CHAPTER - 1
INTRODUCTION

1.1 Background of the study:

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 countries 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 it is only the basis of industrial development It plays a vital role in economy in different ways like, it meet 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 l Hector of land. Because of rapid growth of population, there is mare 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 fanners. 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 charges very high interest rates and called back whenever they like, there is no fixed term and conditions

while lending and barrowings. 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 Nepal (ADBL) was established under the Agriculture Development Act. The main objective of the bank is to deliver comprehensive banking and financial services, capitalizing its extensive network in rural areas.

1.2 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 day perform the essential and valuable function for the development of the nation.

To overcome this economic situation, government has to formulate and implement strategies focusing overall industrialization of the nation and development of a sound banking system is necessary for the rapid industrial development. Dr. Shrestha says, "Financial infrastructure of an economy consists of financial intermediation, financial institution and financial markets" (*Shrestha: 2006*) financial markets and institution economy plays a role of catalyst in the process of economic growth of the country. In this country, a bank is a financial institution, which plays a significance role in the development of a country. It facilitates the growth of trade and industry of national economy. However, bank is a mediator for economic development, which maintains the self confidence of various segments of society and extends credit to the people. Banking sector plays a vital role for the country's economic development opportunities to people. Banks have always been the most important and the targets of financial intermediaries almost everywhere. It plays significant role in the development of a country intermediating between the saving and investment. Essentially the banks and financial systems are the channel through which money has been mobilized distribution throughout the economy. Any bank must maintain adequate cash and bank balance to meet its day-to-day management of cash resources for remote contingencies.

The study focuses on evaluating the deposits utilization of the banks in terms of loans and advances and investments and its contribution in the profitability of the bank. It also focuses on the contribution of off-balance sheet activities in the earnings of the bank and non-performing assets positions of the banks. The term credit is referred to the loan. Credit is the amount of money lent by the creditor (bank) to the borrower (Customer) either based on security or without security.

1.3   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. Despite of being agricultural country, our farming system is traditional one. Using traditional system, it involves more cost, more effort and low production. Modern and scientific agriculture method is imperative to overcome these problems. 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.

1.4 Focus of the Study:

This study is basically focused on the credit management of ADBL 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. To increase productivity, agricultural credit is most

essential. Most of farmers in Nepal are suffering from poverty. They don't have essential financial resources, investable surplus. 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 GDP 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. *(Economic Survey, 2009)*

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.

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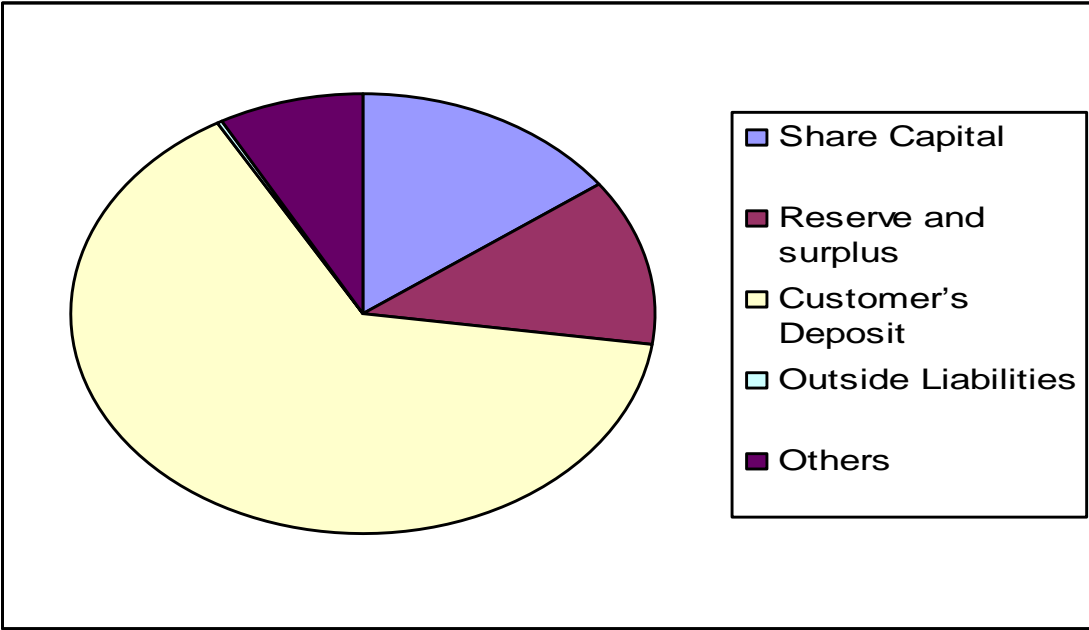
The major sources of financial resources are as under.

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 ADBL, 2009)

Figure No. 1

Pie Chart Showing Sources of Capital Generation

Financial Sources of Bank in %

Source: Table No. 1

1.5.1 Objectives of ADBL

The following are the objectives of ADBL.

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 provides financing facilities for the construction of Govar-Gas plant.

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 their needs and purpose of investment.

1.5.2 Functions of ADBL

To solve the financial problems, to support the farmers to uplift their living standard as well as the economic growth of the country,ADBL was established with border aspects .To fulfill its objective, it has been operating followings activities:

a.   Provide short, medium and long term agriculture loan to individual fanners, 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.   Provide training to the beneficiaries and the bank staff to support each other.

j.   Collect capital to mobilize domestic resources

Table No. 2

List of Branches office of ADBL

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

<div align="right">Source: Annual Report of ADBL</div>

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

ADBL has a huge amount of loan for the agriculture development since 1967. ADBL 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 duke 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.

ADBL is the main specialized ban: 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 ADBL 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 Research questions:

The Research design tries to answer the following 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. What are the sources of collection of data?
6. What will be the sample design?
7. What are the techniques used for the collection of data?
8. How will the data be analyzed?
9. In what style report will be prepared?

1.8 Objectives of the Study:

Undoubtedly, the role of ADBL 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 ADBL. 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 know the effectiveness of the bank's credit management in mobilizing its resources.

2. To analyze the progressive statement about the loan activities of the bank.

3. To state the major contribution of ADBL in the agriculture sector.

4. To identify and analyze the strength and weaknesses of the bank in terms of liquidity, profitability, leverage and other ratios.

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 ADBL 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 ADBL.
5. Time value of money has been fully ignored while analyzing.
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 be 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 ADBL. 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 see 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.

Robert W. Kolb & Ricardo J. Rodriguez, 1996-As a business firm, the commercial bank must acquire funds from surplus economic units at lower rates, repackage these funds and provide them to deficit economic units at higher rates to earn the profit. While investment in securities is important for bank liquidity and provides some return, banks derive the principal share of their revenues from lending. The bread and butter of the bank lending is in lending to commercial firms. Banks lend principally to business firms in retailing and manufacturing, service industries and agriculture. In addition, banks are lenders to individual consumers and banks have become major suppliers of loans for real estate.

2.2.2 Types of Credit:

The different types of credit are as follows:*(Source:ADBL, newsletter 2010)*

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.

2. Term Credit:

A loan of a specified amount for a given period, usually one year and longer.

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..

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.

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.

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. Revolving line of Credit:

A line of credit is a guarantee from a lender to a borrower to provide a certain level f financing for a certain period. Under a line of credit, many firms will borrow for seasonal financing needs.

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 ADBL *(Source: Handbook, lending and recovery policy guidelines)*

2.3.1 Lending Policies and Procedure of the Bank:

ADBL 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

ADBL provides following types of loans:

a.   **Short term production loans (for the maximum period of 18 months):**

ADBL 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): ADBL provides short term marketing loans for marketing agriculture product, transportation shortage facilities etc.

c.   Medium term loan (for not exceeding 7years): ADBL provides medium terms loans for the acquisition of permanent facilities such as tube, wells, pumps sets_ tractors, draught animals, diary, poultry, seeds, other mechinery and equipment related to farm enterprise.

d.   Long term loan (for the period exceeding 7 years and generally up to 20 years): ADBL 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 Security and Margin policy:

ADBL 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 <u>long</u> terms loans. (ADBL Operation and Achievement, 1976:3). For collateral security guarantee, arrangement from the government or arrangement from the individual's institutions is also acceptable.

