 7.51 |
| Mines | 0 | 0 | 3899 | 3730 | 0 | 0 |
| Production | 5265567 | 5605295 | 2794892 | 2602296 | 3445600 | -4.54 |
| Construction | 0 | 0 | 607772 | 561890 | 1087000 | 0 |
| Agricultural Tools | 806600 | 542605 | 186943 | 173814 | 72100 | -40.95 |
| Trans Instrument <br> Production | 87716 | 39346 | 43787 | 43024 | 32200 | -17.69 |
| Trans.\& comm. <br> Service | 878005 | 888438 | 169239 | 164817 | 187300 | -17.18 |
| Marketing | 2793805 | 3324193 | 8301644 | 8785656 | 12481700 | 54.15 |
|  <br> Insurance | 7997726 | 8379026 | 682867 | 635023 | 306700 | -36.45 |
| Service Industry | 1523988 | 1787150 | 1304076 | 1210232 | 1095300 | -6.61 |
| Other Service | 187211 | 1795036 | 1754931 | 1629137 | 1320200 | 207.62 |
| Consumer Loan | 668351 | 773455 | 1122668 | 1105726 | 380400 | -1.56 |
| Others | 320161 | 1246844 | 8011883 | 7073213 | 11151400 | 219.49 |
| Total | 24385023 | 28255509 | 30613889 | 29285522 | 36336000 | 10.99 |

(Source: Annual reports of ADBL)
From the table 4.6, it can be assumed that although the total loan disbursement is in increasing trend, the movement of loan disbursement for different purposes is fluctuating and irregular path. The total loan investment increased from Rs. 24.39 billion in FY 2011/12 to Rs. 36.34 billion in FY 2015/16. The highest investment has been proceeding in marketing activities and that of lowest in mines due to various complicated situation happening in the country.

### 4.7.2 Purpose-wise Loan Collection

Table 4.7: Purpose-wise loan collection (R s. in ' 000 ')

| Loan Purpose | Fiscal Year |  |  |  |  | Growth |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2011 / 12$ | $2012 / 13$ | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ |  |
| Agriculture | 3108614 | 3621400 | 5953102 | 4792954 | 4808300 | 15.43 |
| Mines | 0 | 0 | 3099 | 3050 | 0 | 0.00 |
| Production | 3013391 | 4857471 | 2768236 | 2723360 | 3173900 | 8.28 |
| Construction | 0 | 0 | 332722 | 327328 | 835500 | 0.00 |
| Agricultural Tools | 670849 | 674356 | 168571 | 165838 | 60100 | -34.97 |
| Trans. Instrument <br> Production | 25990 | 101072 | 47039 | 46276 | 35000 | 52.36 |
| Trans.\& comm. Service | 701452 | 764991 | 272778 | 268356 | 206700 | -19.97 |
| Marketing | 2504336 | 3043662 | 8944054 | 8799062 | 11771300 | 61.89 |
| Finance \& Insurance | 7771774 | 8604978 | 623423 | 613317 | 340800 | -32.02 |
| Service Industry | 1608838 | 1652300 | 1023767 | 1007171 | 905700 | -11.76 |
| Other Service | 804601 | 1177646 | 1410900 | 1388028 | 1038200 | 9.84 |
| Consumer Loan | 429521 | 512285 | 1045116 | 1028174 | 287200 | 12.40 |
| Others | 1134608 | 1279589 | 6019410 | 6992985 | 10708951 | 113.13 |
| Total | 21773974 | 26289750 | 28612217 | 28155899 | 34171651 | 12.34 |

(Source: Annual reports of ADBL)
Table 4.7 shows that purpose wise loan collection is in fluctuating trend, total loan collection is in increasing movement from Rs. 21.77 billion in FY 2011/12 to Rs. 34.17 billion in FY 2015/16. The highest collection has been found in marketing and that of lowest in transportation instrument production. The collection table emphasizes incremental trend of collection in all sectors except mines, services industry.

### 4.7.3 Purpose-wise Loan Outstanding

Table 4.8 : Purpose-wise Loan Outstanding (Rs. in '000')

| Loan Purpose | Fiscal Year |  |  |  |  | Growth |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2011 / 12$ | $2012 / 13$ | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ |  |
| Agriculture | 10183143 | 10435864 | 10112050 | 10616060 | 10583900 | 1.02 |
| Mines | 1779 | 1779 | 2579 | 3259 | 3200 | 17.38 |
| Production | 3466965 | 4214789 | 4241445 | 4120381 | 4392200 | 6.49 |
| Construction | 1088981 | 1088981 | 1364031 | 1598593 | 1850000 | 14.55 |
| Agricultural Tools | 517010 | 385259 | 403631 | 411607 | 423600 | -3.96 |
| Trans. Instrument |  |  |  |  |  |  |
| Production | 164553 | 102827 | 99575 | 96323 | 93600 | -11.69 |
| Trans.\& comm. | 576120 | 699567 | 596028 | 492489 | 473100 | -3.67 |
| Service | 9328513 | 9609044 | 8966634 | 8953228 | 9663600 | 1.03 |
| Marketing | 1041488 | 815536 | 874980 | 896686 | 862500 | -3.93 |
| Finance \& Insurance | 1015478 | 1150328 | 1430637 | 1633698 | 1823300 | 15.86 |
| Service Industry | 449240 | 1066630 | 1410661 | 1651770 | 1933700 | 50.96 |
| Other Service | 850030 | 1111200 | 1188752 | 1266304 | 1359500 | 12.90 |
| Consumer Loan | 660015 | 627270 | 2619743 | 2699971 | 3142518 | 83.03 |
| Others | 29343315 | 31309074 | 33310746 | 34440369 | 36604718 | 5.69 |
| Total |  |  |  |  |  |  |

(Source: Annual reports of ADBL)
As shown in the table 4.8 loan outstanding table, the total loan outstanding is seemed to be increasing constantly, which is not good for the bank. The total loan outstanding is increased from Rs. 29.34 billion in F.Y. 2011/12 to Rs. 36.60 billion in FY 2015/16. The highest outstanding loan has been viewed in agricultural sector followed by marketing and lowest outstanding loan is in mines and transportation instrument production. The outstanding table emphasizes the incremental trend of outstanding loan except finance and insurance, transportation instrument production.

