

CHAPTER - 1

INTRODUCTION

1.1 Origin of Banking:

Bank is financial institution that deals with monetary transactions. Bank collects savings as deposits from general sectors, invests this fund in productive sectors and earns interest. The term “Bank” has been derived from the Latin word “Bancus” which refers to the bench on which the banker would keep his money and his records. Some people trace its origin to the French word “Banque” and the Italian word “Banca” which means a bench used for keeping. Lending and exchanging of money or coins in the market place by moneylenders and moneychangers. After a long period, the word bench was pronounced as bank.

Now days, we have seen many branches of banks working in towns and villages. They offer different types of services to the people. In past days, the functions of bank were limited to acceptance of deposits and granting of loans to the public. With the passage of time, there is change in the concept of banking. The principal types of banking in modern industrial world are commercial banking and central banking.

Banking plays a significant role in the development of the economy. It provides an effective payment and credit system, which facilitates the channeling of the funds from the surplus sending units (savers) to the deficit spending units (investors) in the economy. Bank is the financial institution that is mainly confined to finance for the development of the trade, commerce and industry. The banking services now a days perform the essential and valuable function for the development of the nation.

Some of the definitions of bank given by different writers are as follows:
According to Kent, “A bank is an organization whose principal operation is concerned with the accumulation of the temporary idle of the general public for the purpose of advancing to other expenditure.”

As per Oxford dictionary “A bank is an establishment for custody of money which it pays out customers order.”

According to Crowther, “The bankers business is to take the debts of other people to offer his own in exchange and thereby create money.”

According to Sayers, “A bank is an institution whose debts (bank deposits) are widely accepted in settlement of their people’s debt to each other.”

A bank is an institution which deals with money by accepting various types of deposit, disbursing loan and rendering other financial services. Because of providing wide range of services, banks are essential.

1.2 Historical Background of Banking:

In previous days goldsmiths, merchant and moneylenders were the ancient banker of the world as well as of Nepal. In 1175 A.D. ‘The bank of Venice’ of Italy was established as the first banking association in the world. Then after that “The bank of Barcelona” was established in 1401 A.D. in Spain. ‘The Bank of Bombay’ in India in 1840 A.D. ‘The bank of Bengal’ in 1843 A.D. ‘The Bank of Madras’ in 1943 A.D. was established. They were known as presidency bank and later in were established as “The imperial Bank of India” in 1921 A.D. In 1955 A.D. “The imperial bank of India” was altered and name as `State Bank

of India'(SBI).

In 1933 B. S. for a sample banking transaction during the tenure of the Prime Minister Ranodip Singh "Tejarath Adda" was established in Nepal. And this was first step that was led to the institutional development of banking in Nepal. "Tejarath Adda" never used to collect deposit but instead it used to give loans to employees and public against the bullion. In 1994 B.S. Nepal Bank Ltd. Was established as first commercial Bank.

Nepal Rastra Bank was established in 2012 B.S. as a central bank of Nepal. It has been functioning as the government's bank and has contributed to the growth of financial sectors. Nepal Rastra Bank had some limitation so to copy up with the limitation. Rastra Banijya Bank was established in 2022B.S.The above mentioned is commercial bank performed commercial transactions only. It didn't give importance to-the service motive. Since our country is and agriculture country, and despite of being Agricultural country, our farming system is traditional one. Using traditional system, it involves more cost and less yield. To overcome some problem, scientific agriculture system imperative. It involves financial requirement and specialist to the field. To meet these ends, Agriculture Development Bank was established in 2024 B.S. and other bank was established then after.

1.3 Background in Nepal Context:

Nepal is a small landlocked country surrounded by India in the East, West and South and China in the North. The area covered by Nepal is 147181Sq. Km. It is one of the least developed country in the world. Nepal is very rich in natural resources and scenic beauty. It is the second

richest country resources in the world after Brazil. Geographically, Nepal is divided into three regions: Himalayan region, Hilly region and Terai region. These three regions are totally different from one another with respect to climatic condition, living style economic condition etc. Nepal is also divided into five development regions, fourteen zones and seventy five districts. The reason behind these divisions is the balanced economic growth of the country.

Geographically, Nepal is at disadvantage in that it is a landlocked country, which has greatly hindered its foreign trade situation. Nepal has an agro-based economy; more than 80% of people are engaged in agriculture. Agriculture is the backbone and foundation of Nepalese Economy. But it is traditional and fully depends upon monsoon. Out of total land of Nepal, only 26.5% of land is cultivable. Again, among this cultivable land only 20% of it is suitable for farming. Also there is irrigation problem in Nepal. Only one third of cultivable land is provided irrigation facility. In this difficult situation, agriculture sector has to cover the whole economic condition. It means agriculture plays a significant role in order to develop the whole economy.

In Nepal; agriculture is the basis of industrial development. It plays a vital role in economy in different ways like, it meets food demand of increasing population, provides maximum necessary raw materials to the industries, provides employment to the 80% of the qualified and active population and supply 40% of GDP in the fiscal year 2063/2064. Important thing is that our economic growth totally depends upon agriculture sector.

Since Nepal is one of the least developed countries, growth of the

industrial sector is very slow. This happens due to the different and difficult topography. In this situation it is only the sector, which provides opportunities. Even though it is backbone and mainstay of the whole economy, it is traditional type and it is not much developed. Farmers are used Traditional techniques. There are - many problems like lack of modern technology, efficient and effective source of finance, lack of modern equipments and tools, chemical fertilizers and seeds, inadequate and unreliable irrigations facilities and many more. There are some other major problems, which are playing vital and dominating role in every society, and they are poverty and lack of education. The result of all these are low level of production, low level of income, low saving and low level of investment.

Besides being a major source of food supply, the role of this sector is important for the raw materials supply for export and industries. But it couldn't contribute to bring continuity in the supply of raw materials required for agro-based industry thereby increasing the export of agriculture production. To end this, it is necessary to deliver adequate agriculture inputs. Technology and agriculture credit on timely basis by making adequate and scientific improvements on the existing system. Similarly it seems necessary to pay special attention on crop development in accordance with agriculture research, irrigation, geographic conditions and diversification. Because of unreliable and inadequate irrigation facilities, agriculture sector is still depending on monsoon.

Most of Nepalese people are landless. More than 80%of the people have less than 1 Hector of land. Because of rapid growth of population,

there is more pressure of population on land. Currently agriculture production doesn't only depend upon natural resources, climate but also depend upon various tools used by the farmers. Nepalese agriculture has been suffering from different problems.

In Nepalese society, Nepalese people still depend upon non-institutional money lending organization such as local lender called land lords, merchants and Mahajans. They charge very high interest rates and call back whenever they like, there is no fixed term and conditions while lending and borrowings. Because of high interest rates, borrowers are unable to repay the loan in fixed time. So their small amount of loan increases day by day and their whole life passes with debt. This all happens because of the absence of guarantor, terms and conditions.

There is "saying in Nepalese context.'Farmers are born in debt, live in debt and die in debt.' This system force them to transfer their property whatever they have to the landlord. This is another major problem, which creates obstacles in the agriculture development process.

For improvement of agriculture production by adopting modern methods of agriculture operation, huge investment is required .A person doesn't use modern methods due to the lack of purchasing power. To solve the financial problems of the people and develop the agriculture sector, Agriculture Development Bank was established under the Agriculture Development Act. The main objective of the bank is to provide financial support to the required people for the development of agriculture sector.

1.4 Focus of the Study:

This study is basically focused on the credit management of ADBN and its overall financial performance. Since its establishment as compare to other banks and agriculture credit is the nucleus this is system of farm operation to increase the output of agriculture products. It provides a flow to the system averting, which would have occurred due to the lack of monetary capacity of the farmers. During its established ADBN has been working as a premier rural tending institution with market share of more than 80°'0 of rural institution credit in Nepal.

To increase productivity, agricultural credit is most essential. Most of farmers in Nepal are suffering from poverty. They don't have essential financial resources, invest able surplus with them being almost nil, credit has to play a dominant role in enabling them to participate in new technology.

Financial ratio analysis is a widely used tool of financial analysis and its performance of the banks credit management and its policies are usually focused such that bank becomes financially sound enough to meet investors demand and be the safe place for the people to deposit their saving providing them with good customer service. Financial analysis tries to analyze profitability income and expenditure, sources and uses of funds of these institutions. Financial ratios are evaluated with the help of accounting g data and financial statement like balance sheet and profit and loss accounts. With the help of these tools we can measure the liquidity, profitability, leverage and activity in rational way On the other hand, the study also analysis the overall credit policy of the bank and analysis the effective use

of its policy and monitoring of investment and its documentation part as per the NRB rules.

1.5 Introduction of Agriculture Development Bank:

Agriculture is the backbone of Nepalese economy. It is the major source of food supply to the population. It provides raw materials to the small industries and agriculture as well. It is the major source of livelihood for a majority of the countries population. Agriculture has major contribution in GOP i.e. about 60%. But agriculture sector in Nepal faces different problems like lack of proper irrigation facility, lack of improved seeds, lack of adequate capital, lack of fertilizers and insecticides, lack of agricultural tools etc.

Development of agriculture sector is very important. Thus, to overcome all the problems of agriculture and to uplift the living standard of the rural people, first Cooperative Bank was established in 1963 A.D. (2019 B.S.) which later converted into Agriculture Development Bank in 1968 A.D. (2024 B.S. Magh 7) under Agriculture Development Act 1947 A.D. The land reform Savings Cooperative, a similar institution established in 1966 A.D. was merged with the bank in 1977 A.D. to avoid the further possibility of over financing. Since then, Agriculture Development Bank is only the Bank which provides services in the agriculture field.

The bank has been working as premier rural institution since last three decades contributing more than 80% of share in meeting institutional needs in Nepal. It is an autonomous organization under the supervision of the Ministry of Finance of Government of Nepal. Under the ADBN Act, the bank committed to raise the economic conditions of the farmers by providing credit and other necessary inputs in the easy way.

The act also empowered the bank to finance small farmers on group liability and expand its scope of financing to promote cottage industries. It has permitted the bank to engage in commercial banking activities for the mobilizing of domestic resources.

The ADBN is only development bank, which has been adopting a 'Three Window System' to operate its activity in easy way. They are 'Development Banking', 'Small Farmers Development Programs' and three is 'Commercial Banking'. Development Bank works for the development of rural as well as agriculture sector. Small Farmers Development Programs committed uplift tile economic conditions of target groups by providing credits and other inputs and educational programs. Like wise Commercials Banking operates its transactions in urban areas to collect capital to fulfill the credit demand of rural sectors

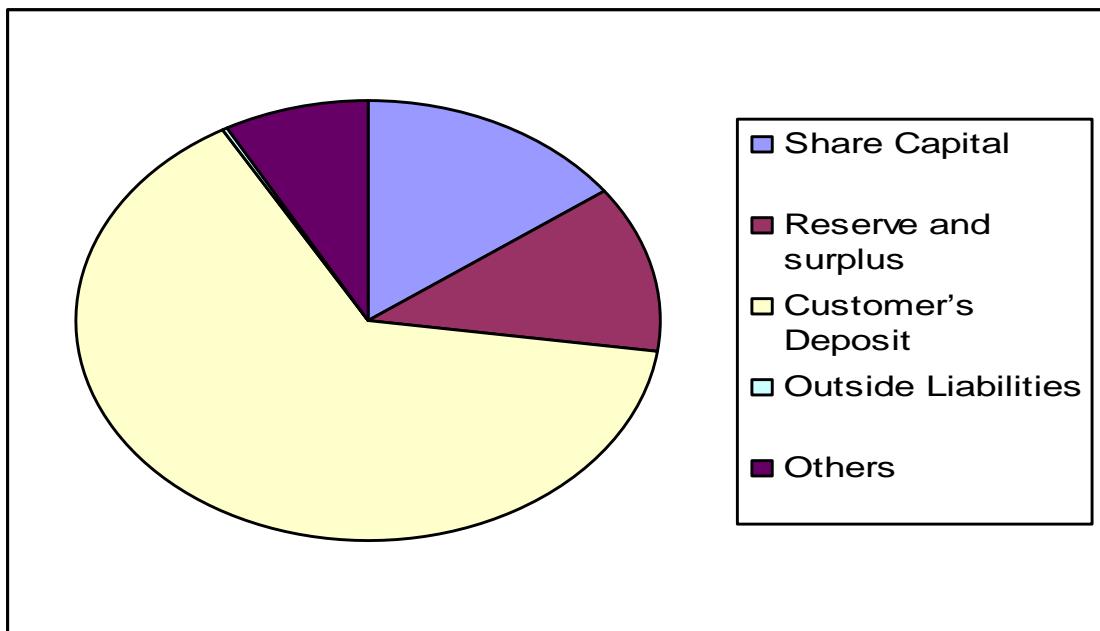
Rural Development Bank, Co-operative Savings bank, Currency exchange bank, Small farmers development project (SFDP) as program of ADBN, are other types of banks working in the various economic sectors. The major sources of financial resources are as under. (By 2007)

Table No. 1
Financial Sources of Bank

S. N.	Sources	Amount in Percentage
1	Share Capital	14.8%
2	Reserve and surplus	12.34%
3	Customer's Deposit	63.97%
4	Outside Liabilities	0.073%
5	Others	8.084%

Source: Annual Report of ADBN

Figure No. 1
Pie Chart Showing Sources of Capital Generation
Financial Sources of Bank in %



Source: Table No. 1

Agriculture Development Bank at a place

Established Date: 2024 B.S. Magh 7

Share Capital 9,27,80,00 (in thousands)

No. of offices: 236

No of SEDP: 310

No of transferred program:

No of employees: 3856

Investment till now: 5,473,229 (in thousands)

Income till now: 1,966,734 (in thousands)

Expenditure till now: 1,571,282 (in thousands)

Deposit till now: 32,614,732 (in thousands)

1.4.1 Objectives of ADBN

To overcome the financing problems facing by the co operative banks and individual, The ADBN came into with the followings objectives:

- a. To attain production, credit. Irrigation and marketing loan to the cooperatives and rural banks.
- b. To encourage the establishment of rural banks.
- C. To provide loan to individuals and other for the purchase of agriculture inputs, tractors and agriculture implements. It also finances for construction of Govar-Gas plants.
- d. To provide loan to individuals to start agriculture business like poultry farming, dairy production, sheep farming and animal husbandry.
- e. To provide banking facilities to co-operatives, individuals and others in the remote areas.
- f. To protect the farmers from high interest rates and provide them timely and adequate credit according to theirs needs and purpose of investment.

1.4.2 Functions of ADBN

To solve the financial problems, to support the farmers to uplift their living standard as well as the economic growth of the country, ADBN was established with border aspects .To fulfills it's objective, it

has been operating followings activities:

- a. Provide short, medium and long term agriculture loan to individual farmers, group of farmers, corporate bodies and village committee.
- b. Provide loan and technical services for the purchase of inputs and capital items such as fertilizers, insecticides, feeds, farm machinery, irrigation equipment, canal construction, boring of pumps sets and sprinklers.
- c. Provide loan for the purchase of livestock.
- d. Finance for the agro-based small cottage industries.
- e. Finance of cold storage, ware housing and other marketing facilities.
- f. Finance for capital goods necessary for the development of alternative sources of energy like solar energy, bio-gas and wind energy.
- g. Organize and Supervise the Small Farmers Development Programs to increase the existing knowledge of the farmers about modern techniques of agriculture.
- h. Under take banking functions to generate resources.
- i. Provide training to the beneficiaries and the bank staff to support each other.
- j. Collect capital to mobilize domestic resources

k. Credit to customer.

Table No. 2
List of Branches office of ADBN

S.N.	Districts	No. of Branches
1	Biratnagar	23
2	Birgunj	19
3	Birtamode	13
4	Bhairhawa	24
5	Dhangadi	27
6	Ghorahi	11
7	Janakpur	16
8	Kathmandu	33
9	Nepalgunj	31
10	Pokhara	31
11	Rajbiraj	20
		233

Source: Annual Report of ADBN

1.6 Statement of the Problem:

Nepal is a small country with limited market. Economic condition of the country is degrading. Due to conflict since 2052 B.S. Over all economic sectors either manufacturing or commercial, have undergone heavy losses. Agriculture sector is the basic sector that must be developed for economic development of the country. About 80% of people in Nepal are engaged in agriculture and agriculture contributes about 60% of the country's GDP. For the development of agriculture sector, ADBN plays a

superior role in the country. Since 1967 A.D. it has launched so many programs in the sector of rural poverty.