2.3.1.3 Procedure of lending:

Every bank has its own set of procedures to be followed before providing loan. Similarly, ADBL has its own procedures to be followed while providing loan. Individuals, co-operative or corporate body willing to obtain the loan from ADBL 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 or 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 ADBL:

The ADBL not only has its lending policies and procedures but also its own set of recovery policies and procedures. ADBL 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 ADBL from borrower very much depends on the Purpose they have spent. The loan installment payment period may be extended depending upon some specific circumstances. ADBL has a loan recovery manual 1993, which was issued in 1993 under the ADBL loan recovery rules and regulations act1976, and ADBL 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 ADBL 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 ADBL 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 installment 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, 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 ADBL 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 *(ADBL News Letter, 1993:3)*

There is not only other financial institution in the nation that could substitute services of ADBL, 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)*

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)*

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 ADBL 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)*

2.5   Review of past thesis (dissertation):

Several thesis works have been conducted by the students regarding the various aspects of commercial banks such as lending policy, investment policy, liquidity, investment in priority sector and deprived sector. Some of them as supposed to be relevant for the study are presented below:

Surendra Gautam, (2006) conducted his thesis on, *"A Comparative Study on Financial Performance Between The Commercial Bank: Standard Chartered Bank Limited and Nepal Bangladesh Bank Limited"* The general study of the present study is to identify the current situation of financial performance of joint venture banks i.e. SCBL and NBBL. The specific objectives are as follows:

- To study the existing capital structure of financial position of joint venture commercial banks and to analyze its impact on the profitability.
- To access the debt servicing of the joint venture commercial banks.
- To examine the correlation and the signification of their relationship between different ratios related to capital structure.
- To provide suggestions and recommendations for the optimal capital structure of the joint venture commercial banks.

Researcher used to various financial tools to analyze the data to support the conclusion. The major ratios like total investments to total deposits ratio, loan and advances to total deposits ratio, net profit to total assets ratio, investment on government securities to total outside investment ratio etc. To process the financial data, some common statistical tools like co-variance, coefficient of variation, mean and trend analysis are used.

Major Findings:

Based on the analysis of the various data remarkable finding are drawn up. The major findings are as follows;

- The liquidity position of SCBNL is comparatively better than NBBL.
- The one an average, NBBL constitutes 16.27 times of DIE ratio, which should be reduced as quickly as possible.
- The financial leverage constitutes of the NBBL is 3.37 times which indicates the higher degree of financial risks.
- The average ROE of SCBL and NBBL are 37.36 % and 21.75 % respectively.

Mr. Aryal , Khimananada (2006) has submitted a thesis named *"A Evaluation of credit Investment and recovery of Finance public Enterprise in Nepal"* a case study of ADBL.

ADBL is one of the major financial institutions supporting for the people different purpose like agro, industries tea coffee, live stock, farming etc ADBL 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 ADBL 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 ADBL. His research's major objectives are:

) To analyze the loan disbursement and recovery pattern of ADBL.

) To analyze possible causes for nonpayment of loan on prescribed time.

Major findings:

) Actual credit disbursement, collection and outstanding are increasing in decreasing rate

) Yearly increase in credit disbursement is higher than that of collection.

) Positive relation between credit disbursement and collection that is 0.996.

) Targeted credit collection and disbursement fixed by planning and project department is not significantly different than the actual.

) Most of the customers are unaware of the policy of the bank.

Deepa Shrestha (2007) conducted his thesis on, *"An analysis of loan disbursement and collection performance of Agriculture Development Bank Nepal"*. The specific objectives of the study are as follows:

) To analyze the achievement of purpose wise, term wise loan disbursement, loan collection and outstanding.

) To study rate of growth of loan disbursement, outstanding, collection of ADBN

) To find out the factors that affects the repayment performance.

) To study lending policy, loan recovery procedure, interest rebate and discount, interest rate charged by ADBN.

) To study the impact of current political insurgency and instability to the farmers with reference to loan investment, outstanding and collection.

Major findings:

- ⟩ Loan disbursement, outstanding, collection is increasing every year. However percentage of loan collection to outstanding is very low.
- ⟩ Misuse of the agriculture loan providing to the farmers by not utilizing the loan for the same purpose
- ⟩ Farmers did not pay regular installment due to natural calamities, impact of politics, low productive due to the traditional farming.

Ishwari Prasad Adhikari (2008) conducted his thesis on, *"Credit Management of Everest Bank Ltd"*. The specific objectives of the study are as follows:
- ⟩ To examine the impact of deposit in liquidity
- ⟩ To examine and evaluate the various stages occurred in loan management procedure
- ⟩ To examine the lending efficiency of the bank
- ⟩ To examine the assets management efficiency and profitability ratios

Major findings:
- ⟩ Everest Bank Ltd (EBL) has sound liquidity position.
- ⟩ EBL has been able to keep the level of non performing assets as adequate portion
- ⟩ Loan loss provision to total loan advances ratio of EBL is also in decreasing trend.

Rita Paudel (2009) conducted her thesis named , *"Credit Management of Nabil Bank Ltd"*. The specific objectives of the study are as follows:
- ⟩ To analyze the portfolio of lending of selected sector of banks.
- ⟩ To evaluate various financial rate of Nabil Bank.
- ⟩ To determine the impact of deposit on liquidity and its effect on lending practices
- ⟩ To offer suitable suggestions based on findings of study.

Major Findings:
- ⟩ Nabil Bank has adequate liquidity position as directed by NRB.

) Nabil Bank is utilizing large portion of their funds mainly on Auto Loan, Housing Loan and Share loan in consumer banking.

) Loan loss provision to total loan and advances ratio of NABIL Bank is in decreasing trend.

) Correlation coeff. Between total deposit and loans and advances has high degree of positive correlated i.e 0.989. It concludes that increasing total deposit will have positive impact towards loans and advances.

Mamata Gyawali (2010) has conducted her thesis on *"Comparative study on financial performance analysis of commercial bank Ltd",* with reference to Everest Bank Ltd, Kumari Bank Ltd and Standard Chartered Bank Ltd. The specific objectives of the study are as follows:

) To compare the liquidity management, assets management efficiency, profitability position, risk position, investment practices of aforesaid banks.

) To find out the relationship between deposit and total investment, deposit and loans and advances and net profit.

) To find out the non performing assets positions of the bank.

) To analyze the risk return ratios of investment of the banks.

Major findings:

) Three banks have strong liquidity position.

) SCBL has more investment on government securities to current assets ratio in comparison to KBL and EBL. This might be taken as risk minimization strategy than KBL and EBL.

) KBL has more productive investment as loans and advances to total working fund ratio of KBL is more than SCBL.

) SCBL and KBL have more quality loans than that of EBL. It means non performing loans to total loans and advances ratio of KBL is 0.01, EBL is 0.01 and SCBL has 0.02.

Research Gap

Since the above mentioned studies offer limited findings, more extensive testing , and adjustment of necessary variables are needed in ordered to be more conclusive about the credit Management.

Previous studies were directed to find the effect of the credit management of different commercial banks. Credit Management has very big role to sustain any banking business. It is equally important to identify the relation of performance of the banking business. So, it tries to assess the credit management of banking sector and by providing the proper atmosphere for the banking market in our country. The present study is based on five years data of commercial banks, which tries to achieve its objectives by analyzing secondary source of data. Thus, the earlier studies on these issues need to be updated and validated because of the many changes taking place in Nepalese banking sector. The current study is a supplement to overcome the weakness and limitation of previous studies.

CHAPTER - 3

RESEARCH METHODOLOGY

3.1 Introduction:

This chapter highlights the methodology used in the study. This chapter includes the research design, population and sample, nature and sources of data and analysis of data.

Research methodology describes the methods and process applied in the entire subject of the related study. Every research should follow the systematic research methodology to solve the research problem. The research methodology considers the logical behind the methods used in the context of research study and explains why particular method or technique is used. Research methodology is a way to solve systematically about the research problems, which includes many tools, if it is necessary in each and every steps of this study.

3.2 Research Design:

Decision regarding what, when, how, why, by what means concerning an enquiry of a research study constitute a research design. The basic aim of this study is to analysis 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. The research design followed for the study is based on the descriptive and analytical research methodology. Some financial and statistical tools have been applied to examine the facts and descriptive techniques.

3.3 Nature and Sources of 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.

    g.   NRB reports and bulletins

3.4 Population and Sample:

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 Data analysis tools

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:

    a)   Financial Tools   b) 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:

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

Where cash and bank balance includes cash on hand, foreign cash on hand, chequee 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 seen 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

$\int$ 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:

$$\overline{X} \, \mathrm{X} \frac{X}{N}$$

Where,

$\overline{X}$ 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 † " It is used as absolute measure of dispersion or variability. It is calculated as:

$$† \ X\sqrt{\frac{x^2}{N} Z \frac{x}{N}^2}$$

Where,

$† \ X$ Standard Deviation

$\dfrac{X^2}{N}$ = Sum of square of Observation

$\dfrac{x}{N}^2$ = 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:

$$C.V. \ X \frac{†}{\overline{X}}$$

Where,

$\overline{X}$ X Mean

$† \ X$ 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 o the dependent variable.