### 4.8 Performing and Non-performing Loan

With a view to improving the quality of assets commercial banks, NRB has directed the commercial banks to classify their outstanding loans and advances on the basis of time effective from 2001. The categories are pass, substandard, doubtful and bad. Pass
loan is defined as performing loan whose principle amount is not past due for a period up to three months. Substandard, doubtful and bad loan are defined as nonperforming loan. Bank's non-performing should be as low as possible so that the chances of nonrecovery will be less. According to the international banking norms, the percentage of non-performing loan should be within $4 \%$ to $5 \%$. The table given below measures the amount and percentage of performing and non-performing loan on total loan outstanding:

### 4.8.1 Performing Loan on Total Loan Outstanding

Table 4.9 : Percentage of Performing Loan on Total Loan Outstanding (Rs. in '000)

| Fiscal Year | Total Loan <br> Outstanding | Performing Loan | \% of Performing Loan on <br> Total Loan |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 29343315 | 23340977 | 79.54 |
| $2012 / 13$ | 31309074 | 25305081 | 80.82 |
| $2013 / 14$ | 33310746 | 26451752 | 79.41 |
| $2014 / 15$ | 34440369 | 28255074 | 82.04 |
| $2015 / 16$ | 36604718 | 32794718 | 89.59 |

(Source: Annual reports of ADBL)

The table 4.2 shows the percentage of performing loan in respect to the total loan outstanding. The above percentage figures indicate that the performing loan is constantly increasing during the review period except in the FY 2013/14. The percentage of performing loan on the total loan outstanding from FY 2011/12 to FY $2015 / 16$ are $79.54 \%, 80.82 \%, 79.41 \%, 82.04 \%$ and $88.31 \%$. From the above percentage figures, it can be said that the bank is doing well in loan management. The following bar diagram also analyzes the amount of performing loan on total loan outstanding.

Figure 4.9: Performing Loan on Total Loan Outstanding


### 4.8.2 Non-Performing Loan on Total Loan Outstanding

Table 4.10 : Percentage of Non-performing loan to total loan outstanding (Rs. in '000)

| Fiscal Year | Total Loan <br> Outstanding | Non-Performing <br> Loan | \% of Non-Performing <br> Loan on Total Loan |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 29343315 | 6002338 | 20.46 |
| $2012 / 13$ | 31309074 | 6003993 | 19.18 |
| $2013 / 14$ | 33310746 | 6858994 | 20.59 |
| $2014 / 15$ | 34440369 | 6185295 | 17.96 |
| $2015 / 16$ | 36604718 | 3810000 | 10.41 |

(Source: Annual reports of ADBL)
The table 4.10 shows the percentage of non-performing loan in respect to the total loan outstanding. The above percentage figures indicate that the non-performing loan is constantly decreasing during the review period except in the FY 2013/14. The percentage of performing loan on the total loan outstanding from FY 2011/12 to FY $2015 / 16$ are $20.46 \%, 19.18 \%, 20.59 \%, 17.96 \%$ and $11.69 \%$ respectively.

The above table shows that the percentage of non-performing loan to total loan outstanding is high in respect to international banking norms. That is, according to International Banking Norms, the percentage of non-performing loan on total loan outstanding should be within $4 \%$ to $5 \%$. The main reason behind this was that bank disbursed huge amount of loan without sorting out about the collateral and also due to
delay of loan repayment by the borrowers. The following bar diagram also analyzes the amount of performing loan on total loan outstanding

Figure 4.10 : Non-Performing Loan on Total Loan Outstanding


### 4.9 Targeted and Achieved Loan Disbursement and Collection

Planning and project department of ADBL determined targeted loan disbursement and collection for each and every year. Actual loan disbursement and collection occurs in every year of business operation.

### 4.9.1 Targeted loan disbursement and achieved loan disbursement

Table 4.11 : Percentage change of Targeted and actual loan disbursement (Rs. In '000)

| FY | Loan Disbursement |  | Difference | Difference (\%) |
| :---: | :---: | :---: | :---: | :---: |
|  | Targeted | Actual |  |  |
| $2011 / 12$ | 12510000 | 24385023 | 11875023 | 94.92 |
| $2012 / 13$ | 14550000 | 28255509 | 13705509 | 94.20 |
| $2013 / 14$ | 16970000 | 30613889 | 13643889 | 80.40 |
| $2014 / 15$ | 18040000 | 29285522 | 11245522 | 62.34 |
| $2015 / 16$ | 19260000 | 36335966 | 17075966 | 88.66 |

(Source: Planning Department of ADBL)
The targeted and actual investment amount is increased annually. The lowest targeted loan investment amount is Rs. 12510000 thousand in FY 2011/12 and the highest targeted amount is Rs. 19260000 thousand in FY 2015/16. Actual loan disbursement is also found in increasing trend. The lowest loan disbursement is Rs. 24418321
thousand in FY 2011/12 and the highest actual loan disbursement amount is 36335966 thousand in FY 2015/16.

The percentage change between targeted loan disbursement and achieved loan disbursement is $94.92 \%, 94.20 \%, 80.40 \%, 62.34 \%$ and $88.66 \%$ in Fiscal Year 2011/12, 2012/13, 2013/14, 2014/15 and 2015/16 respectively.

The tabulated critical value at $\mathrm{t} 5 \%$ level of significance for two tailed test at 8 degree of freedom is 2.306 , which is less than the calculated value $t^{*} 5.86$. Therefore, there is significant difference between the targeted amount and achieved amount of loan disbursement. This mean the targeted amount is extremely differ from the achieved amount, as the achieved amount is high than targeted.

Figure 4.11: Targeted \& Achieved Disbursement


### 4.9.2 Targeted loan Collection and achieved loan Collection

## Table 4.12 : Percentage change of targeted and actual loan collection (Rs. in

 '000)| Fiscal Year | Loan Collection |  | Difference | Difference (\%) |
| :---: | :---: | :---: | :---: | :---: |
|  | Targeted | Actual |  |  |
| $2011 / 12$ | 9460000 | 21773974 | 12313974 | 130.17 |
| $2012 / 13$ | 10310000 | 26289750 | 15979750 | 154.99 |
| $2013 / 14$ | 11720000 | 28612217 | 16892217 | 144.13 |
| $2014 / 15$ | 13160000 | 28155899 | 14995899 | 113.95 |
| $2015 / 16$ | 14730000 | 34171617 | 19441617 | 131.99 |

(Source: Planning department of ADBL)

The targeted and achieved loan collection amount is increased annually. The lowest targeted loan collection amount is Rs. 9460000 thousand in FY 2011/12 and the highest targeted amount is Rs. 14730000 thousand in FY 2015/16. Actual loan collection is also found in increasing trend. The lowest loan collection is Rs. 21773974 thousand in FY 2011/12 and the highest actual loan collection amount is 34171617 thousand in FY 2015/16.

The percentage change between targeted loan collection and achieved loan collection is $130.17 \%, 154.99 \%, 144.13 \%, 113.95 \%$ and $131.99 \%$ from Fiscal Year 2011/12, 2012/13, 2013/14, 2014/15 \& 2015/16 respectively.

