CHAPTER - I

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Banking sector plays an important role in the economic development of the country. Commercial banks are one of the vital aspects of this sector which deals in the process of channelizing the available resources in the needed sectors. It is the intermediary between the deficit and surplus of the financial resources. Financial system contains two components viz depository financial institution and non – depository financial institution. Commercial bank and finance companies (in Nepalese context) are the example of depository financial institution where as employee provident fund, development bank, insurance companies are the example of non depository financial institution. All the economic activities are directly or indirectly channeled through theses banks .people keep their surplus money as deposits in the banks and hence bank provide such fund to finance the industrial activities in the form of loans and advances.

Banks act as an intermediary between the individuals who lend and those who borrow. These institutions accept deposits and provide loan advances to those who are in need. They make the flow of investment easier. Therefore, we cannot deny the role of bank in developing an economy. It pools the funds scattered in the economy and mobilized them to the productive sectors. Their main objective is collecting the idle fund, mobilizing them into productive sectors and causing an overall economic development. The return that the banks enjoys of deposit mobilization through loans and advances is very attractive which is up to 60-70% of its revenues , but they do not come free of cost and free of risk. There is a risk inherent in lending portfolio. Banking sectors is exposed to number of risk like market risk, interest rate risk, liquidity risk, borrower's risk, and among these many risk the bank face one of the most critical is the borrowers risk – the risk of non payment of the disbursed loans and advances. As big chunk of deposits fund is invested in the form of loans and advances banks are expected to support their legal communities with an adequate supply of credit for all business and consumer activities and to price them reasonably in line with competitively determined interest rate. Indeed making loans is the principle economic function of banks to fund consumption and investment spending by business individuals and unity of government. In making loans, banks take almost care in analyzing the creditworthiness of the borrowing customers to ensure that the interest and the principle amount on loans are timely recovered without much trouble. In spite of banks precaution on providing loans and advances, banks do not recover a certain percentage of its loans and advances on maturity. These loans fall under the category of non performing assets (NPA)

An NPA is defined as any credit facility in respect of which interest and /or installment has remained unpaid for the period of two quarter or more from the date it has become past due is to be regarded as 'Non performing' . It is the part of lending programmed of joint venture banks. In simple terms, NPA are defined as the bad debts for the banks and financial institutions. Non – Performing assets can be defined as those assets that cannot be used productively. In other words, NPA is the outdated loan, and bad and doubtful debts. NPA could wreck banks' profitability both through a loss of interest income and write off the principle loan amount. To start with performance in terms of profitability is a benchmark for any business enterprises including the banking industry. However, increasing non- performing assets have the direct impacts on banks' profitability, as legally banks are not allowed to book income on such accounts and at the same since banks are forced to make provision on such assets.

Performing assets are those that repay principle and interest to the banks. These assets constitute the primary sources of income to banks. Banks are willing to lend as much as possible. But they have to be careful about the safety of such loans. Loans are risky assets, even though bank interest most of its resources in granting loans.

Nepal Rastra Bank (NRB) has directed all the commercial banks to classify their loans and advances into four categories based on aging. The four categories being:

1. **Pass/ Good**

   Loans and advances whose principal amounts are not past due and past due for a period up to 3 months are included in this category. These are classified and defined as performing loans.

2. **Substandard**

All loans and advances that are past due for a period of 3 months to 6 months are includes in this category.

3. **Doubtful**

All loans and advances which are past due for a period of 6 months to one year are included in this category.

4. **Loss/Bad**

All loans and advances which are past due for a period of more than one year as well as advances which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future are included in this category.

Loans and advances dominate the assets side of the balance sheet of any bank. Similarly, earning from such loans and advances occupy a major space in income statement of the bank. However, it is very important to be remained that most of the bank failures in the world due to shrinkage on the value of the loans and advance. Hence loan is known as risky assets. Risk of non-repayment of loan is known as credit risk or default risk. Performing loans have multiple benefits to the society while non-performing loan erodes even existing capital

Due to their central role in the economy, governments and central banks try their best to rescue banks from such situations. Hence to protect the banks from such situation and protect depositors and shareholders money, central bank issues various directives and guidelines from time to time with modifications and amendments for the sound regulation of the banking system. All the banks have to abide by the rules and regulation issued by the central bank. Of the many directives, there are ten directives relating to the banking prudential regulation/norms to be followed by the banks.

- **Relating to Collateral**

All collateral used to back loans and advances shall be adequate to cover up the principal and interest and shall also be legally secured. In the n event of non- realization of principal and interest of loan there must be no difficulty in acquiring the title of the collateral asset.