It is calculated as:
$$r_{x1x2} = \frac{N \sum X_1 X_2 - Z(\sum X_1)(\sum X_2)}{\sqrt{N \sum X_1^2 - Z(\sum X_1)^2} \sqrt{N \sum X_2^2 - Z(\sum X_2)^2}}$$

Where,

r_{x1x2} = 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 iii 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 (yc) = a + bx

Where,
$$a = \frac{x}{N} \qquad b = \frac{xy}{x^2}$$

CHAPTER – 4

PRESENTATION AND ANALYSIS OF DATA

In this chapter, the data collected from various sources have been presented and analyzed 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 Loan disbursement

It has been tried to analyze 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.4.1.1

In status of Annual loan Disbursement

At the end of Asadh from F/Y 2061/2062 to 2065/2066

(Rs. in million)

Purpose	2062		2063		2064		2065		2066	
	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	1599.5	16	1842.80	16	1872.70	15	1659.90	11
4. Agri Industries, Marketing	4868.1	48	4955.5	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	1109.4	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. 4.1.1

In Status of Annual Loan Disbursement

At the end of Asadh from 2061/2062-2065/2066
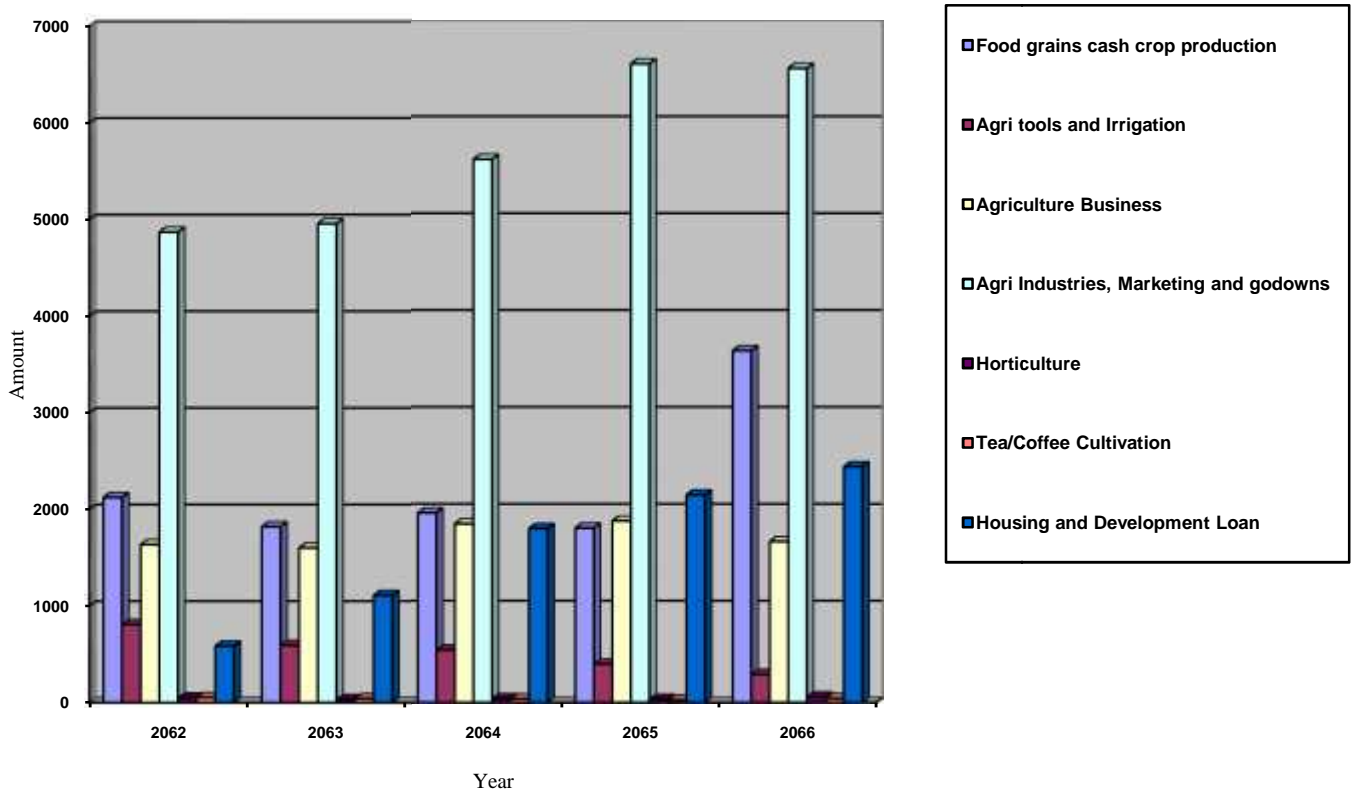
<div align="right">Source Table No. 4.1.1</div>

The above table shows that ADBL is providing loan for 7 different purposes. The highest amount of investment is made in Agriculture Industries, Marketing and godowns. It is Rs. 4868.1 (48%) in the year 061/062, Rs. 4955.50 (49%) in 062/063, Rs. 56053 (47%) in 063/064, Rs. 6590.4

(51%) in 064/065 and Rs. 6543.40 (45%) in 065/066. 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 061/062, Rs. 1820.1 (18%) in 062/063, Rs. 1956.10 (16%) in 061/62, Rs. 1799.5 (14%) in 064/065 and Rs. 3630.30 (25%) in 065/066. 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 061/062 to 065/066.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 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. 4.1.2

In status of Annual Loan Collection

At the end of Asadh from F/Y 2061/2062 to 2065/2066

(Rs. in million)

Purpose	2062		2063		2064		2065		2066	
	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	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	0.2	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 ADBL

Figure No. 4.1.2

In status of Annual Loan Collection

At the end of Asadh from F/Y 2061/2062 to 2065/2066
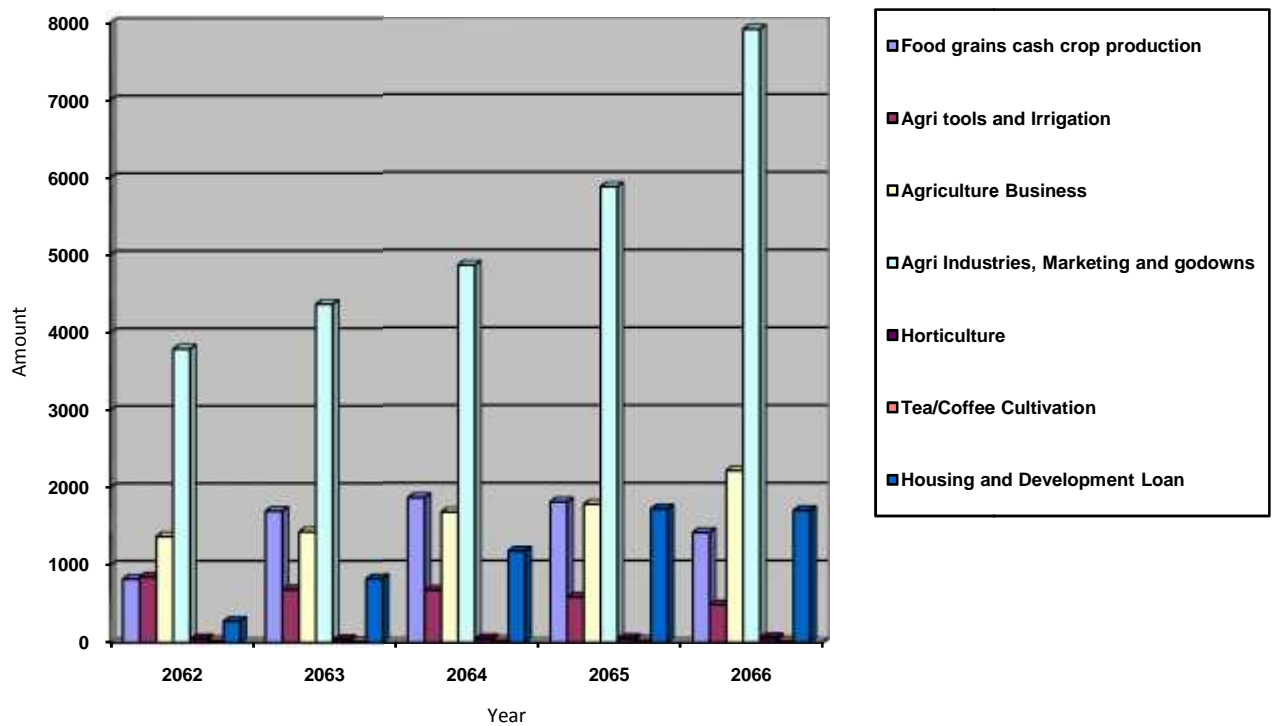
Source: Table No. 4.1.2

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 061/062, Rs. 4366 (48%), Rs. 4857.5 (47%), Rs. 5866.4 (50%) and Rs. 7892.30 (37%) in the year 062/063, 063/064, 064/065 and 065/066 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 061/062 to 065/066.