The tabulated critical value at $\mathrm{t} 5 \%$ level of significance for two tailed test at 8 degree of freedom is 2.306 , which is less than the calculated value $t^{*} 7.15$. Therefore, there is significant difference between the targeted amount and achieved amount of loan collection. This mean the targeted amount is extremely differ from the achieved amount, as the achieved amount is high than targeted.

The difference percentage between targeted and achieved loan disbursement and collection shows error in setting standard of targeted loan disbursement and collection because there is great deviation.

Figure 4.12 : Targeted \& Achieved Loan Collection


### 4.10 Financial Analysis Tools

### 4.10.1 Balance Sheet Analysis

Balance sheet is a classified summary of all assets and liabilities balance as well as all liabilities and credit balance after balance pertaining to profit and loss account have been collected together in a separate account. It is a financial statement used to summarize the financial position of a company on a given date. A quick look at the balance sheet shows the financial health of the company. Therefore, investors, lenders, bankers and creditors like to see the balance sheet of the company before
making any financial deals so that they can know the financial worthiness of the company. Management of the asset and liabilities is important prerequisite for the stability and profitability of every bank. Thus it is the main intend of every commercial bank's management to optimize the portfolio of assets and liabilities with regard to specific bank policy. The principle component of the commercial bank's assets and liabilities are total deposit and loan disbursement.

Table 4.13 : Comparative balance sheet of Agricultural Development Bank

## Limited

| Agricultural Development Bank Limited Comparative Balance Sheet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Rs. In ' 000 |
|  | Fiscal Year |  |  |  |  |
| Capital \& Liabilities | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
| Share Capital | 1574567 | 1677615 | 6478000 | 7528000 | 10777500 |
| Reserves \& Surplus | 411382 | -7666883 | -7313358 | -6254909 | -5442189 |
| Debentures \& Bonds | 0 | 0 | 0 | 0 | 0 |
| Borrowings | 3664938 | 3589299 | 513532 | 373947 | 257373 |
| Deposits | 26244145 | 27223046 | 29631817 | 32416358 | 32553827 |
| Bills Payable | 0 | 0 | 0 | 0 | 0 |
| Proposed Dividend | 0 | 0 | 0 | 0 | 0 |
| Income Tax Liabilities | 0 | 235147 | 748270 | 284744 | 365242 |
| Other Liabilities | 13776913 | 6164751 | 5239362 | 3812071 | 5174996 |
| Total Liabilities | 45671945 | 31222975 | 35297623 | 38160211 | 43686749 |
| Assets |  |  |  |  |  |
| Cash Balance | 546743 | 680844 | 746812 | 749552 | 905235 |
| Balance with Nepal Rastra Bank | 2364117 | 1730302 | 3018299 | 2001144 | 1806731 |
| Balance with Banks | 0 | 623892 | 1006590 | 938625 | 912032 |
| Money at Call or Short Notice | 0 | 0 | 0 | 161599 | 49995 |
| Investment | 2735408 | 1355833 | 1511330 | 3177461 | 4757097 |
| Loans, Advances \& Bills Purchased | 20921784 | 22638255 | 24900913 | 27252333 | 30589428 |
| Fixed Assets | 865347 | 816191 | 882083 | 788868 | 781149 |
| Non-Banking Assets | 0 | 0 | 0 | 0 | 0 |
| Other Assets | 10238322 | 3377658 | 3231596 | 3090629 | 3885082 |
| Net Loss | 8000224 | 0 | 0 | 0 | 0 |
| Total Assets | 45671945 | 31222975 | 35297623 | 38160211 | 43686749 |
| Growth (\%) | - | -31.64 | 13.05 | 8.11 | 14.48 |

Source: Account Division of ADBL

From the balance sheet it is shown that the total liabilities and total assets is increasing in upward trend except in FY 2011/12 and FY 2012/13, because the country was facing the imperfect political situation. Hence in the liability side, the deposit, the amount which means to invest, is also increasing annually in upward trend from FY 2011/12 to FY 2015/16 i.e. in amount Rs.26244145, Rs.27223046, Rs. 29631817 , Rs. 32416358 and Rs. 32553827 thousand respectively. In asset side also, amount of loan advances and bill purchased is in increasing from FY 2011/12 to FY 2015/16, i.e. in amount Rs. 20921784, 22638255, 24900913, 27252333 and Rs. 30589428 thousand respectively. Almost major part of the amount received from deposit is expensed in giving loan. This shows the bank is utilizing the maximum amount of deposit investing in loans, which indicate the bank having sound financial position.

The total amount of assets and liabilities is increasing each sampled year, which is shown in percentage ratio. The percentage ratio is $-31.64 \%, 13.05 \%, 8.11 \%$ and $14.48 \%$ respectively from FY 2012/13 to FY 2015/16. Although the percentage ratio is in fluctuating trend, the final percentage ratio shows it will be increase thereafter.

### 4.10.2 Profit \& Loss Account Analysis

As profit and loss account is the second part of trading and profit and loss account, it is prepared after preparing the trading account for ascertainment of gross profit or loss. It is an account which is designed to highlight the net profit earned or net loss incurred by the company from its business transactions during accounting period.

Table 4.14 : Comparative Profit and Loss Account of Agricultural Development Bank Limited

| Rs. In ' 000 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Particulars | Fiscal Year |  |  |  |  |
|  | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
| Interest Income | 2892494 | 3915225 | 4033545 | 4623096 | 3961131 |
| Interest Expenses | 2093106 | 1487499 | 1439844 | 1605867 | 1641208 |
| Net Interest Income | 799388 | 2427726 | 2593701 | 3017229 | 2319923 |
| Commission \& Discount | 40577 | 42646 | 42262 | 49818 | 71139 |
| Other Operating Income | 241681 | 286315 | 164861 | 232033 | 350677 |
| Exchange Fluctuation Income | 89 | 0 | 2834 | 0 | 11955 |
| Total Operating Income | 1081735 | 2756687 | 2803658 | 3299080 | 2753694 |
| Personnel Expenses | 936199 | 963176 | 1775337 | 1306805 | 1849133 |
| Other Operating Expenses | 552952 | 447881 | 254889 | 277546 | 288020 |
| Exchange Fluctuation Loss | 0 | 11937 | 0 | 14061 | 0 |
| Operating Profit Before Provision | -407416 | 1333693 | 773432 | 1700668 | 616541 |
| Provision for Possible Losses | 7663931 | 1505105 | 149285 | 337783 | 2677477 |
| Operating Profit | $8071347$ | -171412 | 624147 | 1362885 | $2060936$ |
| Non-operating Income/(Expense) | 71123 | 92780 | 117764 | 7419 | 18336 |
| Loan Loss Provision Written-back | 0 | 0 | 549333 | 1803215 | 4064478 |
| Profit From Regular Activities | $8000224$ | -78632 | 1291244 | 3173519 | 2021878 |
| Income / Expenses from Extraordinary Activities | 0 | 0 | -355266 | $1883003$ | $1212162$ |
| Net Profit from All Activities | $8000224$ | -78632 | 935978 | 1290516 | 809717 |
| Employee Bonus Provision | 0 | 0 | 69331 | 95594 | 59979 |
| Income Tax Provision | 0 | 0 | 513123 | 136473 | 80499 |
| This Year | 0 | 0 | 148270 | 136473 | 80499 |
| Up to Last Year | 0 | 0 | 364853 | 0 | 0 |
| Net Profit / (Loss) | $8000224$ | -78632 | 353524 | 1058449 | 669239 |
| Growth |  | 99.01 | 549.6 | 199.4 | -40.55 |