ADB has a huge amount of loan for the agriculture development since 1967. ADB has disbursed millions of loan for various purposes like cereal crops, cash crops, tourism, livestock, cold storage, horticulture, agro-tools etc. agriculture sector of Nepal is mainly comprised of four sub sectors.

- ❖ Agriculture
- ❖ Irrigation
- ❖ Forestry and
- ❖ Land Reform

The growth of agriculture sector has always been dismal and fluctuating .Saving and investment capacity of Nepal is becoming poor day to day because of decreasing agriculture production and increasing population. In this context, the agriculture product is must necessary to promote all over development of the country. A number of farmers under both the project and controlled groups are facing starvation due to insufficient production and opportunity of operating income from non-agricultural sector. So, high priority should be given to agricultural finance programs and policies designed to increase the agriculture production.

ADB is the main specialized bank in agriculture financing in Nepal .Many other institutions are also financing in agriculture sector but their contribution is comparatively very low because they are not meeting the higher demand of agriculture loan. The financial

position of ADBN affects the total agriculture finance of the nation.

On the other hand, unsuitable political situation greatly affecting the nation's economy as well as bank's positions. So the government must take corrective actions to make political stability and also make program and policies to remove weakness of the financial position of bank for its perpetual growth and development.

1.7 Objectives of the Study:

Undoubtedly, the role of ADBN in the development of the agriculture sector through the implementation of different plans and programs is the praise worthily one. The basic objective of the study is to have true insight into the credit management aspect (Practice of disbursing loans and recovery) of the ADBN. This aims to examine its efficiency, effectiveness, systematization and sincerity in disbursing and recovery of loan as well under the supervision of the Ministry of Finance of Government of Nepal. However, following are the objectives of this study:

1. To evaluate financial position of bank.
2. To analyse the strength and weaknesses of the bank in terms of liquidity, profitability, leverage and other ratios.
3. To analyse the progressive statement about the loan activities of the bank.
4. To point out the major contribution of ADBN in the agriculture sector.

5. To know the effectiveness of the banks credit management in mobilizing its resources.

1.8 Significance of the study:

ADBN has facing many more financial problems relating to loan like recollection, relating better investment, relating to investment in non earning assets etc. To over come the above problems financial analysis is key tool. It gives the clear vision about the agricultures bank's current position and helps to make the better prospective plan and policies for its perpetual growth and success. On the other hand, the studies also help shareholders, investor's and other creditors to identify the productivity of their funds in ADBN.

Besides, these studies will also help the mgmt. of the bank to analyze the effectiveness of their credit management. And its policies of the bank in comparison to the government and central bank to formulate the new credit policy.

1.9 Limitation of the Study:

Every study has its own limitation. Following are the limitations:

1. This study is mainly concerned to credit management of ADBN which would otherwise be in descriptive form.
2. This study is only based on five years data.
3. The study is based only on the major financial statements like balance sheet, income statement, profit/loss A/c and cash flow statements.
4. It is based on the annual report published by ADBN.
5. Time value of money has been fully ignored while analysing.

6. There is lack of sufficient time and resource.

1.10 Organization of the Study:

The whole study is divided into five different chapters as follows:

This research has been organized into five chapters the title of the chapter is listed below with brief description of their containment

Chapter 1:

It contains the introduction part of research. In introduction part background, Focus of the study, Statement of problem, Objectives of the study, Significance of the study and limitation of the study are included.

Chapter 2:

It contains review of literature. Here theoretical analysis and brief review of literature is available It also includes discussion on the conceptual frame work and published and unpublished master degree thesis.

Chapter3:

It explains about research methodology .It Includes Research design, Population and sample, Sources of data, Data collection procedure, Methodology of Analysis and definition of statistical Tools.

Chapter 4:

It deals with the presentation and analysis of data to indicate

qualitative factors on saving of deposit using both financial and statistics tools and techniques.

Chapter 5:

It includes summary, findings, conclusion and recommendations. Also at the end of this research Bibliography and Appendices are attached.

CHAPTER - 2

REVIEW OF LITERATURE

2. Conceptual

2.1 Introduction:

The review of literature is the important aspects of planning of the study. The main focus of the study is how to find out the work, which have to done in the area of the research problem and what has not been done in the field of research study undertaken. In this study, the review of literature covers the review of analysis of financial condition of ADBN. Review of literature provides the foundation of developing a comprehensive theoretical framework for which hypothesis can be developed for testing. The literature survey also minimizes the risk of pursing the dead ends in research. “The main purpose of reviewing the literature is to develop some expertise in one’s are to se what new contribution can be made end to receive some ideas for developing a research design.”

2.2 Credit:

2.2.1 Concept of Credit:

In the field of banking transaction, the term credit is referred to the loan. Credit is the amount of money lent by the creditor (bank) to the borrower (customers) either on the basis of security or without security.

“Sum of money lent by a bank” credit and advances is an important item on the asset side of the Balance sheet. Bank earns interest on credit and advances which is one of the major sources of income for banks. “Bank

prepares credit portfolio, otherwise it will not only add bad debts but also affect profitability adversely”

Bank generally grant credit on four ways:

1. Overdraft
2. Cash Credit
3. Discounting of Bills
4. Direct Credit

2.2.2 Types of Credit:

The different types of credit are as follows:

1.Cash Credit:

The credit is not given directly cash but deposit account is being opened on the name of the creditor and amount credited to that account. In this way, every bank loan creates deposit.

2. Term Credit:

Money lent in lump sum to the borrowers is term loan. It is principal form of medium term debt financing having maturities of 1 to 8 years. The term loans are usually repaid in level amounts over the period of the loan, either a large final “Balloon Payment” or just a single “Bullet Payment” at maturity.

Barely 2 Myres urge that bank loans with maturities exceeding years are called term loans. The firm agrees to pay interest based on the banks prime rate and to repay principal in the regular installments.

3.Overdraft:

It is an agreement by which the bank allows the customer to draw over and above the current account balance. Interest on overdraft is charged on debit balance on daily basis.

4. Working Capital Credit:

It means the difference value between current assets and current liabilities. It is granted to the customers to meet their working capital gap for supporting production process. A natural process develops where in funds moving through the cycle are generated to reply a working capital.

5. Installment Credit:

It is well know installment policy. These days most of the financial institution applied this policy for the disbursement of loans in vehicles and home appliances.

6. Housing Credit:

Financial institution adopts this policy as residential building, commercial complex, construction of warehouse etc. It is given to those who have regular income or can earn revenue from housing project itself.

7. Project Credit:

It is granted to the customer as per project viability. The borrower own self invest certain proportion to the project from their equity and rest will be financed by bank. Construction credits are short-term credits made to developers for the purpose

of completing proposed projects. Maturities on construction credit range from 12 months to as long as 5 years depending on the size of the specific project.

8. Consortium Credit:

No single financial institution grant loan to the project due to single borrower limit or other reason and two or more such institutions may consent to grant credit facility to the project of which is applies as consortium loan. It reduces the risk of project among them. Financers have equal charge on the projects assets.

9.Credit Cards and Revolving line of Credit:

Banks are more singly utilizing charge cards and revolving lines of credit to make unsecured customer credit. Revolving credit line lowers the cost of making credit since operating and processing cost are produced. Once the credit line is established, the customer can borrow and repay according to his needs and the bank can provide the fund to the customer at lower cost.

Charge cards and credit lines tied to demand deposit accounts are the two most common revolving credit agreements.

10. Letter of Credit (L/C):

It is used on behalf of the customer (buyer, importer) in favor of the support (seller) for the import of goods, services starting to pay certain sum of money on the submission of certain documents complying the stipulated terms and conditions as per the agreement of L/C.

2.3 Conceptual Frame work of Lending and Recovery Policy and Procedure of ADBN

2.3.1 Lending Policies and Procedure of the Bank:

ADBN aims at providing loans for agriculture production activities and other Agro-based business. The bank generally makes loans against collateral security up to limit of 60% to 80% of the value of the collateral. The individual farmers who are willing to borrow should fill up the prescribed application form of loan provided by the bank. The application form should be accompanied by the supporting documents like loan ownership, receipt of land, revenue payment and receipt of rent payment of a tenant.

After receiving the complete loan application form, the bank employee visits the borrower to inspect about the project sites and its suitability, security to assets etc. If the inspector finds the project technically feasible and sound and economically viable, the bank advances loan to such project. However, the bank has relaxed loan analysis requirement for some extent.

2.3.1.1 Types of loan

ADBN provides following types of loans:

- a. **Short term production loans (for the maximum period of 18 months):** ADBN provides short term production loans for working capital requirement, raising crop, poultry ,livestock's, other form of inputs such as seeds and fertilizer insecticides, fodder and cattle feed , fish culture , farm implements to pay equipment institution charge and wages for hire labor.

- b. Short term marketing and storage loans (for the period not exceeding than 12 month):** ADBN provides short term marketing loans for marketing agriculture product, transportation shortage facilities etc.
- c. Medium term loan (for not exceeding 7years):** ADBN provides medium terms loans for the acquisition of permanent facilities such as tube, wells, pumps sets_ tractors, draught animals, diary, poultry, seeds, other machinery and equipment related to farm enterprise.
- d. Long term loan (for the period exceeding 7 years and generally up to 20 years):** ADBN provides long term loan for clearances and development, construction of farm building, storage and warehouse facilities installation of rice mill, agro processing unit's tea and coffee, rubber, fruit and plantation products. In addition to the above categories the bank also finances on the feasible projects for the manufacturing of agriculture machinery equipment and implements and production of critical inputs required for farm production.

2.3.1.2 Interest Rates of ADBN:

The Bank has following discriminatory interest rate policy depending upon the borrowers and purpose of loan.

Table No. 3
Prevailing Interest Rate Charged by ADBN

S.N.	Purpose	Interest Rate Per Annum	
		Individual	Cooperative
1	Cereal Crops	15%	13%
2	Cash Crop	16%	14%
3	Irrigation	16.5%	14.5%
4	Livestock	17%	15%
5	Horticulture	14%	12%
6	Tea and Coffee	14%	14%
7	Bio-gas	16%	14%
8	Agro-Industry	16%	14%
9	Marketing	17%	15%
10	Land Development and Housing	15%	13%

Sources: Annual Report of ADBN

2.3.1.3 Security and Margin policy:

ADBn requires a security either in terms of immovable property, like land building and other fixed assets or movable property like car, bus. Person's goods, acquired by individuals borrowers against the proceeding of all its long term and medium term loans but for short tennis loans such as security of upheld by the crop itself. The security is maintained at a margin of minimum of 30%' of total valuation for medium and long terms loans. (ADBn Operation and Achievement, 1976:3). For collateral security guarantee, arrangement from the government or arrangement from the individual's institutions is also acceptable.

2.3.1.4 Procedure of lending:

Every bank has its own set of procedures to be followed before providing loan. Similarly, ADBN has its own procedures to be followed while providing loan. Individuals, co-operative or corporate body willing to obtain the loan from ADBN should fill up the prescribed loan application provided by the bank. The application form should be accompanied with the supporting documents such as certificate of land ownership, receipt of land revenue payment or certificate of government registration for corporate and co-operative organization.

After getting the receipt of the complete loan application form filled by the customers, the bank employee visit the borrower's in their places- and inspect about the project site and security of assets, the suitability of the project and also gather information crucial to the economic analysis of the project.

The bank advances loans given only to those borrowers. whose project seems to appear technically feasible and economically viable as per decision made by the loan committee.

2.3.2 Recovery policies and Procedures of ADBN:

The ADBN not only has its lending policies and procedures but also its own set of recovery policies and procedures. ADBN provides the loan for many purposes to small farmers and there are different terms of loan of which are mostly collected in their maximum lending period, The collection of loan made by ADBN from borrower very

much depends on the Purpose they have spent. The loan installment payment period may be extended depending upon some specific circumstances. ADBN has a loan recovery manual 1993, which was issued in 1993 under the ADBN loan recovery rules and regulations act1976, and ADBN act 1967. This loan recovery manual 1993, help to collects the loan amount effectively with in its loan installment period.

The policies and procedure of loan recovery of ADBN has taken into different consideration like.

- Objectives of loan recovery manual 1993.
- Authority of bank, if breaking the agreement
- Provision of interest
- Penalty of interest
- Provision for memorandum letters
- Provision for project
- Correction of payment period
- Borrowers name publication in magazine
- Provision for auction of collateral
- Doubtful loan
- Remission of loan.

2.3.3 Procedure of Recovery.

Every bank must be able to collect the amount it has spent oil various purposes. The bank must be capable of collection its principle and interest amount from the borrowers for the smooth and effective operation and future investment. The ADBN has developed certain policy and procedure for the recovery program. This

has already been expressed above in the chapter.

The bank provides loan under the supervision of collateral of the projects and also as per loan committee decision. The supervisor of the bank monitor its lending project from time to time, Bank also issues memorandum letter from time to time whether it's before or after the loan ~~IIIStal1I11eIlt~~ period. Officials visit for the loan recovery, when the products are harvesting and sold.

The bank should take legal provision to sell. Action of the collateral to recover loan amount if the borrower fails to repay the loan amount in time. Bank may increases loan installment period If there is appears natural disaster like: earthquake, rain fall, flood, disease of natural climates or political crisis or increases in cost of the project operation, bank provides remission of principle and interest amount increases loan installment period, increases loan amount for the improvement of the project.

But if the bank is unable to recover its loan amount then it makes lie blacklist of the borrower and decides the bad debts Even after doing so if it is unable to recover it's loan amount then it has to adopt legal process and procedures or any other process like: selling or auction of collateral and other property from the borrowers.

2.4 Review of Journal and Text Book:

There are some literatures. Study materials taken from the available journal and textbooks are present below.

In the developing countries like Nepal, overall development is possible only with the modernization of agriculture sector and Industrialization .Since ADBN is the only specialized institution for rural finance it has great role to play for up liftmen of the country of agriculture development.

The bank at present has to face many challengers to smoothly carry out its programs; bank activities cannot be compared with other financial institutions. The bank has three window operations, Small farmer development program, Agriculture credit and Commercial banking have been provided loan assistance to rural poor farmers, entrepreneurs and business on various purposes. It has presented itself as a mode in banking atmosphere of Nepal. While carrying out SFDP to alleviate rural poverty, agriculture credit for agriculture development (ADBN News Letter, 1993:3)

There is not only other financial institution in the nation that could substitute services of ADBN, for rural development. Its weakness is its lower rate of loan recovery in comparison to that of disbursement.

Bank has been playing important role for agriculture development and increased agar -production. The bank introduced reform program from this year Different it may be sound in beginning the reform, program has focused its priority to make farmers more laborious, takes loans with refundable capability maintain financial discipline and restructure past due loans. While restructuring' loan overdue and chronic loans have been renewed giving special discount on capital and invest amount.

