## CHAPTER-I

## INTRODUCTION

### 1.1 Background of the Study

The government felt to impact a dynamic role and change the public sector with greater responsibility in fulfilling the agricultural development. With this realization the government mushroomed into a no. of establishment like agriculture, industry, commerce, public works, transport, and other sectors. In this circumstance, banking was seen as major industry to uplift the economic conditions of public, and country and the world as well. Therefore the government was forced to adopt a liberal economic policy regarding operation of banks. About the financial liberalization process it and said that "The interest rate deregulation curtailment or elimination of directed credits, lifting entry and exist barrier for financial intermediaries, restructuring of banking system and institution for regulatory and supervisory mechanism is some of the key components of such liberalization". This led to the influx of commercial bank in Nepal.

Sometime in the past, the gold smith used to store People's good and charge nominal rate against deposit. At that time, people deposited their gold and valuable goods for the security rather than earning. And efficient system of financial institution is obviously necessary not only for financial resources of the community and economic prosperity "Tejarath Adda" is the father of modern banking system in Nepal which delivered a good service to government staffs and general public. In reality, the concept of modern banking was introduced when "Nepal Bank

Limited" was established in 1994 B.S. (1937 A.D.). Since B.S. 1994 NBL carried out the functions as a commercial bank. After that Nepal Rastra Bank came in existence as the central Bank on B.S. 2013. Since B.S. 2013, it has been functioning as the government's bank and has contributed to the growth of financial sector. Up to this date 26 commercial bank, 59 development banks and 79 financial companies are providing service as financial institution in Nepal.

Due to poverty, Nepalese people could not adopt modern system of cultivation. To provide the easy loan for development the agricultural sector and their people, the government established the "Agricultural Development Bank." Agriculture Development Bank is an autonomous organization largely owned by government of Nepal. The main objectives of the bank were well development of agricultural sector and boost up the economic condition of the people who are involved in agriculture. The bank has been growing as a premiur rural credit institution since the last three decades, contributing a more than $67 \%$ of institutional credit supply in the country. The first institutional credit supply arrangement for agricultural development in Nepal was made in 1963 A.D. in the form of Sajha or Co-operative Bank. This bank was commissioned to the credit needs of the co-operative societies. In 1966 A.D, Land Reform Saving Corporation (LRSC) was established to mobilize the compulsory saving generated at the village level. ADBN was established in B.S. 2024 as a development bank with 50 million initial capital where 51 percent paid up capital invested by government and remaining capital invested by NRB. The bank was established as ' B ' class bank. It has certain sector to invest. The bank was mainly focused to invest in agriculture sector. ADB/N has registered as company limited B.S.2062/03/11 as per Company Act 2053. It got the license of 'A' class bank from NRB in B.S. 2062/12/03. Since that date, the bank is providing services to its clients as a commercial bank.
$\mathrm{ADB} / \mathrm{N}$ plays an important role of economic development of the country. They provide capital and other financial service for the development of agriculture and investing by the saving collecting as deposits from public. $\mathrm{ADB} / \mathrm{N}$ provides various services to public sector farmer for developing also by providing personal loan and other forms of loan and financial services. So the $\mathrm{ADB} / \mathrm{N}$ is the most important component for the integrated and speed development of a society. There is very much necessary competitive and reliable banking system is essential for every country for the economic development. They are backbone of the economy.

Bank collects huge amount of deposit from clients and disburse the funds as loan investment. Without disburse the fund which is collected by the bank, any bank can't earn and run smoothly. Thus most important task of the bank or any financial institutions is to utilize or proper management of available fund. In the market, there are so many investment areas. A lot of clients want to take loan from bank. But a bank should disburse in that area and person where the loan would recover easily. Bank has to make correct decision to disburse loan because of default risk. Proper utilization of deposit is very much important for servers as well as for the bank. A bank has to make effective loan disbursement and repayment policy to safeguard their investment. Development of any bank is depends upon its disbursement and repayment. A bank should disburse those sectors where the disburse loan would not bad debt. If the fund would turn into bad debt, the bank will lose huge amount of fund. So, the bank should manage appropriate amount of loan loss provision. It reduces the high amount loss in one single time period. Thus loan disbursement and repayment pattern is one of very essential as well as crucial task.
$\mathrm{ADB} / \mathrm{N}$ provides the short term, long term and medium term loan for improving the agriculture to individual farmers, small farmer groups,
business organization, corporate societies, corporate bodies and small committies. ADB/N provide loans and technical services for the purchase of inputs and capital items.

Only a few studies have been conducted "Loan Disbursement and Repayment Pattern of $\mathrm{ADB} / \mathrm{N}$." Except them, $\mathrm{ADB} / \mathrm{N}$ there are other development banks and micro finance institutions operating in Nepal but the financial problem especially in the field of development credit sector is not yet solved and achievement of loan disbursement is not yet studied. So the necessity of study is felt and done. This study may be millstone in Nepalese context especially in the field of development credit and having significance and value to society.

### 1.2 Problems of the Study

The most important work of Agriculture Development Bank is to provide loan, to improve the agriculture sector. There will be maximum probability of default risk, so a bank should take care before giving loan.
$\mathrm{ADB} / \mathrm{N}$ have operating well from their establishment. Their experience is international banking prompt and computerized services. The main objective of bank is to earn profit. Loan disbursement of bank sector and loan collection is source of profit. Without loan collection, loan disbursement is not effective. ADB/N has to develop the agriculture sector by providing the loan in the rural economy. In the present situation, it is importance to analyze the loan disbursement and problems of loan repayment of $\mathrm{ADB} / \mathrm{N}$. In this situation, this study has attempted to solve the following research questions:-

1. What is the rate of growth of loan disbursement, repayment and outstanding of $\mathrm{ADB} / \mathrm{N}$ ?
2. What is the relationship between the projected and actual loan disbursement and repayment?
3. For what purpose and which sector has the loan of $\mathrm{ADB} / \mathrm{N}$ mobilized?
4. What is the relationship between the loan disbursed, repayment and outstanding?
5. What is the present situation of loan disbursement and repayment?

### 1.3 Objectives of the Study

The general objectives of this research were to gain insight into the loan disbursement of $\mathrm{ADB} / \mathrm{N}$. For the better future of the bank, effective mobilization of the collected deposit, repayment of loan disbursed is very important. The main objectives of the study are to evaluate the loan effectiveness of $\mathrm{ADB} / \mathrm{N}$. Effective utilization and loan investment. This research is mainly concerned with the loan disbursement and repayment of ADB/N. Main objectives are as follows:

1. To evaluate the projected and actual loan disbursement and repayment.
2. To find out the rate of the growth of loan disbursement and repayment.
3. To analysis the purpose-wise, region-wise, loan disbursement, repayment and outstanding.
4. To give suggestion and recommendation.

### 1.4 Focus of the Study

$\mathrm{ADB} / \mathrm{N}$ is the one of the institutional credit to the rural populace by strengthening its network in all over the country. Non-institutional financing still now plays a vital role in rural area. The findings of this study can be useful for the policy-makers, planners, researcher, financial institution. This report would be helpful to the creditors to maximize the utilization of loan, mobilization to the production area. This study tries to focus the $\mathrm{ADB} / \mathrm{N}$ 's targeted and actual loan disbursement and repayment.

So that all Nepalese farmers and other entrepreneur can get some knowledge about receiving the institutional credit of $\mathrm{ADB} / \mathrm{N}$. This study provides some information to analyze the data and some occurring problems for specific field.

In the context of Nepal, very few studies and research have been made related to loan disbursement and repayment pattern of $A D B / N$. This study is importance for the planners, policy makers, targeted entrepreneur, $\mathrm{ADB} / \mathrm{N}$ and interested person \& scholars.

### 1.5 Organizational Structure of ADB/N

The board of directors (BOD) is the apex body of the bank organization and its members are appointed by government. The major functions of BOD are formulated policy, strategies, rules and regulation of the institutions. The board consists of seven members including general manager of the $\mathrm{ADB} / \mathrm{N}$. Other member include of representative each from ministry of finance, ministry of agriculture and cooperative, ministry of land reform and management, Nepal Rastra Bank, the cooperative societies and the individual shareholders .the government appoints one of the members as the chairmen of the board.

## Organizational Structure of ADB/N


(Source: www.adbgov.com.np)
The general Manager is the executive head of the ADB/N. As and institutional head, the general manager provides major decisions, executes day to day management of the organization and smooth implementation of programs with the help of deputy general managers and other staff perform day to day work decisions made by the board.

## Board of Director of ADB/N


(Source: www.adbgov.com.np)

### 1.6 Delimination of the Study

This study is for the partial fulfillment of MBS course of Degree. So this study has certain limit. This study is related with only loan disbursement, repayment and outstanding. This study deals with financing for agriculture development. Following points are major limitations of the study:

- This study covers to the analysis of loan disbursement and repayment of $\mathrm{ADB} / \mathrm{N}$ only.
- This study is based on only secondary data.
- All the require data and information provided from the document and information provided by $\mathrm{ADB} / \mathrm{N}$.
- The study done as per the objectives. Therefore it is not be sufficient to draw conclusions beyond the objectives.
- The study period covers only 5 years (Fiscal year 2061/62 to 2065/66).


### 1.7 Organization of the Study

The Study organized into five chapters, each devoted to some aspects of the study of loan disbursement and repayment of ADB/N. The titles of each of these chapters are summarized and contents of each of these chapters of this study are briefly mentioned here:

## Chapter I: Introduction

This chapter deals with the following points:

- Background of the study
- Focus of the study
- Statement of the problem
- Objectives of the study
- Limitation of the study
- Organization of the study


## Chapter II: Review of Literature

The chapter, review of Literature includes some work, analysis and discussion already made in the field of banks in various planning periods and finally, a brief review of preview research works specially made in respect of disbursement and repayment of $\mathrm{ADB} / \mathrm{N}$. This chapter includes the conceptual framework and review of major past studies.

## Chapter III: Research Methodology

The third chapter, research methodology deals with research design, period covered, sources of data, data collection procedure, method of analysis and analytical tools used.

## Chapter IV: Data Presentation and Analysis

In this chapter collected data through various sources have been presented. It mainly consist the analysis of various types of data regarding disbursement repayment and outstanding of $\mathrm{ADB} / \mathrm{N}$.

## Chapter V: Summary, Conclusion and Recommendation

The fifth and final chapter is concerned with the suggestive framework that consists with the overall findings, issues and gaps, conclusions and recommendations of the study.

## CHAPTER-II

## REVIEW OF LITERATURE

A Literature review is a survey and discussion of the literature that helps to shape the theoretical position developed during the research project. In other word, it is the preliminary search where most of a research's sources are cited thoroughly to generate and refine ideas on loan disbursement and repayment previous research studies that contributed to the field of research are reviewed critically to get information for this academic research proper.

To know the loan disbursement and repayment pattern of $\mathrm{ADB} / \mathrm{N}$, some important literature like materials directly related to $\mathrm{ADB} / \mathrm{N}$ and SFDP, SFCL, various journals articles published by ADB/N and NRB, Internet websites, loan investment and repayment manual NRB directives, Annual Report of $\mathrm{ADB} / \mathrm{N}$, text book and past thesis are reviewed as a related literature.

### 2.1 Theoretical Review

### 2.1.1 General Background

Agriculture is the backbone of our economy and it is main occupation of Nepalese farmers. Therefore, our economy is mainly agriculture dominated. So, without the agriculture development, we cannot develop our economy. There are so many factors like lack of irrigation; lack of improved seeds, lack of chemical fertilizers, lack of equipment, lack of technology etc affect Nepalese agriculture. Without sufficient finance, it is impossible to improve these factors, which result a
decrease in agricultural product. To supply sufficient finance, the financial agencies are needed and there are many financial institutions in the financial market. $\mathrm{ADB} / \mathrm{N}$ is the main source of finance. Actually $\mathrm{ADB} / \mathrm{N}$ is called the bank of farmers. $\mathrm{ADB} / \mathrm{N}$ is the largest financial institutional in Nepal with exclusive focus on the rural economy.

It comes under the broad administrative control of ministry of finance. Agricultural Development Bank implies commercial banking program at B.S.2062/12/03.
"Indeed, making loans is the principal economic function of banks, to fund consumption and investment spending by businesses individuals, and units of government. How well a bank performs its lending function has a great deal to do with the economic health of its region, because loan support the growth of new business and jobs within the banks trade territory and promote economic vitality. Moreover, a bank loan often seems to convey positive information to the market place about borrower's credit quality, enabling a borrower to obtain more and perhaps some what cheaper funds from other sources (Rose; 2002: 517).

### 2.1.2 Objectives of ADB/N

Unless and until the agriculture sector is development. It is impossible to imagine and think about the economic development of the country .The bank was established with the objective of initiating effective approaches to raise the economic position of the farmers and sure overall agricultural development by making available agricultural credit easily. Main objectives of the bank can be to promote the agriculture sector of the country by uplifting the socio-economic status of general people through providing short, medium, and long term loan, provide loan to individual and organizational for the purchase of agricultural materials. Such as:- irrigation equipment, spray, animal feed, machinery, provide quality banking and financial services to clients adopting market driven strategy, invest loans for purchase of livestock,
deliver loans for cottage and small scale industries.To deliver comprehensive banking and financial services, capitalising its extensive network in rural areas, disburse loan to individual farmers, group of farmers, co-operative societies, corporate bodies and village committies and provide skill oriented training and workshop for human resource development of the agricultural area. To supervise small farmer development program (SFDP) and small farmers co-operative limited.

### 2.1.3 Functions of ADB/N

$\mathrm{ADB} / \mathrm{N}$ provides loan for short, medium and long term period to individual farmers, co-operatives and corporate bodies who are engaged in agricultural farming. The major functions of the bank is to accept deposit of persons and the institutions under fixed deposit account, current deposit account and saving account and to give loan to those who want to invest to help the farmers and to help in the economic development of the country. Such kind of loans may be provided by the bank for the purchase of inputs and capital items such as chemical fertilizer, insecticides, farm machineries pump-sets, Gobar-Gas plants, which are essential to increase the agricultural production. Also ADB/N provide loans for tenants for purchasing lands to make them able to get benefit from farming for their economic development. ADB/N supervise Small Farmer Development program of uplift the socio-economic status of small farmers. $\mathrm{ADB} / \mathrm{N}$ undertakes banking functions to generate resources and $\mathrm{ADB} / \mathrm{N}$ provide training to the beneficiaries and the bank staff.

ADB/N provides banking services with the approval of Nepal Rastra Bank in accordance with Commercial Banking Act 1974(2031) in rural areas. $\mathrm{ADB} / \mathrm{N}$ organize knowledge and skill- oriented training and workshop for human resource development.

### 2.1.4 Major Programmes of ADB/N

## 1. Reform Programme

Over the period of more than three decades of operation the bank has been upgrading its policies from time to time in order to tune its services as per need of time. Repayment performance declined with increased overdue amount and outstanding interest. Due to increasing non- performing loans lack of resources for credit disbursement posed, quality of loan portfolio deteriorated. $\mathrm{ADB} / \mathrm{N}$ has been facing some repayment rates are the major problems of the bank.

Therefore ADB/N introduced the reform program in 1997 A.D. with the main objectives of taking about improvement the areas of credit delivery system of disbursement system, repayment rate, monthly interest collection and restructuring of existing loan portfolio.

After reform program, improvement in repayment rate, increase in domestic resource mobilization through its existing and new saving package and increase in income through reduction in non-performing loans are other positive results indicating $\mathrm{ADB} / \mathrm{N}$ 's better financial position as compared to the past. Therefore, potential donor agencies are also being impressed and attracted to support $\mathrm{ADB} / \mathrm{N}$ activities.