Source: Account Division, ADBL
The above profit and loss account show the bank's worth position during the sampled period. So it can be reviewed that the bank gains the good worth position with the achievement of increasing growth percentage ratio except in FY 2015/16. it can be seen that there is also the profitable position of the company in FY 2015/16 but it is
low as compared to the last year i.e. FY 2014/15. So this does not indicate that the bank is not profitably weak.

Table 4.15 : Interest received from investment of loan

| Years | $\mathbf{2 0 1 1 / 1 2}$ | $\mathbf{2 0 1 2 / 1 3}$ | $\mathbf{2 0 1 3 / 1 4}$ | $\mathbf{2 0 1 4 / 1 5}$ | $\mathbf{2 0 1 5 / 1 6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Interest received <br> from Loan | 2807233 | 3842793 | 3921137 | 4548409 | 3886444 |
| Total Income | 3245964 | 4336966 | 4910599 | 6715581 | 8477716 |
| Income $\%$ | 86.48 | 88.61 | 79.85 | 67.73 | 45.84 |

From the interest table, the income received from the interest takes maximum majority in total income. With respect to the total income, the interest income received from loan is $86.48 \%, 88.61 \%, 79.85 \%, 67.73 \%$ and $45.84 \%$ in FY 2011/12 to FY 2015/16 respectively. Although, the income from interest takes majority measurement in total income, it is declining year by year. Hence this indicates that the loan and interest collecting ratio is not analogous with loan disbursement.

### 4.11 Major Findings of the Study

## Finding Obtained from Analysis of Deposit Collection and Loan Disbursement

There is a good picture of deposit collection with increment every year from fiscal year 2011/12 to 2015/16. But increased percentage of deposit collection does not follow the consistent trend, rather it is fluctuating. Like wise loan disbursement amount has also increased every year but with fluctuating rate. In the FY 2015/16, the percentage of loan disbursed is high as compare to other which indicates that the maximum amount is utilized as loan in respect to deposit collected in that year. The calculated coefficient of correlation is 0.79 , which shows that deposit collected loan disbursed are positively correlated. Hence, it can be that ADBL has successfully mobilized its increasing deposit in granting during the five year period.

Findings obtained from analysis of loan disbursement, loan collection and loan outstanding:

Actual loan investment and collection is increasing year by year with fluctuating growth rate. Although there is declining trend of loan disbursement and loan collection, the percentage of loan collection is high in FY 2014/15 in comparison to other years. The highest percentage of collection to disbursement is $96.14 \%$. There exist a positive relationship between loan collection and disbursement, i.e. 0.937,
which indicates that if loan collection is high then there will be high amount of loan disburse.

Though the loan collection is in fluctuating trend, there is increasing trend of outstanding loan but it is not so good for the bank. Even the loan outstanding is inclining upward; the percentage of loan collection to loan outstanding is also in climbing trend. This shows that the amount of collection to outstanding is high as of amount of collection to disbursement. The highest percentage of loan collection to outstanding is $93.35 \%$ in FY 2015/16 and also there exist positive relationship between loan collection and outstanding.

Finding obtained from purpose-wise loan disbursement, collection and outstanding

The total loan disbursement is in increasing trend, the movement of loan disbursement for different purposes is fluctuating and irregular path. The total loan investment increased from Rs. 24.39 billion in FY 2011/12 to Rs. 36.34 billion in FY 2015/16. The highest investment has been proceeding in marketing activities and that of lowest in mines due to various complicated situation happening in the country.

Although purpose wise loan collection is in fluctuating trend, total loan collection is in increasing movement from Rs. 21.77 billion in FY 2011/12 to Rs. 34.17 billion in FY 2015/16. The highest collection has been found in marketing and that of lowest in transportation instrument production. The collection table emphasizes incremental trend of collection in all sectors except mines, services industry.

The total loan outstanding is seemed to be increasing constantly, which is not good for the bank. The total loan outstanding is increased from Rs. 29.34 billion in F.Y.2011/12 to Rs. 36.60 billion in FY 2015/16. The highest outstanding loan has been viewed in agricultural sector followed by marketing and lowest outstanding loan is in mines and transportation instrument production. The outstanding table emphasizes the incremental trend of outstanding loan except finance and insurance, transportation instrument production

Finding obtained from analysis of performing and non-performing loan
Out of total loan outstanding, performing and non-performing loan are classified according to there recovery due date The performing loan is constantly increasing during the review period except in the FY 2013/14, which can be said that the bank is
doing well in loan management. The non-performing loan is constantly decreasing during the review period except in the FY 2013/14. The percentage of non-performing loan to total loan outstanding is high in respect to international banking norms. That is, according to International Banking Norms, the percentage of non-performing loan on total loan outstanding should be within $4 \%$ to $5 \%$. But ADBL tries to reduce the percentage of non-performing loan and keep trying to increase the performing loan percentage.

Finding obtained from analysis of targeted and achieved loan disbursement and collection

Targeted loan disbursement and collection is set according to company rules. Although the targeted disbursement and collection is increasing, the percentage difference between targeted and achieved loan disbursement and collection is in fluctuating trend. Overall the targeted and achieved investment and loan collection amount is increased annually. The targeted amount of loan disbursement and collection is vastly different from achieved amount, as the amount achieved is very high. So, it excellent for the ADBL profit and performance.

## CHAPTER - FIVE

## SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter is a complete package of conclusion and suggestion, which would be meaningful to top management of the bank to initiate action and achieve the desire result. Summary gives the brief introduction to the entire chapter of the study and shows the actual facts of the present situation under the topic of the study. Conclusions of the findings are based on the consequences of the analysis of relevant data by using various financial and statistical tools.