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 Loan outstanding:

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

Table No. 4.1.3

In status of Annual Loan Outstanding

At the end of Asadh from F/Y 2061/2062 to 2065/2066

(Rs. in million)

Purpose	2062		2063		2064		2065		2066	
	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	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 ADBL

Figure No. 4.1.3

In status of Annual Loan Outstanding

At the end of Asadh from F/Y 2061/2062 to 2065/2066
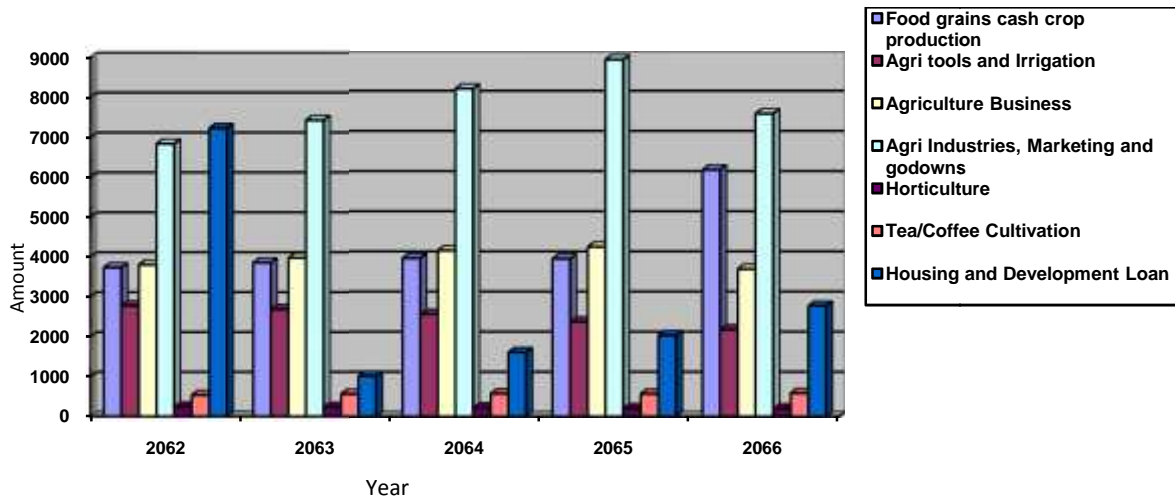
After loan investment and loan collection, loan outstanding is also important aspect of agriculture financing. From the above table it can be seen that the highest amount of loan outstanding is in Agri Industries, Marketing & godowns. It is Rs. 6828.3 (9.95%), Rs. 7418.1 (37.62%), Rs. 8165.9 (38.56%), Rs. 8889.9 (40.06%) and Rs. 7541% in the year 061/062 to 065/066 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 061/062 to 065/066.

In Agri tools and irrigation and agriculture business, it has increased by certain percentage from the year 061/062 to 062/063 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 6 time series for the continuous case is referred as a histogram.

4.2.1 Time Series of Total Loan Disbursement:

Table No. 4.2.1
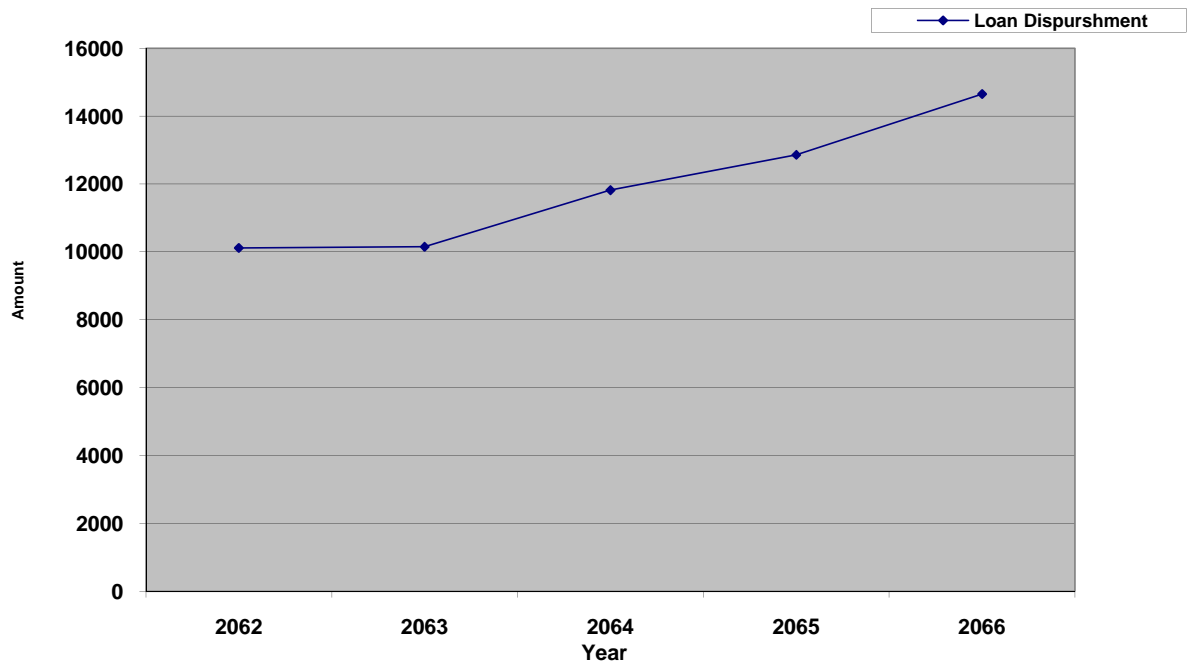
Time Series of Total Loan Disbursement

F/Y	Total Amount (Rs. In million)
2062	10115
2063	10149
2064	11817
2065	12856
2066	14650

Source: Annual Report of ADBL

The above table shows that the Total loan disbursement of ADBL has been increasing year by year. It is Rs. 10115 in 061/062, Rs. 11817 in 063/064, Rs. 12856 in 10149 in 064/065 and reached to Rs. 14650 in the year 065/066. We can see this from the graph also.

Figure No. 4.2.1

Time Series Graph of Total Loan Disbursement

Source: Table No. 4.2.1

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

4.2.2 Time Series of Total Loan Collection:

Table No. 4.2.2

Time Series of Total Loan Collection

F/Y	Total Amount (Rs. In million)
2062	8173
2063	9050
2064	10331
2065	11842
2066	13789

The above table shows that the Total loan collection of ADBL has also been increasing year by year. It has increased from Rs. 8173 to Rs. 13789 from the year 061/062 to 065/066.

Figure No. 4.2.2

Time Series Graph of Total Loan Collection
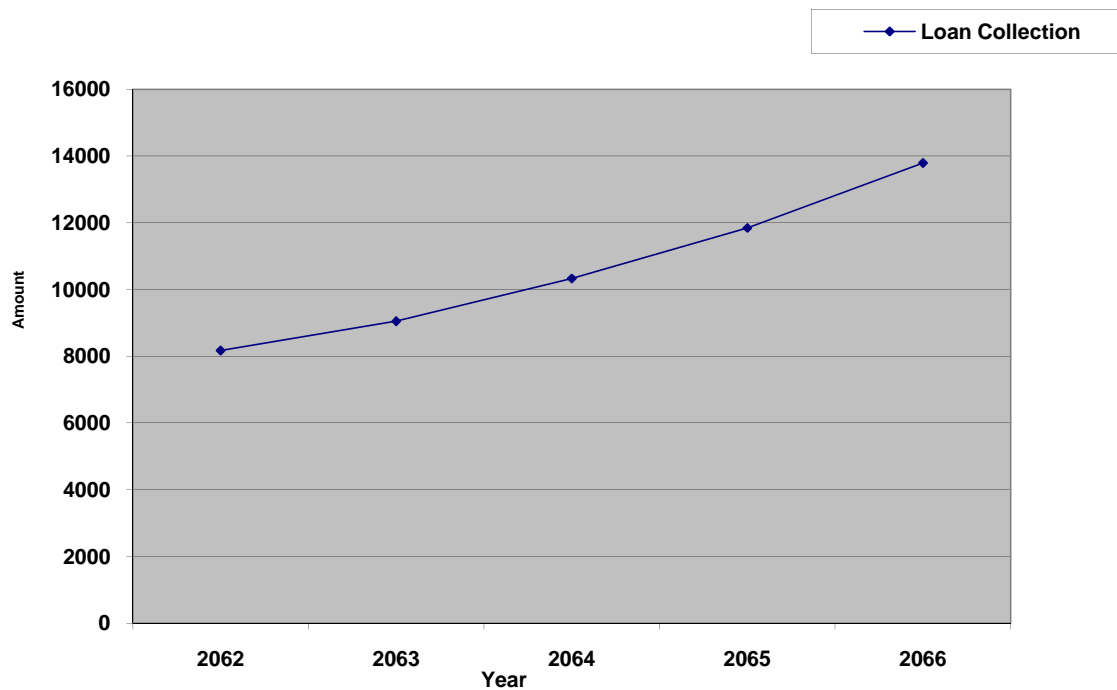
While plotting the tabulated figures on the graph we obtain an upward sloping curve. This shows the increasing trend of loan collection.