## 2. Commercial Banking Programme

The first banking office established at Ratna Park in 1984 and totals 62 offices in Urban Areas. Commercial banking's primary objectives is mobilizing urban resources to the rural sector. Its activities that deposit collection and lending operation. Deposit services are made available for current account, saving and term deposits. The bank has mainly focused on commerce, industry, overdraft, contract, hire purchase, service loan, educational loan, house loan, project loan, housing loan auto
loan, agricultural loan. Commercial banking programming contributes the organization becoming self reliance on financial sector. The bank has been successful to attract a large no. of depositors by providing different services in commercial banking sector. In terms of deposit collection, commercial banks of $\mathrm{ADB} / \mathrm{N}$ stand a best position among the largest commercial banks in the country. ADB/N should finance the agro-based industries. It reduces the labor - burden in the agricultural fields, where land ratio is sufficiently high.

## 3. Small Farmer Development Programme

Small Farmer Development Program was started in 1974 A.D. which is one of the most important programs directed towards poverty in Nepal with operation system is challenging. After ASARD organized multi agency field workshops in a number of countries including Nepal, SFDP started as an institutional. SFDP includes the economic and social activities which provide micro credit to improve the production technologies with intensive cultivation practices. Main objectives of the SFDP are:-

To raise the economic status of the small farmers with income level \& to raise their social status by empowering and involving them in social and community activities. The socio- economic status of land-less labor including women by co-operational development of their own grass-root level organizations is to be raised. Adoption of the group approach for the program implementation $\&$ to provide financial and non-financial services by categorizing per capita family income (i.e. equal or less than RS. 2500)and land holding size as small farm families. It encourages people to develop saving habit among small farmers, group saving and its mobilizing is also being undertaken as an integral components. Also, to provide credit for different purposes related to marketing, generate employment and production activities.

To achieve these above objectives as systematic procedures is followed based on the group approach involving various development agencies, local agencies and small farmers. As complementary input to credit and saving services, the target groups of the program are also trained in different areas such as group management and it's functioning, saving mobilization, income generating activities are also being undertaken for the welfare of rural people. From SFDP, loans are provided without collateral and the only guarantee being the group of member itself, which is jointly responsible for loan repayment.

## 4. Small Farmers Co-operative Limited

SFCL is a multi service cooperative designed to deliver financial and non- financial services to its members in rural areas. SFCL are civil society organizations that pool their joint resources to meet basic needs and defend their members' interests. They are member owned and managed and have a membership policy towards poor farmers. SFCL's effort made small farmers capable of planning, implementing monitoring and evaluating the programs from their own levels for the benefit of small farmers' families on one hand and minimizing the operational cost for annovative approach developed within SFDP and is based on participatory approach. In 1987 A.D., the ADB/N introduced an action research Institutional Development Programme (IDP) with support of the German Technical Cooperation (GTZ). The objective of IDP was to transfer the ADB/N run SPOs into fully self administered and managed cooperative of small farmers i.e. SFCLs.

## 5. Sana Kisan Bank Limited

Sana Kisan Bank Limited emerged as a specialized wholesale lending financial institution to meet the above stated requirements of SFCLs. SKBB was established and registered with the company registrar's office in July 2001, for the services as supervision, monitoring
and training to Small Farmer co-operatives and similar institutions. ADBL is the one promoter of SKKB limited.

Main objectives of Sana Kisan Bikas Limited are to encourage SFCLs to become majority shareholders within 5-10 years and support social mobilization process to speed up social transformation. SFCL helps institutional \& human resource development of micro finance institutions and extend refinancing to SFCL's and similar other grass root microfinance institutions involved in poverty reduction.

### 2.1.5 Definition of Loan

Websters Dictionary define loan as "Something lend esp. sum money lent often for a specified period and repayable with interest."(Oxford Dictionary 1992:279). Financial institution lend money out of deposits, they have received. They must increase money by advancing loans since they have to pay interest on deposits. Loans and advances are the important item on the assets side of the balance sheet.
"Bank earns interest on credits and advances, which is one of the major source of income for the banks. Banks prepare credit portfolio otherwise it will not only add bad debts but also affect profitability adversely." (Varshney N.P and Swarrop G, 1994;6)

### 2.1.6 Credit Policy of a Bank

In providing loans to its customer a bank has to follow a sound credit policy and conduct the business of lending on the basis of certain sound principles without effective and proper lending of credit policy, banks can not achieve its predetermined goals and objectives. The established credit policy normally speaks about the following components:-

Safety of Funds :- A banker deals with others money and its own common sense. It has to use that common sense to safeguard the money
of others. Its first duty is to see that money, Which it lends, comes back to him. The recovery of a bank's money will not only be safe at the time of lending but will remain so throughout.

Liquidity :- A banker has to ensure that it cones by on demand or in accordance with agreed terms of repayment. Liquidity means short term solvency of the borrower. A banker is essentially the lender of short terms fund because he knows that bulks on his deposit are repayable on demand or short notice. So a bank should maintain his liquidity position.

Security :- The security offered against the loan may be various. It may vary from gold and silver to stock exchange securities, goods, documents of title to goods, insurance policy and immovable properly. The security accepted by a banker to cover a bank advance must be adequate readily marketable and easy to handle and free form traditionally bankers have been security oriented. It must be adequate readily marketable.

Purpose of Loan :- Loan may be productive purposes, trading purposes, agriculture purpose, transport purpose, and self employment purpose. If a loan is required for a non-productive or speculative purpose, the banker should be consideration in entertaining such as proposition.

Profitability :- Without advance of profitable, the banks can't run properly. In other words, while making a sound credit policy a bank should maintain its profitability. Sometimes the considered may not appear profitable in itself but may bring substantial deposits or to exchange business, which may be remunerative to a banking lending rates are affected by bank's internal policy such as:- creating the borrower bank rate of central bank, inter bank competition and directives of NRB.

Loan Portfolio/ Loan Mix :- A successful banker is one who can manage risks. One of the tools of managements of risks is to spread his advances. Portfolio not only among many borrowers but also to diversify
lending to types of industries and against different types of securities. A banker who puts all his eggs in one basket is not a prudent banker.

National Interest:- A banker should follow the national interest of that country while making a disbursement policy. Purpose of advance, priority given, by government and national interest is assumed greater importance than security, especially in priority sector lending (Rose; 2002:525).

### 2.1.7 Interest Rate of ADB/N

The bank has followed discriminatory interest rate policy depending upon the borrowers and purpose of loans. Loans for cooperative are cheaper than individual borrowers and auto loan, construction loan educational and agricultural loan are cheaper than others. The prevailing interest rate charged by $\mathrm{ADB} / \mathrm{N}$ has shown in table:

Table 2.1

## Current Interest Rate Charged by ADB/N

| S.No | Purpose | Interest Rate |
| :--- | :--- | :--- |
| 1 | Housing loan <br> a. Upto 5 years <br> b. 5-10 Years <br> c. Above 10 Years | $9.50 \%$ <br>  <br> 2 |
| Cold storage | $10.50 \%$ |  |
| $11.50 \%$ |  |  |

(Source: ADB/N 2010, MIS Division, Head office, ADB/N)

### 2.1.8 Components of a Good Loan Application:-

Loan application is the primary source of information give in a systematic manner, required for assessment of the proposal. Banks have different sets of application forms for different schemes of loans contained variety of information. Name of the borrower, Legal status of the borrower, address, experience, qualification of businessman, past dealing, dealings in other bank specific purpose are contained in the loan application form. It also attempt amount sought, turnover and existing capacity, profitability, viability, security and business growth.

### 2.1.9 Lending Documentation

Lending policy should prescribe uniform credit file and documentation procedure. Although such documentation procedures are determined by individual credit officer with management committee under the NRB directives. An effective documentation will support the uniformity leading lower loan loss. A lending documentation is checked by all credit departs of the bank. The list of needed documentation are loan application, financial statements, co-operate borrowing, articles of association in joint stock company, detail security documentation, partnership agreement and feasibility reports in Nepal.

### 2.1.10 Lending Condition and Loan Approval Process

Srivastava (1986) mentioned that generally, the bank sanctions loan subject to all or any of the conditions. Such as: interest rate, repayment frequency, disbursement frequency, expiry of the facilities, commitment fee and documentation. It is also drawing power, submission of statement, bank's right to inspection and to call back of facilities and right of borrower to take loan from other financial condition. Before disbursing any loan, a banker should ensure himself that borrowing concern should be able to earn sufficient income to pay to loan installments. The appraisal of loan includes projection of future trends of
output, sales and estimates of cost, returns and flow of funds. "It is extremely difficult to have a clear cut formula for the appraisal of loans, since many factor have to be considered, such as type or borrowing institution and its activities, the size of the company, its product or services, the market potential, its management, financial position, the amount of its repayment."

When an individual of the business organization demand the loan, a bank should adopt the process or working method of loan approval process. For the all kinds of loan, the bank should different process. The process to accept loan for common people and to approve the loan to same industry, businessman or merchants are different. The bank makes special types of study, research and analysis before providing loan, because the bank wants to be more secure to its investment with grows the quantity of loan.

From the view point of both principal and practice, the loan approval processes of banks are as follows (Dahal and Dahal; 2002:139):

## Evaluation of Loan Proposal:

After submission of a proposal by individual or organization, bank makes a deeply study of the proposal by various angels. If the bank feels the loan proposal it is satisfactory after study, then it will approve the loan. All of the right to accept or reject the bank proposal remains with the bank.

## Types of Loan:

After accepting the loan proposal the bank discusses on the subjects that what types of loan the business firm or the person wants, as there are many types of loan like social, contract, business, hire purchase loan and employees loan. The loan can be classified as secured or unsecured loan.

## Determination of Loan Amount:

After the determination of the loan category a bank determines the limitation of a loan. In fact the proponent writes in his proposal, what amount of loan the customer is needed. The bank may or may not give the amount which has demanded. The bank on it will determines the loan amount.

## Preparation of Necessary Documents:

The bank should prepare some documents while providing loan to its customers. Only after preparing the legal documents an evidence of borrowing loan is given to the creditor. It becomes the evidence of the loan becomes the evidence of the loan taken by the borrower.

## Loan Acceptance:

After completing the above process the bank decides to provide loan. According to decision the banks open account in the name of the borrower and deposits the proposed loan amount in it. According to the provision of the loan document, the borrower can withdraw the money from the bank.

### 2.1.11 Lending Policies and Practice

According to lending policies and practices of $\mathrm{ADB} / \mathrm{N}$ (1991), under different consideration is given below:

## A. Price water House Coopers Report

Through Asian Development bank, Price Water House Coopers completed "Financial and Operational review" of $\mathrm{ADB} / \mathrm{N}$. $\mathrm{ADB} / \mathrm{N}$ has kept precondition to $\mathrm{ADB} / \mathrm{N}$ to give capital and technical support for financial restructuring according to the approval report of Government.

The major pre-conditions of $\mathrm{ADB} / \mathrm{N}$ are to improve in organizational structure and do financial restructuring .Management of
human resource either short term human resource or long term human resources. Non- performing the loan assets management comes under the pre-condition of $\mathrm{ADB} / \mathrm{N}$. To give the priority on efficiency of appraisal for loan quality. Enlargement of quality of MIS Division services of loan management committee to risk management. Facilities of internal audit to control internal regulation and transparent account are compulsory for the price water house coopers report. It helps in preparing the three years corporate planning.

## B. NRB's Supervision and Direction

NRB is the bank of banks. NRB supervises and gives direction to other banks. NRB's direction to development banks are loan classification and loan loss provision, Financial source collection limit, Provision on sector wise loan limit, Provision on investment, Provision on nonperforming assets and Provision of effective ministering, follow up \& supervision for loan utilization.

## C. Eligible Borrowers of ADB/N

According to Lending Policy of $\mathrm{ADB} / \mathrm{N}$, if the applicant must be willing to willing to meet the equity contribution for the project as required by $\mathrm{ADB} / \mathrm{N}$ 's rules and regulation.

## D. Loan Limits

Depending upon the purpose and type of the loan, The ADB/N provides loan ranging from $80 \%$ to $100 \%$ of total project cost. The remaining part of the cost of the project will be the equity contribution of the borrower. Limits have also been set regarding the amount of loan that can be sanctioned at a time and amount that can be remain outstanding (ADB/N Lending Policy, 1991,10)

## E. Pocket Area Group Loan Total Production Loan

"The lending policy of $\mathrm{ADB} / \mathrm{N}$ is broadly based two considerations. If bank officers classify loan according to geographical structure such as climate, condition of natural resources, physical infrastructure facility, marketability etc to provide agricultural credit his work center's different places, than it is called pocket area group loan. $\mathrm{ADB} / \mathrm{N}$ generally follows this approach to provide agricultural loan in easy and smooth manner to people for balanced economic development of the country. Pocket area loan group includes 5 to 20 members. Under total production loan, $\mathrm{ADB} / \mathrm{N}$ approves total requirement of credit to borrower in different purposes such as rice millet, mustered etc. within one year at a time for maximum three purposes. Generally, the problem of submitting documents to get loan on different purpose in different time within one year is reduced and farmers will get advantage form it". (ADB/N, 1989, pp. 100:102).

## F. Green Card

Accroding to Rijal (2001), "If the borrowers of the ADB/N have been talking loan from $\mathrm{ADB} / \mathrm{N}$ since last three years and taking advantage from the project and also paying loan's principle \& interest timely to the bank, 'Green Card' is given to those farmers. The borrowers have to pay less interest rate in current prime lending rate". (Rijal, 2001:15).

## G. Interest Rates of ADB/N

$\mathrm{ADB} / \mathrm{N}$ has followed discriminatory interest rate policy depending upon the borrowers and the purpose of loans. The effective rate of interest of $\mathrm{ADB} / \mathrm{N}$ is different in according to the sectors of lending. The chart of current interest rate is enclosed in Appendix:
a. Prime interest rate will be charged if interest is paid monthly and 20Percent interest discount is removed.
b. Additional 1 Percent and 3 Percent medium term interest will be charged on deprived class credit and other credit respectively if interest is not paid monthly.
c. 2 Percent and 4 Percent high interest rate will be charged in medium term interest on deprived class credit and other credit respectively.
(Note: $A D B / N, 2004,19)$

## H. Security and Margin Policy

$\mathrm{ADB} / \mathrm{N}$ has following provision on security and margin policy. $\mathrm{ADB} / \mathrm{N}$ requires either immovable or movable property such as land building, car, bus etc.

## I. Practice of Lending

Individuals, cooperatives or corporate body willing to borrow the loan from $\mathrm{ADB} / \mathrm{N}$ must fill up the prescribed loan application firm supplied by $\mathrm{ADB} / \mathrm{N}$. The applicant should submit supportive documents with the application firm such as certificate of land ownership, receipt of land revenue payment or certificate of government registration for corporate and cooperatives organization. In some cases big project feasibility report is essential. After receiving the application from borrowers, $\mathrm{ADB} / \mathrm{N}$ officials inspect the document as well as project site and security. After inspecting security, security is valued and borrower's acceptance on security is taken by bank. After examining all documents and field visit, loan committee approves loan to those borrowers whose project seems technically feasible, economically viable, politically suitable, and socially acceptable. ADB/N gives approved notice borrower at last.

### 2.1.12 Recovery Policy and Practices of ADB/N

Each and every financial institutions including $\mathrm{ADB} / \mathrm{N}$ has its own recovery policies to collect principal and interest from farmers. ADB/N grants short term and long-term loan with fixed lending period. These term loan requires to recover so, $\mathrm{ADB} / \mathrm{N}$ has loan recovery manual 1992 which was issued1992 A.D. under the ADB/N Loan recovery regulation 1975 A.D. and ADB/N act A.D.1967. The loan recovery manual is considered as a main base/guideline to collect the loan invested early to farmers effectively with in its loan installment period. The bank has the authority to sell or auction of the collateral to recover the loan amount and interest. If the collateral valuation of the borrower decreases, bank has to authority to receive other properly from borrower to sell and auction the property from borrower to sell and auction the property to collect the principal and interest amount. Bank collects their loan amount by selling collateral. If the amount is received higher than loan amount and other charge, bank should be return those amount to the borrowers which is more than from their recovery amount. Collateral is not possible for selling or auction, the bank has authority to take the title of collateral from the related government office. Bank has authority to transfer the title of collateral to the third party. The third party has same legal validity of their property title which is transferred by the bank is same as by the borrowers. According to recovery policy, $\mathrm{ADB} / \mathrm{N}$ charges one recent service charge, if the loan amount and outstanding is more than Rs. 50000.00. $\mathrm{ADB} / \mathrm{N}$ has three types of memorandum letters from the loan collection which are first, second memo. Letter and pre-notice to publish borrowers name in magazines.