### 5.1 Summary

Financial institution plays a crucial role in the process of economic growth of a country. Banks are financial regulator, which collects funds and invest them in productive sector. Commercial bank is one of the organs of capital market, which accumulates the scattered fund in the deposit and utilizes them by giving away credit to the various sectors like trade, industry, agriculture etc. The well-managed investing activities of bank enhance the economic health of the country because the loan provided by bank supports the growth of new business, which in turn uplift the economic activities of the country. At present, there are 30 commercial banks operating in Nepal. Although agricultural development bank has started its banking operation as development bank, now it has enhanced its operation toward the commercial banking.

As the research covers the lending and recovery activities of the bank, deposit collected has also been studied as it is associated with the loan disbursement. The main function of bank is to collect the scattered money from public in the form of deposit and to disburse it as loan in order to obtain profit. Bank charges higher interest rate to borrowers than they pay to depositors. Success of bank does not rely on mobilization of deposit as loan, the timely recovery of loan is also equally important. If loan are not recovered on time, it becomes non-performing loan and the bank has to maintain higher amount of loan loss provision which leads to stumpy profit. Hence, the profitability of the bank is very much affected by the lending function. In this research, analysis and presentation of data has been conducted by using various financial and statistical tools.

First of all, deposit collection is analyzed for the further analysis. The analysis of deposit collection by the bank reveals that amount of deposit collected every year has increased except the last review period. The highest deposit collection is $8.59 \%$ in FY 2014/15. But in FY2015/16, the deposit collection is low i.e. $0.42 \%$, due to low interest rate in comparison to others and also overgrowing of commercial banks, which cause external distribution of bank. Another reason of low deposit collection is investment of fund in non-banking sector like shares, real estate etc. considering these reason of low deposit collection, the bank has to make strategy to raising the deposit.

The amount of loan disbursed has increased every year. As the highest loan disbursement is $19.04 \%$ in FY 2015/16 and the correlation coefficient shows that there is significant relationship between deposit collected and loan disbursed. It implies that the deposit collected has significantly been mobilized in loan disbursement. At same time, the loan collection is also increasing annually. As of loan disbursement, the highest loan collection is $20.74 \%$ in FY 2012/13.which is followed by $17.60 \%$ in FY2015/16 and the correlation between loan collection and loan disbursement is highly positive.

The loan collection status of ADBL is satisfactory increasing and at same time, the outstanding loan is also inclining upward, but it is not so good for the bank. The highest percentage of outstanding loan is $6.70 \%$ in FY 2012/13. Although the amount of loan outstanding is increasing, its percentage is decreasing, which means the correlation between loan collection and loan outstanding is perfectively positive. It means that the recovery of disburse and outstand loan is considerably well, which indicates good financial health of bank.

Despite of being loan and advances more profitable than other assets, it creates risk of non-repayment. Therefore they are classified into performing and nonperforming loan on the basis of overdue ageing schedule. Analysis of performing and non-performing loan shows that the performing loan is highest in FY 2015/16 and in same year nonperforming is declined to $10.41 \%$. Overall, it can be said that the bank's loan disbursement and recovery is going well and it will increase the bank's financial strength.

### 5.2 Conclusion

The analysis of the study reveals that the loan disbursement and collection function of ADBL is satisfactory. But the fluctuating trend of loan disbursement and recovery can't be overlooked. The deposit collection of bank shows the increasing pattern but at a fluctuating rate. In the same way, the percentage of loan disbursed is also in increasing trend though it is fluctuating. Although the deposit collection is low in 2015/16, the loan investment is high.

The amount of non-performing loan has been declining, which shows the better performance of bank. Although the nonperforming loan is decreasing, it is not sufficient for the bank's better position. As according to the International banking norms, the percentage of non-performing loan should be 4 to $5 \%$ of total outstanding loan. So it is not as good as required. The reason for decreasing non-performing loan is written off of them according to direction given by NRB, i.e. the non-performing loans overdue above 5 years are to be written off. Though the reason of low amount of non-performing loan is writing off of them, it improves the annual performance of bank.

The total loan disbursement, collection and outstanding of ADBL is in increasing trend. From the overall data, higher volume of amount has been investing in the agricultural sector in comparison with other sector. Hence, it seems ADBL has promoting overall agricultural sector. ADBL is running through the guide line of NRB and its supervision and direction is always accepted by the bank. Now days, ADBL is working as private company. Bearing many constraints, it is going to change its lending, recovery and collection policy by time to time in near future. So we can hope that it will make investment in the entire sector.

### 5.3 Recommendations

One of the objectives of this study is to provide a number of suggestions after analyzing the data of ADBL. The following suggestion will be helpful to the organization and other interested person and organization.

- Although there is satisfactory condition of loan disbursement and collection function of bank, the fluctuating trend should be revealed into smooth and regular increment.
- The deposit collection is directly affecting the disbursement of loan. So the bank should make positive effort to increase the deposit by providing equivalently high interest rate as of other.
- Loan must be given if the banker is satisfied that borrower can repay it from the cash flow generated from the operating activities. However the bank wants to ensure that their loan is repaid even incase of failure of business. To prevent the loss, the bank takes collateral for recovery of loan. So, the bank should take proper valuation of collateral.
- Loan recovery is not as good as loan disbursement. Poor recovery is cause of weak supervision, high interest and other charges laid by bank, poor liquidity of borrower, so it is recommended that the recovery policy and procedure must be exercised strictly.
- There occurs the chance of bank's failure due to the higher percentage of nonperforming loan, though it is decreased. So it is recommended that high intention is given in reducing the level of non-performing loan as to the banking norms.
- As the bank has set up the targets for loan disbursement, collection and outstanding, it is seemed the achieved is more than targeted, which indicates that bank is performing well. So the target must set targets for every fiscal year.
- Professionals should be given opportunity to manage the banks and introduce effective management to run the organization independently. And unnecessary obstacles and disturbance of employee union should be minimized.
- Before several years Nepal was facing the problem of insurgency which resulted to shift the branches from rural areas to the urban areas but after change of political scenario of the country. Nepal is heading toward the peace keeping process. More consciously Nepal is in transition stage. This is the perfect period for resifting those branches back to the respective areas.
- Now ADBL has changed into public limited, it should maintain the new commercial loan other than agricultural loan to attract more customers relating to agro and non-agro business.
- Political influences in loan disbursement should be avoided as it may lead worse condition to the bank's loan management process.