- **Additional arrangement in respect of Pass Loan**

Loans and advances fully secured by gold, silver, FDR and N G securities or
An NRB bond is places as security of aging. Loans aging FDRs of other bank shall also qualify for inclusion under pass loan.

- **Additional Arrangement in Respect of Loss Loan**

Even if the loan is not past due, loans having any or all of the following discrepancies shall be classified as loss

1. No security at all or security that is not in accordance with the borrower's agreement with the bank.
2. The borrower has been declared bankrupt.
3. The borrower is absconding or cannot be found.
4. Purchased or discounted bills are not realized within 90 days from the due date.
5. The credit has been used for the purpose originally intended.
6. Owing to non – recovery, initiation as to auctioning of the collateral has passed 6 months and if the recovery process under litigations.
7. Loan provided to the borrower included in the blacklisted and where the CIB blacklists the borrower.

- **Additional Arrangement in Respect of Term Loan**

In respect of term loans, the classification shall be made against the entire outstanding loan on the basis of the past due period of overdue installment.

In the event of conversion of contingent liabilities of the bank e. g. letter of credit, immature guarantees, into the liability of the bank such amount becomes recoverable from the customers. Hence, such amounts shall also be classified as per the classification norms applicable to loans and advances and accordingly with requisite provisioning.

- **Loan Loss Provisioning**

The loan loss provisioning, on the basis of the outstanding loans and advances and bills purchases classified as per this directives, shall be provided as follows:

Classification of loan	**Loan loss provision**
Pass	1 percent
Substandard	25 percent
Doubtful	50 percent
Loss	100 percent

Loan loss provision is the accumulated provision as a safeguard to cover possible losses. It means that it is accumulated provisioning fund, which is used as safety fund to cover future losses. It is expected provision fund.

Loan loss provision set aside for performing loan is defined as "General loan loss provision "and loan loss provision set aside for non performing loan is defined as "Specific loan loss provision" where the banks provide for loam loss provisioning in excess of the proportion as requires under the directives of NRB, the whole amount of such additional provision may be in the general loan loss provision under the supplementary.

1.2 FOCUS OF THE STUDY

Loans and advances are the most profitable of all the assets of the banks universally seek after the assets. These assets constitutes primary source of income to banks. As the business institution, a banks aim at making a huge profits and is willing lend loans and advances for the certain predetermined fixed period or maturity period. While lending loans advances s/he has to be careful about the safety of such loans. The borrowers must repay the loans by the maturity periods or expiry date but there is no certainty that all the loans are recovered by the maturity date. Loans that can not be recovered even after its maturity remain as non performing assets of the bank. In Nepal, increasing

Non performing assets (NPA) is major problem faced by the Nepalese banks.

Credit information bureau (CIB) was established to function as an intermediary between bank and financial institution for credit information where by customer availing credit facility of Rs. 2 million and above and not repaying the loans by the stipulated time and / or violating other terms and condition of the credit would be listed in the black list. On 16 July 2003, altogether 2074 borrowers are black listed by CIB. From this list it is clearly known those banks are facing the problem in recovering the granted loans that had turned to NPA. Even two nationalized commercial bank namely Nepal bank limited and Rastriya Banijya bank have non performing assets to the extend of 60 % and 50 % respectively. Over all, total NPA of Nepalese banking system adversely affecting the depositors and other parties of the society.

Going through the old provision of directives, it was seen that the loans classification and provisioning norms direct the banks to classify the loans into six different categories. However as the directives of Nepal Rastra bank issued 'on October 2001' the bank required to categorize the loans into four different categories. Besides this as per the old provision for loans to be bad, time period of the past due was 5 years but with the new directives, the past due of the loans to be bad, is three years or more. Similarly, the past due period of the loans to categorized under doubtful loans category has been reduced from one year to five years to one year to three years. This means that the previous categorized doubtful loans will now be a bad loans and with no change in the percentage of the provision to be made. Hence, there may be an increase in the provisioned amount. Subsequently, the profit might come down. Ultimately, the share holder may end up getting lesser dividends or no dividend at all.