The first memorandum letter will be sent to borrower before loan installment period to borrower before loan installment period where as second memo letter will be sent to borrower after one month; if the borrower did not pay principal and interest with the loan installment
period after sending first memorandum letter. If the borrower did not pay loan after sending first memo letter. $\mathrm{ADB} / \mathrm{N}$ send to borrower after 60 days. This memo letter will be sent through post office and officials of $\mathrm{ADB} / \mathrm{N}$ who goes in field visits for loan collection. After sending memo letter of 35 days, notice should be published in newspaper. If the project is affected by different diseases, the project is going on loss by the causes of natural climates and the borrower's family requests after death of main proprietor, the correction of payment period will be done by ADB/N. If the loan is impossible to recover, $\mathrm{ADB} / \mathrm{N}$ announces the doubtful loan. The Board of Director of $\mathrm{ADB} / \mathrm{N}$ has a right to grant remission of principal and interest of loan provided by the $\mathrm{ADB} / \mathrm{N}$. The general manager has right to grand remission of capitalized interest of capitalized amount. The loan committee has authority for providing the remission of loan.

### 2.1.13 Targeted Loan Disbursement and Repayment

The target or loan disbursement and repayment is fixed with the achievement of previous year. If achievement is higher than its target of previous year. This year target would be increased or vice versa. The indicator of loan effectiveness is achievement percentage with its target. It well be made effective loan, when the actual disbursement or repayment of this year is equal or greater than its target. But the variation of targeted and achievement should not be very difference. The difference between target and achievement arises when the target maker estimates over or under valuation. So the target of next year should be fixed from the achievement of this year.

### 2.1.14 Loan Disbursement

To balance of the liquidity position of the bank it should be divide its loan investment into short, medium and long term duration. The effective repayment is depends upon effective disbursement. So the
productive sector's disbursement and use the loan in proper purpose is effective loan disbursement.

### 2.1.15 Loan Repayment

Loan repayment in time is essential for bank to maintain its cash liquidity. The source of further disbursement is repayment of previous loan, so the repayment of loan is a main indicator of loan effectiveness. Bank's ability to provide continued credit service depends upon the record of loan repayment. Due to the limited nature of institution resource, satisfactory repayment of debt is important for the smooth functioning of the entire credit machinery. Their repayment of due loan in time is an important aspect of the bank, which determines the further expansions of the bank's activities. If the cultivator repays the loan in time the ban gets chance to mobilize the collected amount in other profitable areas. Efficiency of the bank's measured by the extent to which it collects the amount of due loan in time, so it is important for the bank's progress.

### 2.1.16 Outstanding Loan

The increasing the outstanding loan becomes burden of the bank because of provision for doubtful debt will also high due to outstanding loan. For this, the expenses also rise and profit would be decrease.

### 2.2 Review of Journals and Articles

Pant \& Jain (1969) Concluded that one of the main problems of Nepalese agriculture is its slow productivity. Some of the main factors responsible for the low productivity are the inadequate supply of various essential inputs, viz. fertilizers, improved varieties of seeds, lack of adequate irrigation facilities, insecticides and lack of knowledge on the part of the the cultivation of improved techniques of cultivation. Other factor conditioning the slow growth of agricultural output are the poor farming techniques, insufficient incentive to augment production under
the traditional system of land tenure, lack of adequate agricultural credit and marketing facilities.

Vaidya (1999) opined in his book "Banking Management" that how well a bank performs its lending functions has a great deal to do with the economic health of the country because bank loans support the growth of new business and jobs within support the growth of new business and jobs within the bank's trade territory and promote its economic activity.

Karki (2059) has mentioned in the article, "Challenges of a nonperforming loan management in Nepal", the course of increasing trend of non-performing loan. She identifies the major courses such as poor loan analysis guarantee oriented loan system, desire platoon of value assets, misuse of loan, lack of regular supervision of loan.

Bhattarai (2059) stressed in his article trying to indicate the problem of bank bad debt and NPA. According to him, if a bank can not receiver, its loan-lending bank's cash flow will be badly affected. Similarly it can affect the lease relationship between depositors.

Kunwar (2002) mentioned that Agricultural Development Bank was established 20-30 years ago to extend financial services mainly credit of subsidized interest rates, to customers not considered creditworthy by commercial banks. They are largely state-owened and funded by government and international donor agencies. In general, $\mathrm{ADB} / \mathrm{N}$ has focused on providing credit rather than an accepting deposits, a practice that has undermined their self reliance as well as their viability. Given the high cost of administering large number of small loans, the banks bane tented to provide bigger loans to better-off farmers. Because farming is a seasonal occupation, agricultural lending intuitions experience the boom and bust of the cash flows, with loan requirements dramatically increasing during the sowing season. In addition, an emphasis on providing loans strictly for agricultural activities, mainly crop production, as opposed to providing credit for other kinds of rural income generating
activities has limited the potential of $\mathrm{ADB} / \mathrm{N}$ to serve a wider clientele. Such preferential credit programmes have tended to curtail rather than expand their outreach to small farmers and other customers in rural areas.

Nepal (2009) published an article "Home Loan Making Real Estate Business Attractive" where he explained about the housing loan, which is more popular than other loan. Housing loan is the one loan which is provided by commercial bank. The writer focuses that real-estate business is increasing rapidly in Kathmandu valley. Securities, remittance from foreign country are reason of real-estate business. The history of housing loan in Nepal is very short within a three years period, many banks are introducing attractive scheme of financing for housing in Kathmandu. By understanding this general notion of the people, banks are financing for housing so that people can purchase building in the early days. While extending this type of loan, banks will simply see the income of customers. It takes hardly ten to twelve days for loan processing. He writes that this scheme is becoming more profitable from the angle of banks and at the same time less risky. The default of non-repayment is very loss.

Dahal and Dahal (1999) wrote "A Hand Book to Banking", write about the credit policy of the banks. They opine that the factors like directive, deposit mix, competition, and quality of lending officials affect a bank's credit policy. Considering these factors, the credit policy should be carefully established, communicated properly to the lending officers. A sound credit policy should be based in the objectives like having good assets, contributing to the economic development, giving guidance to the lending officers, and establishing a standard for control. The proper implementation of such policy is ensured by periodic follow-up. This helps take corrective actions if any drift between actual and standard is seen. The corrective action may vary as per the nature of deviation from proper education to lending officer to amendments of policy.

Klisse (1978) given in his view in his book "Money and Banking" that in an economy depends more and more on credit, banks find themselves lending for a variety of purposes, sometimes directly, sometimes through other agencies. This wider use of loan is not due merely to a change in attitude of the banks. It reflects also more fundamental changes such as shifts in the public's consumption pattern and in financial investment policies. He further enlists the four C's of credit as character, capacity, capital and collateral. He suggests that the most obvious thing for the creditor to investigate is the borrower's past attitude towards his obligations. He calls this attribute "Character". If the prospective borrower is considered a good risk from the standpoint of character, he still cannot be safely extended credit unless he appears able to make repayment. This clarifies the importance of the borrower's capacity. For larger loans or other extensions of credit, the applicant needs to show that he already has resources of his own. Sometimes, but not always, the debtor fails to live upto his agreement, the creditor sells the collateral and uses the proceeds to cancel the credit.

### 2.3 Review of Thesis

Some of the relevant theses are helpful for this research. So following information and knowledge will be enough for the research work:-

Sharma (2001) on his study "Analysis of Loan Disbursement Pattern of $A D B / N$ of Nepal". He emphasized on the significant role of agricultural in the economic development of Nepal. Agriculture credit is one of the most important factors for increasing agricultural production. He findings that the amount of the banks loan disbursement is largly depending upon the amount of the loan repayment in each year. So, the bank should encourage to farmers by various policy such as loan, interest etc. for the loan repayment of loan. He also concluded the ADB/N should help to fulfill the maximum credit gap between the small and big farmers.

Dahal (2002) quoted in his study " Analysis of priority sector credit and its recovery of Rastriya Banijya Bank" the development of an economy in fact depends upon the development of the financial institutions to a substantial extend. The mission of such financial institution is significant not only in mobilizing saving but also in making investment for the development of different sector of an economy which consequently helps in reducing purvey, raising employment opportunities and minimizing disparity in the wealth and opportunities between richer and poor sections of the society.

Khanal (2002) mentioned "An Analysis of Loan Disbursement of Agricultural Development Bank/Nepal". He has focused to ascertain the potential areas of agricultural credit, develop model that best describes the relationship between disbursement and input variables and find out the annual growth. He concluded that there was a high degree of positive correlation between loan disbursement of $\mathrm{ADB} / \mathrm{N}$ and the loan disbursement of $\mathrm{ADB} / \mathrm{N}$ had grown significantly in comparison with other identical financial institutions which shows the increasing demand for agricultural credit was supplied by $\mathrm{ADB} / \mathrm{N}$. Co-operatives had been inactive and more loans were disbursed on individual basis.

Banstola (2003) conducted "Loan Disbursement and Repayment Pattern of Agricultural Development Bank" analysis of loan disbursement of Agriculture Development Bank in Nepal. The research shows that loan disbursement of $\mathrm{ADB} / \mathrm{N}$ has grown frequently which shows the increasing demand for agricultural credit. The study findings that growth rate of repayment are greater than growth rate of loan disbursement. He concluded that much more loans were distributed as individual basis not group-wise. The bank should only focus mainly on short-term disbursement for effectively repayment. Bank should provide different facilities and supervise for the effective utilization of loan.

Pradhan (2004) studied on "Loan Disbursement and Collection Pattern of $A D B / N^{\prime \prime}$, He said in his thesis that, banks staffs were not careful in loan disbursement and not serious in collecting the loan which have matured. Even, from this bank, depositors have not received attractive interest rates while the borrowers and investors have suffered from large cost of funds. While it is reported that small depositors and entrepreneurs are discouraged from opening their accounts and carrying out transactions in the joint venture banks. Banks gives less consideration to the concept of social banking. It is plagued by problems like operational inefficiencies, managerial deficiencies and least improvement in their dealings and transactions with their clients.

The annual percentage share in loan disbursement of Central Development Region has increasing tendency while that of Eastern Region has decreasing tendency. The unequal disbursement of loan for different types of purposes might be seen among the development region. The high portion of collection comes from Central Development Region but the annual percentages share in collection from this region has a decreasing tendency.

Paudel (2060) highlighted "Loan Effectiveness of Agricultural Development Bank Nepal." He focused on non-agricultural loan like marketing, agro tools, and industries are seen effective loan rather than agricultural purposes. Effective repayment strategies, effective invest in target people and place and the motivated staff can reduce the overdue loan and increase the loan repayment rate in agricultural purposes. He findings that monthly interest collection system is seen effective. So interest collection is increased in every year. The growth rate of loan collection is less than loan disbursement. The reasons are: lack of political sustainability, transfer of branches from remote areas, competitive environment, lack of reinvest. Financial program is an
essential factor for the country. $\mathrm{ADB} / \mathrm{N}$ can play a vital role for the development of the rational economy

Pandey (2004) studied on his study "An Evaluation of loan disbursement and collection of Agriculture Development Bank". The main objectives on his study has been to try and expose the target of loan disbursement and collection, achievement of purpose-wise, term-wise and region-wise loan disbursement, outstanding and collection. He concluded that the achievement of loan disbursement and collection the growth rate of disbursement is fluctuated over the study period and achievement of collections is found increasing throughout the study. He found that the actual loan outstanding is increasing and loan increase in loan disbursement and outstanding loan of ceral crop, bio-gas, tea-coffee than agri-business in term of purpose-wise. In the term-wise short term and medium term loan disbursement, collection and outstanding are increasing trend over the period and long term loan disbursement \& outstanding is fluctuated where as loan collection is in increasing trend throughout the period.

Sharma (2007) stressed on "Micro Finance Practices and Their Sustainability in Nepal". He wrote in his PHD thesis, credit related programmes have played a significant role in the socio-economic development of the nation in general and the rural sector development in particular. Since 1950's micro-finance accepted in |Nepal by following Grameen Bank Model. Despite of this model the working efficient of Nepalese micro-finance seemed weak. Micro-finance programme appear to more efficient in improving socio-economic condition with women empowerment. Objectives of this research are to assess rural poverty alleviation efforts, policies and programmes intiated in Nepal through micro-finance, to examine the role of micro-finance in employment creation and income generation and the role of micro-finance in women empowerment. He findings in his PHD thesis micro-finance leads to
social and economic changes in the borrowers after the participation of the programmes. |Increasing income among borrower results increase in food sufficiency, consumption, health awareness. Women empowerment showed positive changes specially involvement in decision-making, changes in occupational structure, participation in the social activities, self- confidence, awareness in social issues and control of income. Microfinance has potential to have a powerful impact on poverty reduction and women's empowerment. However, micro finance is not a panacea it self. He suggested that the government should formulate a national policy of micro-finance setting the vision objectives, strategies and policies implementation. Micro-finance may be promoted as wholesale agencies to deliver credit in the rural areas and outreach of wholesale lending.

Shrestha (2007) focused on "Deposit Collection and Loan Disbursement of Agricultural Development Bank of Nepal". Total deposit collection and total loan disbursement trend has increased in each year. So, loan disbursement shows the increasing demand for agricultural credit. Loan collection of short term is higher than medium and long-term loan. She concluded that the bank is moving to positive direction due to the "Reform Programme" implemented. Although the bank has not enough fund and internal resources for its extensive programmes, it has developed its ability to refuse the assistance provided by foreign donor agencies, if the banks consider the assistance out of its priority. Her major analysis and findings that the market of commercial bank has become competitive every day because of the participation of private sector deposit the tough competition; Agricultural Development Bank, of Nepal, Head Office and Kathmandu has been successfully collecting the deposits from customers.

## Research Gap

The main objectives of this research is to examine the loan disbursement and repayment pattern of $\mathrm{ADB} / \mathrm{N}$ and to evaluate the achievement of disbursed
loan and to evaluate the achievement of disbursed loan and to find out the reasons for outstanding or delay in repayment of loan. The purpose of this study is to develop some expertise in one's area, to see what new contribution can be made and to receive some knowledge and suggestions in relation to "Loan disbursement and Repayment Pattern of ADB/N. The previous studies provide the foundation to the present study or there was to continuity in research. This continuity in research is ensured by linking the present study with the past research studies. But all the above research focused on only growth rate of loan disbursement and repayment. In this study has only different from the past studies in the sense that, growth rate of targeted loan disbursement, repayment and actual loan disbursement, repayment. This study is mainly on achievement of loan disbursement and repayment, which is not analysis by previous researcher.

After commercialization of the $\mathrm{ADB} / \mathrm{N}$, no research has been conducted till the date. So, the impact of financing in the agriculture sector and whether the bank has funded in non agriculture sector or not, has been discussed in the report. The achievement of the loan disbursement and repayment has been focused in post commercialization of $\mathrm{ADB} / \mathrm{N}$. In this regard, here the researcher is going to analyze the different techniques of loan disbursement and repayment, which is considered only on ADB/N. Recent five years data (F/Y 2061/62 to 2065/66) has been used to get more accurate conclusion. Hence, this is significantly different from previous study. Effort on this particular subject will be found properly genuine and it will be recognized valuable suggestions provided in this particular study.