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## APPENDICES

## APPENDIX-1

a. Correlation analysis of deposit collection and loan disbursement

Let,
$\mathrm{X}=$ deposit collection
$\mathrm{Y}=$ loan disbursement

Rs. in billion

| Fiscal <br> year | $\mathbf{X}$ | $x=(X-\bar{X})$ |  | $\mathbf{\mathbf { x } ^ { 2 }}$ | $\mathbf{Y}$ | $y=(Y-\bar{Y})$ | $\mathbf{y}^{\mathbf{2}}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{x y}$ |  |  |  |  |  |  |  |
| $2011 / 12$ | 26.24 | -3.37 | 11.36 | 24.39 | -5.39 | 29.05 | 18.16 |
| $2012 / 13$ | 27.22 | -2.39 | 5.72 | 28.26 | -1.52 | 2.31 | 3.63 |
| $2013 / 14$ | 29.63 | 0.02 | 0.00 | 30.61 | 0.84 | 0.70 | 0.02 |
| $2014 / 15$ | 32.42 | 2.80 | 7.85 | 29.29 | -0.49 | 0.24 | -1.37 |
| $2015 / 16$ | 32.55 | 2.94 | 8.64 | 36.34 | 6.56 | 43.05 | 19.29 |
|  | $\mathbf{1 4 8 . 0 7}$ |  | $\mathbf{3 3 . 5 7}$ | $\mathbf{1 4 8 . 8 8}$ |  | $\mathbf{7 5 . 3 5}$ | $\mathbf{3 9 . 7 3}$ |

$\mathrm{N}=5$
$\bar{X}=\frac{\sum X}{N}=\frac{148.07}{5}=29.61$
$\bar{Y}=\frac{\sum Y}{N}=\frac{148.88}{5}=29.78$
$\mathrm{r}=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum y^{2}}}}=\frac{39.73}{\sqrt{33.57} \sqrt{75.35}}=0.790$
$r^{2}=0.61$
$\mathrm{t}^{*}=\frac{r}{\sqrt{\frac{1-r^{2}}{n-2}}}=\frac{0.790}{\sqrt{\frac{1-(0.790)^{2}}{5-2}}}=2.232$

## b. Correlation analysis of loan disbursement and loan collection

Let,
$\mathrm{X}=$ loan disbursement
$\mathrm{Y}=$ loan collection
Rs. in billion

| Fiscal <br> year | $\mathbf{X}$ | $x=(X-\bar{X})$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{Y}$ | $y=(Y-\bar{Y})$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{x y}$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $2011 / 12$ | 24.39 | -5.39 | 29.05 | 21.77 | -6.03 | 36.32 | 32.48 |
| $2012 / 13$ | 28.26 | -1.52 | 2.31 | 26.29 | -1.51 | 2.28 | 2.30 |
| $2013 / 14$ | 30.61 | 0.84 | 0.70 | 28.61 | 0.81 | 0.66 | 0.68 |
| $2014 / 15$ | 29.29 | -0.49 | 0.24 | 28.16 | 0.36 | 0.13 | -0.17 |
| $2015 / 16$ | 36.34 | 6.56 | 43.05 | 34.17 | 6.37 | 40.59 | 41.80 |
|  | $\mathbf{1 4 8 . 8 8}$ |  | $\mathbf{7 5 . 3 5}$ | $\mathbf{1 3 9 . 0 0}$ |  | $\mathbf{7 9 . 9 8}$ | $\mathbf{7 7 . 0 9}$ |

$\mathrm{N}=5$
$\bar{X}=\frac{\sum X}{N}=\frac{148.88}{5}=29.78$
$\bar{Y}=\frac{\sum Y}{N}=\frac{139.00}{5}=27.80$
$\mathrm{r}=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum y^{2}}}}=\frac{77.09}{\sqrt{75.35} \sqrt{79.98}}=0.993$
$r^{2}=0.986$
$\mathrm{t}^{*}=\frac{r}{\sqrt{\frac{1-r^{2}}{n-2}}}=\frac{0.993}{\sqrt{\frac{1-(0.993)^{2}}{5-2}}}=14.56$

## c. Correlation analysis of loan collection and loan outstanding

Let,
$\mathrm{X}=$ loan collection
$\mathrm{Y}=$ loan outstanding
Rs. in billion

| Fiscal <br> year | $\mathbf{X}$ | $x=(X-\bar{X})$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{Y}$ | $y=(Y-\bar{Y})$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{x y}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2011 / 12$ | 21.77 | -6.03 | 36.32 | 29.34 | -3.66 | 13.38 | 22.05 |
| $2012 / 13$ | 26.29 | -1.51 | 2.28 | 31.31 | -1.69 | 2.86 | 2.56 |
| $2013 / 14$ | 28.61 | 0.81 | 0.66 | 33.31 | 0.31 | 0.10 | 0.25 |
| $2014 / 15$ | 28.16 | 0.36 | 0.13 | 34.44 | 1.44 | 2.07 | 0.51 |
| $2015 / 16$ | 34.17 | 6.37 | 40.59 | 36.60 | 3.60 | 12.98 | 22.95 |
|  | $\mathbf{1 3 9 . 0 0}$ |  | $\mathbf{7 9 . 9 8}$ | $\mathbf{1 6 5 . 0 1}$ |  | $\mathbf{3 1 . 4 0}$ | $\mathbf{4 8 . 3 2}$ |

$\mathrm{N}=5$
$\bar{X}=\frac{\sum X}{N}=\frac{139.00}{5}=27.80$
$\bar{Y}=\frac{\sum Y}{N}=\frac{165.01}{5}=33.00$
$r=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum y^{2}}}}=\frac{48.32}{\sqrt{79.98} \sqrt{31.40}}=0.964$
$r^{2}=0.929$
$\mathrm{t}^{*}=\frac{r}{\sqrt{\frac{1-r^{2}}{n-2}}}=\frac{0.964}{\sqrt{\frac{1-(0.964)^{2}}{5-2}}}=14.56$

## Appendix - 2

## a. Trend analysis of total deposit collection

Rs. in billion.

| FY | Year (x) | total deposit (y) | xy | $\mathbf{x}^{\mathbf{2}}$ |
| :--- | ---: | :--- | :--- | :--- |
| $2011 / 12$ | 1 | 26.24 | 26.24 | 1 |
| $2012 / 13$ | 2 | 27.22 | 54.45 | 4 |
| $2013 / 14$ | 3 | 29.63 | 88.90 | 9 |
| $2014 / 15$ | 4 | 32.42 | 129.67 | 16 |
| $2015 / 16$ | 5 | 32.55 | 162.77 | 25 |
|  | $\boldsymbol{\Sigma x = 1 5}$ | $\mathbf{1 4 8 . 0 7}$ | $\mathbf{4 6 2 . 0 2}$ | $\boldsymbol{\Sigma} \mathbf{x}^{\mathbf{2}=55}$ |