Increasing non-performing assets is one of the emerging problems of Nepalese commercial banks. This study mainly focused on non-performing loans or assets of selected commercial banks. It studies the ratios like loans and advances to total assets, loans and advances to total deposit, non- performing loans to total loans and advances, provision held to non-performing assets, which indicates the performance and provides comparable forum on non-performing assets. It also tries to shows the effects on profitability of commercial banks and related NRB directives, which is concerned towards the rendering loan and loan loss provision. The total NPA of Nepalese commercial banks are growing rapidly and it is the main cause to failure of bank. In this study, the NPA of commercial banks are presented, analyzed, summarized and stated findings and recommendation.

1.3 STATEMENT OF THE PROBLEM

Financial institutions assist in the economic development of the country. Commercial bank being the financial institution plays significant role by collecting scattered surplus funds and deploy these fund in the productive sectors as investment. Economic development of the country is directly related to the volume of investment made and return obtained by the bank. Investment problem has become very serious for the least developed country like Nepal. This is due to lack of sound investment policy of commercial bank.

Nepalese commercial banks have not formulated their investment policy in an organized manner. The implementation of policy is not effective. The credit extended by the commercial bank to agriculture and industrial sector is not satisfactory to meet the present growing need. Nepotism and political pressure also effects the investment decision of the commercial banks. Granting loan against insufficient deposit, overvaluation of goods pledged, land and building mortgaged, risk averting decision regarding loan recovery and negligence in recovery of overdue loan is some of the basic loopholes and the result of unsound investment policy sighted in the banks.

As the bank has to meet various challenges, this study will be helpful to the bank to identify and solve some of its weaknesses and problem. In every organization, the resources are scare and out of these scare resources, the objectives of the organizations are to be accomplished. Increase in revenue and control over expenditure significantly contributes to improve the profitability as well as the over all financial performance of an organization by the help of the best utilization of resources.

Commercial bank's investment has been found to have lower productively due to the lack of supervision regarding whether there is proper utilization of their investment or not. Lack of farsightedness in policy formulation and absence of strong commitment towards it is a major problem. The rules and regulations are only the tools of NRB to supervise and monitor the financial institution.

Currently, the banking sector is facing various problems. One of them, the banking has been becoming a victim of huge Non-Performing Assets (NPAs). NPAs are one of the serious problems faced by the commercial banks. Due to instable political condition, insecurity and other many factors, industries of Nepal are closing down. Lending carries credit risk, which arises from the failure of borrower to fulfill its contractual obligation during the course of transaction. It is well known fact that the bank and financial institution in Nepal face the problem of swelling non-performing assets (NPAs) and issue is becoming more and more unmanageable. The main focus of the statement of the problem is the matter related to the NPAs of the commercial banks.

This research has been conducted to find out the solution of following problem:-

1. Does NPA can have severe impact in financial health of banks?
2. How significant effect does NPA has on profitability of the banks?
3. Is NRB's directive of priority lending helping in increasing NPA of the commercial banks in Nepal?
4. Does auctioning NPA or creating it to NBA helps to solve NPA problem in banks? Does it improve financial status of banks?
5. Is provisioning loan works as cushion for possible loss or is it an extra burden for banks?

1.4 OBJECTIVES OF THE STUDY

The major objective of this research is to examine the level of non- performing assets (NPAs). The specific objectives are;

- To analyze the Non-performing Assets of Nepalese Commercial Banks
- To asses the level of NPA in different Nepalese commercial banks.
- To study the internal factor that influences the proper management of NPA
- To study the overall impact of loss provision on the profitability of commercial bank.
- To study the external factors have significant contribution on NPA increment
- To find out whether the NPA guidelines are followed in making provision relate to NPAs

- To make a comparison of NPAs of various commercial banks of Nepal.
- To provide recommendation on reducing the level of NPA cased on analysis and findings of the study.
- To evaluate the proportion of non-performing loan and the level of NPAs in total assets, total deposit and total lending in the selected commercial banks.
- To analyze the impact of non-performing assets in the performance of commercial banks.
- To provide suggestions and recommendations for the further important.

1.5 SIGNIFICANCE OF THE STUDY

An NPA is defined as an asset non contribution to the income of the bank. It is a loan asset whose Recovery (principal and / or interest) has been difficult for the bank financial institution – for whatever reasons. In other words, a loan from which repayment of principal or interest is not forthcoming as per the facilities agreement at as demanded by the bank. In simple terms, NPAs are defined as the bad debts for banks and financial institution. Hence it is important that a study be taken to study the impact of non performing assets.