## CHAPTER-III

## RESEARCH METHODOLOGY

### 3.1 Introduction

Research methodology can be understood as a science of studying how research is done scientifically. It is a way to systematically solve the research problem. Research Methodology refers to the various sequential steps to be adopted by a research in studying a problem with certain object in view (Kothari, 1978). Research Methodology is a really a method of critical thinking by defining and redefining problems, formulating hypothesis or suggested solution, collecting organizing and evaluating data making deduction and making conclusion to determine whether they fit the formulation hypothesis. Research Methodology helps to find out accuracy validity and stability of research. Research methodology upon the various aspects of the research project. The size of project, importance of the project, time of project are the variables that determines the research methodology of that particular project. Therefore, research methods help to analyze exam one and interpolation of data and information in research work.

### 3.2 Research Design

A Research design is a overall framework or plan for the activities to be undertaker during the course of a research study, Research design serves as framework for the study going the collection of data, analysis of data instruments to be utilized, evaluating the data. This study is going to examine the loan disbursement and repayment pattern of ADB/N. This available information from secondary sources are used to examine, explain and evaluate this disbursement and repayment situation of
$\mathrm{ADB} / \mathrm{N}$. This chapter looks into research design period covered, the nature and source of data research variables and tools used in this research. In this research, Descriptive and Analytical research design is based on single case study.

Research Design is the plan structure of investigation conceived so as to obtain answer to research question and to control variance. (Kerlinger, 1989)

### 3.3 Period Covered

This present study covers only the data for five years from F/Y 2061/062 to 2064/065. The analysis is mainly based on data and information of these last five year.

### 3.4 Nature and Sources of Data

The necessary data and information used in this study are collected from secondary sources or techniques. Mainly, this study is dominated by secondary data. Primary data and information also are used in this research work, which are collected by using unstructured interview with staff of $\mathrm{ADB} / \mathrm{N}$. Secondary data have been collected from the following sources:-

- Published Journal about the $\mathrm{ADB} / \mathrm{N}$.
- Annual Report of $\mathrm{ADB} / \mathrm{N}$.
- Quarterly, Yearly, Monthly Bulletin of ADB/N.
- Published Dissertation, Research Reports related to ADB/N.
- Auditor General Report.
- Publication of National Planning Commission
- NRB Reports and Directives.

Other sources of secondary data relating to this study are collected from the publication of NRB. Some valuable information has been collected from personal interaction with managerial staff of ADB/N. Data
are collected to draw conclusion for this research. Different techniques or sources are used to find out and describe the characteristic of the variable of interest in a situation.

### 3.5 Data Collection Procedure

Collection data is the connecting link to the world of reality. The data collection is the taking ordered information from reality and transferring it into some recording system. According to the needs and objectives of the study, collected data are tabulated into various forms and formats. These data are based on the information provided by the officers or concerned department of Agricultural development Bank in Nepal. The annual report of bank has been obtained from field visiting of the head office of $\mathrm{ADB} / \mathrm{N}$. NRB publication such as quarterly economic bulletins, bank and financial statistic economic bulletins, banking and financial statistic economic report. The data on some of aspects of this bank have been obtained from the official website of $A D B / N$. (i.e. www.adbngov.np)

### 3.6 Research Variable

Disbursement repayment outstanding loan and time period of $\mathrm{ADB} / \mathrm{N}$ are the main research variables of the present study.

### 3.7 Population and Sample Size

Loan disbursement and repayment data of $\mathrm{ADB} / \mathrm{N}$ are the population of the study. Out of these five years (i.e. Fiscal year 2061/062 to $2065 / 066$ ) are the sample size and these five years taken as the sample for the purpose study.

### 3.8 Statistical Tools used in Research

Collection data and information from different sources are analyzed and presented in proper table, chart, format and graphs. To analyze the collected data some financial, mathematical and statistical tools have
been used as per requirements statistical analysis is used to find out current trend of loan investment and collection of $\mathrm{ADB} / \mathrm{N}$.

Coefficient of Correlation is used in this study in the form of statistical tools. Correlation analysis is defined as the statistical technique, which measures the degree and direction of relationship between the variable. In other words, correlation refers to the relationship or interdependence between two or more than two variables. On the basis of correlation we can determine the cause and effect relationship between 2 or more that two set of variable once at a time.

The Karl Pearson coefficient of correlation method used in this study, which is given by the following formula:
$r=\frac{\sum x y}{\sqrt{\sum x^{2}} \sqrt{\sum y^{2}}}$
Where
$r=$ coefficient of correlations
$\mathrm{x}=\mathrm{x}-\mathrm{X}$
$\mathrm{y}=\mathrm{Y}-\mathrm{Y}$
$\mathrm{x}=$ Independent variable
$\mathrm{y}=$ dependent variable

Following diagram is considered to describe relationship between variables. If $r$ is :

| -1 | -0.7 | -0.3 | 0 | +0.3 | +0.7 | +1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Perfect | Strong | Weak | Perfect | Weak | Strong | Perfect |
| Negative | Negative | Negative | Independence | Positive | Positive | Positive |

Regression analysis shows how the variables are related. Regression determines the nature and strength of relationship between two variables regression equation of loan disbursement and repayment
Let the regression equation is, $Y=a+b x$

Where,
a and b are constant.
X is the independent variable (Repayment and Outstanding Loan)
Y is the dependent variable (Disbursed Loan)

## CHAPTER -IV

## PRESENTATION AND ANALYSIS OF DATA

### 4.1 Introduction

The main purpose of analyzing the data is to change it from an unprocessed to understandable presentation. Analysis is not complete without interpretation and interpretation is not complete without analysis. Data is analyzed by using statistical tools such as correlation coefficient and regression analysis. This analysis focuses to present disbursement, repayment and outstanding situation of $\mathrm{ADB} / \mathrm{N}$. On the basis of several data, the research also tries to find out some possible causes for delayed payment of loan. It focuses to present an overall collection for repayment situation of the loan granted by $\mathrm{ADB} / \mathrm{N}$ to different purposes of Agricultural Development in Nepal.

All the available secondary information are examined, analyzed and presented. Five years data has been presented for the purpose of analysis. To fulfill the objectives, this chapter deals with the primary and secondary information on the aspect of loan disbursement and repayment of $\mathrm{ADB} / \mathrm{N}$. Annual reports from F/Y 2061/62 to F/Y 2065/66 are the main sources of secondary data and personal interaction from bank staff are the major sources for planning and budget from F/Y 2061/62 to F/Y 2065/66.

For the purpose of analysis, data has been presented in the form of charts, graphs and tables. The objectives of this study measure the target and actual loan disbursement and repayment. So, presentation analysis and interpretation of data are conducted to fulfill the objectives of the study. Summarizing the data in a tabular form and showing them in
diagram sets a base for finding out conclusion and making important recommendations.

### 4.2 Loan Disbursement, Repayment and Outstanding

The bank disburses loan to different channels for the various purposes such as industries, agriculture, minerals, education etc. which in term helps for farm improvement and Industrial, Agricultural, Minerals, Educational development. The collection of installment due in time is an important aspect of the bank, which determines the further expansion of bank's activities. If the loanee repay the loan in time the bank gets chance to mobilize. The collected amount of due loan in time measures the efficiency of the bank. Satisfactory repayment of loan is important for the smooth functioning of the entire credit machinery. Loan that cannot be covered is outstanding loan. The amount of outstanding loan is represented by the cumulative value from beginning to now. The increase in bad outstanding loan may cause credit of the bank to remain idle in terms of loan dues but increase in past category outstanding loan is good for the bank because it earns interest regularly.

### 4.2.1 Targeted Loan Disbursement and Repayment

The targeted loan disbursement and repayment for each and every year is determined by planning and project department of ADB/N. Every bank makes planning to disburse and repay money. So, ADB/N also had targeted loan disbursement and repayment planning in different areas and projects. Detail description is given below:

Table 4.1
Targeted Loan Disbursement and Repayment
(RS'000)

| F/Y | Targeted Loan <br> Disbursement | Growth <br> Rate <br> $\%$ | Targeted Loan <br> Repayment | Growth <br> Rate <br> $\%$ | \% of <br> Repayment to <br> Disbursement |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 062$ | 11272370 | - | 10306829 | - | 91.43 |
| $2062 / 063$ | 13981420 | 24.03 | 11721164 | 13.72 | 83.83 |
| $2063 / 064$ | 29442018 | 110.57 | 24808267 | 111.65 | 84.26 |
| $2064 / 065$ | 31770190 | 7.90 | 27241375 | 9.80 | 85.75 |
| $2065 / 066$ | 34325700 | 8.04 | 32075177 | 17.74 | 93.44 |

Source: Annual Program \& Budget from F/Y 2061/062 to 2065/066


Fig. 4.1: Line Diagram of Targeted Loan Disbursement and Repayment

From the table and chart presented above, it is clear that targeted loan disbursement of $\mathrm{ADB} / \mathrm{N}$ has been increasing in every year. The lowest targeted loan disbursement amount is Rs. 1127.23 crore in $\mathrm{F} / \mathrm{Y}$ 2061/062 while the highest targeted loan amount is Rs. 3432.57 crore in F/Y 2065/066. Similarly, highest growth rate in targeted loan disbursement is $110.57 \%$ in F/Y 2063/064 and lowest growth rate is $7.90 \%$ in F/Y 2064/065. Targeted loan disbursement's growth rate has been fluctuated widely, it was $24.03 \%$ in F/Y 2062/063 and it is increased to $110.57 \%$ in $\mathrm{F} / \mathrm{Y} .2063 / 064$ and again decreased $7.90 \%$ in $\mathrm{F} / \mathrm{Y}$. 2064/065. At last, it is increased upto $8.04 \%$.

Target loan repayment amount also increased in F/Y 2062/063 and F/Y. 2063/064. But in F/Y. 2064/065, it has decreased by $9.80 \%$. The lowest targeted loan repayment amount was Rs 1030.69 crore in $\mathrm{F} / \mathrm{Y}$ 2062/063 and highest targeted loan repayment amount is Rs. 3207.52 crore at F/Y 2065/066. Similarly, the lowest growth rate on loan repayment is $9.80 \%$ in $\mathrm{F} / \mathrm{Y}$ 2064/065 and the highest growth rate is $111.65 \%$ in $\mathrm{F} / \mathrm{Y}$ 2063/064. Targeted loan repayment's growth rate also fluctuated. It was $13.72 \%$ in F/Y. 2062/063 and it reached $111.65 \%$ in F/Y. 2063/064 which shows the dramatically increase. The percentage of targeted loan repayment to disbursement loan decreased from $91.43 \%$ to $83.83 \%$ in F/Y. 2062/063 and which was not satisfactory but has increased to $84.25 \%, 85.75 \%$ and $93.44 \%$ in F/Y 2063/064, 2064/065, 2065/066 respectively. It shows that growth rate is increased very slowly.

Correlation coefficient calculated between targeted loan disbursement and repayment is 0.807 , (See Appendix I) which is strong positively correlated. The coefficient of determination ( $\mathrm{r}^{2}$ ) is 0.6512 , which shows that increase in targeted loan disbursed leads to repayment. A higher coefficient of correlation between targeted loan disbursement and repayment is good sign.

### 4.2.2 Actual Loan Disbursement and Repayment of ADB/N

Actual loan disbursement and repayment of $\mathrm{ADB} / \mathrm{N}$ is occurred each and every year during the actual operation of business. Growth Rate of loan disbursement and repayment and repayment to disbursement percentage of $\mathrm{ADB} / \mathrm{N}$ are as follows:

Table 4.2
Actual Loan Disbursement and Repayment
(Rs.' 000)

| F/Y | Actual Loan <br> Disbursement | Growth <br> Rate <br> $\%$ | Actual Loan <br> Repayment | Growth <br> Rate <br> $\%$ | \% of <br> Repayment to <br> Disbursement |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 062$ | $11,817,057$ | - | $10,330,873$ | - | 87.42 |
| $2062 / 063$ | $30,613,889$ | 159.07 | $28,612,217$ | 179.96 | 93.46 |
| $2063 / 064$ | $29,285,522$ | -4.34 | $28,155,899$ | -1.59 | 96.14 |
| $2064 / 065$ | $36,335,966$ | 24.07 | $34,171,617$ | 21.37 | 94.04 |
| $2065 / 066$ | $41,915,104$ | 15.35 | $40,281,719$ | 17.70 | 95.95 |

Source: Annual Report from F/Y 2061/062 to 2065/066


Fig. 4.2: Line Diagram of Actual Loan Disbursement and Repayment

From the above table and chart, it is clear that $\mathrm{ADB} / \mathrm{N}$, actual loan, disbursement increased in F/Y 2062/063, but it is decreased in F/Y 2063/064 and increased in F/Y 2064/065, again decreased in F/Y 2065/066. The highest actual loan disbursement is Rs 4191.51 crore at 2065/066 and lowest loan is Rs. 1181.71 crore at F/Y 2061/062. Its highest growth rate is $159.07 \%$ in $\mathrm{F} / \mathrm{Y}$ 2062/063 and lowest and negative growth rat is $-4.34 \%$ in F/Y. 2063/064.

The actual loan repayment also increased every year except in F/Y 2063/064. The lowest actual loan repayment is Rs. 1033.09 crore in F/Y 2061/062 and highest actual loan repayment is Rs. 4028.17 crore in $\mathrm{F} / \mathrm{Y}$ 2065/066. The lowest growth rate is -1.59 percent in F/Y 2063/064 and highest growth rate is 179.96 percent in $\mathrm{F} / \mathrm{Y}$ 2062/063.

The percentage of actual loan repayment to disbursement is in increasing trend from F/Y 2061/062 to 2063/064 and it is in decreasing trend from F/Y 2063/064 to 2064/065. Again it is increasing trend in F/Y 2065/066. The highest percentage of actual loan repayment to disbursement is 96.14 percent and the lowest percentage is $87.42 \%$ in $\mathrm{F} / \mathrm{Y}$ 2063/64 and in F/Y 2061/062 respectively.

From figure, we can see the distance of loan disbursement is always a little greater than loan repayment. So, it is a good condition that the figures emphasis a good relation between loan disbursement and loan relation between loan disbursement and loan repayment of $\mathrm{ADB} / \mathrm{N}$ during the study period.

The calculated correlation coefficient between actual loan disbursement and repayment is 0.999 (See Appendix II), which is almost positively correlated. The Coefficient of determination $\left(r^{2}\right)$ is 0.9980 , which indicates that increase in actual loan disbursement leads to repayment. A higher correlation coefficient between actual loan disbursement and repayment is good sign.

### 4.2.3 Actual Loan Repayment and Outstanding of ADB/N

$\mathrm{ADB} / \mathrm{N}$ collects loan amount regularly but its outstanding is increasing day by day because of market out reach as well as outstanding loan. Growth Rate of loan repayment and outstanding loan and repayment to outstanding loan of $\mathrm{ADB} / \mathrm{N}$ are as follows:

Table 4.3

## Actual Loan Outstanding and Repayment

(Rs.'000)

| F/Y | Loan <br> Outstanding | Growth <br> Rate <br> $\%$ | Loan <br> Repayment | Growth <br> Rate <br> $\%$ | \% of <br> Repayment <br> to <br> Outstanding |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 062$ | $21,173,013$ | - | $10,330,873$ | - | 48.79 |
| $2062 / 063$ | $333,101,746$ | 57.33 | $28,612,217$ | 176.96 | 85.89 |
| $2063 / 064$ | $34,440,369$ | 3.39 | $28,155,899$ | -1.59 | 81.75 |
| $2064 / 065$ | $36,604,718$ | 6.28 | $30,171,617$ | 21.37 | 93.35 |
| $2065 / 066$ | $38,301,103$ | 4.63 | $40,218,719$ | 17.70 | 105.01 |

Source: Annual Report from F/Y 2061/062 to 2065/066


## Fig. 4.3: Line Diagram of Actual Loan Outstanding and Repayment

From the above table and chart, we can analyse, loan outstanding of $\mathrm{ADB} / \mathrm{N}$ is increased in every year in decreasing trend. It is clear that loan outstanding was very high in F/Y 2062/063 and in F/Y2064/065. But dramatically it decreased in F/Y 2063/064 and 2065/066. The highest loan outstanding amount is Rs. 3830.11 crore in F/Y. 2065/066 and lowest loan outstanding is Rs 2117.30 crore in F/Y 2061/062. The lowest growth rate of actual loan outstanding is $3.39 \%$ in F/Y 2063/064 and highest growth rate is $57.33 \%$ in F/Y 2062/063.