The regression equation of total deposit (y) on years (x) is as follows:
$y=a+b x$
Where, a and b are constants
The normal equations are
$\sum y=n a+b \sum x$
$\sum x y=a \sum x+b \sum x^{2}$
Substituting the values in above equations we get,
$148.07=5 \mathrm{a}+15 \mathrm{~b} \ldots$ (2)
$462.02=15 \mathrm{a}+55 \mathrm{~b} \ldots$ (3)
Multiply equation no. (2) By 3 and subtracting it from equation (3), we get
$444.21=15 a+45 b$
$462.02=15 \mathrm{a}+55 \mathrm{~b}$
$17.81=10 \mathrm{~b}$
$\therefore \mathrm{b}=1.781$

Putting the value of (b) in equation number (2), we get
$148.07=5 a+15 \times 1.781$
$148.07=5 \mathrm{a}+26.715$
$5 \mathrm{a}=121.355$
$\mathrm{a}=24.27$
Now putting the value of $a$ and $b$ in equation no. (1) We get regression equation of $y$ on x
$y=24.27+1.78 x$

| FY | Year $(\mathbf{x})$ | Deposit <br> $\mathbf{y = 2 4 . 2 7}+\mathbf{1 . 7 8} \mathbf{x}$ <br> $2016 / 17$ |
| :--- | :--- | :--- |
| $2017 / 18$ | 6 | 34.95 |
| $2018 / 19$ | 7 | 36.73 |
| $2019 / 20$ | 9 | 38.51 |
| $2020 / 21$ | 10 | 40.29 |
|  |  | 42.07 |

b. Trend analysis of total loan disbursement

| $\mathbf{F Y}$ | Year (x) | Total loan disbursement <br> $(\mathbf{y})$ | $\mathbf{x y}$ | $\mathbf{x}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 24.39 | 24.39 | 1 |
| $2012 / 13$ | 2 | 28.26 | 56.51 | 4 |
| $2013 / 14$ | 3 | 30.61 | 91.84 | 9 |
| $2014 / 15$ | 4 | 29.29 | 117.14 | 16 |
| $2015 / 16$ | 5 | 36.34 | 181.68 | 25 |
|  | $\boldsymbol{\Sigma} \mathbf{x}=\mathbf{1 5}$ | $\mathbf{1 4 8 . 8 8}$ | $\mathbf{4 7 1 . 5 6}$ | $\boldsymbol{\Sigma} \mathbf{x}^{\mathbf{2}=55}$ |

The regression equation of total deposit ( y ) on years ( x ) is as follows:
$y=a+b x \ldots$ (1)
Where, a and b are constants

The normal equations are
$\sum y=n a+b \sum x$
$\sum x y=a \sum x+b \sum x^{2}$
Substituting the values in above equations we get,
$148.88=5 a+15 b \ldots$ (2)
$471.56=15 \mathrm{a}+55 \mathrm{~b}$
Multiply equation no. (2) By 3 and subtracting it from equation (3), we get
$446.64=15 a+45 b$
$471.56=15 a+55 b$
$24.92=10 \mathrm{~b}$
$\therefore \mathrm{b}=2.49$

Putting the value of $b$ in equation number (2), we get
$148.88=5 \mathrm{a}+15 \times 2.49$
$148.88=5 a+37.35$
$5 \mathrm{a}=111.53$
$\mathrm{a}=22.31$
Now, putting the value of (a) and (b) in equation number (1) we get regression equation of $y$ on $x$
$\mathrm{y}=22.31+2.49 \mathrm{x}$

Forecast of 5 years

| FY | Year $(\mathbf{x})$ | Disbur <br> $\mathbf{y = 2 2 . 3 1}$ <br>  <br> $2016 / 17$ |
| :--- | :--- | :---: |
| $2017 / 18$ | 6 | 37.25 |
| $2018 / 19$ | 7 | 39.74 |
| $2019 / 20$ | 8 | 42.23 |
| $2020 / 21$ | 9 | 44.72 |
|  | 10 | 47.21 |

## c. Trend analysis of total loan collection

Rs. in billion

| FY | Year (x) | Total loan collection (y) | $\mathbf{x y}$ | $\mathbf{x}^{\mathbf{2}}$ |
| :--- | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 21.77 | 21.77 | 1 |
| $2012 / 13$ | 2 | 26.29 | 52.58 | 4 |
| $2013 / 14$ | 3 | 28.61 | 85.84 | 9 |
| $2014 / 15$ | 4 | 28.16 | 112.62 | 16 |
| $2015 / 16$ | 5 | 34.17 | 170.86 | 25 |
|  | $\boldsymbol{\Sigma x}=\mathbf{1 5}$ | $\mathbf{1 3 9 . 0 0}$ | $\mathbf{4 4 3 . 6 7}$ | $\boldsymbol{\Sigma} \mathbf{x}^{\mathbf{2}}=\mathbf{5 5}$ |

The regression equation of total deposit (y) on years (x) is as follows:
$y=a+b x \ldots$ (1)
Where, 'a' and 'b' are constants
The normal equations are
$\sum y=n a+b \sum x$
$\sum x y=a \sum x+b \sum x^{2}$

Substituting the values in above equations we get,
$139.00=5 a+15 b \ldots$ (2)
$443.67=15 a+55 b \ldots$
$443.67=15 \mathrm{a}+55 \mathrm{~b} \ldots$ (3)
Multiply equation no. (2) By 3 and subtracting it from equation (3), we get
$417.01=15 a+45 b$
$443.67=15 a+55 b$
$26.66=10 b$
$\therefore \mathrm{b}=2.67$

Putting the value of (b) in equation number (2), we get
$139.00=5 \mathrm{a}+15 \times 2.67$
$139.00=5 \mathrm{a}+40.05$
$5 \mathrm{a}=98.95$
$\mathrm{a}=19.79$
Now putting the value of (a) and (b) in equation number (1) We get regression equation of $y$ on $x$
$y=19.79+2367 x$
Forecast of 5 years

| FY | Year (x) | Collection <br> $\mathbf{y}=\mathbf{1 9 . 7 9 + 2 . 6 7 x}$ |
| :--- | :--- | :---: |
| $2016 / 17$ | 6 | 35.81 |
| $2017 / 18$ | 7 | 38.48 |
| $2018 / 19$ | 8 | 41.15 |
| $2019 / 20$ | 9 | 43.82 |
| $2020 / 21$ | 10 | 46.49 |

d. Trend analysis of total loan outstanding

| $\mathbf{F Y}$ | Year (x) | Total loan outstanding (y) | $\mathbf{x y}$ | $\mathbf{x}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 29.34 | 29.34 | 1 |
| $2012 / 13$ | 2 | 31.31 | 62.62 | 4 |
| $2013 / 14$ | 3 | 33.31 | 99.93 | 9 |
| $2014 / 15$ | 4 | 34.44 | 137.76 | 16 |
| $2015 / 16$ | 5 | 36.60 | 183.02 | $\mathbf{2 5}$ |
|  | $\boldsymbol{\Sigma x}=\mathbf{1 5}$ | $\mathbf{1 6 5 . 0 1}$ | $\mathbf{5 1 2 . 6 8}$ | $\boldsymbol{\Sigma} \mathbf{x}^{\mathbf{2}=55}$ |

The regression equation of total deposit ( y ) on years ( x ) is as follows:
$y=a+b x \ldots$ (1)

Where, a and b are constants
The normal equations are
$\sum y=n a+b \sum x$
$\sum x y=a \sum x+b \sum x^{2}$
Substituting the values in above equations we get,
$165.01=5 \mathrm{a}+15 \mathrm{~b} \ldots$. (2)
$512.68=15 \mathrm{a}+55 \mathrm{~b}$.