Another fact, why Nepalese farmers basically need credit. Nepalese

farmers are born in debt and die in debt. Such poor conditions are the result of agriculture backwardness rather agriculture country. Agriculture has to pay the cost of development of overall national economy. (Mathema, 1966; 80)

Agriculture credit is one of the most vital factors for increasing agricultural production. The importance of agriculture credit not lies in increasing agriculture production but also in maintain present level .Modernization of Nepalese agriculture requires financial assistance and institution agriculture credit, which has a very late start in our country. (Pant, 1971; 73)

Nepal has also agro-based economy; it plays a crucial role in Nepalese economy in many ways. To develop the agriculture products there must be introduction of new technology of cultivation. But farmers cannot change self that primitive method because of their poverty and unskilled hands. So for this purpose the provision government should facilitate some things for those farmers. Hence the provision if easy, timely and adequate loan by developing financial institution in Nepal is very important. So fulfill this need first introduce a cooperative society Sajha has established latter on ADBN was introduce to fulfill the financial aids to agriculture sectors. (Shrestha, 1975; 50)

Katheria have discussed the problem of agriculture financing Future more they found out that in the country like ours, where farmers are hardly educated in using improved farm technology .It is possible that credit may not be utilized Unfriendly for the purpose for which, it has been granted They also suggest that farm visits is an important part of

becoming acquainted with farmers. It helps banker to appreciate and comprehend more fully problems and difficulties of farmers and will also enable them to analyze the financial position with greater understanding. This visit also helps to develop a friendly relationship and create a sense of confidence in the farm etc. (katheria, et, a1, 1975:34)

Theodore writes a wear of hunger , may appeal to some as call for action but it is no to help in clarifying the underlying problem of enlarging the capacity and Output of agriculture The solution of this problem depends on the technical properties of inputs and on the profitability of using them. (Theodore, 1969:124)

2.5 Review of past thesis (dissertation):

Mr. Khimananada Aryal (2006) has submitted a thesis named "A Evaluation of credit Investment and recovery of Finance public Enterprise in Nepal" a case study of ADBN. His research statement of problem:

Because of high interest rate of non- institutional sources, people are unable to pay their credit at fixed rate time these institutions compel them to transfer their property to the money lender resulting himself or herself as a landless person.

ADBN is one of the major financial institutions supporting for the people different purpose like agro, industries tea coffee, live stock, farming etc ADBN provides the credit for individual and co-operative sector to all region of the Country. Credit outstanding amount is increasing day by day but the collection amount is not good However ADBN has

increased its effort to collect its credit. It is said that those people who really need don't receive sufficient amount of credit from ADBN. His research's major **objectives are**:

- J To analyze the loan disbursement and recovery pattern of ADBN.
- J To analyze possible causes for non payment of loan on prescribed time.

Major findings:

1. Actual credit disbursement, collection and outstanding are increasing in decreasing rate
2. Yearly increase in credit disbursement is higher than that of collection.
3. Positive relation between credit disbursement and collection that is 0.996.
4. Targeted credit collection and disbursement fixed by planning and project department is not significantly different than the actual.
5. Most of the customers are unaware of the policy of the bank.

RECOMMENDATIONS:

- J The borrower should be informed about the credit, its use and its payment procedures and schedule.
- J Greater attention should be given to increase the credit collection and to collect old outstanding amount of the credit

and renewal of it. To accelerate the collection, credit should be followed continuously in regular interval of the time

-) The behavioral of the personal should be strictly supervised in granting credit in proper investment proposal because of most of the bad credit disbursement is due to weak decision of the personnel.

Rirukusam Gautam (2004) has submitted thesis named "Investment Analysis of finance Company of Nepal" on July 2000 to T.U. Her research **major objectives** relevant to my research are:

-) An analysis of the interest rate structure of the credit.
-) An analysis of loan collection, loan disbursement and loan outstanding.

Major findings:

-) The use of funds towards the hire purchase credit is decreasing rapidly.
-) As the direct data of good and bad credit was not available, the credit loss provision used to analyze the credit quality. Credit loss increasing every year significantly and should be controlled.
-) The loss provision of some company is more alarming on individual analysis The Company having above average credit loss provision should rethink on their investment and repayment policy.

Recommendations:

- J Companies should develop proper loan policy and high attention should be given while implementing the policy.
- J Purpose of the loan should be checked properly.

Mr. Badri Narayan Shrestha has submitted a thesis named "study of Industrial credit provided by NIDC in sunsari Districts" on 1990 T.U. His research objectives:

- J To study the financial assistance provides by NIDC in different sectors in Sunsari districts.
- J To study the attitudes of industrialists' in regard to the performance of NIDC. To give suggestions to improve the role of NIDC.

Major findings:

- J One of the most important policies NIDC has adopted in investing its fund to the industries in security orients rather than industrial development oriented.
- J It seems that NIDC lack definite, systematic and clear -cut long financing policy.
- J Repayment and follow up activities followed by NIDC are not efficient, as not take sides by side.

Recommendations:

- J Short, medium and long term loan policy should be

developed.

-]) Proper guideline/ manual should be developed for loan administration department.

Mr. Ganesh Bahadur Chand (2004) has submitted his thesis on “Credit disbursement and repayment of Agriculture Development Bank Nepal” his research statement of problems;

-]) The bank does not benefit small farmers (i.e. problem of balance development)
-]) The collection of credit is slow so it hinders the flow of capital required to developed economic growth.

Objectives:

-]) To see the repayment situation.
-]) To find out the rate of growth of investment.
-]) To explain possible causes of none and delayed repayment.

Major findings:

-]) There is systematic relationship between credit disbursement and repayment. The coefficient of correlation value as calculated is 0.94 which shows significance relationship
-]) Repayment situation is satisfactory on production inputs and agro-based industry, ware houses and marketing percentage of repayment due to the firm mechanization and irrigation and tea horticulture and livestock, poultry and fisheries in much

less satisfactory.

Recommendations:

-) ADBN should play a significant role in such direction as to full fill the credit demands of rural areas.
-) For effective recovery from the borrowers or clients credit should be channeled through the borrowers groups.

CHAPTER - 3

RESEARCH METHODOLOGY

3.1 Introduction:

Research in common sense refers to a search for knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation. It is a process of investigation which involves a series of well through out activity of gathering, recording, analyzing and interpreting the data with the purpose of finding to the problem. Research is not only solving the problem but also it will build some ideas of knowledge.

The Advance Learner's Dictionary of Current English lays down the meaning of research as “a careful investigation or inquiry specially through search for new facts in any branch of knowledge”

Redman and Mory Define research as a “Systematized effort to gain new knowledge”

Some people consider research as a movement, a movement from the known to the unknown. It is actually, a voyage of discovery. We all possess the vital instinct of inquisitiveness for, when the unknown confronts us, we wonder and our inquisitiveness makes us prove and attain full and fuller understanding of the unknown. The inquisitiveness is the mother of all knowledge and the method which man employs for

obtaining the knowledge of whatever the unknown, can be termed as research.

The research methodology ma is defined as science of studying, how research is done scientifically. It tells about various steps that are generally adopted by a researcher in studying his research problem along with the logic behind him “Methodology is a way to systematically solve the research problem.” Research methodology has many dimensions and research methods do consists a part of the research methodology. Thus, the scope of research methodology is wider than that of research methods.

3.2 Research Design:

Decision regarding what, when, how, why, by what means concerning an enquiry of a research study constitute a research design. “A research design is the arrangement of conditions for collection and analysis of data in manner that aims to combine relevance to the research purpose with economy in procedure.” In fact the research constitutes the blueprint of the collection, measurement and analysis of data. As such, the design includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data.

A research design, bearing the techniques and systematic steps of research, helps to collect various information required to researcher, thesis writing or any investigation. In the lack of the research design, the functional process on researches is never achieved.

After the researches study has been formulated, the next logical steps are to construct the research design which refers to the entire process of

planning and carrying out the research study. The research design tries to answer the following WH questions.

1. What is the study about?
2. Why is the study made?
3. Where will the study be carried out?
4. What type of data is required?
5. Where can the required data be found?
6. What will be the sample design?
7. What techniques of data collection will be used?
8. How will the data be analyzed?
9. In what style will report will be prepared?

The basic aim of this study is to analyse the soundness of ADBN in relation to credit disbursement and recovery as well. It examines and assesses the financial performance of ADBN through the collection, evaluation, verification and analysis of data systematically for the improvement and exploration of certain facts.

3.3 Data Collection:

The researcher uses two types of sources of data collection.

- a) Primary data and
- b) Secondary data

The primary data are those which are collected a fresh and for the first

time and thus happen to be original in character. The secondary data on the other hand are those which have already been collected by some else and already, been passed through the statistical process.

In some cases primary data are also taken as personal interview, face to face and telephone interview but the Study is mainly based on secondary data. So, the major sources of secondary data for this study are as follows.

- a. Annual reports of the banks.
- b. Published and Unpublished bulletins, reports of the banks.
- c. Previous studies and reports.
- d. Unpublished official records.
- e. various Internet websites.
- f. Other published materials.

3.4. Data Collection Procedure:

As the study will also base on primary data, Information will be also collected, developing a scheduled questionnaire and distributing these to employees of the banks and clients. Question of open end (i.e. yes or no) will be included in questionnaire. Besides this, junior employee and clients are also being observed and response has been drawn from them about relevant questionnaires.

3.4 Population and Sample:

Population covers the whole or total of observation that has been selected for the study sample is the part of population which represents population with regards to the study.

This study is made by using Judgment or purposive sampling only the required statements like income statement, balance sheet and cash flow

statements have been taken for analyzing financial performance of bank. only recent past five year such statements have been collected and used for analyzing bank's financial performance similarly, some of the popular and well accepted tools and techniques have been used to analyze and interpret the financial condition and performance of the bank i.e. comparative financial analysis, cash and funds flow analysis, trend analysis, ratio analysis correlation analysis etc.. It has been error in this study so that the required objective can be achieved.

3.5 Methods of data Analysis

To make study more specific and reliable, some of well- accepted and importance financial and statistical tools have been used to measure the financial performance of agriculture development bank, Nepal. Those tools and techniques are:

Financial Tools

Statistical Tools

3.5.1 Financial Tools

Financial tools measures the financial strength and weakness of the bank ADBN establishing relationship between the items of balance sheet and profit/loss account. The major financial tool used in this thesis is ratio analysis.

3.5.1.1 Ratio analysis:

Ratio analysis is a technique of analysis and interpretation of financial statement through mathematical expression the may be defined as the mathematical expression of the relationship between two counting figure. To evaluate the different performance of an organization by creating the ratio from the figure of different accounts is termed as a ratio analysis In short ratio analysis can be defined as an analysis of financial statement with help of ratios.

Ratio analysis is a powerful and most widely used tool of financial analysis. A ratio defined as, a ratio is a mathematical relationship between two variables. The management can arrive of important decisions by using ratio analysis. In fact any given data in the financial statement are not important in itself to make as real important. It is to be expressed in referring to other figures with the helpof ratio. By ratio analysis, we come to know about liquidity position, solvency position and help for the future forecasting, decision making, corrective action, and communication and cost control.

So, here are the following ratios that are calculated for finding the current financial positions of ADBN. They are:

A. Liquidity Ratio:

Liquidity refers to the ability f a concern to meet its current obligation as and when these become due. In other words, liquidity ratios are the indicator short term solvency or financial strength of the firm. Liquidity ratio shows the relationship of the firm's cash and other current assets to HS current liabilities.

Concerned ratios under liquidity are explained as below:

a. Cash and Bank Balance to Total Deposit:

Bank's liquidity capacity can be measured on the basis of cash and bank balance, which are the most liquid assets. Cash and bank balance to total deposit ratio measures the percentage of most liquid assets to pay depositors immediately. This ratio is computed dividing the amount of cash and bank balance by the total deposits. It can be shown as:

$$\text{Cash and Bank balance to Total Deposit Ratio} \times \frac{\text{Cash and Bank balance}}{\text{Total deposit}}$$

Where cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items and balance held abroad. Total deposit consists of deposits on current account, saving account, fixed account, money at call and short notice and other deposits.

b. Cash and Bank Balance to Current Assets Ratio:

This ratio measures the ability of a bank to meet the unanticipated call on all types of deposits. Higher ratio shows the higher capacity of firms to meet the cash demand. But very high ratio is not desirable since bank has to pay interest on deposit. It can be calculated as: Cash and Bank

$$\text{Balance to Current Assets ratio} = \frac{\text{Cash and Bank balance}}{\text{Current assets}}$$

c. Investment on Government securities to Current assets ratio:

This ratio examines the portion of banks current assets that is invested on different government securities. It can be presented as

$$\text{Investment of Govt. Sect. to Current assets} = \frac{\text{Investment on Govt. Sect.}}{\text{Current assets}}$$

Where, investment of government securities involves treasury bills and development bonds etc.

B. Assets Management Ratios:

Assets management ratios, measures how effectively the firm is managing its assets in profitable and satisfactory manner. These ratios are, designed to answer these questions; does the total amount of each type of assets as reported on the balance sheet seem researchable or not. If a firm has excessive investments in assets than its capital costs will be unduly high and its stock price will suffer.

The following financial ratios related to fund mobilization are calculated under these topics. Which are as follows:

a. Loan and advances to Total deposit ratio:

This ratio measures the extent to which banks are successful to mobilize their total deposit on loan and advances. Higher ratio indicates the better utilization of total deposit. This ratio can be obtained dividing loan and advances by total deposits, which can be shown as:

$$\text{Loan and advance to Total deposit ratio} = \frac{\text{Total Loan and advances}}{\text{Total deposits}}$$

b. Investment on shares and debentures to total working fund ratio:

Banks are investing into share and debenture of other companies. This ratio shows the investment of banks on shares and debentures of other companies in terms of total working fund. It can be formulized as:

$$\text{Interest on shares and debentures to TWD ratio} = \frac{\text{Invest on share and debenture}}{\text{Total working fund}}$$

Where, total investment includes investment on government securities, investment on debenture and bonds, share of other company.

c. Investment on Government securities to Total working fund ratio:

This ratio is very important to know the extent to which the banks are successful in mobilizing their total fund on different types of government Securities to maximize its income. It can be presented as:

$$\text{Invest on govt. secut. To TWF ratio} = \frac{\text{Invest. On govt. sec.}}{\text{Total working fund}}$$

C. Profitability Ratio:

Profit is essential for the survival of business. So it's regarded as the engine that drives the business and indicates economic mileage. Profitability ratios are used as a measure to judge the operating efficiency a firm. This ratio shows the combined effects of liquidity assets management and debt on operating results. Profitability ratios are very helpful to measure the overall efficiency of operation of a

firm. It is true. Indication of the financial performance of each and every business organization. Following profitability ratio, which are related with fund mobilization is studied under this heading:

a) Return on Loan and advances ratio:

It measures the earning capacity of a bank from provided loan and advances. This ratio is calculated dividing net profit (loss) by the total amount of loan and advances. We have:

$$\text{Return on loan and advances ratio} = \frac{\text{Net Profit (Loss)}}{\text{Loan and advances}}$$

b) Return on total working fund ratio:

Return on total working fund ratio measures the profit earning capacity by utilizing available resources i.e. total assets. Efficient utilization and well management of working fund bring high return. Maximizing taxes, this in the legal option available will also improve the return. It is Calculated as:

$$\text{Return on total working fund ratio} = \frac{\text{Net Profit (Loss)}}{\text{Total working fund}}$$

c) Total interest paid to total working fund ratio:

This ratio measures the percentage of interest paid against total working fund. A high ratio indicates the higher interest expenses on total working fund and vice versa. This is computed as:

$$\text{Total interest paid to Total working fund ratio} = \frac{\text{Total interest paid}}{\text{Total working fund}}$$

d) Total interest earned to Total working fund ratio:

This ratio reflects the extent to which the banks are successful in mobilizing these total assets to acquire incomes as interest. This ratio actually reveals the earning capacity of: = bank's by mobilizing its working fund. Higher the ratio higher will be the income as interest. This is obtained as:

$$\text{Total interest earned to TWF ratio} = \frac{\text{Total interest earned}}{\text{Total working fund}}$$

3.5.1.2 Limitation of Ratio Analysis:

Ratio analysis is suffered from some inherent limitations that are direct inherited from financial statements. Some of the most common weakness of ratio analysis is as follows:

- i. Different firms in the industry although apparently comparable in respect to size; age, location, product mix and technology may not be really comparable if they are following different accounting methods.
- ii. Financial statements record past transactions. They are, thus an index of what happened in past. They do not show the current position of the business. Evidently ratio analysis is also primarily concerned with analyzing the past, which may or may not be relevant today. It is thus assort of 'POST-MORTEM' analysis rather than a guide for decision-making.
- iii. In the context of persistent price level changes, intro firm trends analysis losses much of its operational significance.

- iv. The differences in the definitions of items in the balance sheet and the income statement make the interpretation of ratios difficult.
- v. Sometimes ratio analysis may suffer from what is known as fallacy of misplaced concreteness.

Although, various limitations of ratio analysis and doubt may arise about the valid measure of the financial performance but they are used widely to measure the financial performance of the bank.