Actual loan repayment has also increased in every year except $\mathrm{F} / \mathrm{Y}$ 2063/064. The lowest actual loan repayment is Rs. 1033.09 crore in F/Y 2061/062 and highest actual loan repayment is Rs. 4021.87 crore in $\mathrm{F} / \mathrm{Y}$ 2065/066. Then lowest growth rate on actual loan repayment is $-1.59 \%$ in F/Y 2063/064 and highest is $176.96 \%$ in F/Y 2062/063. The loan repayment growth rate has been fluctuated in every year.

The percentage of actual loan repayment to outstanding has been increased every year except in F/Y 2063/064. The percentage of actual
loan repayment has increased very rapidly growth from F/Y 2061/062 to F/Y 2065/066 which is nearly double. The lowest growth percentage is $48.79 \%$ in $\mathrm{F} / \mathrm{Y}$ 2061/062 and highest is 105.01 percent in F/Y 2065/066 respectively.

The calculated correlation coefficient between actual loan outstanding and repayment is 0.9799 (See Appendix III), which is almost perfectly positively correlated. The Coefficient of determination ( $r^{2}$ ) is 0.9602 indicates that 96.02 percent actual loan repayment is explained by the actual loan outstanding.

### 4.2.4 Analysis of Targeted and Actual Loan Disbursement

The bank has its own system to disbursed loan to different sector and different areas. It has followed the planning system of operation. The bank has fixed the loan disbursement target at the beginning of the fiscal year and it evaluates the achievement of the bank at last of fiscal year. Loan disbursement target and actual of the $\mathrm{ADB} / \mathrm{N}$ is presented in the following table and diagram:

## Table 4.4

Targeted and Actual Loan Disbursement
(Rs. '000)

| F/Y | Targeted Loan <br> Disbursement | Actual Loan <br> Disbursement | Actual /Target <br> Achievement (\%) |
| :---: | :---: | :---: | :---: |
| $2061 / 062$ | $11,272,370$ | $11,817,057$ | 104.83 |
| $2062 / 063$ | $13,981,420$ | $30,613,889$ | 218.96 |
| $2063 / 064$ | $29,442,018$ | $29,285,522$ | 99.47 |
| $2064 / 065$ | $31,770,190$ | $36,335,966$ | 114.37 |
| $2065 / 066$ | $34,325,700$ | $41,915,104$ | 122.11 |

Source: Annual Program \& Budget from F/Y. 2061/062 to 2065/066


Fig. 4.4: Line Diagram of Targeted and Actual Loan Disbursement

Above table and chart clearly show that targeted loan disbursement is lower than actual loan disbursement except in F/Y 2063/064. The achievement of loan disbursement on targeted loan disbursement is $104.83 \%$ in $\mathrm{F} / \mathrm{Y}$ 2061/062 and it is $218.96 \%$ in F/Y 2062/063, this indicates that actual loan disbursement is higher than targeted loan disbursement. In F/Y 2062/063, loan disbursement is more than twice (i.e. 218.96\%) higher than targeted loan disbursement. In F/Y2063/064, It has dramatically changed to $99.47 \%$ and it again increased to $114.37 \%$ and $122.11 \%$ in F/Y 2064/065 and F/Y 2065/066 respectively. In above analysis concluded that, there is a good planning and projection of $\mathrm{ADB} / \mathrm{N}$. They can formulate the real plan of loan disbursement. They are doing well so the bank has a good performance in disbursing loan. However there is a gap between projected and actual achievement.

The calculated correlation coefficient between targeted loan disbursement and actual loan disbursement is 0.8089 (see Appendix IV), which is strong positively correlated. Coefficient of determination ( $r^{2}$ ) is 0.6543 indicates that 65.43 percent actual loan disbursement is explained by targeted loan disbursement.

### 4.2.5 Analysis of Targeted and Actual Loan Repayment of ADB/N

$\mathrm{ADB} / \mathrm{N}$ has followed the budgetary system of operation. There is a planning and project department, which formulates the plan and fixes the target of loan repayment for every fiscal year. Here, this study has evaluated the target and achievement of loan repayment. Loan repayment and actual loan of $\mathrm{ADB} / \mathrm{N}$ can be presented below by using table and diagram:

## Table 4.5

Targeted and Actual Loan Repayment
(Rs. '000)

| F/Y | Targeted Loan <br> Repayment | Actual Loan <br> Repayment | Achievement <br> $(\%)$ (Actual/ <br> Target) |
| :---: | :---: | :---: | :---: |
| $2061 / 062$ | $10,306,829$ | $10,330,873$ | 100.23 |
| $2062 / 063$ | $11,721,164$ | $28,612,217$ | 244.11 |
| $2063 / 064$ | $24,808,267$ | $28,155,899$ | 113.49 |
| $2064 / 065$ | $27,241,375$ | $34,171,617$ | 125.44 |
| $2065 / 066$ | $32,075,177$ | $40,218,719$ | 125.39 |

Source: Annual Program \& Budget from F/Y. 2061/062 to 2065/066


Fig 4.5: Line Diagram of Targeted and Actual Loan Repayment
From the above table and chart, it is clear that the forecast of targeted loan repayment has failed in all fiscal years. Achievement of actual loan repayment over targeted loan repayment is $100.23 \%$ in $\mathrm{F} / \mathrm{Y}$ 2061/062 and actual loan repayment is more than double (i.e. $244.11 \%$ ) of targeted loan repayment in F/Y 2062/063. The achievement of loan repayment was $113.49 \%$ in F/Y 2063/064, 125.44\% in F/Y 2064/065 and $125.39 \%$ in F/Y. 2065/066 respectively. It shows that the bank has been successful in achieving its target. This table and diagram clearly show that although target has been fixed low but achievement has always been high calculated correlation coefficient between targeted loan \& actual loan repayment is 1.06 (see Appendix $V$ ) which is perfect positive correlated. Coefficient of Determination ( $\mathrm{r}^{2}$ ) is 1.124 indicates that $112.4 \%$ actual loan repayment is explained by targeted loan repayment.

### 4.2.6 Loan Disbursement of ADB/N by Purpose-Wise

To evaluate the lending performance of banks, it is important to how much amount is disburssed. $\mathrm{ADB} / \mathrm{N}$ has disbursed loan for different
purpose. In this section the disbursement of loan on different purposes are analysed by purposewise loan disbursement of $\mathrm{ADB} / \mathrm{N}$.They are given below:

Table 4.6
Purpose-Wise Loan Disbursement of ADB/N
(Rs. '000, in \%)

| S.N. | Purpose | 2061/062 | $062 / 063$ | 2063/064 | 2064/065 | 2065/066 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Agriculture | $\begin{gathered} 1917978 \\ (16.23 \%) \end{gathered}$ | $\begin{aligned} & 5629288 \\ & (18.39 \%) \end{aligned}$ | $\begin{aligned} & 5296964 \\ & (18.09 \%) \end{aligned}$ | $\begin{aligned} & 4776136 \\ & (13.14 \%) \end{aligned}$ | $\begin{gathered} 3653828 \\ (8.71 \%) \end{gathered}$ | $\begin{gathered} 21274194 \\ (14.19 \%) \end{gathered}$ |
| 2 | Minerals | $0$ | $\begin{gathered} 3899 \\ (0.013 \%) \end{gathered}$ | $\begin{gathered} 3730 \\ (0.013 \%) \end{gathered}$ | $\begin{gathered} 23 \\ (0.00063 \%) \end{gathered}$ | $\begin{gathered} 172 \\ (0.00041 \%) \end{gathered}$ | $\begin{gathered} 7824 \\ (0.01 \%) \end{gathered}$ |
| 3 | Productions | $\begin{gathered} 1956143 \\ (16.55 \%) \end{gathered}$ | $\begin{gathered} 2794892 \\ (9.13 \%) \end{gathered}$ | $\begin{gathered} 2602296 \\ (8.89 \%) \end{gathered}$ | $\begin{gathered} 3445626 \\ (9.48 \%) \end{gathered}$ | $\begin{aligned} & 5920549 \\ & (14.13 \%) \end{aligned}$ | $\begin{aligned} & 16719506 \\ & (11.15 \%) \end{aligned}$ |
| 4 | Construction | 0 | $\begin{aligned} & 607772 \\ & (1.99 \%) \end{aligned}$ | $\begin{aligned} & 561890 \\ & (1.92 \%) \end{aligned}$ | $\begin{aligned} & 1086978 \\ & (2.99 \%) \end{aligned}$ | $\begin{aligned} & 979951 \\ & (2.34 \%) \end{aligned}$ | $\begin{aligned} & 3236591 \\ & (2.16 \%) \end{aligned}$ |
| 5 | Machinery | $\begin{aligned} & 542605 \\ & (4.59 \%) \end{aligned}$ | $\begin{aligned} & 186943 \\ & (0.61 \%) \end{aligned}$ | $\begin{aligned} & 173814 \\ & (0.59 \%) \end{aligned}$ | $\begin{gathered} 72044 \\ (0.20 \%) \end{gathered}$ | $\begin{gathered} 1050 \\ (0.0025 \%) \end{gathered}$ | $\begin{aligned} & 976456 \\ & (0.65 \%) \end{aligned}$ |
| 6 | Transportation | 0 | $\begin{gathered} \hline 43787 \\ (0.14 \%) \end{gathered}$ | $\begin{gathered} \hline 43024 \\ (0.15 \%) \end{gathered}$ | $\begin{gathered} \hline 32216 \\ (0.009 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (0.000021 \%) \end{gathered}$ | $\begin{aligned} & \hline 119036 \\ & (0.08 \%) \end{aligned}$ |
| 7 | Communication Service | 0 | $\begin{aligned} & 169239 \\ & (0.55 \%) \end{aligned}$ | $\begin{gathered} 164817 \\ (0.56 \%) \end{gathered}$ | $\begin{gathered} 187286 \\ (0.052 \%) \end{gathered}$ | $\begin{aligned} & 104653 \\ & (0.25 \%) \end{aligned}$ | $\begin{aligned} & 625995 \\ & (0.42 \%) \end{aligned}$ |
| 8 | Wholesale of Retail | $\begin{aligned} & 5605295 \\ & (47.43 \%) \end{aligned}$ | $\begin{aligned} & 8301644 \\ & (27.12 \%) \end{aligned}$ | $\begin{gathered} 8785656 \\ (30 \%) \end{gathered}$ | $\begin{aligned} & 12481659 \\ & (34.35 \%) \end{aligned}$ | $\begin{aligned} & 13323832 \\ & (31.79 \%) \end{aligned}$ | $\begin{gathered} 48498086 \\ (32.34 \%) \end{gathered}$ |
| 9 | Finance \& Insurance | 0 | $\begin{aligned} & \hline 682867 \\ & (2.23 \%) \end{aligned}$ | $\begin{aligned} & \hline 635023 \\ & (2.17 \%) \end{aligned}$ | $\begin{aligned} & 306657 \\ & (0.84 \%) \end{aligned}$ | $\begin{aligned} & \hline 324420 \\ & (0.77 \%) \end{aligned}$ | $\begin{aligned} & 1948967 \\ & (1.30 \%) \end{aligned}$ |
| 10 | Service Industry | 0 | $\begin{aligned} & 1304076 \\ & (4.26 \%) \end{aligned}$ | $\begin{aligned} & 1210232 \\ & (4.13 \%) \end{aligned}$ | $\begin{aligned} & 1095305 \\ & (3.01 \%) \end{aligned}$ | $\begin{aligned} & 1001480 \\ & (2.39 \%) \end{aligned}$ | $\begin{aligned} & 4611093 \\ & (3.07 \%) \end{aligned}$ |
| 11 | Other service | 0 | $\begin{aligned} & 1754931 \\ & (5.73 \%) \end{aligned}$ | $\begin{aligned} & 1629137 \\ & (5.56 \%) \end{aligned}$ | $\begin{aligned} & 1320202 \\ & (3.63 \%) \end{aligned}$ | $\begin{gathered} 2024222 \\ (4.83 \%) \end{gathered}$ | $\begin{aligned} & 6728492 \\ & (4.49 \%) \end{aligned}$ |
| 12 | Consumer | 0 | $\begin{aligned} & 1122668 \\ & (3.67 \%) \end{aligned}$ | $\begin{aligned} & 1105726 \\ & (3.78 \%) \end{aligned}$ | $\begin{aligned} & 380436 \\ & (1.05 \%) \end{aligned}$ | $\begin{aligned} & 1139874 \\ & (2.72 \%) \end{aligned}$ | $\begin{aligned} & 3748704 \\ & (2.50 \%) \end{aligned}$ |
| 13 | Others | $\begin{aligned} & \hline 1795036 \\ & (15.19 \%) \end{aligned}$ | $\begin{aligned} & 8011883 \\ & (26.17 \%) \end{aligned}$ | $\begin{aligned} & \hline 7073213 \\ & (24.15 \%) \end{aligned}$ | $\begin{aligned} & 11151398 \\ & (30.69 \%) \end{aligned}$ | $\begin{aligned} & \hline 13441064 \\ & (32.07 \%) \end{aligned}$ | $\begin{aligned} & \hline 41472594 \\ & (27.65 \%) \end{aligned}$ |
|  | Total | 11817057 | 30613889 | 29285522 | 36335966 | 41915104 | 149967538 |

Source: Annual Report of ADB/N from F/Y 2061/062 to 2065/066


Fig. 4.6: Loan Disbursement of ADB/N: Loan Portfolio Share percent by Purpose-Wise (F/Y 2061/062 to 2065/066)

From the above table and figure, $\mathrm{ADB} / \mathrm{N}$ has categorized its loan portfolio into 13 purposes. The uncategorized loan of $\mathrm{ADB} / \mathrm{N}$ is included in other sector. The highest loan disbursement amount of all fiscal year in wholesale and retail purpose is Rs. 560.53 crore ( $47.43 \%$ ) in $\mathrm{F} / \mathrm{Y}$. 2061/062 and Rs. 830.16 crore ( $27.12 \%$ ), Rs. $8,78.57$ crore ( $30 \%$ ), Rs. 1248.17 crore (34.35\%), Rs. 1332.38 crore (31.79\%) at F/Y 2062/063, 2063/064, 2064/065 and 2065/066 respectively. Before commercialization of $\mathrm{ADB} / \mathrm{N}$ production purpose was in second position in F/Y 2061/062. But after that, others took the second position and agriculture remained at the third position from F/Y 2062/063 to 2065/066. The table shows that after commercialization, ADB/N disbursed the finance and insurance loan, construction loan, consumer loan, service industry, machinery loan, which was not disbursed before

F/Y 2062/063. It concluded that $\mathrm{ADB} / \mathrm{N}$ has focused the other business loan according to commercial bank policy. Other service loan, service, industry, consumer loan, construction loan, finance \& insurance loan, have smaller proportion of disbursement loan. Hence, it is concluded that wholesale \& retail, agriculture and other sectors got the higher proportion of loan disbursement as compared to service loan, industry, consumer loan, construction loan, finance \& insurance loan.

Loan disbursement of agriculture, production, wholesale and retail and other purposes are fluctuated in every year. After commercialization minerals, machinery, transportation, communication, finance and insurance and service industry are in decreasing trend during the research period. But construction purpose is increased year by year.