Multiply equation no. (2) By 3 and subtracting it from equation (3), we get
$495.03=15 a+45 b$
$512.68=15 \mathrm{a}+55 \mathrm{~b}$
$17.65=10 \mathrm{~b}$
$\therefore \mathrm{b}=1.77$

Putting the value of (b) in equation number (2), we get
$165.01=5 \mathrm{a}+15 \times 1.77$
$165.01=5 \mathrm{a}+26.55$
$5 \mathrm{a}=138.46$
$\mathrm{a}=27.69$
Now putting the value of (a) and (b) in equation number (1) we get regression equation of $y$ on $x$
$y=27.69+1.77 x$
Forecast of 5 years

| FY | Year (x) | Outstanding <br> $\mathbf{y}=\mathbf{2 7 . 6 9}+\mathbf{1 . 7 7 x}$ |
| :--- | :--- | :---: |
|  |  |  |
| $2016 / 17$ | 6 | 38.31 |
| $2017 / 18$ | 7 | 40.08 |
| $2018 / 19$ | 8 | 41.85 |
| $2019 / 20$ | 9 | 43.62 |
| $2020 / 21$ | 10 | 45.39 |

## Appendix-3

## A. t-test for targeted and actual loan disbursement

Let,
$\mathrm{X} 1=$ targeted loan disbursement
$\mathrm{X} 2=$ actual loan disbursement
Rs. in billion

| Fiscal year | $\mathbf{X}_{\mathbf{1}}$ | $\mathbf{x}_{\mathbf{1}}{ }^{\mathbf{2}}=\left(\mathbf{X}_{\mathbf{1}}-\overline{\mathbf{X}}_{\mathbf{1}} \mathbf{}^{\mathbf{2}}\right.$ | $\mathbf{X}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{2}}{ }^{\mathbf{2}}=\left(\mathbf{X}_{\mathbf{2}}-\overline{\mathbf{X}}_{\mathbf{2}}\right)^{\mathbf{2}}$ |
| :--- | ---: | ---: | ---: | ---: |
| $2011 / 12$ | 12.15 | 16.35 | 24.39 | 29.05 |
| $2012 / 13$ | 14.55 | 2.70 | 28.26 | 2.31 |
| $2013 / 14$ | 16.97 | 0.60 | 30.61 | 0.70 |
| $2014 / 15$ | 18.04 | 3.41 | 29.29 | 0.24 |
| $2015 / 16$ | 19.26 | 9.40 | 36.34 | 43.05 |
|  | $\mathbf{8 0 . 9 7}$ | $\mathbf{3 2 . 4 7}$ | $\mathbf{1 4 8 . 8 8}$ | $\mathbf{7 5 . 3 5}$ |

$\mathrm{N}=5$
$\bar{X}_{1}=\frac{\sum X_{1}}{N}=\frac{80.97}{5}=16.19$
$\overline{X_{2}}=\frac{\sum X_{2}}{N}=\frac{148.88}{5}=29.78$
$S^{2}=\frac{\sum X_{1}{ }^{2}+\sum X_{2}{ }^{2}}{n_{1}+n_{2}-2}=\frac{32.47+75.35}{5+5-2}=13.48$
Test statistic under $H_{0}$,
$t=\frac{\overline{x_{1}}-\overline{x_{2}}}{\sqrt{S^{2}}\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}=\frac{16.19-29.78}{\sqrt{13.48\left(\frac{1}{5}+\frac{1}{5}\right)}}=-5.86$
$|t|=5.86$

## B. t-test for targeted and actual loan collection

Let,
$\mathrm{X} 1=$ targeted loan collection
$\mathrm{X} 2=$ actual loan collection
Rs. in billion

| Fiscal year | $\mathbf{X}_{\mathbf{1}}$ | $\mathbf{x}_{\mathbf{1}}{ }^{\mathbf{}}=\left(\mathbf{X}_{\mathbf{1}}-\overline{\mathbf{X}}_{\mathbf{1}}\right)^{\mathbf{2}}$ | $\mathbf{X}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{2}}{ }^{\mathbf{}}=\left(\mathbf{X}_{\mathbf{2}} \overline{\mathbf{X}}_{\mathbf{2}} \mathbf{2}^{\mathbf{2}}\right.$ |
| :--- | ---: | ---: | ---: | ---: |
| $2011 / 12$ | 9.46 | 5.69 | 21.77 | 36.32 |
| $2012 / 13$ | 10.31 | 2.36 | 26.29 | 2.28 |
| $2013 / 14$ | 11.12 | 0.53 | 28.61 | 0.66 |
| $2014 / 15$ | 13.61 | 3.11 | 28.16 | 0.13 |
| $2015 / 16$ | 14.73 | 8.32 | 34.17 | 40.59 |
|  | $\mathbf{5 9 . 2 3}$ | $\mathbf{2 0 . 0 1}$ | $\mathbf{1 3 9 . 0 0}$ | $\mathbf{7 9 . 9 8}$ |

$\mathrm{N}=5$
$\bar{X}_{1}=\frac{\sum X_{1}}{N}=\frac{59.23}{5}=11.85$
$\overline{X_{2}}=\frac{\sum X_{2}}{N}=\frac{139.00}{5}=27.80$
$S^{2}=\frac{\sum X_{1}{ }^{2}+\sum X_{2}{ }^{2}}{n_{1}+n_{2}-2}=\frac{20.01+79.89}{5+5-2}=12.49$

Test statistic under $H_{0}$,

$$
\begin{aligned}
& t=\frac{\overline{x_{1}}-\overline{x_{2}}}{\sqrt{S^{2}}\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}=\frac{11.85-27.80}{\sqrt{12.49\left(\frac{1}{5}+\frac{1}{5}\right)}}=-7.15 \\
& |t|=7.15
\end{aligned}
$$


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