4.2.3 Time Series of Total Loan Outstanding:

Table No. 4.2.3

Time Series of Cumulative Loan Outstanding

F/Y	Total Amount (Rs. In million)
2062	18695
2063	19714
2064	21173
2065	22187
2066	23048

Source: Annual Report of ADBL

The above table also shows that the Total loan outstanding of ADBL has been increasing. It increases from Rs 18695 to 23048 from the year 061/062 to 065/066.
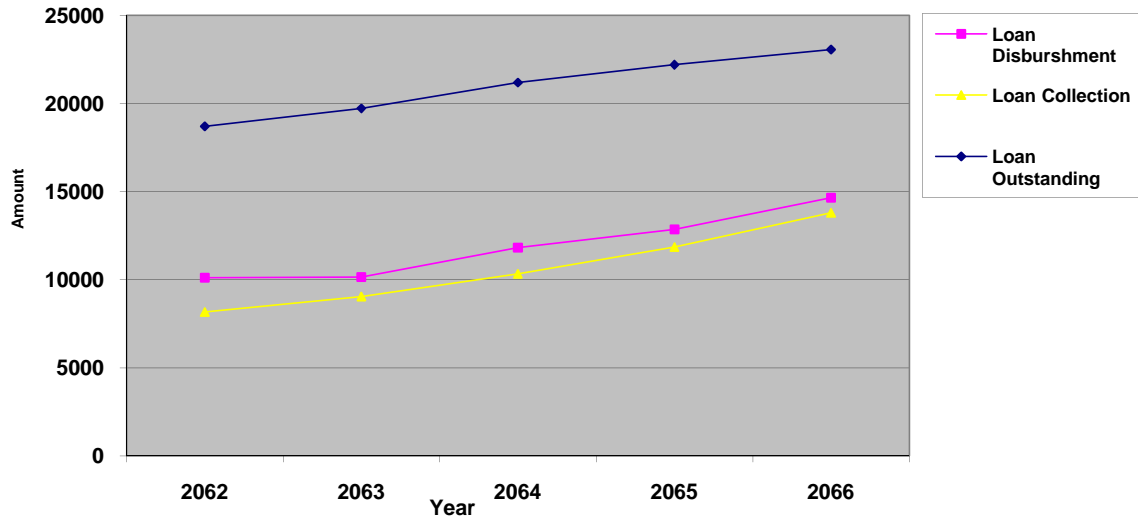
Figure No. 4.2.3

Time Series of Cumulative Loan Outstanding
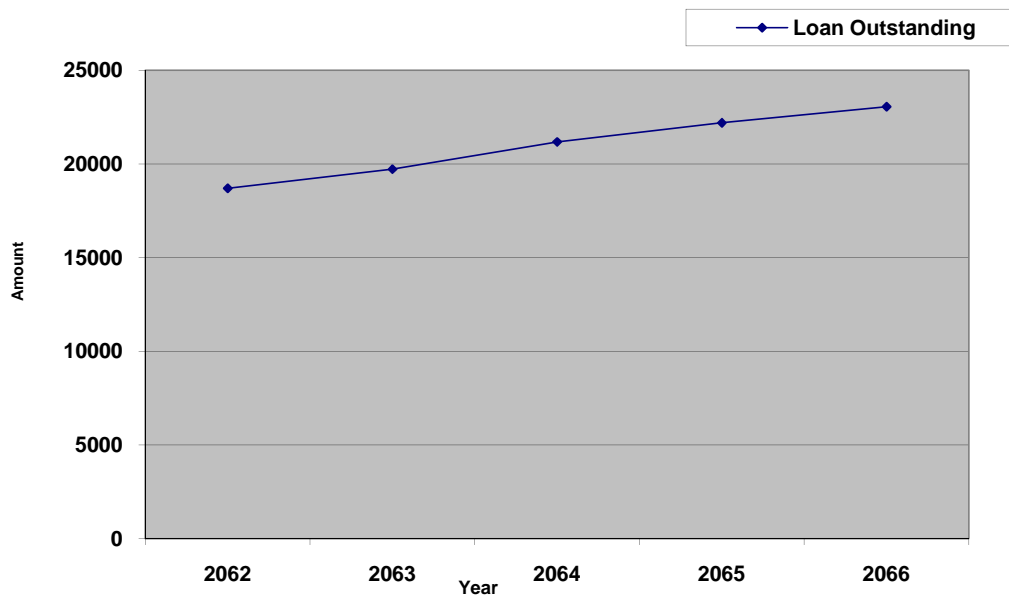
The tabulated figures while plotted on the graph give the upward sloping curve. This shows the increasing trend of Total loan outstanding of ADBL.

Figure No. 4.2.4

Time Series of all Three Activities

Source: Table No. 4.2.1,4.2.2,4.2.3

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 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.

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 X3 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 4.3

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	$X_1 X_2$	$X_1 X_3$	$X_2 X_3$
2062	101	186	81	-17.8	377	-24.8	316.84	529	615.04	409.4	441.44	570.4
2063	101	197	90	.17.8	-112	-15.8	316.84	144	249.64	213.6	281.24	189.6
2064	118	211	103	-0.8	-98	-2.8	0.64	4	7.84	1.6	2.24	5.6
2065	128	221	118	9.2	-88	12.2	84.64	144	148.84	110.4	122.24	146.4
2066	146	230	137	27.2	-79	31.2	739.84	441	973.44	571.2	848.64	655.2
	X1 = 594	X2 = 1045	X3 = 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,

$$\overline{X_1} \; X \frac{X_1}{N_1} \; X \frac{594}{5} \; X118.8$$

$$\overline{X_2} \; X \frac{X_2}{N_2} \; X \frac{1045}{5} \; X209$$

$$\overline{X_3} \; X \frac{X_3}{N_3} \; X \frac{529}{5} \; X105.8$$

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}.

$$R_{12} \quad = \quad \frac{X_1 X_2}{\sqrt{X_1^2}\sqrt{X_2^2}}$$

$$= \quad \frac{1306.2}{\sqrt{1458.8}\mid\sqrt{1262}}$$

$$= \quad \frac{1306.2}{38.19\mid 35.52}$$

$$= \quad 0.96$$

Again,

$$r_{13} \quad = \quad \frac{X_1 X_3}{\sqrt{X_1^2}\sqrt{X_3^2}}$$

$$= \quad \frac{1695}{\sqrt{1458.8}\mid\sqrt{1994.8}}$$

$$= \quad \frac{1695.8}{38.19\mid 44.66}$$

$$= \quad \frac{1695}{1705.5}$$

$$= \quad 0.99$$

Then,

$$r_{23} \quad = \quad \frac{X_2 X_3}{\sqrt{X_2^2}\sqrt{X_3^2}}$$

$$= \quad \frac{1567.2}{\sqrt{1262}\mid\sqrt{1994.8}}$$

$$= \quad \frac{1567.2}{35.52\mid 44.66}$$

$$= \frac{1567.2}{1586.2}$$

$$= 0.98$$

Now,

$$r_{3.12} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2 \cdot r_{12} r_{13} r_{23}}{1 - r_{12}^2}}$$

$$= \sqrt{\frac{(0.96)^2 + (0.98)^2 - 2 \cdot 0.96 \cdot 0.99 \cdot 0.98}{1 - (0.96)^2}}$$

$$= \sqrt{\frac{0.9216 + 0.9604 - 1.8627}{1 - 0.9216}}$$

$$= \sqrt{\frac{0.0913}{0.0784}}$$

$$= \sqrt{0.2461}$$

$$= 0.4961$$

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.

$$R_{3.12} = \sqrt{\frac{r_{12}^2 + r_{13}^2 - 2 \cdot r_{12} r_{13} r_{23}}{1 - r_{12}^2}}$$

$$R_{3.12}^2 = \frac{r_{12}^2 + r_{13}^2 - 2 \cdot r_{12} r_{13} r_{23}}{1 - r_{12}^2}$$

$$R_{3.12}^2 = (0.4961)^2$$

$$R_{3.12}^2 = 0.2461$$

$$= 24.61\%$$

Decision, Since $R_{3.12}^2 = 0.2461$. 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 ADBL 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. 4.4.1

Trend Analysis of Food Grains and Cash Crop Production

Year	2062	2063	2064	2065	2066
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 ADBL