### 4.2.7 Loan Repayment of ADB/N by Purpose-Wise

For the evaluate of loan recovery of $\mathrm{ADB} / \mathrm{N}$. It is important to how much collected of disbursed ment purpsoe. ADB/N collect the loan from different purpose. The purposewise loan reapyment are as follows:

Table 4.7
Purpose-Wise Loan Repayment of ADB/N
(Rs. '000, in \%)

| S.N. | Purpose | $\mathbf{2 0 6 1 / 0 6 2}$ | $\mathbf{0 6 2 / 0 6 3}$ | $\mathbf{2 0 6 3 / 0 6 4}$ | $\mathbf{2 0 6 4 / 0 6 5}$ | $\mathbf{2 0 6 5 / 0 6 6}$ | Total |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 | Agriculture | 1755688 | 5953102 | 4792954 | 4808315 | 5240311 | 22550370 |
|  |  | $(16.99 \%)$ | $(20.81 \%)$ | $(17.02 \%)$ | $(14.07 \%)$ | $(13.03 \%)$ | $(15.94 \%)$ |
| 2 | Minerals | 0 | 3099 | 3050 | 58 | 2997 | 9204 |
|  |  | 0 | $(0.01 \%)$ | $(0.01 \%)$ | $(0.0017 \%)$ | $(0.007 \%)$ | $(0.01 \%)$ |
| 3 | Productions | 1865712 | 2768236 | 2723360 | 3173855 | 5078097 | 15609260 |
|  |  | $(18.06 \%)$ | $(9.68 \%)$ | $(9.67 \%)$ | $(9.29 \%)$ | $(12.63 \%)$ | $(11.03 \%)$ |
| 4 | Construction | 0 | 332722 | 327328 | 835533 | 701259 | 2196842 |
|  |  | - | $(1.16 \%)$ | $(1.16 \%)$ | $(2.45 \%)$ | $(1.75 \%)$ | $(1.55 \%)$ |
| 5 | Machinery | 674356 | 168571 | 165838 | 600071 | 1370 | 1070206 |
|  |  | $(6.53 \%)$ | $(0.59 \%)$ | $(0.59 \%)$ | $(0.18 \%)$ | $(0.003 \%)$ | $(0.76 \%)$ |
| 6 | Transportation | 0 | 47039 | 46276 | 34971 | 53 | 128339 |
|  |  | - | $(0.16 \%)$ | $(0.16 \%)$ | $(0.10 \%)$ | $(0.0013 \%)$ | $(0.09 \%)$ |
| 7 | Communication | 0 | 272778 | 268356 | 206672 | 152004 | 899810 |
|  | Service | - | $(0.95 \%)$ | $(0.95 \%)$ | $(0.60 \%)$ | $(0.38 \%)$ | $(0.64 \%)$ |
| 8 | Wholesale and | 4857471 | 8944054 | 8799062 | 1177127 | 12676725 | 47048588 |
|  | Retail | $(47.02 \%)$ | $(31.26 \%)$ | $(31.25 \%)$ | $(34.45 \%)$ | $(31.52 \%)$ | $(33.25 \%)$ |
| 9 | Finance \& | 0 | 623423 | 613317 | 34081 | 459568 | 2037123 |
|  | Insurance | - | $(2.18 \%)$ | $(2.18 \%)$ | $(1 \%)$ | $(1.14 \%)$ | $(1.44 \%)$ |
| 10 | Service Industry | 0 | 1023767 | 1007171 | 905698 | 961223 | 3897859 |
|  |  | - | $(3.58 \%)$ | $(3.58 \%)$ | $(2.65 \%)$ | $(2.39 \%)$ | $(2.75 \%)$ |
| 11 | Other service | 0 | 1410900 | 1388028 | 1038244 | 1615400 | 5452572 |
|  |  | - | $(4.93 \%)$ | $(4.93 \%)$ | $(3.04 \%)$ | $(4.02 \%)$ | $(3.85 \%)$ |
| 12 | Consumer | 0 | 1045116 | 1028174 | 287205 | 514407 | 2874902 |
|  |  | - | $(3.65 \%)$ | $(3.65 \%)$ | $(0.84 \%)$ | $(1.28 \%)$ | $(2.03 \%)$ |
| 13 | Others | 1177646 | 6019410 | 6992985 | 10708904 | 12815305 | 37714250 |
|  |  | $(11.40 \%)$ | $(21.04 \%)$ | $(24.84 \%)$ | $(31.34 \%)$ | $(31.86 \%)$ | $(26.66 \%)$ |
|  | Total | $\mathbf{1 0 3 3 0 8 7 3}$ | $\mathbf{2 8 6 1 2 2 1 7}$ | $\mathbf{2 8 1 5 5 8 9}$ | $\mathbf{3 4 1 7 1 6 1 7}$ | $\mathbf{4 0 2 1 8 7 9}$ | $\mathbf{1 4 1 4 8 9 3 2 5}$ |

Source: Annual Report of ADB/N from F/Y 2061/062 to 2065/066


Fig. 4.7: Loan Repayment of ADB/N: Loan Protfolio Share Percent by Purpose-Wise (F/Y 2061/062 to 2065/066)

The table shows the distribution of loan repayment of $\mathrm{ADB} / \mathrm{N}$ categorized into 13 purposes. The uncategorized loan of $A D B / N$ is included in other sector. In F/Y 2061/062, the highest collection of Rs. 485.75 crore $(47.02 \%)$ was recorded in the wholesale and retail. The share of retail and wholesale activities remained at the top from F/Y 2061/062 to 2065/066. In F/Y 2061/062, production purposes took the second position (16.99\%). After commercialization other purpose took the second position while agriculture, production, consumer service took third, fourth, fifth and sixth position respectively. The composition of collection portfolio has not changed much in the subsequent fiscal year. In F/Y 2065/066, the highest amount of Rs. 1267.67 crore was collected in wholesale and retail whereas Rs. 1281.53 crore in other purpose and Rs. 524.03 crore for agriculture activities. In conclusion wholesale \& retail purpose can be considered as best.

Fig. 4.7 shows the composition of loan repayment made by ADB/N between the F/Y 2061/062 to 2065/066. During the period, wholesale and
retail (33.25\%), other (26.66\%), agriculture (15.94\%), production $(11.03 \%)$ dominated the loan repayment scene in the history of ADB/N.

### 4.2.8 Loan Outstanding of ADB/N by Purpose-Wise

For the evaluate of effective loan of $\mathrm{ADB} / \mathrm{N}$, it is important to how much amount outstanding. The increase in outstanding loan may cause to create hands of the bank to remain idle in terms loan dues. The bank disburse the loan by purpose-wise. The outstanding loan amount and percentage of different purposes are as follows:

Table 4.8
Purpose-Wise Loan Outstanding of ADB/N
(Rs.'000, in \%)

| S.N. | Purpose | 2061/062 | 062/063 | 2063/064 | 2064/065 | 2065/066 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Agriculture | $\begin{gathered} 4879166 \\ (23.04 \%) \end{gathered}$ | $\begin{array}{r} 10112050 \\ (30.36 \%) \end{array}$ | $\begin{array}{r} 10616060 \\ (30.82 \%) \end{array}$ | $\begin{array}{r} 10583881 \\ (28.91 \%) \end{array}$ | $\begin{gathered} 8997398 \\ (23.49 \%) \end{gathered}$ | $\begin{array}{r} 45188555 \\ (27.58 \%) \end{array}$ |
| 2 | Minerals | 0 | $\begin{array}{r} 2579 \\ (0.008 \%) \end{array}$ | $\begin{array}{r} 3259 \\ (0.01 \%) \end{array}$ | $\begin{array}{r} 3224 \\ (0.09 \%) \end{array}$ | $\begin{array}{r} 399 \\ (0.001 \%) \end{array}$ | $\begin{array}{r} 9461 \\ (0.0058 \%) \end{array}$ |
| 3 | Productions | $\begin{gathered} 3913996 \\ (18.49 \%) \end{gathered}$ | $\begin{aligned} & 4241445 \\ & (12.73 \%) \end{aligned}$ | $\begin{gathered} 4120381 \\ (11.96 \%) \end{gathered}$ | $\begin{aligned} & 4392152 \\ & (12.00 \%) \end{aligned}$ | $\begin{gathered} \hline 5234604 \\ (13.70 \%) \end{gathered}$ | $\begin{array}{r} \hline 21902578 \\ (13.37 \%) \end{array}$ |
| 4 | Construction | 0 | $\begin{array}{r} 136403 \\ (4.09 \%) \end{array}$ | $\begin{gathered} 1598593 \\ (4.64 \%) \end{gathered}$ | $\begin{array}{r} 1850038 \\ (5.05 \%) \end{array}$ | $\begin{array}{r} 2449497 \\ (6.40 \%) \end{array}$ | $\begin{array}{r} 7262159 \\ (4.43 \%) \end{array}$ |
| 5 | Machinery | $\begin{gathered} 2601317 \\ (12.29 \%) \end{gathered}$ | $\begin{array}{r} 40363 \\ (1.21 \%) \end{array}$ | $\begin{aligned} & 411607 \\ & (1.20 \%) \end{aligned}$ | $\begin{array}{r} \hline 423580 \\ (1.16 \%) \end{array}$ | $\begin{gathered} 102493 \\ (0.27 \%) \end{gathered}$ | $\begin{array}{r} 3942628 \\ (2.41 \%) \end{array}$ |
| 6 | Transportation | 0 | $\begin{array}{r} 99575 \\ (0.30 \%) \end{array}$ | $\begin{array}{r} 96323 \\ (0.28 \%) \end{array}$ | $\begin{array}{r} 93568 \\ (0.26 \%) \end{array}$ | $\begin{array}{r} 93524 \\ (0.24 \%) \end{array}$ | $\begin{gathered} 382990 \\ (0.23 \%) \end{gathered}$ |
| 7 | Communication Service | 0 | $\begin{array}{c\|} \hline 596028 \\ (1.79 \%) \end{array}$ | $\begin{aligned} & 492489 \\ & (1.43 \%) \end{aligned}$ | $\begin{array}{\|c\|} \hline 473103 \\ (1.29 \%) \end{array}$ | $\begin{array}{r} 425752 \\ (1.11 \%) \end{array}$ | $\begin{array}{r} 1987372 \\ (1.21 \%) \end{array}$ |
| 8 | Wholesale and Retail | $\begin{array}{r} 8385494 \\ (39.60 \%) \end{array}$ | $\begin{array}{r} 896634 \\ (26.92 \%) \end{array}$ | $\begin{gathered} 8953228 \\ (26.00 \%) \end{gathered}$ | $\begin{array}{r} 9663611 \\ (26.40 \%) \end{array}$ | $\begin{array}{r} 10310718 \\ (26.92 \%) \end{array}$ | $\begin{array}{r} 46279685 \\ (28.25 \%) \end{array}$ |
| 9 | Finance \& Insurance | 0 | $\begin{gathered} 874980 \\ (2.63 \%) \end{gathered}$ | $\begin{array}{r} 8966634 \\ (2.60 \%) \end{array}$ | $\begin{gathered} 862528 \\ (2.36 \%) \end{gathered}$ | $\begin{gathered} 727380 \\ (1.90 \%) \end{gathered}$ | $\begin{array}{r} 3361574 \\ (2.05 \%) \end{array}$ |
| 10 | Service Industry | $\begin{array}{r} 7829 \\ (0.04 \%) \end{array}$ | $\begin{array}{r} 1430637 \\ (4.29 \%) \end{array}$ | $\begin{array}{r} 1633698 \\ (4.74 \%) \end{array}$ | $\begin{array}{r} 1823305 \\ (4.98 \%) \end{array}$ | $\begin{array}{r} 1863562 \\ (4.87 \%) \end{array}$ | $\begin{array}{r} \hline 6759031 \\ (4.13 \%) \end{array}$ |
| 11 | Other service | 0 | $\begin{gathered} 1410661 \\ (4.23 \%) \end{gathered}$ | $\begin{gathered} 1651770 \\ (4.84 \%) \end{gathered}$ | $\begin{gathered} 1937728 \\ (5.28 \%) \end{gathered}$ | $\begin{array}{r} 2342550 \\ (6.12 \%) \end{array}$ | $\begin{array}{r} 7338709 \\ (4.48 \%) \end{array}$ |
| 12 | Consumer | $\begin{array}{r} 9057 \\ (0.042 \%) \end{array}$ | $\begin{array}{r} 1188752 \\ (2.57 \%) \end{array}$ | $\begin{gathered} 1266304 \\ (3.68 \%) \end{gathered}$ | $\begin{gathered} 1359535 \\ (3.71 \%) \end{gathered}$ | $\begin{array}{r} 1985002 \\ (5.18 \%) \end{array}$ | $\begin{array}{r} 5808650 \\ (3.55 \%) \end{array}$ |
| 13 | Others | $\begin{array}{r} 1376154 \\ (6.50 \%) \end{array}$ | $\begin{array}{r} 2619743 \\ (7.86 \%) \end{array}$ | $\begin{array}{r} 2699971 \\ (7.84 \%) \end{array}$ | $\begin{array}{r} 3142465 \\ (8.58 \%) \end{array}$ | $\begin{array}{r} 3768224 \\ (9.84 \%) \end{array}$ | $\begin{array}{r} 13606557 \\ (8.31 \%) \end{array}$ |
|  | Total | 21173013 | 33310746 | 34440369 | 36604718 | 38301103 | 163829949 |

Source: Annual Report of ADB/N from F/Y 2061/062 to 2065/066


Fig. 4.8: Loan Outstanding of ADB/N: Loan Portfolio Share Percent by Purpose-Wise From F/Y 2061/062 to 2065/066

The table 4.8 shows the distribution of outstanding loan of $\mathrm{ADB} / \mathrm{N}$ into 13 different purposes. The uncategorized loan of $\mathrm{ADB} / \mathrm{N}$ is included in other sector. The outstanding loan of wholesale and retail activities has highest share in loan outstanding of Rs. 838.55 crore (39.60\%) in F/Y 2061/062. In F/Y 2062/063 and 2063/064, agriculture has highest share of Rs. 1011.21 crore ( $30.61 \%$ ) and Rs. 1061.61 crore ( $30.82 \%$ ) respectively. After that outstanding loan of agriculture was decreased in each year. But wholesale and retail is increased in each year from F/Y 2063/064 to 2065/066. The proportion of outstanding agricultural loan was continuously increasing from F/Y 2061/062 to 2063/064, but it started decreasing from F/Y 2064/065 to 2065/066.

The proportion of the outstanding loan of machinery, transportation, communication, wholesale and retail, finance and insurance are decreasing each year whereas the proportion of the minerals, construction and other's outstanding loan has increasing trend. Also the consumer outstanding loan is fluctuating every year.

Fig. 4.8 shows the composition of outstanding loan from $\mathrm{F} / \mathrm{Y}$ 2061/062 to 2065/066. From the fig, it is clear that wholesale and retail, agriculture, production, other service got the higher proportion of loans where as the minerals, transportation, communication, service loans got smaller proportion of loan disbursed by ADB/N.

### 4.2.9 Actual Loan Disbursement, Repayment and Outstanding of Development Region

$\mathrm{ADB} / \mathrm{N}$ grants loan to the farmers of all five development regions. The purpose of division of five development regions is to develop all regions equally to achieve sustainable economic growth rate and distribute return equally to the people that area by granting rural credit and also to reduce regional economic imbalances. Actual loan disbursement, outstanding and repayment of Central, Eastern, Western, Mid-western and Far Western region are given below:

The structure of disbursed loan in various development regions gives a critical picture of Mid-Western and Far-Western Development Region. From the analysis of above table, central region has got the highest amount of loan disbursed in all fiscal years.

The volumes of disbursement were recorded at Rs. 278.93 crore Rs. 381.68 crore, Rs. 345.02 crore, Rs. 107.44 crore and Rs. 68.63, core crore in F/Y 2061/062 ,the Eastern, Central, Western, Mid-Western and Far-Western Development Regions respectively. From F/Y 2061/062 to 2065/066, the loan disbursement amount has been increased every year and in every region. But the CDR was beneficial from half of the total disbursement. But MWDR and FWDR are among the least beneficial as total loan disbursement is less than $10 \%$ of total amount in all fiscal years. It concludes that CDR is ranked as a significant contributor on the loan disbursement of $\mathrm{ADB} / \mathrm{N}$.