3.5.2. Statistical Tools Used:

For supporting the study, statistical tool such as Mean, Standard deviation, Coefficient of variation. Correlation, trend analysis, hypothesis and

ʃ Diagrammatic cum pictorial tools have been used under it.

3.5.2.1 Arithmetic Mean (Average):

Average is statistical constants which enables us to comprehend in a single effort the significance of the whole. It represents the entire data by a single value. It provides the list and lives the eagle eye view of the huge mass of un-widely numerical data. It is calculated as:

$$\bar{X} = \frac{X}{N}$$

Where,

\bar{X} X Arithmetic mean

N = Number of observations

X = Number of observations

3.5.2.2 Standard Deviation (S.D.):

"The standard deviation is the square root of mean squared deviations from the arithmetic mean and is denoted by S.D. or σ " It is used as absolute measure of dispersion or variability. It is calculated as:

$$\sigma = \sqrt{\frac{x^2}{N} - \left(\frac{\bar{x}}{N}\right)^2}$$

Where,

σ X Standard Deviation

$\frac{x^2}{N}$ = Sum of square of Observation

$\left(\frac{\bar{x}}{N}\right)^2$ = Sum of squares of Mean

3.5.2.3 Coefficient of variation (C.V.):

"The coefficient of variation is the relative measure based on the standard deviation and is defined as the ratio of standard deviation to the mean expressed in percent." It is independent of units. Hence it is a suitable measure for comparing variability of two series with same or different units a series with smaller C.V. is said to be less variable or more consistent or more homogeneous or more uniform or more stable than the others and vice versa. It is calculated as:

$$C.V. = \frac{\sigma}{\bar{x}}$$

Where,

\bar{x} X Mean

σ X Standard Deviation

C.V. = Coefficient of variation

3.5.2.4 Correlation Coefficient (r):

Correlation may be defined as the degree of linear relationship existing between two or more variables. These variables are said to be correlated when the change in the value of one results change in another variable. Correlation is of three types. They are; Simple, Partial and Multiple correlations. Correlations may be positive, negative or zero. Correlation can be classified as linear or non-linear. Here we study simple correlation only. In simple correlation the effect of others is not excluded rather these are taken as constant considering them to have no serious effect on the dependent variable.

$$\text{It is calculated as: } r_{x_1x_2} = \frac{N \sum X_1 X_2 - \bar{X}_1 \bar{X}_2}{\sqrt{N \sum X_1^2 - \bar{X}_1^2} \sqrt{N \sum X_2^2 - \bar{X}_2^2}}$$

Where,

$r_{x_1x_2}$ = Correlation between X_1 and X_2

N = Product of No. of observation and sum of product of X_1 and X_2

$N \sum X_1 X_2$ = Product of sum of X_1 and sum of X_2

3.5.2.5 Coefficient of determination (r^2):

It explains the variation percent derived in dependent variable due to any one specified variable. It denotes the fact that the independent variable is good predictor of the behavior of the dependent variable. It is square of correlation coefficient.

3.5.2 Trend analysis:

Trend analysis is an important tool of horizontal financial analysis this method is immensely helpful in making a comparative study of the financial statement of several years. This analysis reflects the changes in financial statements between the periods. These can be easily studied by establishing a base year this device is valuable to the in-nit. Of

because by the substitution of percentage for large amount and brevity and readability are achieved. They are generally computed for major items in the statement minor amounts are omitted trend percentage indicates the causes for the changes. The important value of trend analysis is that it can disclose to the analyst a better understanding of management. Policies and motives which are the causes for changes. In this analysis, various data related to financial performance have been analyzed in the terms of time series.

Liner trend line (y_c) = $a + bx$

Where,

$$a = \frac{x}{N} \quad b = \frac{xy}{x^2}$$

CHAPTER – 4

PRESENTATION AND ANALYSIS OF DATA

In this chapter, the data collected from various sources have been presented and analysed to measure the various dimensions of the problems of the study and the major findings of the study are presented systematically.

4.1 Purpose wise analysis of loan disbursement, loan collection and loan outstanding.

4.1.1 Purpose wise analysis of loan disbursement.

It has been tried to analysis the loan investment volume considering the purpose of loan in the following table and interpretation assuming cent percent investment during the relevant year.

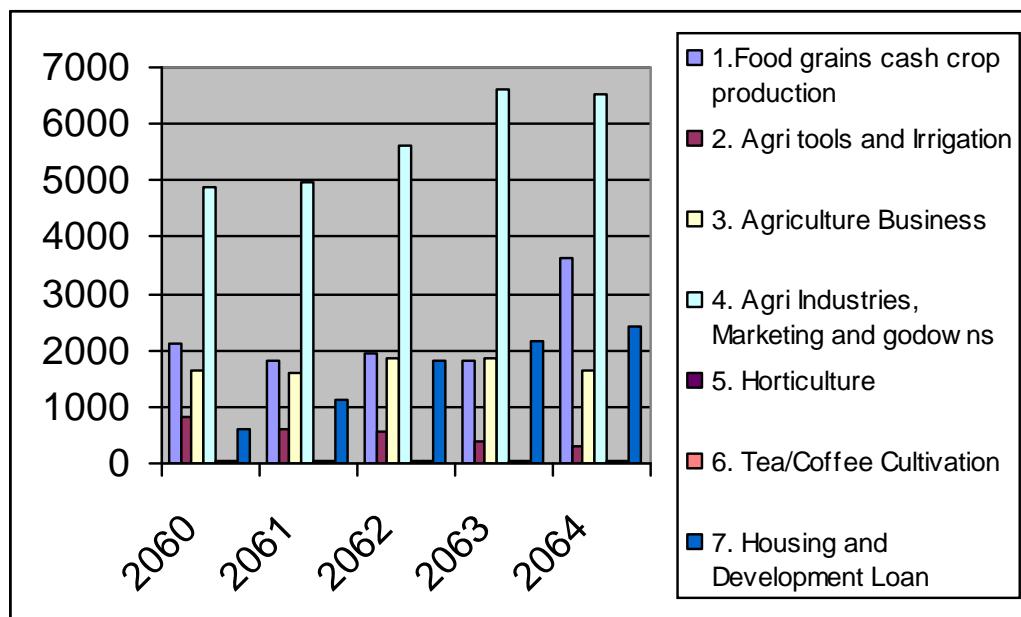
Table No.4
In status of Annual loan Disbursement
At the end of Asadh from F/Y 2059/2060 to 2063/200
(Rs. in million)

Purpose	2060		2061		2062		2063		2064	
	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%
1. Food grains cash crop production	2121.5	21	1820.1	18	1956.10	16	1799.50	14	3630.30	25
2. Agri tools and Irrigation	806.6	8	591.70	6	542.60	5	395.80	3	289.80	2
3. Agriculture Business	1634	16	1599.50	16	1842.80	16	1872.70	15	1659.90	11
4. Agri Industries, Marketing and godowns	4868.1	48	4955.50	49	5605.3	47	6590.4	51	6543.40	45
5. Horticulture	48.20	0.48	31.50	0.31	38.70	0.33	31.90	0.25	56.40	0.38
6. Tea/Coffee Cultivation	52.10	0.52	40.90	0.4	36.50	0.31	23.60	0.18	39.90	0.22
7. Housing and Development Loan	584.70	6	1109.40	11	1795	15	2141.70	17	2432.50	17
Total	10115	100	10149	100	11817	100	12856	100	14650.2	100
Average	1445		1450		1688		1937		2093	

Bar Diagram:

The bar diagram represents the data by bars or rectangles of equal width. The length of the bars represents the given figures and the width may of any size. The bar diagram, which represents two or more sets of related data is called multiple bar diagram.

Figure No. 2
In Status of Annual Loan Disbursement
At the end of Asadh from 2059/2060-2063/2064



Source Table No. 4

The above table shows that ADBN is providing loan for 7 different purpose. The highest amount of investment is made in Agriculture Industries, Marketing and godowns.

It is Rs. 4868.1 (48%) in the year 059/060, Rs. 4955.50 (49%) in 060/061, Rs. 56053 (47%) in 061/062, Rs. 6590.4 (51%) in 062/063 and Rs. 6543.40 (45%) in 063/064. From the table, we also can see that through the investment in Agriculture Industries, Marketing and godowns is highest it is fluctuating year by year.

The second highest investment is made in food grains and cash crop production. It is Rs. 2121.5 (21%) in the year 059/060, Rs. 1820.1 (18%) in 060/061, Rs. 1956.10 (16%) in 061/62, Rs. 1799.5 (14%) in 062/063 and Rs. 3630.30 (25%) in 063/064.

The investment made in agri tools and irrigation and agriculture business do not seem to be good as it is in decreasing.

The loan investment made in Housing and land development loan sector is in increasing trend. It has increased from Rs. 584.70 (6%) to Rs. 2432.50 (17%) from the year 059/060 to 063/064.

The loan investment in Tea, Coffee, Cultivation and Horticulture is not good as its weight has not increased even by 1% of total in the following years.

4.1.2 Purpose wise analysis of loan Collection:

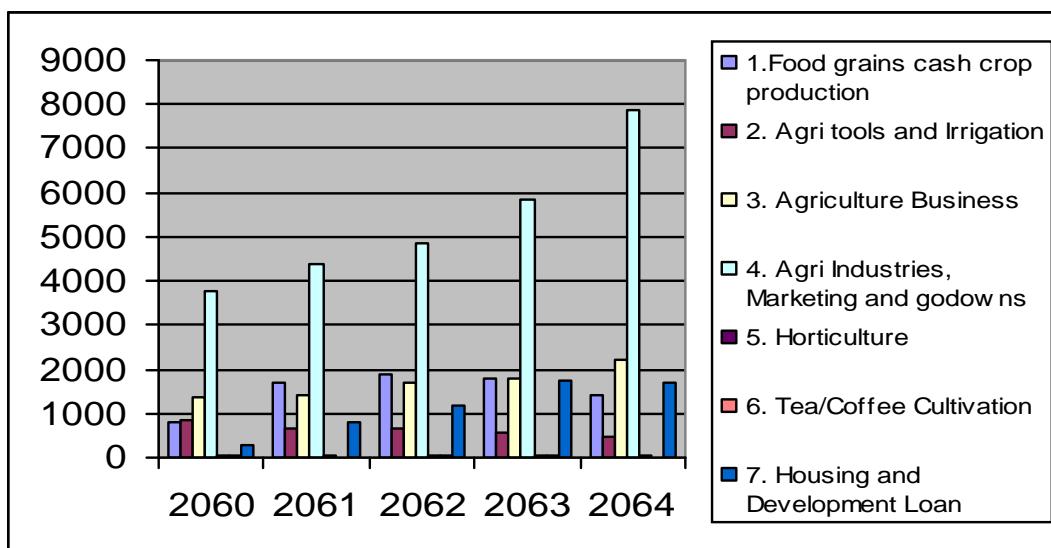
It has been tried to analysis the loan collection volume considering the purpose of loan in the following table and interpretation assuming cent percent collection during the relevant year.

Table No. 5
In status of Annual Loan Collection
At the end of Asadh from F/Y 2059/2060 to 2063/200
(Rs. in million)

Purpose	2060		2061		2062		2063		2064	
	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%
1.Food grains cash crop production	819.7	22	1696.5	19	1865.7	18	1810.5	15	1415.60	10
2. Agri tools and Irrigation	846.70	10	682.10	8	674.40	7	585.10	5	485.60	4
3. Agriculture Business	1367.9	17	1429.10	16	1679.80	16	1779.80	15	2212.50	16
4. Agri Industries, Marketing and godowns	3787.20	46	4366	48	4857.5	47	5866.4	50	7892.30	57
5. Horticulture	49.50	0.61	39	0.43	50	0.48	51.90	0.44	61.90	0.45
6. Tea/Coffee Cultivation	25.90	0.32	14.60	0.16	25.90	0.25	27.80	0.23	21.50	0.16
7. Housing and Development Loan	276.40	3	823	9	1177.60	11	1720.10	15	1699.50	12
Total	8173.30	100	950.30	100	10330.9	100	11841.60	100	137883.9	100
Average	1168		1293		1476		1692		1970	

Source: Annual Report of ADBN

Figure No. 3
In status of Annual Loan Collection
At the end of Asadh from F/Y 2059/2060 to 2063/200



Source: Table No. 5

Loan collection is the very important aspect of agriculture financing. It is highest in Agri Industries, Marketing and godowns. The table shows, it is Rs. 3787.20 (46%) in the year 059/060, Rs. 4366 (48%), Rs. 4857.5 (47%), Rs. 5866.4 (50%) and Rs. 7892.30 (37%) in the year 060/061, 061/062, 062/063 and 063/064 respectively.

The second highest loan collection is from Agriculture business but is fluctuating.

In housing and loan development loan, the loan collection is good because it has increased from 3% to 12% from 059/060 to 063/064.

Loan collection in Food grains and cash crop production and Agri tools and Irrigation is in decreasing trend. It has decreased from 22% to 10% and 10% to 4% respectively in the 4 years.

In Horticulture and Tee/coffee cultivation, the loan collection is less than 1% of the total.

4.1.3 Purpose wise analysis of loan outstanding:

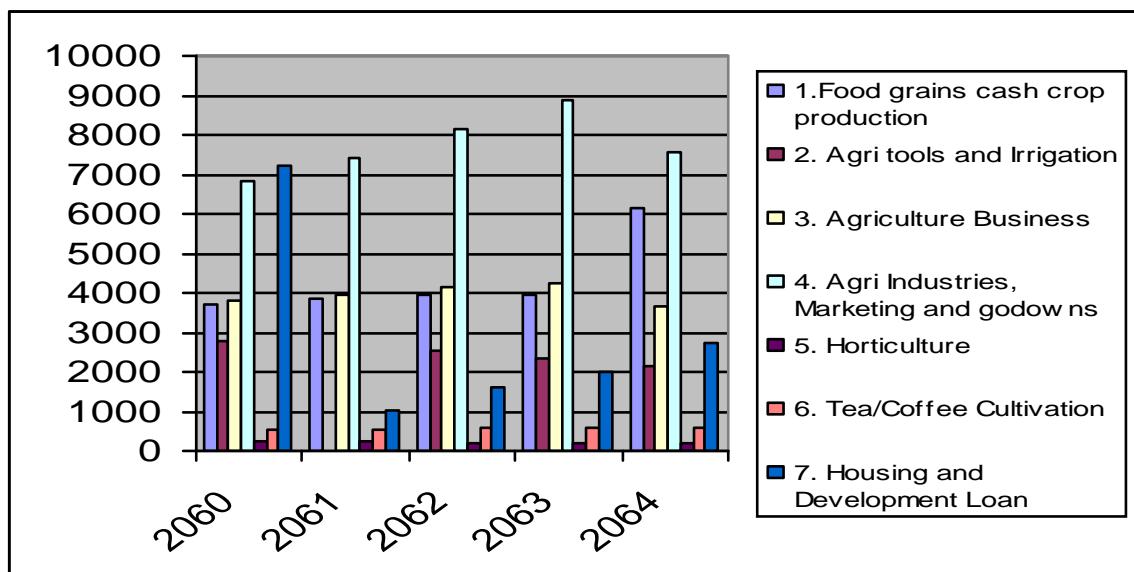
It has been tried to analyse the loan outstanding volume considering the purpose of loan in the following table and interpretation.