Figure No. 4.4.1

Trend Percentage Analysis of Food Grains and Cash Crop Production
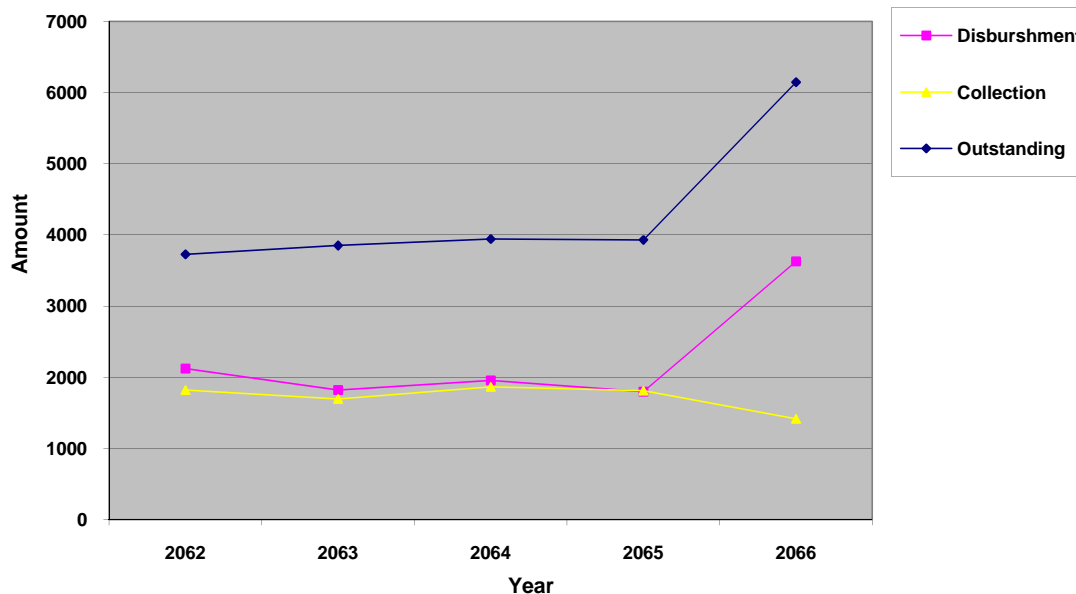
Source: Table No. 4.4.1

The loan disbursement in Food grains and cash crop production is Rs. 2121.5 in 061/062. Then after it decreases to Rs. 1820.1 in 062/063.Again it shows slight increment and becomes Rs.

1956.1 in 063/064. In the year 064/065 again it decreases to Rs. 1799.5. 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 061/062, Rs. 1696.7 in 062/063, Rs. 1865.7 in year 063/064, Rs. 1810.5 in 064/065 and Rs 1415.6 in 065/066.

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. 4.4.2
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. 4.4.3

Trend analysis of Agri, Tools and Irrigation

Particulars	2062	2063	2064	2065	2066
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. 4.4.2

Trend analysis of Agri,Tools and Irrigation
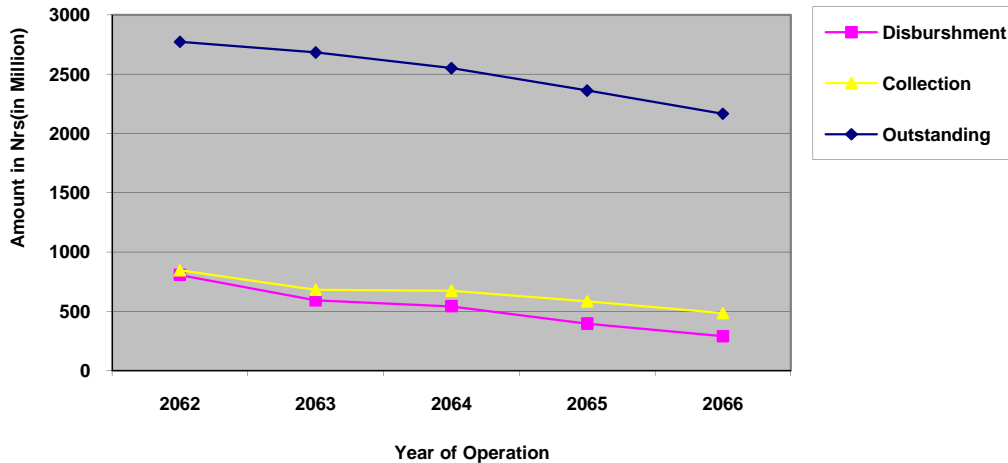
The loan disbursement and loan collection of Agri Tools and Irrigation are decreasing year by year. They have decreased from Rs. 806.6 to Rs. 289.8 and Rs. 846.7 to Rs. 485.6 from the year 061/062 to 065/066 respectively. The loan outstanding also is decreasing from Rs. 2722.3 to Rs. 2165 in 5 years. The loan outstanding curve lies higher than the loan disbursement and collection. Decreasing trend of loan outstanding is good for the bank.

Table No. 4.4.4

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.
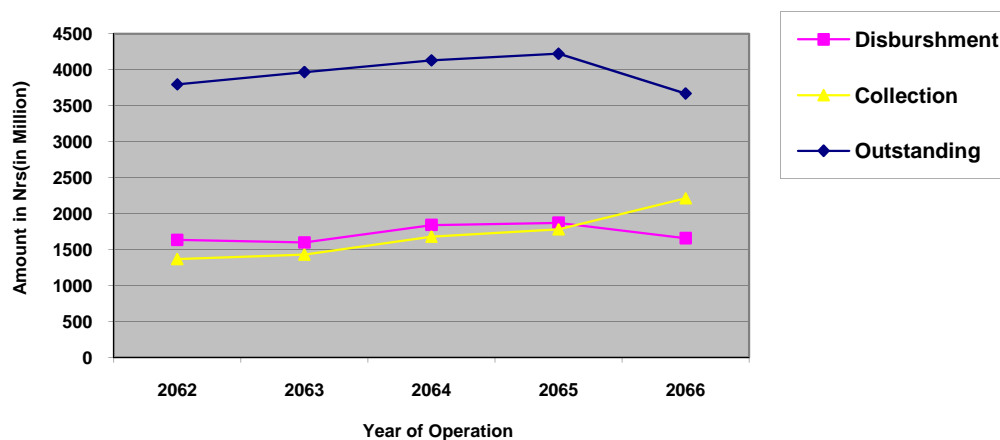
Table No. 4.4.5

Trend analysis of Agriculture Business

Particulars	2062	2063	2064	2065	2066
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. 4.4.3

Trend analysis of Agriculture Business

Source: Table No.4.4.5

After analysis the table, we can see that loan disbursement on Agriculture business is Rs.1634 in F/Y 2062 which is decreased to Rs. l599.5 in F/Y2063 and then raised up to Rs. 1842.8 in F/Y 2064. It means loan disbursement is fluctuating. Loan collection is Rs.1367.9 in F/Y2062 which is increased to Rs.2121.5 in F/Y 2066, it means bankˉs collection policy is good and outstanding isRs.3097 in F/Y 2062 and increased to Rs.3977.97 in F/Y 2065 and then slightly down in F/Y 2066 of Rs 3424.37.it means outstanding is fluctuating.

Table No. 4.4.6

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. 4.4.7

Trend analysis of Agriculture industries, marketing and godowns

Particular	2062	2063	2064	2065	2066
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. 4.4.4

Trend analysis of Agriculture industries, marketing and godowns
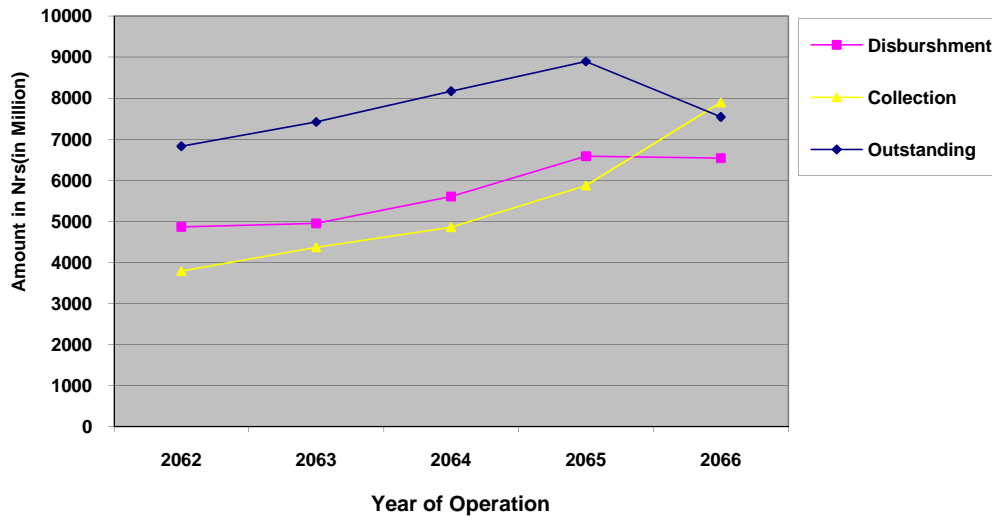
After analysis the trend, we can see that loan disbursement on Agriculture industries, marketing and godowns is increasing in every <u>year</u> is Rs.4868.1 in F/Y 2062 which is increased to Rs.6543.4 in F/Y2066, which is very good sign for bank. Collection is Rs. 3787.2 in F/Y 2062 and increased to Rs. 7892.3in F/Y 2066.it means increasing collection is good for bank. Outstanding is Rs.6828.3 in F/Y 2062 and reached up to Rs.7541in F/Y 2066.increasing outstanding is bad sign for bank.