Fig.: 4.9 Share of Development Regions of Loan Disbursement of ADB/N (F/Y 2061/062 to 2065/66)

The data in table 4.9 are plotted in figure 4.9. According to figure, the contribution of development regions on loan disbursement of $\mathrm{ADB} / \mathrm{N}$ varied from a lowest $5.19 \%$ in FWDR to the highest $50.03 \%$ in the CDR during the same period of time.

Table 4.10 shows that structure of principal collection in various development regions gives a picture of Mid-Western and Far-Western Development Regions, which have lowest disbursed amount. The amount of principal collection were recorded at Rs. 247.48 crore, Rs. 323.64 crore, Rs. 308.57 crore, Rs. 96.51 crore and Rs. 56.89 crore in F/Y 2061/062 in thousands at the Eastern, Central, Western, Mid-western and Far-western regions respectively. These volumes of repayment have increased respectively to Rs. 640.01 crore, Rs. 2038.32 crore, Rs. 849.79 crore, Rs. 260.24 crore and Rs 242.50 crore in F/Y 2065/066 in the Eastern, Central, Western, Mid Western and Far-Western region respectively.. As per the table, highest loan repayment amount is in the CDR and lowest repayment amount is in FWDR.


Fig.4.10: Share of Development Regions on Repayment Loan of ADB/N (F/Y 2061/062 to 2065/066)

According to the data in table 4.10, and plotted in figure. 4.10, the contribution of development regions of loan repayment of ADB/N varied from the lowest of $6.03 \%$ in the FWDR to the highest of $50.68 \%$ in the CDR ,during the same span of time. Hence it is concluded that CDR is ranked as a significant contributor on the loan repayment of $\mathrm{ADB} / \mathrm{N}$.


Fig.4.11: Share of Development Regions on Outstanding Loan of ADB/N (F/Y 2061/062 to 2065/066)

The table and figure show the form of outstanding loans in various development regions. The volume of outstanding loan were Rs. 583.68 crore, Rs. 706.06 crore, Rs 481.40 crore, Rs. 173.85 crore and Rs. 172.30 crore in the Eastern, Central, Western, Mid-Western and Far-Western Region in F/Y 2061/062 respectively. Obviously, in F/Y 2065/066 volumes of outstanding loan have been increased to Rs. 699.13 corer, Rs. 1896.18 corer, Rs. 738.17 corer, Rs. 261.72 crore and Rs. 234.90 crore Eastern, Central, Western, Mid-Western and Far-Western Development Regions respectively.

Loan outstanding amount of all development regions are less than after commercialization. According to the data in table and figure 4.11 the contribution of development regions on outstanding loan of $A D B / N$ is lowest in MDR at $7.27 \%$ and the highest at $44.55 \%$ in the CDR during the same interval of time. Before and after commercialization, loan outstanding of $\mathrm{ADB} / \mathrm{N}$ has not changed but after commercialization loan outstanding share in all development region except CDR has decreased.

### 4.3 Major Findings of the study

Most of the activities of the bank are related with loan disbursement and repayment. It plays the major role in profitability of the organization. It is highly complicated task in the bank. Here we discuss about the major findings of loan disbursement and repayment pattern of $\mathrm{ADB} / \mathrm{N}$ during the study period:

- Loan repayment amount depends upon loan disbursement. The correlation coefficient between these two variable is 0.999 which express strong positive relationship between these variables. The coefficient of determination is 0.9980 .
- There is positive correlation between targeted loan disbursement and targeted loan repayment. Percentage of targeted loan repayment over targeted loan disbursement is in decreasing trend every year except last year (F/Y 2065/066). From the table, the growth rate of targeted loan disbursement and targeted loan repayment has fluctuated from F/Y 2062/063 to 2063/064.
- Percentage of actual loan repayment over actual loan disbursement is in increasing trend every year and it is positively correlated. Actual loan disbursement is fluctuated in F/Y 2063/064 but is in increasing trend. The growth rate of actual loan disbursement and repayment are fluctuated. In F/Y 2063/064, growth rate is negative. It is concluded that actual loan disbursement is lower than previous year. Similarly, loan repayment is negative in F/Y 2063/064 which shows decreasing demand for agricultural credit.
- Actual loan repayment percentage over outstanding was very low in F/Y 2061/062(\% of repayment to outstanding is only $48.79 \%$ ). This was due to extension of credit to some influential persons without sufficient collateral and without field report. Bank should
analyze credit worthiness of its customer before lending. The main problems of loan collection are anlayzed as follows: misutilisation of loan, lack of political sustainability, competitive environment, lack of motivation and knowledge. Before providing loan, bank should consider the repayment capacity of borrowers. So, that chance of non-recovery of loan is minimized. This was the situation before commercialization of bank. There after it was in increasing trend every year. In $\mathrm{F} / \mathrm{Y}$ 2065/066, it reached to $105.01 \%$ which is much satisfactory. ADB/N follows different methods for recovery of outstanding loan and is so far successful.
- The targeted loan seems weak in F/Y 2062/63, because actual loan disbursement was double than targeted loan disbursement. It was like imaginary situation. The data analysis clearly shows that actual loan disbursement is greater than targeted loan disbursement in every year except F/Y 2063/064.
- The targeted repayment seems weak in F/Y 2062/63. The data analysis shows that actual loan repayment is greater than targeted loan repayment in all fiscal year. The repayment effort shows highly admirable. Because of actual loan repayment is more than double of targeted. The bank should do more exercise in this department to do a well forecast.
- Coefficient of correlation (r) is perfect positively correlated in all cases which means that the movement of targeted loan disbursement and repayment are in same direction.
- Wholesale and retail, other sector, agriculture, and production are some remarkable purposes of the loan disbursement market. They shared $32.34 \%, 27.65 \%, 14.19 \%$, $11.15 \%$ (F/Y 2061/062 to 2065/066) of loan disbursement of $\mathrm{ADB} / \mathrm{N}$ while minerals,
transportation, communication service, machinery, finance and insurance, construction, consumer and service industry, other services have smaller proportion of loan disbursed by ADB/N.
- In the same manner wholesale and retail, other purposes, agriculture and production are some remarkable purposes of loan repayment. They shared $33.25 \%, 26.66 \% 15.94 \%$ and $11.03 \%$ respectively of loan repayment in the overall. While minerals, transportation, construction, transportation, finance and insurance, machinery, consumer, service industry and other services have smaller proportions of loan repayment.
- Wholesale and retail, agriculture, production and others are some remarkable purpose of the outstanding loan, which has shared $28.25 \%, 27.58 \%, 13.37 \%$ and $8.31 \%$ respectively. But minerals' transportation, communication, finance, machinery, consumer, other service have smaller proportion of outstanding loan. Before commercialization, wholesale and retail took first position as compared as after commercialization in outstanding situation.
- The CDR is the significant contributor (50.03\%) on the loan disbursement of $\mathrm{ADB} / \mathrm{N}$ where as the sharing of the FWDR contributes the least share of $5.19 \%$.
- The CDR is the significant contributor on the loan repayment of $\mathrm{ADB} / \mathrm{N}$ with the highest share of $50.68 \%$, while FWDR is the lowest contributor by sharing only $6.03 \%$. After commercialization Eastern, Western and Mid-Western Development regions have not succeed in Loan Repayment as compared to pre-commercialization period.
- In the case of loan outstanding, CDR took the first position in region-wise loan outstanding whereas MWDR took the lowest position.


## CHAPTER - V

## SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter is a complete conclusive and suggestive package with contains summary, conclusions of the findings. Summary gives the brief introduction of all chapters of this research study. It shows the actual fact of the present situation under the topic of the study. Conclusions of the data by using various statistical tools. Recommendations are presented according to the findings from research and what should do to overcome from present problems and not to repeat same mistake in the future.

### 5.1 Summary

Nepal is the one of least developed countries in the world. It is small land- locked, poorest country in the world. More than 80 percent people mainly based upon agriculture but standard of land is very poor. For the Nepalese people, agriculture is the main occupation. Agricultural system is very traditional. The development of agriculture could not success due to the lack of skillful manpower, economic support and lack of resources. The Agricultural Development Bank Limited, Nepal was made in 1969 A.D. ADB/N is established in the form of institutional agricultural credits to farmers. The bank is converting in to ' A ' class commercial bank in B.S. 2062, which is 18th commercial bank. The main objectives of the bank is to grow up the economic prosperity of the nation through being reliable and qualitative banking and financing intermediaries in all over the country by providing services in agriculture, industry, business, service etc. sector. ADB/N provides credit as well as aware people to get loan from institutions. Now, financial institute covers
majority of agricultural credit and $\mathrm{ADB} / \mathrm{N}$ is in service with board. Loan disbursement of development banking refers agricultural credit by $\mathrm{ADB} / \mathrm{N}$. Such as purpose-wise, region-wise in urban areas and rural area. The purpose of giving loan is to uplift life standards of the loanee by income generating activities. Loan repayment of $\mathrm{ADB} / \mathrm{N}$ indicates collection of loan principal from its loan or borrowers early for different purposes.

The main objective of this research is growth rate loan disbursement and repayment of $\mathrm{ADB} / \mathrm{N}$. This research measures the achievement of targeted loan disbursement and repayment. It clears that purposes and areas of loan disbursed by $\mathrm{ADB} / \mathrm{N}$. Specific and supportive objectives are kept to fulfill the general objectives. For this whole research is divided into five chapters.

In chapter one, conceptual discussion of banking is mentioned and very specific and supportive objectives of research are kept. This research is focused on ADB/N's loan has been achieved or not in the view of target? The general objectives of this research are to study target \& actual loan disbursement, repayment and outstanding of ADB/N. Different areas of loan disbursement, repayment is studied in this research. Limitations are kept to study its data and information for the five years period.

In the chapter two, review of literature is related to this research. As a preliminary search in order to generate research ideas on loan disbursement and repayment, credit policy, major programmes of $\mathrm{ADB} / \mathrm{N}$, recovery policy lending documentation, lending conditions, loan approval process of $\mathrm{ADB} / \mathrm{N}$. Various publications of $\mathrm{ADB} / \mathrm{N}$, related text book, journals, magazine and past thesis are review on research's subject matter.

In the chapter three, research methodology, research design, such as statistical method of analyzing data and descriptive analysis are used in analysis of the data.

In chapter four, data are collected through the secondary data such as annual report, programmes and budget of $\mathrm{ADB} / \mathrm{N}$. Collected data are analyzed through organizing, tabulating, performing statistical analysis to draw inferences about current loan disbursement and repayment situation of $\mathrm{ADB} / \mathrm{N}$ and relationship between projected \& actual loan disbursement and repayment of $\mathrm{ADB} / \mathrm{N}$.

In chapter five, analysis of data is performed. Findings obtain from analysis of data re presented and suggestions are given to make the loan disbursement and repayment pattern of $\mathrm{ADB} / \mathrm{N}$. It is more effective and practical.

### 5.2 Conclusion

If disbursement and repayment do not occur timely, each and every organization can't be operationally and economically sound. This research is focused on agricultural lending and recovery with in the related of loan disbursement and repayment situation of $\mathrm{ADB} / \mathrm{N}$. The following conclusion are drawn on the basis of the desired objectives of the study:

## Conclusion from Growth Rate of Loan Disbursement, Repayment and Outstanding:

The loan disbursement of $\mathrm{ADB} / \mathrm{N}$ has grown significantly which shows the increasing demand for agricultural credit. Growth rate of repayment has been greater than growth rate of loan disbursement (i.e. $179.96 \%$ > $159.07 \%$ in F/Y 2062/063), which indicates the growth rate of outstanding loan has decreased. So loan disbursement and repayment situation of $\mathrm{ADB} / \mathrm{N}$ has been satisfactory from $\mathrm{F} / \mathrm{Y}$ 2061/062 to 2065/066.

## Conclusions from Targeted/Actual Loan Disbursement, Repayment and Outstanding:

Targeted loan disbursement and repayment is increased in every year and growth rate has been fluctuating trend. Similarly, percentage of targeted loan repayment to disbursement has been fluctuated. This indicates that there is some error in standard settings and experts are not careful for the forecast.

Actual loan disbursement and repayment are in increasing trend according to targeted. Growth rate are fluctuated where as growth rate is negatives in F/Y 2063/064. Increasing the actual loan disbursement increases loan repayment, because there is closely relationship. This means that movements of both variables have same direction. According to correlation coefficient, it is found that there is significant relationship of actual loan disbursement and collection (i.e. $r$ is 0.9799 ). This explains that increase in disbursement increased in repayment.

Actual disbursement is always greater than targeted loan disbursement except F/Y 2063/064. Similarly, actual loan repayment is always greater than targeted. So, it concluded that the forecast made on targeted loan disbursement and repayment is not correct. But achievement between targeted and actual loan disbursement is perfectly utilized. According to correlation coefficient, it is found that there is close relation between targeted and actual.

## Conclusion from the Purpose-Wise Sector:

Wholesale and retail got the higher proportion of loan disbursement and repayment Minerals, transportation have smaller proportion of loan disbursement repayment and outstanding. Agriculture, production, others and other services have larger proportion than minerals, transportation and communication service during the fiscal year ADB/N mobilized loan in the business sector in the comparison of before commercialization.

## Conclusion from Region -Wise:

Looking at the region-wise, the $\mathrm{ADB} / \mathrm{N}$ disbursed large amount of loan is central development region while very low amount o loan disbursed in Far-Western Development Region. CDR ranked as a significant contributor on the loan repayment, disbursement and outstanding. Before and after commercialization, loan repayment and outstanding has not changed in the development region because CDR took the highest position. From the analysis of data, ADB/N has focused in the CDR, CDR took the highest proportion of loan disbursement, repayment and outstanding. $\mathrm{ADB} / \mathrm{N}$ is not emphasized in total portfolio on the rural as compared to urban sector. Because of $\mathrm{ADB} / \mathrm{N}$ 's objective is to improve and focus on rural areas.

### 5.3 Recommendations

Recovery policy and procedures must be exercised strictly to reduce outstanding loan. Strict supervision must be made for issuing the memorandum letter. After that the growth rate could not be fluctuated.

- Targeted loan disbursement and repayment is increased in every year but growth rate is in decreasing trend. And also share of loan repayment to disbursement is fluctuating year by year. New standards should be set to minimize this variance in loan repayment and disbursement. Because of this research concluded that the targeted loan amount is always less than actual achievement during the study period.
- Detail plan of action should be prepared while projecting their saving and credit by participating concerned authorities.
- Human resources training and information should be provided to the concerned staffs. So that forecasting and standard setting do not vary. Targeted loan should match with actual loan disbursement and repayment.
- In this globalized world, $\mathrm{ADB} / \mathrm{N}$ should focus itself in the area of transportation, communication, finance etc rather than traditional method of financing in a particular area so that it can compete with other commercial banks.
- Central Development Region (CDR) is the most beneficial among others to facilitate itself from loan disbursement and loan repayment facility. But less development regions such as MWDR and FWDR are being ignored. CDR has got 8-10 times more investment as compared to above mentioned development areas and cities rather than rural areas and villages. But if the bank really wants to progress then it should give equal importance to all the fields, sectors and regions. Then only bank can move towards actual commercialization. The bank should apply easy loan policy to improve in the life of the rural people.
- The correlation coefficient between loan disbursement and repayment is positive, which is positive signal for the organization. That is better for profitability of the organization. The bank should try to increase the relationship for the better improvement.
- The trend of loan repayment is in increasing trend which is good for the organization but the repayment trend should increase with loan disbursement. $\mathrm{ADB} / \mathrm{N}$ should maintain good relationship with customer to repay its outstanding. New Modern Banking Technique should be introduced to reduce outstanding loan as well as to disburse in agriculture sector.
- To achieve the objectives of $\mathrm{ADB} / \mathrm{N}$, the efficient loan disbursement and repayment is necessary. It is not only necessary but also compulsory for better performance of the organization. If $\mathrm{ADB} / \mathrm{N}$ initiates steps to the appropriate management of loan, certainly it will attain its set objectives successfully.
- To achieve the desired objectives of the bank, there should be practice of efficient resource management.
- The loan disbursement, repayment is in increasing trend except one year during the study period. But outstanding loan is always increasing trend. So the bank should encourage to maintain same trend of increasing. And the bank should make effective policy to repay disburse the loan. The percentage of non- performing loan should be discourage by adopting various measure of loan recovery.
- Most of the people of our country live in rural area. They are not benefited from the banking service. Generally, our assumption is that, $\mathrm{ADB} / \mathrm{N}$ is one of the banks, which give service to the rural area's people. But it is not shown in practice. So the bank should create a desirable level of all sector and areas are provided with the banking services in this present situation.
- Rural credit should be emphasized to create self-employment, income generation and women empowerment.
- To improve the existing effectiveness of the bank, the productivity of the staff should be improved in terms of staff loan disbursement, saving and client services.
- $\mathrm{ADB} / \mathrm{N}$ have major portfolio of loan in CDR. So, the bank should be focus in the rural areas, likewise MWDR and FWDR.