Table No. 6
In status of Annual Loan Outstanding
At the end of Asadh from F/Y 2059/2060 to 2063/200
(Rs. in million)

Purpose	2060		2061		2062		2063		2064		
	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%	
1.Food grains cash crop production	3726.6	5.43	3850.2	19.5	3940.6	18.61	3929.6	17.71	6144.3	26.65	
2. Agri tools and Irrigation	2772.38	4.03	26.81.9	13.60	2550.1	12.04	2360.8	10.64	2165	9.39	
3. Agriculture Business	3798.1	5.53	3968.5	20.13	4131.5	19.51	4224.4	19.03	3670.8	15.92	
4. Agri Industries, Marketing and godowns	6828.3	9.95	7418.1	37.62	8165.9	38.56	8889.9	40.06	7541	32.71	
5. Horticulture	236.99	0.34	229.4	1.16	218.1	1.03	198.1	0.892	192.6	0.835	
6. Tea/Coffee Cultivation	531.4	0.77	557.7	2.83	568.3	2.68	564.1	2.54	581.5	2.52	
7. Housing and Development Loan	7221.1	1.05	1008.5	58.83	1598.5	75.57	2020.1	19.13	2753.1	11.94	
Total	18613	100	19714		100	21173	100	22187	100	23048	100
Average	3722.6		2816			3024.7		3169.5		3292.5	

Source: Annual Report of ADBN

Figure No. 4
In status of Annual Loan Outstanding
At the end of Asadh from F/Y 2059/2060 to 2063/200



Source: Table No. 6

After loan investment and loan collection, loan outstanding is also important aspect of agriculture financing. From the above table it can be seen that the highest amount of loan outstanding is in Agri Industries, Marketing & godowns. It is Rs. 6828.3 (9.95%), Rs. 7418.1 (37.62%), Rs. 8165.9 (38.56%), Rs. 8889.9 (40.06%) and Rs. 7541% in the year 059/060 to 063/064 respectively.

Second highest loan outstanding is in Food grains and cash crop production. The trend of loan outstanding in this sector is fluctuating.

In Housing and land development loan, there is greater fluctuation. i.e 1.05%, 58.83% 75.51%, 19.13% and 11.94% respectively from the year 059/060 to 063/064.

In Agri tools and irrigation and agriculture business, it has increased by certain percentage from the year 059/060 to 060/061 and then it is in decreasing trend.

Loan outstanding in Housing and Tee/coffee cultivation is very low in comparison to other sectors.

4.2. Time series graph (Annually):

Time series graphs show the changing in the value of variable with the passage of the time the graph of time series for the continuous case is referred as a histogram.

4.2.1 Time Series of Total Loan Disbursement:

Table No. 7

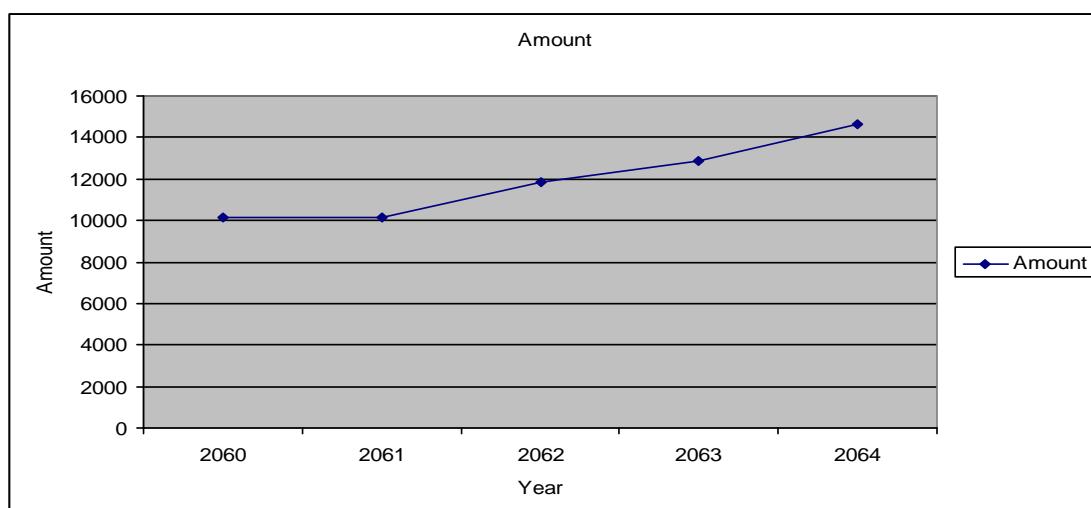
Time Series of Total Loan Disbursement

F/Y	Total Amount (Rs. In million)
2060	10115
2061	10149
2062	11817
2063	12856
2064	14650

Source: Annual Report of ADBN

The above table shows that the Total loan disbursement of ADBN has been increasing year by year. It is Rs. 10115 in 059/060, Rs. 11817 in 061/062, Rs. 12856 in 10149 in 062/063 and reached to Rs. 14650 in the year 063/064. We can see this from the graph also.

Figure No. 5
Time Series Graph of Total Loan Disbursement



Source: Table No. 7

The tabulated figures while plotted on the graph give an upward sloping curve. This shows the increasing trend of Total loan disbursement of ADBN.

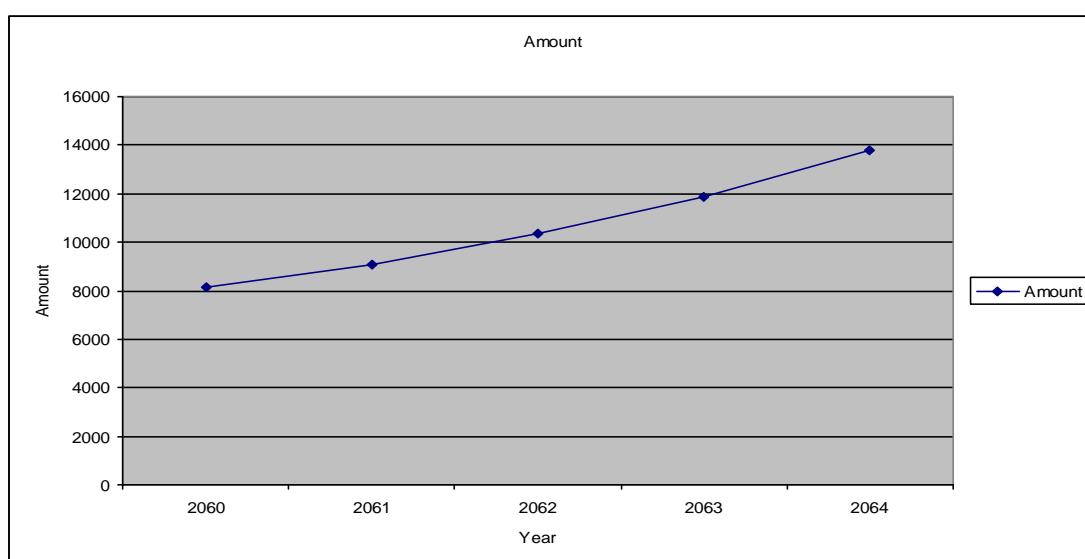
4.2.2 Time Series of Total Loan Collection:

Table No. 8
Time Series of Total Loan Disbursement

F/Y	Total Amount (Rs. In million)
2060	8173
2061	9050
2062	10331
2063	11842
2064	13789

The above table shows that the Total loan collection of ADBN has also been increasing year by year. It has increased from Rs. 8173 to Rs. 13789 from the year 059/060 to 063/064.

Figure No. 6
Time Series Graph of Total Loan Collection



Source: Table No. 8

While plotting the tabulated figures on the graph we obtain an upward sloping curve. This shows the increasing trend of loan collection.

4.2.3 Time Series of Total Loan Outstanding:

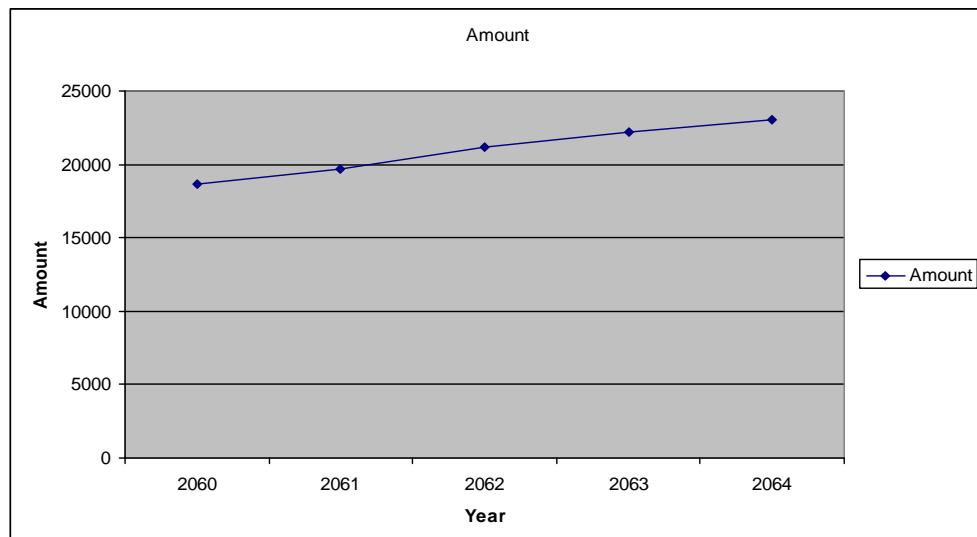
Table No. 9
Time Series of Cumulative Loan Outstanding

F/Y	Total Amount (Rs. In million)
2060	18695
2061	19714
2062	21173
2063	22187
2064	23048

Source: Annual Report of ADBN

The above table also shows that the Total loan outstanding of ADBN has been increasing. It increases from Rs 18695 to 23048 from the year 059/060 to 063/064.

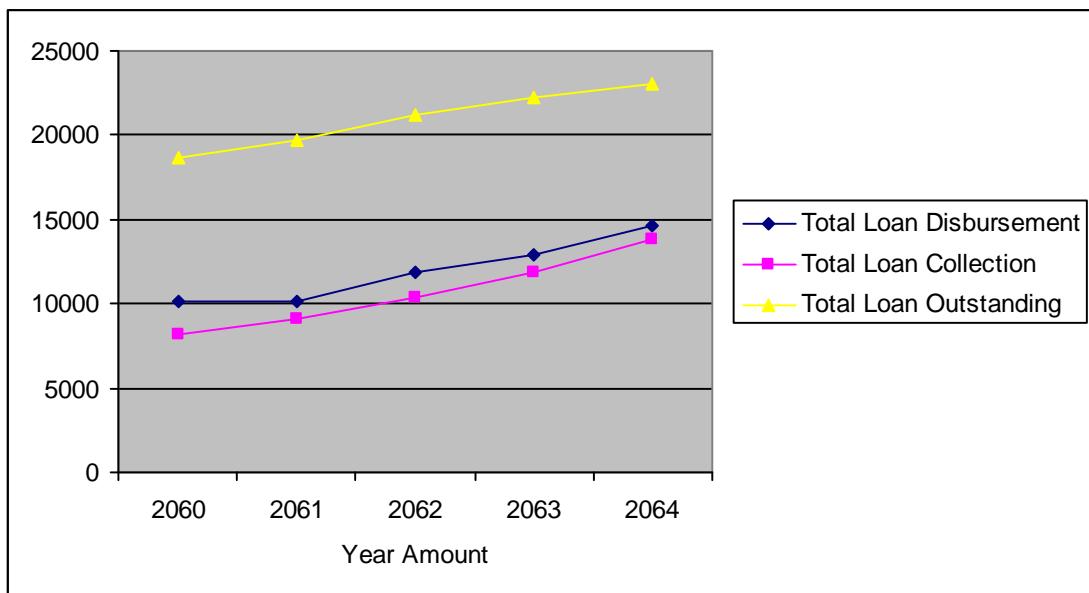
Figure No. 7
Time Series of Cumulative Loan Outstanding



Source: Table No. 9

The tabulated figures while plotted on the graph gives the upward sloping curve. This shows the increasing trend of Total loan outstanding of ADBN.

Figure No. 8
Time Series of all Three Activities



Source: Table No. 7, 8, 9

When all the three graphs of loan disbursement, loan collection and loan outstanding are combined we can see that all of these are upward sloping curves. These are in increasing trend. In the above figure, we can see that the loan disbursement curve lies higher than the loan collection curve. Again the loan outstanding curve lies more higher than other two curves. Thus, it is clear that the bank's loan collection policy is not much effective as the loan outstanding curve goes higher and higher year by year. It means there are other factors also that affect the loan collection.

Now we have to calculate the multiple correlation coefficients.

4.3 Multiple Correlation Coefficients:

We can see the relationship between; loan investment, loan outstanding and loan collection by calculating multiple correlation coefficients.

Lets us take loan collection as dependent variable denoted by X_3 and loan investment and loan outstanding as independent variables denoted by X_1 and X_2 respectively. Since X_3 is dependent variables, we should compute the multiple correlation coefficients $R_{3.12}$

Table No 10
Calculated of Multiple Correlation Coefficients $r_{3.12}$

Year	X_1	X_2	X_3	$X_1 = X_1 - 118$	$X_2 = X_2 - 209$	$X_3 = X_3 - 105.8$	X_1^2	X_2^2	X_3^2	$X_1 X_2$	$X_1 X_3$	$X_2 X_3$
2060	101	186	81	-17.8	377	-24.8	316.84	529	615.04	409.4	441.44	570.4
2061	101	197	90	.17.8	-112	-15.8	316.84	144	249.64	213.6	281.24	189.6
2062	118	211	103	-0.8	-98	-2.8	0.64	4	7.84	1.6	2.24	5.6
2063	128	221	118	9.2	-88	12.2	84.64	144	148.84	110.4	122.24	146.4
2064	146	230	137	27.2	-79	31.2	739.84	441	973.44	571.2	848.64	655.2
	X_1 = 594	X_2 = 1045	X_3 = 529	X_1 = 35.6	$X_2 = 0$	$X_3 = 0$	X_1^2 = 1458.8	X_2^2 = 1262	X_3^2 = 1994.8	$X_1 X_2$ = 1306.2	$X_1 X_3$ = 1695.8	$X_2 X_3$ = 1567.2

Here,

X_1 = Loan Investment

X_2 = Loan Outstanding

X_3 = Loan Collection

Now,

$$\overline{X}_1 = \frac{X_1}{N_1} = \frac{594}{5} = 118.8$$

$$\overline{X}_2 = \frac{X_2}{N_2} = \frac{1045}{5} = 209$$

$$\overline{X_3} X \frac{X_3}{N_3} X \frac{529}{5} X 105.8$$

Here,

$$X_1 X_2 = 1306.2, \quad X_1 X_3 = 1695, \quad X_2 X_3 = 1567$$

$$X_1^2 = 1458.8, \quad X_2^2 = 1262, \quad X_3^2 = 1994.8$$

For finding the value of R_{3-12} , we must first find the value of r_{12} , r_{13} , r_{23} .

$$\begin{aligned} R_{12} &= \frac{X_1 X_2}{\sqrt{X_1^2 \sqrt{X_2^2}}} \\ &= \frac{1306.2}{\sqrt{1458.8} \mid \sqrt{1262}} \\ &= \frac{1306.2}{38.19 \mid 35.52} \\ &= 0.96 \end{aligned}$$

Again,

$$\begin{aligned} r_{13} &= \frac{X_1 X_3}{\sqrt{X_1^2 \sqrt{X_3^2}}} \\ &= \frac{1695}{\sqrt{1458.8} \mid \sqrt{1994.8}} \\ &= \frac{1695.8}{38.19 \mid 44.66} \\ &= \frac{1695}{1705.5} \\ &= 0.99 \end{aligned}$$

Then,

$$\begin{aligned}
r_{23} &= \frac{X_2 X_3}{\sqrt{X_2^2 \sqrt{X_3^2}}} \\
&= \frac{1567.2}{\sqrt{1262} \mid \sqrt{1994.8}} \\
&= \frac{1567.2}{35.52 \mid 44.66} \\
&= \frac{1567.2}{1586.2} \\
&= 0.98
\end{aligned}$$

Now,

$$\begin{aligned}
r_{3.12} &= \sqrt{\frac{r_{12}^{-2} \Gamma r_{13}^{-2} Z2 \mid r_{12} r_{13} r_{23}}{1 Z r_{12}^{-2}}} \\
&= \sqrt{\frac{(0.96)^2 \Gamma(0.98)^2 Z2 \mid 0.96 \mid 0.99 \mid 0.98}{1 Z(0.96)^2}} \\
&= \sqrt{\frac{0.9216 \Gamma 0.9604 Z 1.8627}{1 Z 0.9216}} \\
&= \sqrt{\frac{0.0913}{0.0784}} \\
&= \sqrt{0.2461} \\
&= 0.4961
\end{aligned}$$

For interpretation of the value, we have to calculate multiple correlation coefficients. The coefficient of multiple determinants can be obtained by squaring on both side of equation.

$$R_{3.12} = \sqrt{\frac{r_{12}^{-2} \Gamma r_{13}^{-2} Z2 \mid r_{12} r_{13} r_{23}}{1 Z r_{12}^{-2}}}$$

$$\begin{aligned}
 R^2_{3.12} &= \frac{r_{12}^2 \Gamma r_{13}^2 Z_2 | r_{12} r_{13} r_{23}}{1 Z r_{12}^2} \\
 R^2_{3.12} &= (0.4961)^2 \\
 R^2_{3.12} &= 0.2461 \\
 &= 24.61\%
 \end{aligned}$$

Decision, Since $R^2_{3.12} = 0.2461$. It shows that 24.61% of total variance in dependent variable i.e. loan collection denoted by x^3 has been affected by the two independent variable, loan disbursement (x^1) and loan outstanding (x^2) and 75.39% another factor that effect loan collection.