Table No. 4.4.8

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

Form 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. 4.4.9

Trend Analysis of Horticulture

Particulars	2062	2063	2064	2065	2066
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. 4.4.5

Trend Analysis of Horticulture
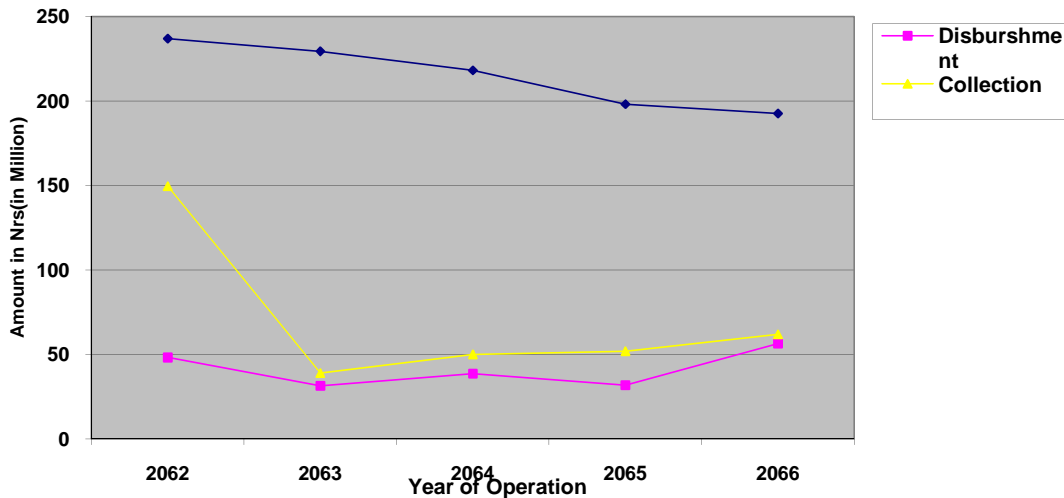
After analysis the trend, we can see that loan disbursement on horticulture isRs.48.2 in F/Y 2062 which is increased to Rs.56.4 in F/Y2064. Collection is Rs. 49.5 in F/Y 2062 and increased to Rs. 61.9 in F/Y 2066.it means disbursement and collections both are increasing, which is good for bank. Outstanding is Rs231.3 in F/Y 2062 and slide down up to Rs.172.69in F/Y

2066 decreasing outstanding means banks collection policy is good.

Table No.4.4.10

Trend equation and coefficient of determination 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

Form 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. 4.4.11

Trend Analysis of Tea/Coffee Cultivation

Particulars	2062	2063	2064	2065	2066
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	564.1	581.5

Figure No. 4.4.6

Trend Analysis of Tea/Coffee Cultivation
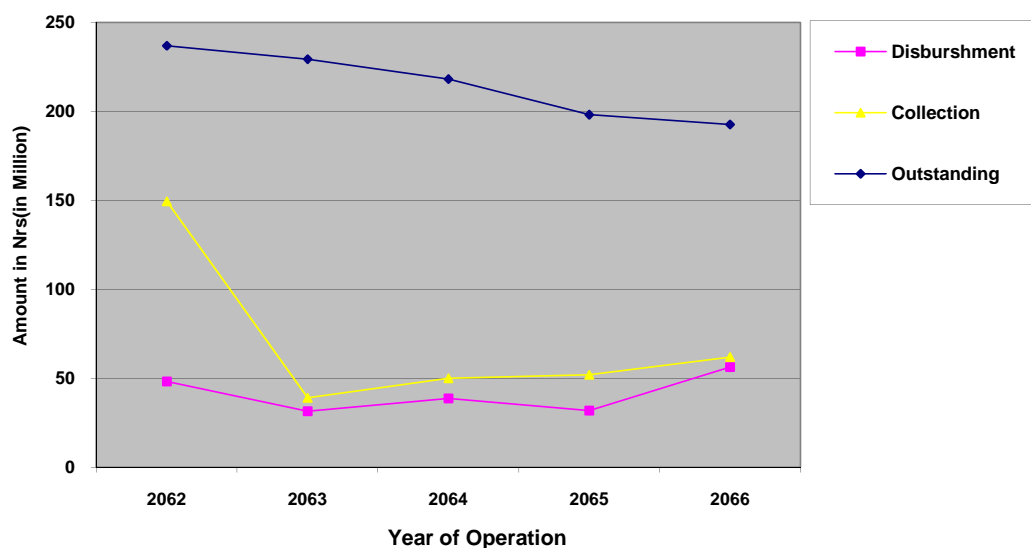
Source: Table No. 4.4.11

After analysis the trend, we can see that loan disbursement Oil horticulture isRs.52.1 in F/Y 2062 which is increased to Rs.38.9 III F/Y2066, Collection is Rs. 25.9 in F/Y 2062 and increased to Rs.21. 5 in F/Y 2066.it means disbursement and collection both are decreasing, Outstanding is Rs. 564 in F/Y 2062 and increased to Rs.613.84 in F/Y 2066 increasing outstanding is not good for bank.

Table No. 4.4.12

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

Form 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.4.4.13

Trend Analysis of House and land Development Loan

Particulars	2062	2063	2064	2065	2066
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. 4.4.7

Trend Analysis of House and land Development Loan
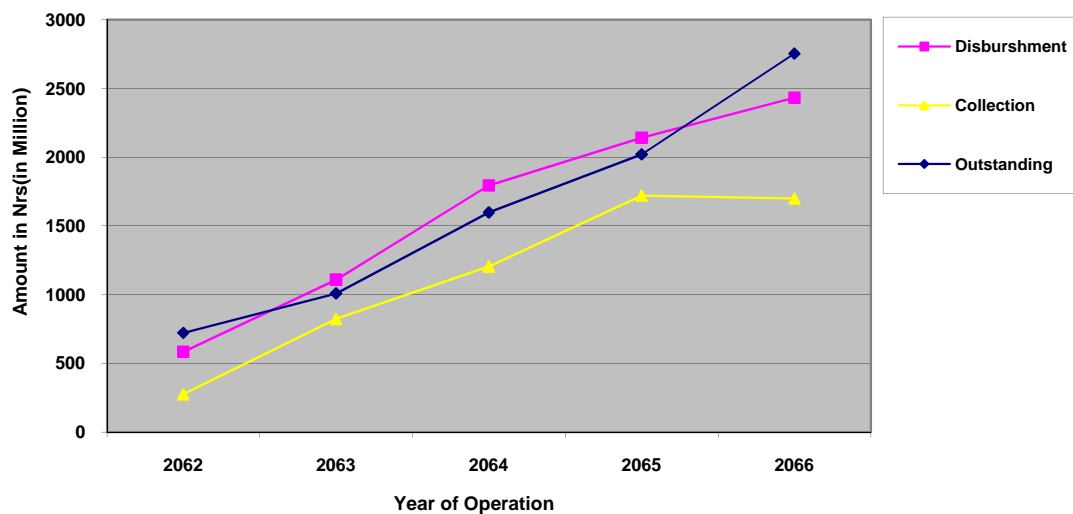
Source: Table No. 4.4.13

After analysis the trend, we can see that loan disbursement on House and land Development Loan is Rs. 84.7 F/Y 2062 which is decreased up to Rs. 2432.5 in F/Y2066, Collection is Rs. 276.4 in F/Y 2062 and increased to Rs.1599.5 in F/Y 2066. It means collection is increasing. Increasing collection is better for bank. Outstanding is Rs. 722.1 in F/Y 2062 and increased to Rs. 2753.1 in F/Y 2066 increasing outstanding is not good for bank.

Table No. 4.4.14

Trend equation and coefficient of determination of House and land

Development Loan

Particulars	Trend Equation	R square
Disbursement	Y = 472.79x + 194.29	09739
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.4.5.1.1

Cash and Bank Balance to total Deposit Ratio

Year	Cash and Bank Balance	Total Deposit	Ratio
2062	2766	23950	11.55%
2063	2911	26244	11.09%
2064	2035	7223	11.15%
2065	4772	29632	16.10%
2066	851	2416	11.88%
Total			61.77
Mean(X)			12.35
S.D.			2.1884
C.V.			0.1715

The Above table shows that cash and bank balance to total deposit ratio of ADBL 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 2064/2065 and lowest average ratio is 11.09% in F/Y 2062/2063.Their mean value is 12.35 and standard deviation and coefficient of variance of the ratio is 2.1184 & 0.171 5 respectively.