## BIBILOGRAPHY

## Thesis:

Bastola, T. R. (2003). Loan Disbursement and Repayment Pattern of ADB/N. Unpublished Mater Degree Dissertation, PNC., Pokhara.

Dahal, I. P. (2002). An Analysis of Priority Sector Credit and It's Recovery of Rastriya Banijya Bank; Unpublished Master's Dissertation, Shankar Dev Campus, T.U.
Khanal, A. B. (2002). Analysis of Loan Disbursement of ADB/N. Unpublished Master Dissertation, Central Department of Management, T.U., Kirtipur.

Pandey, R. (2004). An Evaluation of Loan Disbursement and Collection of $\boldsymbol{A D B} / \boldsymbol{N}$. Unpublished Master Degree Dissertation, Shankar Dev Campus, T.U.

Paudel, S. (2060). Loan Effectiveness of Agricultural Development Bank Nepal. Unpublished Master Degree Thesis, PNC., Pokhara.

Pradhan, G. (2004). Loan Disbursement and Collection Pattern of ADB/N. Unpublished Master Degree Thesis, Central Department of Management, T.U., Kirtipur.

Sharma, C. N. (2001). Analysis of Loan Disbursement Pattern of ADB/N. An unpublished Master Degree Dissertation, Central Department of Management, T.U., Kirtipur.

Sharma, P. (2007). Micro Finance Practices and their Sustainability in Nepal. Unpublished Ph. D. Dissertation.

Shrestha, N. (2007). Deposit Collection and Loan Disbursement of ADB/N. Unpublished Master Degree Dissertation, PNC., Pokhara.

Sthapit, A. B. (2006). Statistical Methods. Kathmandu: Buddha Academic Publishers and Distributors Pvt. Ltd.

Udas, R. (2007). Loan Management of Commercial Bank: A Case Study of Machhapuchhre Bank Limited. An Unpublished Master Degree Thesis., PNC., Pokhara.

## Articles and Journals:

ADB/N (1989). Eligible Borrowers of ADB/N. Loan Mannual. Kathmandu: Loan Division of ADB/N

ADB/N (1989). Loan Limit/Line of Credit. Loan Mannual. Kathmandu: Loan Division of ADB/N.

ADB/N (1989). Pocket Area Group Loan and Total Production Loan. Loan Mannual. Kathmandu: Loan Division of ADB/N.

ADB/N (2061 to 2065). Annual Program and Budget. Kathmandu: Planning and Project Department of ADB/N.

ADB/N. (2061 to 2065). Annual Report. Kathmandu: MIS Division of ADB/N.
ADBL Newsletter, Anniversary Bulletin, Agricultural Development Bank Ltd., Nepal.

ADBL Newsletter(Jan to July 2010), Monthly Bulletin, Agricultural Development Bank Ltd., Nepal.

Bhattarai, M. (2059). The Problem of Bank Bad Debt and NPA. An Article Published in the NRB Samachar Patra, Vol. 47: 62.

Dahal, B. and Dahal, S. (2002). A Hand Book to Banking. Kathmandu: Asmita Books and Stationary.

Karki, U. (2059). Challenging of Non-Performing Loan Management in Nepal. An Article Published in the NRB Samachar Patra, Vol 47:87.

Kerlinger, F. N. (1986). Foundations of Behavioural Research (3rd ed.). New York: Holt, Rimehart and Winston.

Klisse, E. (1978). Money and Banking, Brighton England: South Western Publishing Company.
Kothari, C.R. (2001). Research Methodology Methods \& Techniques. New Delhi: Wishowa Publications.

Kunwar, K.B. (2002). The Himalayan Poverty: Threat to the World. Kathmandu: Meena Publication.

Pant, Y.P.and Jain, S.C. (1969). Agricultural Development in Nepal. Bombay: Vora and Co Publishers Pvt. Ltd.

Rijal, V.R. (2001). What Do we Get Loan? n. p.

Vaidya, S. (1999). Banking Management, Kathmandu: Mintor, Nepal.
Wolfe, H.K. and Pant, P.R. (2007). Social Science Research and Thesis
Writing. Kathmandu: Buddha Academic Publishers and Distributors Pvt. Ltd.

## Website:

www.adbgov.com.np
www.nrb.com.np
www.google.com.np

## Appendix-1

Karl Pearson's Correlation Coefficient between Targeted Loan Disbursement and Repayment

Let,

$$
\begin{aligned}
& \text { Targeted Loan Disbursement }=\mathrm{X} \\
& \text { Targeted Loan Repayment }=\mathrm{Y}
\end{aligned}
$$

## Computation of Correlation Coefficient

| F/Y. | Targeted Loan Disbursement (X) | Targeted Loan Repayment (Y) | $\begin{aligned} & x=X-\bar{X} \\ & x=X-17.29 \end{aligned}$ | $\begin{aligned} & y=Y-\bar{Y} \\ & =Y-21.23 \end{aligned}$ | $\mathrm{x}^{2}$ | $\mathrm{y}^{2}$ | xy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2061/062 | 11.27 | 10.31 | -6.02 | -10.92 | 36.92 | 119.25 | 65.74 |
| 2062/063 | 13.98 | 11.72 | -3.31 | -9.51 | 10.96 | 90.44 | 31.48 |
| 2063/064 | 29.44 | 24.81 | 12.15 | 3.58 | 147.62 | 12.82 | 43.50 |
| 2064/065 | 31.77 | 27.24 | 14.48 | 6.01 | 209.67 | 36.12 | 87.02 |
| 2065/066 | 34.33 | 32.08 | 17.04 | 10.85 | 290.36 | 117.72 | 184.88 |
|  | $\sum x=86.46$ | $\sum y=106.16$ |  |  | $\sum_{694.85}^{x^{2}=}$ | $\sum_{376.35}^{y^{2}}=$ | $\sum_{412.62}^{x y=}$ |

$$
\begin{aligned}
& \bar{X}=\frac{\sum X}{n}=\frac{86.46}{5}=17.29 \\
& \bar{Y}=\frac{\sum Y}{n}=\frac{106.16}{5}=21.23
\end{aligned}
$$

Now,

$$
\mathrm{r}_{\mathrm{xy}}=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum z y^{2}}}}=\frac{412.62}{\sqrt{694.85} \sqrt{376.35}}=0.8069=0.807
$$

$$
\therefore r x y=0.807
$$

Calculation of Coefficient of Determination:

$$
r^{2}=(0.807)^{2}=0.6512
$$

## Appendix-II

Karl Pearson's Correlation Coefficient between Actual Loan Disbursement and Repayment.

Let,

$$
\begin{array}{ll}
\text { Actual Loan Disbursement } & =\mathrm{X} \\
\text { Actual Loan Repayment } & =\mathrm{Y}
\end{array}
$$

## Computation of Correlation Coefficient

| F/Y. | Actual Loan <br> Disbursement <br> (X) | Actual Loan <br> Repayment <br> $(\mathbf{Y})$ | $x=X-\bar{X}$ <br> $=X-30$ | $y=Y-\bar{Y}$ <br> $=Y-28.30$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{y}^{\mathbf{2}}$ | xy |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2061 / 062$ | 11.82 | 10.33 | -18.18 | -17.97 | 330.51 | 322.92 | 326.69 |
| $2062 / 063$ | 30.61 | 28.61 | 0.61 | -0.31 | 0.372 | 0.10 | -0.1891 |
| $2063 / 064$ | 29.29 | 28.16 | -0.71 | -0.14 | 0.50 | 0.02 | 0.0994 |
| $2064 / 065$ | 36.34 | 34.17 | 6.34 | 5.87 | 40.20 | 34.46 | 37.22 |
| $2065 / 066$ | 41.92 | 40.22 | 11.92 | 11.92 | 142.09 | 142.09 | 142.09 |
|  | $\sum x=149.98$ | $\sum y=141.49$ |  |  | $\sum_{513.67}^{x^{2}=}$ | $\sum_{4}^{y^{2}=}$ | $\sum^{x y}=$ |

$\bar{X}=\frac{\sum X}{n}=\frac{149.98}{5}=30$
$\bar{Y}=\frac{\sum Y}{n}=\frac{141.49}{5}=28.30$
Now,

$$
\mathrm{r}_{\mathrm{xy}}=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum z y^{2}}}}=\frac{505.92}{\sqrt{513.67} \sqrt{499.59}}=0.999
$$

Again ,
Calculation of Coefficient of Determination:

$$
r^{2}=(0.999)^{2}=0.9980
$$

## Appendix-III

Karl Pearson's Correlation Coefficient between Actual Loan outstanding and Repayment

Let,

| Actual Loan Outstanding | $=\mathrm{X}$ |
| :--- | :--- |
| Actual Loan Repayment | $=\mathrm{Y}$ |

Computation of Correlation Coefficient

| F.Y. | Actual Loan <br> Outstanding <br> (X) | Actual Loan <br> Repayment <br> $(\mathbf{Y})$ | $x=X-\bar{X}$ <br> $=X-32.76$ | $y=Y-\bar{Y}$ <br> $=Y-28.30$ | $\mathbf{x}^{2}$ | $\mathbf{y}^{2}$ | $\mathbf{x y}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2061 / 062$ | 21.17 | 10.33 | -11.59 | -17.92 | 134.33 | 322.92 | 207.69 |
| $2062 / 063$ | 33.31 | 28.61 | 0.55 | -0.31 | 0.3025 | 0.10 | 0.17 |
| $2063 / 064$ | 34.44 | 28.16 | 1.68 | -0.14 | 2.822 | 0.02 | -0.24 |
| $2064 / 065$ | 36.60 | 34.17 | 3.84 | 5.81 | 14.75 | 34.46 | 22.54 |
| $2065 / 066$ | 38.30 | 40.22 | 5.54 | 11.92 | 30.69 | 142.09 | 66.04 |
|  | $\sum x=163.82$ | $\sum y=141.49$ |  |  | $\sum_{182.89}^{x^{2}=}$ | $\sum_{499.59}^{y^{2}=}$ | $\sum_{296}^{x y=}$ |

$\bar{X}=\frac{\sum X}{n}=\frac{163.82}{5}=32.76$
$\bar{Y}=\frac{\sum Y}{n}=\frac{141.49}{5}=28.30$
Now,

$$
\mathrm{r}_{\mathrm{xy}}=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum z y^{2}}}}=\frac{296.2}{\sqrt{182.89} \sqrt{499.59}}=0.9799
$$

Again,
Calculation of Coefficient of Determination:

$$
\mathrm{r}^{2}=(0.9799)^{2}=0.9602
$$

## Appendix-IV

Karl Pearson's Correlation Coefficient between Actual Loan outstanding and Repayment

Let,

$$
\begin{aligned}
\text { Targeted Loan Disbursement } & =\mathrm{X} \\
\text { Actual Loan Disbursement } & =\mathrm{Y}
\end{aligned}
$$

## Computation of Correlation Coefficient

| F/Y. | Actual Loan <br> Outstanding <br> (X) | Actual Loan <br> Repayment (Y) | $x=X-\bar{X}$ <br> $=X-24.16$ | $y=Y-\bar{Y}$ <br> $=Y-30$ | $\mathbf{x}^{2}$ | $\mathbf{y}^{2}$ | $\mathbf{x y}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2061 / 062$ | 11.27 | 11.82 | -12.89 | -18.18 | 166.15 | 330.51 | 234.34 |
| $2062 / 063$ | 13.98 | 30.61 | -10.81 | 0.61 | 103.63 | 0.372 | -6.21 |
| $2063 / 064$ | 29.44 | 29.29 | 5.28 | -0.71 | 27.88 | 0.50 | -3.75 |
| $2064 / 065$ | 31.77 | 36.34 | 6.61 | 11.92 | 96.83 | 142.09 | 117.29 |
| $2065 / 066$ | 34.33 | $\sum x=120.79$ | $\sum y=149.98$ |  |  | $\sum^{x^{2}=}$ | $\sum^{y^{2}=}$ |
|  |  |  |  | $\sum^{x y}=$ |  |  |  |

$\bar{X}=\frac{\sum X}{n}=\frac{120.79}{5}=24.16$
$\bar{Y}=\frac{\sum Y}{n}=\frac{149.98}{5}=30$
Now,

$$
\mathrm{r}_{\mathrm{xy}}=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum z y^{2}}}}=\frac{389.92}{\sqrt{452.4} \sqrt{513.67}}=0.8089
$$

Again
Calculation of Coefficient of Determination:

$$
r^{2}=(0.8089)^{2}=0.6543
$$

## Appendix-V

Karl Pearson's Correlation Coefficient between Actual Targeted and Actual Loan Repayment

Let,

| Targeted Loan Payment | $=\mathrm{X}$ |
| :--- | :--- |
| Actual Loan Repayment | $=\mathrm{Y}$ |

## Computation of Correlation Coefficient

| F/Y. | Targeted <br> Loan <br> Outstanding <br> (X) | Actual Loan <br> Repayment <br> (Y) | $x=X-\bar{X}$ <br> $=X-21.23$ | $y=Y-\bar{Y}$ <br> $=Y-28.30$ | $\mathbf{x}^{2}$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{x y}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2061 / 062$ | 10.31 | 10.33 | -10.92 | -17.97 | 119.25 | 322.92 | 196.23 |
| $2062 / 063$ | 11.72 | 28.61 | -9.51 | -10.31 | 90.44 | 0.10 | 9805 |
| $2063 / 064$ | 24.81 | 28.16 | 3.58 | -0.14 | 12.82 | 0.02 | -0.50 |
| $2064 / 065$ | 27.24 | 34.17 | 6.01 | 5.87 | 36.12 | 34.46 | 35.28 |
| $2065 / 066$ | 32.08 | 40.22 | 10.85 | 11.92 | 117.72 | 142.09 | 129.33 |
|  | $\sum x=106.16$ | $\sum y=141.49$ |  |  | $\sum_{376.35}^{x^{2}=}$ | $\sum_{499.59}^{y^{2}=}$ | $\sum_{458}^{x y=}$ |
|  |  |  |  |  |  |  |  |

$\bar{X}=\frac{\sum X}{n}=\frac{106.16}{5}=21.23$
$\bar{Y}=\frac{\sum Y}{n}=\frac{141.49}{5}=28.30$
Now,

$$
\mathrm{r}_{\mathrm{xy}}=\frac{\sum x y}{\sqrt{\sum x^{2} \sqrt{\sum z y^{2}}}}=\frac{459.39}{\sqrt{376.35} \sqrt{499.59}}=1.06
$$

Again ,
Calculation of Coefficient of Determination:

$$
\mathrm{r}^{2}=(1.06)^{2}=1.124
$$