4.4 Trend Analysis:

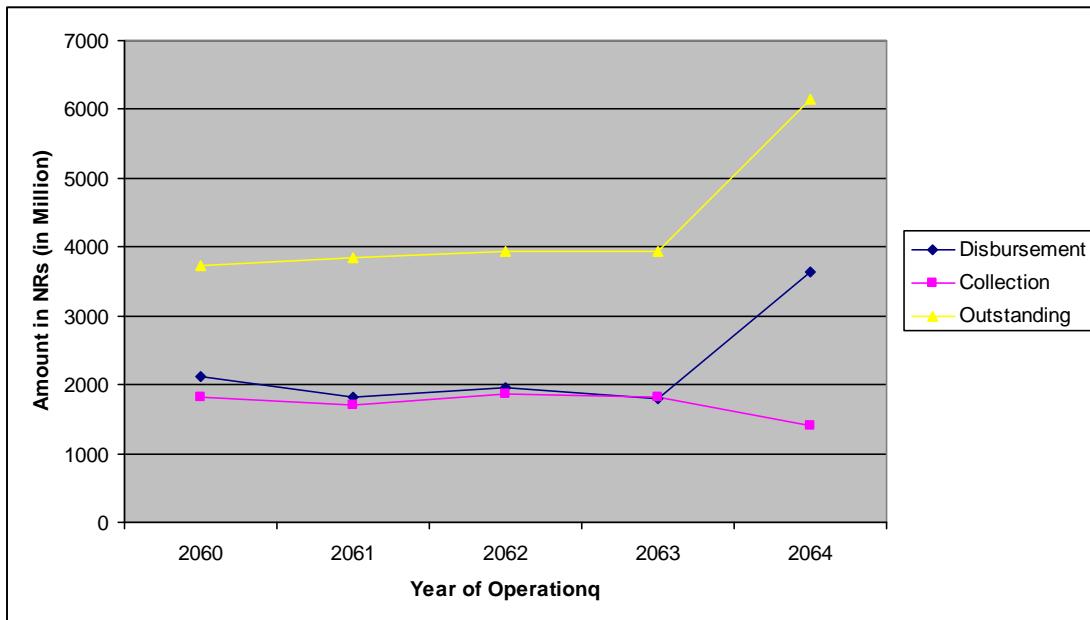
Here on trend analysis, we analysis all the purpose of ADBN where the bank invest loan amount on each purpose. Trend value and co-efficient of determinants calculated on each purpose including loan disbursement, loan collection and outstanding.

Table No. 11
Trend Analysis of Food Grains and Cash Crop Production

Year	2060	2061	2062	2063	2064
Disbursement	2121.5	1820.1	1956.1	1799.5	3630.3
Collection	1819.7	1696.5	1865.7	1810.5	1415.6
Outstanding	3726.6	3850.2	3940.6	3929.6	6144.3

Source: Annual Report of ADBN

Figure No. 9
Trend Percentage Analysis of Food Grains and Cash Crop Production



Source: Table No. 11

The loan disbursement in Food grains and cash crop production is Rs. 2121.5 in 059/060. Then after it decreases to Rs. 1820.1 in 060/061. Again it shows slight increment and becomes Rs. 1956.1 in 061/062. In the year 062/063 again it decreases to Rs. 1810.5 in 063/064. This shows that the loan disbursement in Food grains and cash crop production is fluctuating. The loan collection also fluctuates year by year. It is Rs. 1819.7 in 059/060, Rs. 1696.7 in 060/061, Rs. 1865.7 in year 061/062, Rs. 1810.5 in 062/063 and Rs 1415.6 in 063/064.

The loan outstanding is increasing year by year. It increases from Rs. 3726.6 to Rs. 6144.3 in 5 years. It shows ineffective collection policy of bank.

Trend equation and coefficient of determination of food grain and cash crop production is as follow:

Table No. 12

Trend equation and coefficient of determination of food grain and cash crop production.

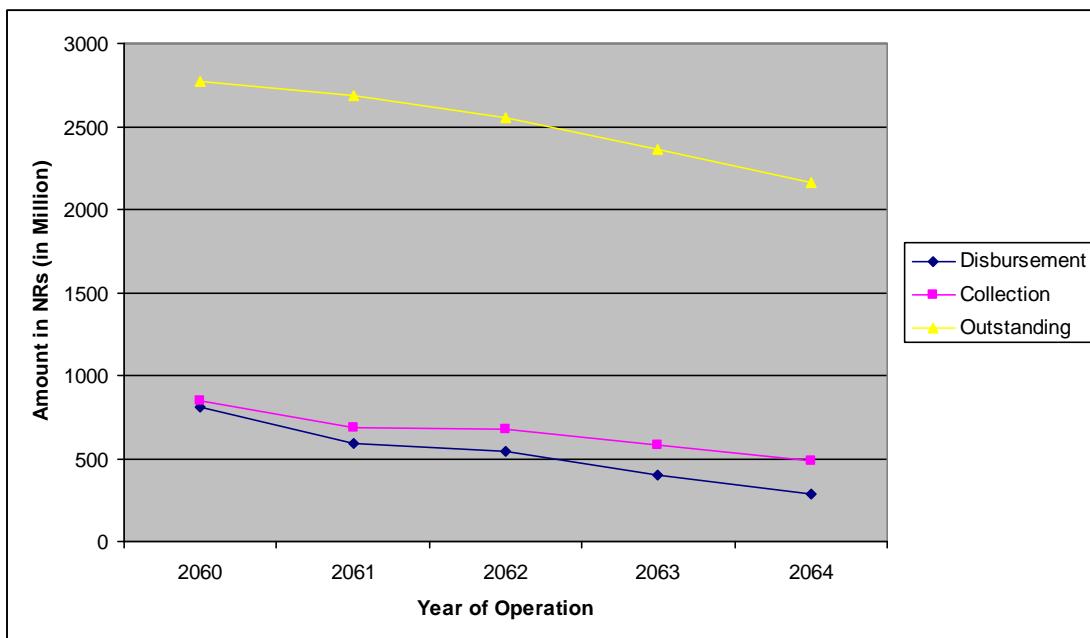
Particular	Trend Equation	R Square
Disbursement	$Y = 299.7x + 1355.4$	0.3751
Collection	$Y = -69.42x + 1929.9$	0.3636
Outstanding	$Y = 491.48x + 2843.8$	0.5755

From the above table, we can see that loan disbursement and outstanding are in increasing trend. Where as loan collection is in decreasing trend. It decreases by Rs. 69.42 per year. The annual variation on dependent variables are fluctuating by 37.51%, 36.36% and 57.55% respectively on loan disbursement, loan collection and loan outstanding.

Table No. 13
Trend analysis of Agri, Tools and Irrigation

Particulars	2060	2061	2062	2063	2064
Disbursement	806.6	591.7	542.6	395.8	289.8
Collection	846.7	682.1	674.4	585.1	485.6
Outstanding	2772.3	2681.9	2550.1	2360.8	2165

Figure No. 10
Trend analysis of Agri, Tools and Irrigation



The loan disbursement and loan collection of Agri Tools and Irrigation are decreasing year by year. They have decreased from Rs. 806.6 to Rs. 289.8 and Rs. 846.7 to Rs. 485.6 from the year 059/060 to 063/064 respectively. The loan outstanding also is decreasing from Rs. 2722.3 to Rs. 2165 in 5 years. The loan outstanding curve lies higher than the loan disbursement and collection. Decreasing trend of loan outstanding is good for the bank.

Table No. 14
Trend Equation and coefficient of Determination of Agri, Tools and Irrigation is as follow:

Particulars	Trend Equation	R square
Disbursement	$Y = -122.95x + 894.15$	0.9686
Collection	$Y = -81.92x + 900.54$	0.9394
Outstanding	$Y = -153.57x + 2966.7$	0.9779

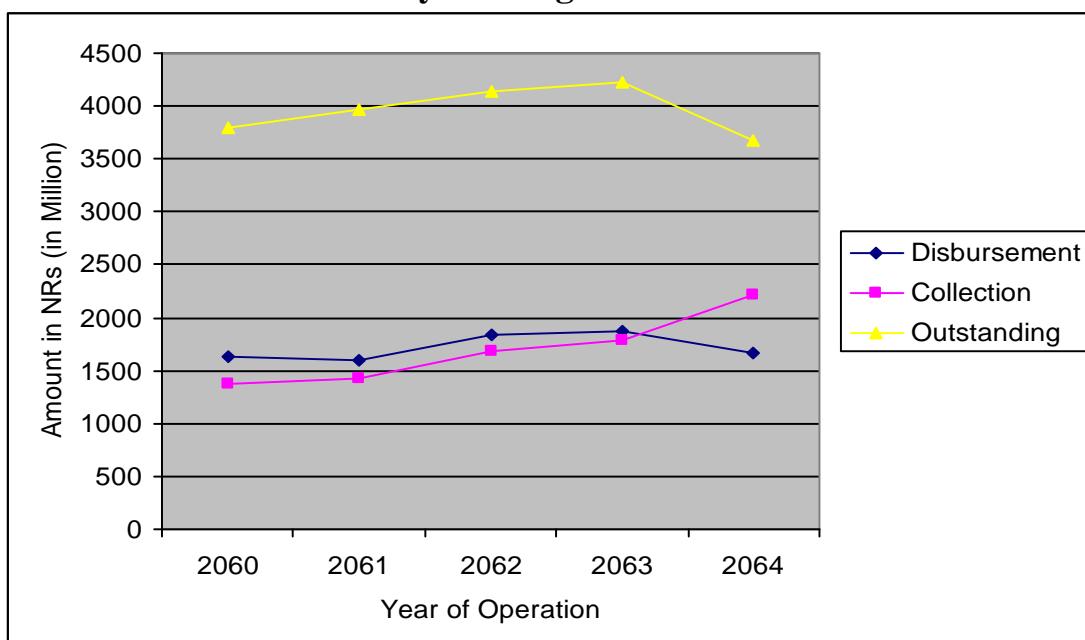
The above table of trend equation shows that loan disbursement, loan collection and loan outstanding are in decreasing trend. They are decreasing by Rs. 122.95, Rs. 81.92 and Rs. 153.5 per year respectively.

The annual variations on dependent variable are fluctuating by 96.86%, 93.94% and 97.79% respectively.

Table No. 15
Trend analysis of Agriculture Business

Particulars	2060	2061	2062	2063	2064
Disbursement	1634	1599.5	1842.8	1872.7	1658.9
Collection	1367.9	1429.1	1679.8	1779.8	2212.5
Outstanding	3798.1	3968.5	4131.5	4224.4	3670.8

Figure No. 11
Trend analysis of Agriculture Business



Source: Table No.15

After analysis the table, we can see that loan disbursement on Agriculture business is Rs.1634 in F/Y 2060 which is decreased to Rs. 1599.5 in F/Y2061 and then raised up to Rs. 1842.8 in F/Y 2062. It means loan disbursement is fluctuating. Loan collection is Rs.1367.9 in F/Y2060 which is increased to Rs.2121.5 in F/Y 2064, it means bank's collection policy is good and outstanding isRs.3097 in F/Y 2060 and increased to Rs.3977.97 in F/Y 2063 and then slightly down in F/Y 2064 of Rs 3424.37.it means outstanding is fluctuating.

Table No. 16

Trend equation and coefficient of determination of Agriculture Business

Particulars	Trend Equation	R square
Disbursement	$y = 32.3x + 1624.7$	0.1629
Collection	$y = 203.99x + 1081.9$	0.9188
Outstanding	$Y = 0.13x + 3958.3$	8.00E-07

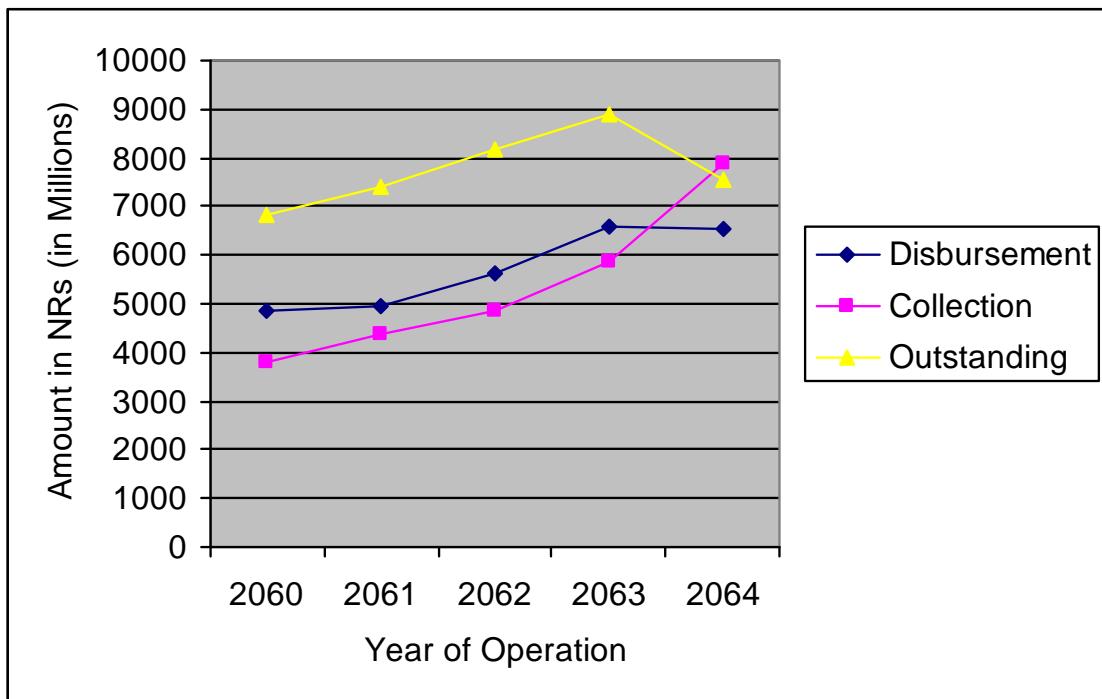
Form the above table, it is clear that loan disbursement and loan outstanding and loan collection are in increasing trend by Rs32.3, Rs.203.99,0.1 3 per year respectively. Annual variation on dependent variable (disbursement and collection) are fluctuating by 16.29%, 91.88°'o and0.08% respectively and outstanding is negligible.

Table No. 17

Trend analysis of Agriculture industries, marketing and godowns

Particular	2060	2061	2062	2063	2064
Disbursement	4868.1	4955.8	5605.3	6590.4	6543.4
Collection	3787.2	4366	4857.5	5866.4	7892.3
Outstanding	6828.3	7418.1	8165.9	8889.9	7541

Figure No. 12
Trend analysis of Agriculture industries, marketing and godowns



Source: Table No. 17

After analysis the trend, we can see that loan disbursement on Agriculture industries, marketing and godowns is increasing in every year is Rs.4868.1 in F/Y 2060 which is increased to Rs.6543.4 in F/Y2064, which is very good sign for bank. Collection is Rs. 3787.2 in F/Y 2060 and increased to Rs. 7892.3in F/Y 2064.it means increasing collection is good for bank. Outstanding is Rs.6828.3 in F/Y 2060 and reached up to Rs.7541in F/Y 2064.increasing outstanding is bad sign for bank.