B. Cash and Bank Balance to Current Assets Ratio

Table No.4.5.1.2

Cash and Bank Balance to Current Assets Ratio

(Rs. in million)

Year	Cash and Bank Balance	Current Assets	Ratio
2062	2766	3122	88.59%
2063	2911	3340	87.15 %
2064	3035	3401	89.23%
2065	4772	4853	98.9%
2066	3851	4014	95.9%
Total		1330.41	
Mean(X)		266.082	
S.D.		81.92	
C.V.		0.3078	

Above table shows that cash and bank balance to current assets ratio of ADBL for five years is 88.59%, 87.15%, 89.23%, 98.9% and 959°/0 respectively and the highest average ratio is 98.9% in F/Y 2064/2065 and lowest average ratio is 87.15°ro in F/Y

2062/206LTheir inean 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.4.5.1.3

Investment 'on Government Securities to Current Assets Ratio

(Rs. in million)

Year	Investment on Government Securities	Current Assets	Ratio
2062	967	3122	30.99%
2063	669	3340	20.05%
2064	198	3401	5.826%
2065	397	4853	8.180%
2066	1759	4014	43.83%
Total			108.876
Mean			21.77
S.D.			17.34
C.V.			0.7965

The above table shows that investment on government securities to current assets ratio of ADBL 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 206512066it means in year 2066 ,AI3i3/N has invested 43.83% of current assets in government securities. The lowest average ratio is 5.826% in F/Y 2063/2064.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.4.5.2.1
Loan and Advanced to Total Deposit Ratio
(Rs. in million)

Year	Loan and Advances	Total Deposit	Ratio
2062	1349	23949	5.63%
2063	1348	26244	5.14%
2064	1511	27223	5.55%
2065	1608	29631	5.43%
2066	1521	32416	4.69%
Total			26.44
Mean (X)			5.28
S.D.			0.3825
C.V.			0.0724

The above table shows that investment on government securities to current assets ratio of ADBL 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 2061/2062 The lowest average ratio is 4.69% in F/Y 2065/2066.Their mean value is 5.28 and standard deviation and coefficient of variance of the ratio iso.3825 & 0.0724 respectively.

B. Investment on Government Securities to Total working fund Ratio
Table No. 4.5.2.2
Investment on Government Securities to Total Working Fund Ratio
(Rs. in million)

Year	Investment on Government Securities	Total Working Fund	Ratio
2062	967	40318	2.40%
2063	669	45671	1.466%
2064	198	38694	0.512%
2065	397	35297	1.125%
2066	1759	38160	4.61%
Total			10.108
Mean			2.02

S.D.	1.59
C.V.	0.7871

The above table shows that investment on government securities to total working fund ratio of ADBL 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 2065/2066 it means in year 2066 ADBL has invested 4.61 % of fund in government securities. The lowest average ratio is Q.512% in F/Y 2063/2064.Their mean value is 2.02 and standard deviation and coefficient of variance of the ratio is 1.5p9& 0.7871 respectively.

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

Table No.4.5.2.3

Investment on Share and Debenture to Total Working Fund Ratio

(Rs. in million)

Year	Investment on Share and Debenture	Total Working Fund	Ratio
2062	2647	40318	6.56%
2063	2735	45671	5.99%
2064	1356	38694	3.50%
2065	1511	35297	0.428%
2066	3177	38160	8.326%
Total			24.804
Mean			4.96
S.D.			0.4186
C.V.			0.0968

The above table shows that investment on Share and debenture to total working fund ratio of ADBL 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 2065/2066 it means in year 2066 ADBL has invested 8.326% o of total fund in government securities. The lowest average ratio is 0.428% in F/Y 206-

2/2065. 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.4.5.3.1
Return on Loan and Advances Ratio
(Rs. in million)

Year	Return (Net Profit/Loss)	Loan and advances	Ratio
2062	15	1349	1.157%
2063	(8000)	1348	(593.18) %
2064	(786)	1511	(5.2027) %
2065	353	1608	-1.97%
2066	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 ADBL from F/Y 2061/2062 i.e. 1.157%, (593.18) %, (5.2027)%, 21.97% and 69.57% respectively in year2066 it takes highest ratio that means ADBL earn more profit on loan and advances but in F/Y 2062/2063 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.4.5.3.2
Return on Total Working Fund Ratio
(Rs. in million)

Year	Return (Net Profit/Loss)	Total Working Fund	Ratio
2062	15	403 18	0.3)616%

Year			
2063	(8000)	45671	(17.51)%
2064	(^{7}/86)	18694	(0.2032)%
2065	353	35297	1%
2066	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) %, l% and 2.77% respectively the highest ratio is 2.77% in year 2066. Likewise lowest ratio is (17.51 %) in year 2063. 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. 4.5.3.3

Total Interest Earned to Total Working Fund Ratio

(Rs. in million)

Year	Total interest earned	Total Working Fund	Ratio
2062	3554	40318	8.81 %
2063	2892	45671	16.33%
2064	391 5	38694	10.11%
2063	4033	35297	1 1.42%
2066	4623	38160	12.11%
Total			48.78
Mean(X)			9
S.D.			0.3125
C.V.			0.02

The above table, it shows total interest earned to total working fund ratio of ADBL for five years is 8.81%, 6.33%, 10.11%, 1 1.42% and 12.11% respectively and the highest

average ratio is12.11 % in F/Y 2065/2066 it means in year 2066 ADBL has earned 12.11% interest earned on total working fund. The lowest average ratio is 6.33% in F% T' 2062/2063.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.4.5.3.4

Total -Interest Paid to Total Working Fund Ratio

(Rs. in million)

Year	Total Interest Paid	Total Working Fund	Ratio
2062	1979	40318	4.90%
2063	2093	45671	4.58%
2064	1487	38694	3.844%
2065	1439	35297	4.079%
2066	1605	3816	4.208%
Total			21.611
Mean (X)			4.32
S.D.			0.4186
C.V.			0.0968

The above table, shows total interest paid to total working fund ratio of ADBL 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 2061/2062 it means in year 2062 ADBL paid 4.90% of interest on total working fund. The lowest average ratio is 3.844% 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.

E. Net Interest Margin Ratio

Table No. 4.5.3.5
Net Interest Margin Ratio
(Rs. in million)

Year	Total Interest Margin	Interest Earning Assets	Ratio
2062	1575	2646	59.51%
2063	799	2735	29.22%
2064	2427	1355	179.05%
2065	2593	1511	171.10%
2066	3017	3177	4.208%
Total			21.611
Mean (X)			4.32
S.D.			0.4186
C.V.			0.0968

The above table shows net interest margin ratio of ADBL 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 2063/2064 it means in year 2064, ADBL earns net interest on interest assets by 179.05°/oThe lowest average ratio is 4.208% in F/Y 2065/2066. 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 ADBL 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 061/062 to 065/066. ADBL 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 ADBL has increased from Rs. 8173 million to 13789 million in 5 years. ADBL 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 ADBL is not much effective.

4. Purpose wise loan outstanding of ADBL is in increasing trend. It was Rs 18695 million in 061/062 and reached to Rs. 23,048 million in 065/066. 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 ADBL is satisfactory. It is almost same in all the 5 years. C.V of the ration 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 ADBL is almost similar during the 5 years period. It is 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 ADBL 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 ADBL 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 ADBL is also not good in early years where as 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 ADBL 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 ADBL 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 various problems like use of traditional tools and techniques, illiteracy, imperfect market, small holdings and insufficient credit and funds for developing agricultural sector, scientific tools and techniques should be used and sufficient institutional credit should be provided for the development of agriculture sector as our country largely depends on the agriculture sectors.

Agriculture Development Bank Limited (ADBL) was established in 1968 with the main objective of providing institutional credit for enhancing the production and productivity of the agriculture sector in the country. The bank has been working as a premier rural credit institution since the last three decades, contributing a more than 67% of institutional credit supply in the country. Besides, it has also been executing Small Farmer Development Program (SFDP).

ADBL provides short-term production loans, short term marketing and storage loans medium and long-term loans. Total loans invested by ADBL till 2066 was Rs. 70.51 billion. It has invested huge amount of loan in Agriculture industries, marketing and go downs 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.

All the information and data used in this research has been collected from personal interviews with the staffs of the banks, annual reports of the banks, website of the bank(www.adbl.gov.np), published and unpublished bulletins, previous studies of thesis and reports and others materials.

By using statistical tools and technique, multiple correlation coefficients have ascertained that 24.67% of total loan collection is dependent on two variables i.e loan disbursement and loan outstanding. Till 2066 loan collection of ADBL was Rs. 52.24 billion and loan outstanding was

Rs. 18.52 billion except commercial banking. Ratio analysis has been used to analyze the liquidity position, assets management ratios and profitability ratios of the bank. Liquidity position of the bank is satisfactory, reasonable investment on government securities resulting to the efficient assets management of the bank. Despite the slack in the collection of outstanding, the bank has been successful to earn the profit in the recent years and it is expected to improve in the future.

5.2   Conclusion:

ADBL 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 (061/062 to 065/066) 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 ADBL to increase its weight in loan collection in the case of loan outstanding of ADBL, 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 slow in the collection of outstanding resulting to the goodwill of the bank. The bank should strict in the recovery of the outstanding for the efficient operation of the bank and for the economic development. At last, ADBL plays vital role in the rural development through providing financial services in adopting modern technology in the agriculture sector.

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 ADBL 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. ADBL 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.

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