Table No. 18
Trend equation and coefficient of determination of Agriculture
industries, marketing and godowns

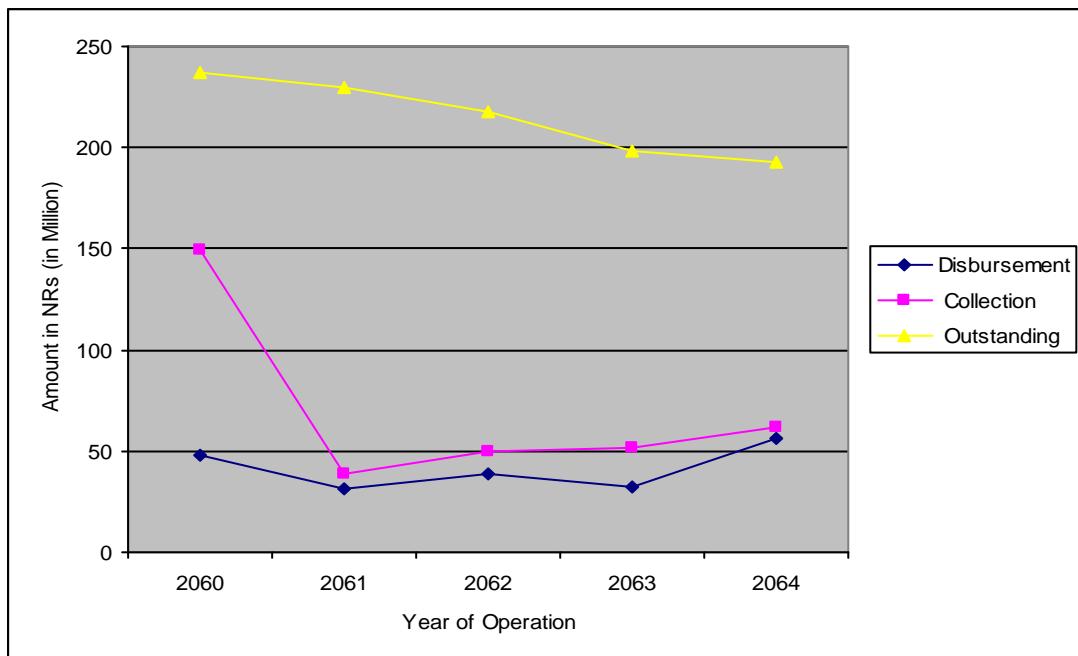
Particulars	Trend Equation	R square
Disbursement	$Y = 498.52x + 4217$	0.901
Collection	$Y = 971.06x + 2440.7$	0.9082
Outstanding	$Y = 289.72x + 6899.5$	0.3393

From the above table, it is clear that loan disbursement and loan outstanding and loan collection are in Increasing trend by Rs498.52, Rs289.72, 971.06 per year respectively. Annual variation on dependent variable (disbursement, collection are outstanding) are fluctuating by 90.1%, 90.8% and 33.93% respectively.

Table No. 19
Trend Analysis of Horticulture

Particulars	2060	2061	2062	2063	2064
Disbursement	48.2	31.5	38.7	31.9	56.4
Collection	149.5	39	50	51.9	61.9
Outstanding	236.9	229.4	218.1	198.1	192.6

Figure No. 13
Trend Analysis of Horticulture



Source: Table No. 19

After analysis the trend, we can see that loan disbursement on horticulture is Rs.48.2 in F/Y 2060 which is increased to Rs.56.4 in F/Y 2064. Collection is Rs. 49.5 in F/Y 2060 and increased to Rs. 61.9 in F/Y 2064.it means disbursement and collections both are increasing, which is good for bank. Outstanding is Rs231.3 in F/Y 2060 and slide down up to Rs.172.69in F/Y 2064 decreasing outstanding means banks collection policy is good.

Table No.20
Trend equation and coefficient of detennination of Horticulture

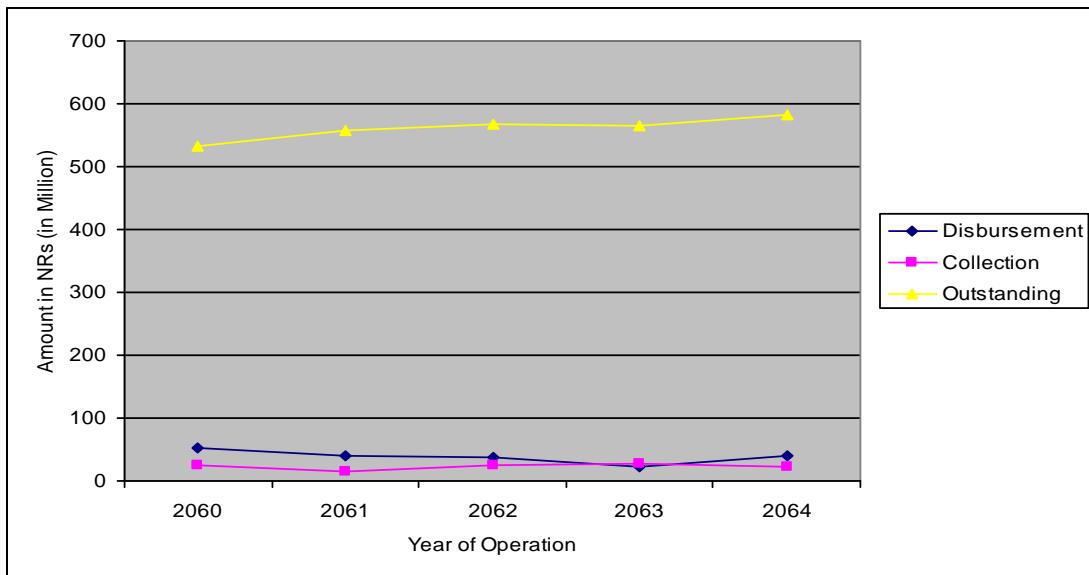
Particulars	Trend Equation	R square
Disbursement	$Y = 1.68x + 36.3$	0.0605
Collection	$Y = 3.77x + 39.15$	0.5355
Outstanding	$y = -11.99x + 250.99$	0.9688

From the above table, it is clear that loan disbursement and loan collection are in increasing trend by Rs. 1.68 and Rs.3.77 per year respectively but outstanding is in decreasing trend by Rs. 11.99(in million) per year. Annual variation on dependent variable (disbursement, collection and outstanding) are fluctuating by 6.05%, 53.55% and 96.88% respectively.

Table No. 21
Trend Analysis of Tea/Coffee Cultivation

Particulars	2060	2061	2062	2063	2064
Disbursement	52.1	40.9	36.5	23.6	38.9
Collection	25.9	14.6	25.9	27.8	21.5
Outstanding	531.4	557.7	568.3	564.	581.5

Figure No. 14
Trend Analysis of Tea/Coffee Cultivation



Source: Table No. 21

After analysis the trend, we can see that loan disbursement Oil horticulture is Rs.52.1 in F/Y 2060 which is increased to Rs.38.9 III F/Y2064, Collection is Rs. 25.9 in F/Y 2060 and increased to Rs.21.5 in F/Y 2064.it means disbursement and collection both are decreasing, Outstanding is Rs. 564 in F/Y 2060 and increased to Rs.613.84 in F/Y 2064 increasing outstanding is not good for bank.

Table No. 22
Trend equation and coefficient of determination of Tea/coffee Cultivation

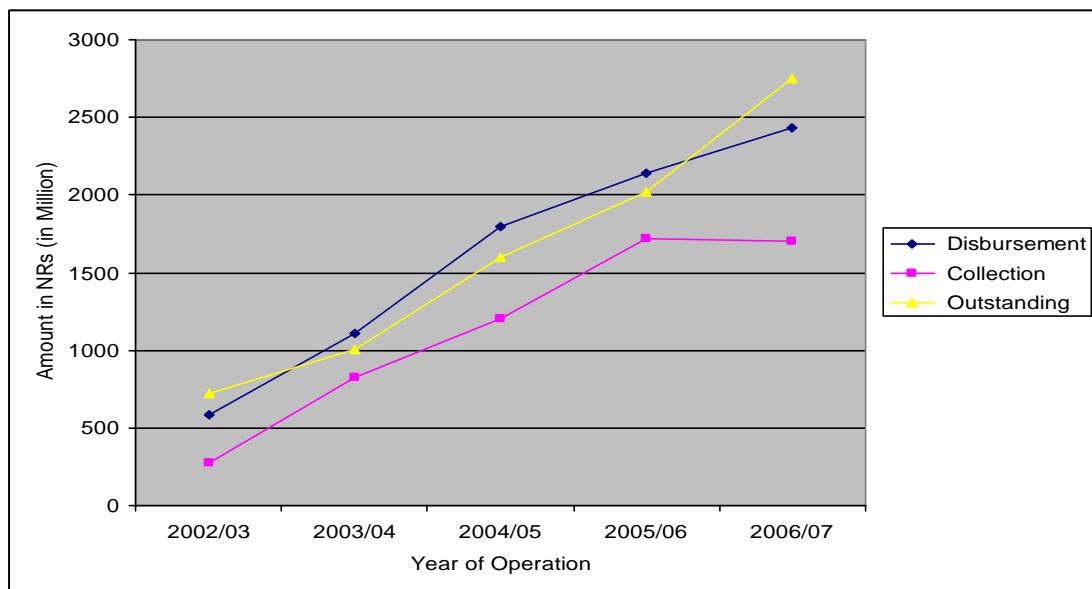
Particulars	Trend Equation	R square
Disbursement	$Y = 1.68x + 36.3$	0.0605
Collection	$Y = 3.77x + 39.15$	0.5355
Outstanding	$Y = -11.99x + 250.99$	0.9688

From the above table, it is clear that loan disbursement and loan collection are in increasing trend by Rs. L68 and Rs.3.77 per year respectively but outstanding is in decreasing trend by Rs. 11.99(in million) per year. Annual variation on dependent variable (disbursement, collection and outstanding) are fluctuating by 0.60°0, 53.55% and 96.88% o respectively.

Table No.23
Trend Analysis of House and land Development Loan

Particulars	2002/03	2003/04	2004/05	2005/06	2006/07
Disbursement	584.7	1109.4	1795	2141.7	2432.5
Collection	276.4	823	1205	1720.1	1699.5
Outstanding	722.1	1008.5	1598.5	2020.1	2753.1

Figure No. 15
Trend Analysis of House and land Development Loan



Source: Table No. 23

After analysis the trend, we can see that loan disbursement on House

and land Development Loan is Rs. 84.7 F/Y 2060 which is decreased up to Rs. 2432.5 in F/Y2064, Collection is Rs. 276.4 in F/Y 2060 and increased to Rs.1599.5 in F/Y 2064. It means collection is increasing. Increasing collection is better for bank. Outstanding is Rs. 722.1 in F/Y 2060 and increased to Rs. 2753.1 in F/Y 2064 increasing outstanding is not good for bank.

Table No. 23

Trend equation and coefficient of determination of House and land

Development Loan		
Particulars	Trend Equation	R square
Disbursement	$Y = 472.79x + 194.29$	0.9739
Collection	$Y = 374.33x + 21.81$	0.9342
Outstanding	$Y = 507.36x + 98.38$	0.9808

The above table, it is clear that loan disbursement, and loan outstanding and loan collection are in increasing trend by Rs472.79 Rs374.33, 507.36 per year respectively. Annual variation on dependent variable (disbursement, collection are outstanding) are fluctuating by 97.39%, 93.42% and 90.08°o respectively.

4.5 Ratio Analysis

4.5.1 Liquidity ratio

A. Cash and Bank Balance to Total Deposit

Table No.24
Cash and Bank Balance to total Deposit Ratio
(Rs. in million)

Year	Cash and Bank Balance	Total Deposit	Ratio
2060	2766	23950	11.55%
2061	2911	26244	11.09%
2062	2035	7223	11.15%
2063	4772	29632	16.10%
2064	851	2416	11.88%
Total			61.77
Mean(X)			12.35
S.D.			2.1884
C.V.			0.1715

Source: Appendix 1&2

The Above table shows that cash and bank balance to total deposit ratio of ADBN for five years is 11.15%, 11.09%, 11.15%, 16.10% and 11.88% respectively and the highest average ratio is 16.10% in F/Y 2062/2063 and lowest average ratio is 11.09% in F/Y 2060/2061. Their mean value is 12.35 and standard deviation and coefficient of variance of the ratio is 2.1184 & 0.1715 respectively.

B. Cash and Bank Balance to Current Assets Ratio

Table No.25
Cash and Bank Balance to Current Assets Ratio
(Rs. in million)

Year	Cash and Bank Balance	Current Assets	Ratio
2060	2766	3122	88.59%
2061	2911	3340	87.15 %
2062	3035	3401	89.23%
2063	4772	4853	98.9%
2064	3851	4014	95.9%
Total		1330.41	
Mean(X)		266.082	
S.D.		81.92	
C.V.		0.3078	

Source: Appendix 1&2

Above table shows that cash and bank balance to current assets ratio of ADBN for five years is 88.59%, 87.15%, 89.23%, 98.9% and 959% respectively and the highest average ratio is 98.9% in F/Y 2062/2063 and lowest average ratio is 87.15% in F/Y 2060/2061. Their mean value is 266.082 and standard deviation and coefficient of variance of the ratio is 81.92 & 0.3078 respectively.

C. Investment on Government Securities to Current Assets Ratio

Table No.26
Investment 'on Government Securities to Current Assets Ratio
(Rs. in million)

Year	Investment on Government Securities	Current Assets	Ratio
2060	967	3122	3099%
2061	669	3340	20.05%
2062	198	3401	5.826%
2063	397	4853	8.180%
2064	1759	4014	43.83%
Total			108.876
Mean (X)			21.77
S.D.			17.34
C.V.			0.7965

Source: Appendix 1&2

The above table shows that investment on government securities to current assets ratio of ADBN for five years is 30.99%, 20.05%, 5.826%, 8.180% and 43.83% respectively and the highest average ratio is 43.83% in F/Y 2063/2064 it means in year 2064 ,AI3i3/N has invested 43.83% of current assets in government securities. The lowest average ratio is 5.826% in F/Y 2061/2062. Their mean value is 21.77 and standard deviation and coefficient of variance of the ratio is 17.34 & 0.7965 respectively.

4.5.2 Assets Management Ratio

A. Loan and Advanced to Total Deposit Ratio

Table No.27
Loan and Advanced to Total Deposit Ratio (Rs. in million)

Year	Loan and Advances	Total Deposit	Ratio
2060	1349	23949	5.63%
2061	1348	26244	5.14%
2062	1511	27223	5.55%
2063	1608	29631	5.43%
2064	1521	32416	4.69%
Total		26.44	
Mean (X)		5.28	
S.D.		0.3825	
C.V.		0.0724	

Source: Appendix 1&2

The above table shows that investment on government securities to current assets ratio of ADBN for five years is 5.63%, 5.14%, 5.55%, 5.43% and 4.69% respectively and the highest average ratio is 5.63% in F/Y 2059/2060. The lowest average ratio is 4.69% in F/Y 2063/2064. Their mean value is 5.28 and standard deviation and coefficient of variance of the ratio is 0.3825 & 0.0724 respectively.

B. Investment on Government Securities to Total working fund Ratio

Table No. 28
Investment on Government Securities to Total Working Fund
Ratio (Rs. in million)

Year	Investment on Government Securities	Total Working Fund	Ratio
2060	967	40318	2.40%
2061	669	45671	1.466%
2062	198	38694	0.512%
2063	397	35297	1.125%
2064	1759	38160	4.61%
Total			10.108
Mean (X)			2.02
S.D.			1.59
C.V.			0.7871

Source: Appendix 1&2

The above table shows that investment on government securities to total working fund ratio of ADBN for five years is 2.40%, 1.46%, 0.512%, 1.125% and 4.61% respectively and the highest average ratio is 4.61% in F/Y 2063/2064 it means in year 2064 ADBN has invested 4.61 % of fund in government securities. The lowest average ratio is Q.512% in F/Y 2061/2062.Their mean value is 2.02 and standard deviation and coefficient of variance of the ratio is 1.59& 0.7871 respectively.

C. Investment on Share and Debenture to Total Working Fund Ratio

Table No.29

**Investment on Share and Debenture to Total Working Fund Ratio
(Rs. in million)**

Year	Investment on Share and Debenture	Total Working Fund	Ratio
2060	2647	40318	6.56%
2061	2735	45671	5.99%
2062	1356	38694	3.50%
2063	1511	35297	0.428%
2064	3177	38160	8.326%
Total			24.804
Mean (X)			4.96
S.D.			0.4186
C.V.			0.0968

Source: Appendix 1&2

The above table shows that investment on Share and debenture to total working fund ratio of ADBN for five years is 6.56%, 5.99%, 3.50%, 0.428% and 8.326% respectively and the highest average ratio is 8.326% in F/Y 2063/2064 it means in year 2064 ADBN has invested 8.326% o of total fund in government securities. The lowest average ratio is 0.428% in F/Y 206-2/2063. Their mean value is 4.96 and standard deviation and coefficient of variance of the ratio is 0.4186 & 0.0868 respectively.

4.5.3 Profitability Ratio

A. Return on Loan and Advances Ratio

Table No.30
Return on Loan and Advances Ratio (Rs. in million)

Year	Return (Net Profit/Loss)	Loan and advances	Ratio
2060	15	1349	1.157%
2061	(8000)	1348	(593.18) %
2062	(786)	1511	(5.2027) %
2063	353	1608	-1.97%
2064	1058	1521	69.57%
Total			(505.68)
Mean(X)			(100.13)
S.D.			275.10
C.V.			(2.7474)

The above table shows the ratio of return on loan and advances of ADBN from F/Y 2059/2060 i.e. 1.157%, (593.18) %, (5.2027)%, 21.97% and 69.57% respectively in year 2064 it takes highest ratio that means ADBN earn more profit on loan and advances but in F/Y 2060/2061 the bank bear (593.18%) loss on it. Their mean value is (100. 13) and standard deviation and coefficient of variance of the ratio is 275.10 & (2.7474) respectively

B. Return on total Working Fund Ratio

Table No.31

Return on Total Working Fund Ratio (Rs. in million)

Year	Return (Net Profit/Loss)	Total Fund	Working Ratio
2060	15	403 18	0.3616%
2061	(8000)	45671	(17.51)%
2062	(7/86)	J8694	(0.2032)%
2063	353	35297	1%
2064	1058	38160	2.77%
Total			(13.5816)
Mean(X)			(2.71)
S.D.			8.344
C. V.			(3.078)

The above table shows the ratio of return on loan and advances for five years is. 0.3616%, (17.51) %, (0.2032) %, 1% and 2.77% respectively the highest ratio is 2.77% in year 2064. Likewise lowest ratio is (17.51 %) in year 2061. Their mean value is (13.5816) standard deviation and coefficient of variance of the ratio is 2.71 & (3.078) respectively.

C. Total Interest Earned to Total working Fund Ratio

Table No. 32
Total Interest Earned to Total Working Fund Ratio (Rs. in million)

Year	Total interest earned	Total Working Fund	Ratio
2060	3554	40318	8.81%
2061	2892	45671	1 6.33%
2062	391 5	38694	10.11%
2063	4033	35297	1 1.42%
2064	4623	38160	12.11%
Total			48.78
Mean(X)			9
S.D.			0.3125
C. V.			0.02

Source: Appendix 1&2

The above table, it shows total interest earned to total working fund ratio of ADBN for five years is 8.81%, 6.33%, 10.11%, 1 1.42% and 12.11% respectively and the highest average ratio is 12.11 % in F/Y 2063/2064 it means in year 2064 ADBN has earned 12.11% interest earned on total working fund. The lowest average ratio is 6.33% in F% T' 2060/2061. Their mean value is and standard deviation and coefficient of variance of the ratio is 0.3125 & 0.032 respectively.

D. Total Interest paid to Total Working Fund Ratio

Table No.33

Total -Interest Paid to Total Working Fund Ratio (Rs. in million)

Year	Total Interest Paid	Total Working Fund	Ratio
2060	1979	40318	4.90%
2061	2093	45671	4.58%
2062	1487	38694	3.844%
2063	1439	35297	4.079%
2064	1605	3816	4.208%
Total			21.611
Mean (X)			4.32
S.D.			0.4186
C.V.			0.0968

Source: Appendix 1&2

The above table, shows total interest paid to total working fund ratio of ADBN for five years is 4.90%, 4.58%, 3.844%, 4.079% and 4.208% respectively and the highest average ratio is 4.90% in F/Y 2059/2060 it means in year 2060 ADBN paid 4.90% of interest on total working fund. The lowest average ratio is 3.844% in F/Y 2061/2062. Their mean value is 4.32 and standard deviation and coefficient of variance of the ratio is 0.4186 & 0.0968 respectively.

E. Net Interest Margin Ratio

Table No. 34
Net Interest Margin Ratio (Rs. in million)

Year	Total Interest Margin	Interest Earning Assets	Ratio
2060	1575	2646	59.51%
2061	799	2735	29.22%
2062	2427	1355	179.05%
2063	2593	1511	171.10%
2064	3017	3177	4.208%
Total			21.611
Mean (X)			4.32
S.D.			0.4186
C.V.			0.0968

Source: Appendix 1&2

The above table shows net interest margin ratio of ADBN for five years is 59.51%, 29.22%, 179.05%, 171.10% and 4.208% respectively and the highest average ratio is 179.05% in F/Y 2061/2062 it means in year 2062, ADBN earns net interest on interest assets by 179.05%. The lowest average ratio is 4.208% in F/Y 2063/2064. Their mean value is 4.32 and standard deviation and coefficient of variance of the ratio is 0.4186 & 0.0968 respectively.

4.6 Major Findings from the Study:

This Topic focuses on the major findings of the study which are summarized as follows:

1. Agriculture Development Bank has been established with the motive of the development of the agriculture sector and raise the economic standard of rural peoples. It has been providing agriculture credit and technical support the people in different areas like Food grain, Cash crop, Marketing, Irrigation, Cottage Industry, Tea/Coffee Cultivation, Agri Tools, Agriculture business etc.

Findings from Financial Analysis:

2. Purpose wise ADBN has disbursement loan in 7 sectors. They are Food grains, Cash crop production, Agri Tools and Irrigation, Agriculture business, Agri Industries, Marketing and Godowns, Horticulture, Tea/Coffee cultivation, Housing and Land Development loan. The loan disbursement in agriculture credit increased from Rs. 10115 million to Rs. 14650 million from the year 059/060 to 063/064. ADBN disburses 80% total loan in Food grain and Cash crop production, Agriculture Business, Agri Industries, Marketing and godowns and Housing and Land Development Loan.
3. Purpose wise loan collection of ADBN has increased from Rs. 8173 million to 13789 million in 5 years. ADBN is able to collect huge amount of loan only in Agri industries and marketing. In other purpose loan collection trend is fluctuating. This shows the loan collection policy of ADBN is not much effective.

4. Purpose wise loan outstanding of ADBN is in increasing trend. It was Rs 18695 million in 059/060 and reached to Rs. 23048 million in 063/064. The major sectors of loan outstanding are Agri Industries, Marketing and godowns, Food grains and Cash crop production, Agriculture business and Housing and Land development loan. About 85% of Total loan outstanding is in these 4 major sectors. The increasing trend of loan outstanding is not good for bank.

Findings from Ratio Analysis

5. Liquidity Ratio:

Ratio of cash and bank balance to total deposit shows that liquidity of ADBN is satisfactory. It is almost same in all the 5 years. C.V of the ratio is more consistent.

Ratio of Cash and bank balance to current asset is quite good in 5 years period. It is more than 85% C.V of ratio is more consistent.

6. Assets Management Ratio:

Ratio of loans and advances to total deposit of ADBN is almost similar during the 5 years period. It shows that the bank has mobilized its collected deposit in loans and advances in similar ways during the 5 years period. C.V of ratio is consistent.

Ratio of investment on government securities to total working fund ratio shows that ADBN was more successful to invest in government securities in the last year than the previous years. C.V of ratio is more consistent.

7. Profitability Ratio:

Ratio of return on loans and advances of ADBN is not good in early years but in last 2 years it has earned profit on loans and advances. C.V of ratio is less consistent. P. C. Ratio of return on total working fund of ADBN is also not good in early years whereas in last 2 years it is quite satisfactory. The bank is able to earn profit in last years. However C.V of ratio is less consistent.

Ratio of total interest earned to total working fund of ADBN is good. It means the banks profit earning power seems stronger in all the years. C.V of ratio is more consistent. P. C. Ratio of total interest paid to total working fund of ADBN is good. It is almost similar in last 5 years. C.V of ratio is more consistent.

CHAPTER - 5

SUMMARY AND CONCLUSION

5.1 Summary:

Nepal is predominantly an agricultural country. So development of agricultural sector is a pre-condition for the economic development of the country. But the agriculture sector faces different types of problems like use of traditional tools and technique, imperfect market, small holdings and insufficient credit for developing agricultural sector, scientific tools and technique should be used and sufficient institutional credit should be provided.

The institutional agriculture credit system in Nepal began with the establishment of the cooperative bank in 1963 A.D. During 1966 another institution Land Reform Saving Corporation (LRCC) was established to provide agriculture credit. Then in 1968 A.D, ADBN was established to provide loans under optimum condition in agriculture sector. ADBN provides short-term production loans, short term marketing and storage loans medium and long-term loans. Total loans invested by ADBN till 2064 was Rs. 70.51 billion. It has invested huge amount of loan in Agriculture industries, marketing and godowns each year as compared to other sector. The bank not only invests but it also collects the huge amount of loan from these sectors. There is also a huge amount of loan outstanding in different sectors. In this study, by using statistical tools and technique, multiple correlation coefficients have found out that 24.67% of total loan collection is dependent on two variables i.e loan disbursement and loan outstanding. Till 2064 loan collection of ADBN was Rs. 52.24 billion and loan outstanding was Rs. 18.52 billion except commercial banking.

5.2 Conclusion:

ADBn has disbursed loan purpose wise in Agriculture industries, marketing and godowns but highly it makes loan collection from medium term as the bank gives more emphasis to farm mechanism. The largest amount of loan outstanding is in Agriculture industries, Marketing, and godowns because in recent years (059/060 to 063/064) the bank has given top priority to food grain and cash crop production. The flow of loan is sectors like horticulture and tea/coffee cultivation is not enough. The repayment of loan is not good on the other hand. The trend of loan collection is not good as compared to loan outstanding.

We can see that in spite of increase in volume of loan disbursement each year in Agriculture industries, marketing and godowns. Its weight is slightly fluctuating. The same result can be seen in loan collection also as its weight is increasing with passage of time. This is not good for ADBN to increase its weight in loan collection in the case of loan outstanding of ADBN, the decrease in its weight means that the bank has been able to decrease its loan outstanding which has significant effect on loan collection. With the decrease in weight of loan outstanding the bank can increase its loan collection. The bank has been able to speed up its loan investment in agriculture industries, marketing and godowns which is the most contributing sector after being able to reduce its loan outstanding in particular sector each year.

The reason for slow collection may be attributed to the liberal policy, weak supervision and controlling system, negligence towards collection procedure, poor economic condition of people, overvaluation of security

on loan sanction and difficult geographical condition of the country. The present unstable situation negatively affects the activities of the bank.

In overall, we can conclude that the recovery policy of the bank is not effective and such situation may create a great problem for the bank in future if favorable measures are not adopted immediately to get the better result.

5.3 Recommendation:

From the analysis of the findings and conclusions of the study, the following recommendation is offered to improve the present lending and collection procedure and change the present management system of the bank.

- ❖ In every year and sector collection is slow than disbursement and increasing outstanding is the major problem of the bank. This happen due to flexible lending and collection policy of the bank. Therefore, the bank is recommended to give certain consciousness towards the loan disbursement, collection policy and procedure. The most important thing is that the bank must improve its present supervision and controlling department by providing them necessary powers, the officials must visit tile field before investment to find out the viability, feasibility and after investment to find out the progress
- ❖ It is widely accepted that agriculture needs adequate credit from an effective credit institution for its development but both the borrower. and non borrower have complain regarding

higher interest rate, services and commitment charges, stringent security rules and difficulties in securing loan when needed. So ADBN should reduce its interest rate. Services and commitment charge and make easier to attract and motivate the small farmers.

- ❖ Bank should launch various programs to the different areas according to the people and their economic conditions. Bank should provide agriculture production loan in Terai region and livestock, horticulture, poultry farming loan in hill and mountain region. Except this bank must launch different education program to give Information about new ideas, new & scientific technology, modern equipment to improve the existing quantity and quality of the production.
- ❖ The bank should have improved the liquidation position. For this, the management of bank should properly utilize current assets and current liabilities. It helps bank to able to meet the current obligations by improving the liquidation position. The bank has bearing high risk as well as low returns to shareholder equity. So management also should have focus to improve its profit earning. Making right sizing of offices and staffs number and making good investment can increase the profit. Return of fixed asset is satisfied but succeeding year it is decreasing so bank authority should be serious at the time of investing in fixed assets and think how to use the assets to increase profit rationally. Earning per share is very low so it may be

disappointment to shareholders. So bank should consider on increasing EPS by improving⁻ its profit earning.

Finally, the active financial program is necessary for the economic development of the country. ADBN is the only institution which plays a vital role to uplift the farmers by providing agriculture credit as well as the national development. But the bank is not able to fulfill the whole objectives. Government should also provide powers to the bank and individuals must bear their responsibility loyally and help the bank to achieve national objectives.

BIBLIOGRAPHY

Books:

Bhandari,Dilli Raj (2003) *Banking & Insurance* Ayush publication Katmandu.

Buralkoti, Gokul (2059) *Samanya Gyan Darsan*, Makalu Publication Ktm, Nepal.

Chhabra, T.N. and Taneja, *P.L. law and Practice of Banking, Delhi*, 1991.

Dahal Bhuban and Dahal Sarita (1999). *A hand book of banking*

Kharel Shree Krishan and Shrestha Nilam kumar (2061). *Banking Finance, economic policies, management .Act &rules.*

Kerlinger, F.N; *Foundation of Behavioral Research; Holt Rinehart and Minston inc.* New York.

Kothari, C. R; *Research Methodology Methods and Techniques*, 2nd edition, 1990.

Kothari,C.R., *Research Methodology Method and Techniques*, New Delhi: Wiley Eastern Ltd, 1990.

Oxford Advanced Learners Dictionary, Calcutta: *Oxford University Press*, 1992.

Redman, L. V. and Mory A.V. H; *The Romance of the research*; 1923.

Saravanavel, P. *Research Methodolo* Allahabad;Kitab Mahal 1990.

Shakerspear Vaidhya (2001), *Banking &Insurance Management* Telaju Prakasan, Bhotahity, Ktm.

Sir J.S. Bania, *A Book note.*

The New Encyclopedia Britannica; Volume -10, 15thedition 1969.

Wolff. Howard K and Panta Prem Raj, *Social Science Research and Thesis Writing*, Buddha Academic Enterprises Pvt_ Ltd, 1999.

Varshney, N.P. and Swaroop, G. *Banking law and Practice for C.A.LLB.* New Delhi, 1994.

Past Thesis:

Aryal, k, *An Evaluation of Loan Investment and Recovery of Financial Public Enterprises in Nepal*, A Case study of Agriculture Development Bank (Unpublished Master Degree Thesis Submitted to Kritipur)T.U.2006.

Chand, G.B. *Loan Disbursement and Repayment of Agriculture Development Bank Nepal* (An Unpublished Master Degree Thesis submitted to Kritipur) T.U.2000.

Gautam,R. *Investment Analysis of Finance Company of Nepal* (Unpublished Master Degree Thesis submitted to SDC), T.U.2004.

Shrestha,B.N, *A study on Industrial Loan provided by NIDC in Sunsari District* (Unpublished Master Degree Thesis submitted to SDC), T.U.2004.

Articles:

Loan Department of *Agriculture Development Bank, Ktm.*

Agriculture Credit Bi Annual journal Yo136, July 2003.

Agriculture Development Bank, Annual report, Central Training Institute, Head office, Ktm.

Agriculture Development Bank (2003) Agriculture Credit Bi Annual journal Vol 35, Central Training Institute,

Banking Smachar, A Monthly Publication of Agriculture Development Bank Nepal, 2064 B.S.