The success and prosperity of the bank heavily depends upon the successful implementation and investment is collected resources, which develops the economy of the country. Good investment policy of the bank has positive impact on economic development of the country and vice versa. Increasing non-performing loan followed by increasing loans and loan loss provision is one of the challenges faced by commercial banks in the present context. Proper loan provision and loan loss provision helps to get financial strength of the bank. This research will be able to give the some of the present issues, latest information and data regarding non-performing loan and loan loss provision. Not only that, this study gives the real picture of the current non-performing assets to its stakeholders. The main focus of this study will be know about the non-performing assets of selected Nepalese commercial banks and make comparison study of non-performing assets of selected commercial banks.

1.6 PROFILE OF SELECTED BANKS

- **NIBL**

Overview

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world.

With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, has acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd.

The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

Mission Statement:

To be the leading Nepali bank, delivering world class service through the blending of state-of-the-art technology and visionary management in partnership with competent and committed staff, to achieve sound financial health with sustainable value addition to all our stakeholders. We are committed to do this mission while ensuring the highest levels of ethical standards, professional integrity, corporate governance and regulatory compliance.

Core Values and Ethical Principles:

Our core Values tell us, our customers and the communities we serve, who we really are; what we are about; and the principles by which we pledge to conduct business. In essence, we believe that success can only be achieved by living our core values and principles:

- **HBL**

Overview

Himalayan Bank was established in 1993 in joint venture with Habib Bank Limited of Pakistan. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities- Loans and Deposits.

Legacy of Himalayan lives on in an institution that's known throughout Nepal for its innovative approaches to merchandising and customer service. Products such as Premium Savings Account, HBL Proprietary Card and Millionaire Deposit Scheme besides services such as ATMs and Tele-banking were first introduced by HBL. Other financial institutions in the country have been following our lead by introducing similar products and services. Therefore, HBL believes it stand for the innovations that it brings about in this country to help our Customers besides modernizing the banking sector. With the highest deposit base and loan portfolio amongst private sector banks and extending guarantees to correspondent banks covering exposure of other local banks under its credit standing with foreign correspondent banks, HBL believe they obviously lead the banking sector of Nepal. The most recent rating of HBL by Bankers' Almanac as country's number 1 Bank easily confirms its claim.

HBL is not only a Bank, It is committed Corporate Citizen

Corporate Social Responsibility (CSR) holds one of the very important aspects of HBL. Being one of the corporate citizens of the country, HBL has always promoted social activities. Many activities that do a common good to the society have been undertaken by HBL in the past and this happens as HBL on an ongoing basis. Significant portion of the sponsorship budget of the Bank is committed towards activities that assist the society as large.

The Bank's Vision:

Himalayan Bank Limited holds of a vision to become a **Leading Bank of the country** by providing premium products and services to the customers, thus ensuring attractive and substantial returns to the stakeholders of the Bank.

The Bank's Mission:

The Bank's mission is to become preferred provider of quality financial services in the country. There are two components in the mission of the Bank; **Preferred Provider and Quality Financial Services**; therefore we at HBL believe that the mission will be accomplished only by satisfying these two important components with the Customer at focus. The Bank always strives positioning itself in the hearts and minds of the customers.

The Bank's Objective:

To become the Bank of first choice is the main objective of the Bank.

- **NEPAL BANGLADESH BANK LTD.**

Overview

Nepal Bangladesh Bank Ltd. was established in June 1994 with an authorized capital of Rs. 240 million and Paid up capital of Rs. 60 million as a Joint Venture Bank with IFIC Bank Ltd. of Bangladesh. Its Head Office is situated at New Baneshwor, Bijuli Bazar, Kathmandu.

The prime objective of this Bank is to render banking services to the different sectors like industries, traders, businessman, priority sector, small entrepreneurs and weaker section of the society and every other people who need Banking Services. During the period of 15 years of its operation, it has accommodated a large number of clients and has been able to provide excellent services to its clients.

Bank has a network of 17 branches. The Bank has earned the glory of making available the services to almost all the top business houses of the country and it occupies one of the leading positions among the Joint Venture Banks in Nepal. The Bank is still pursuing to accommodate as many clients as far as possible.

Top Exporters and Importers of the country have established banking relationship with the Bank with a substantial volume of foreign business which has enhanced the Bank's popularity in the International Trade front. Bank has developed Agency and Correspondent relationship with more than 200 prominent Foreign Banks in the world. With the continuous support of our valued customers the Bank has made all round progress in every sphere of its operation.

1.7 ORGANIZATION OF THE STUDY

- **Chapter -I Introduction**

This chapter generally covers the general background regarding the impact of non performing assets of joint venture bank. And it includes focus of study, statement of problem, objectives of study, significance of the study and limitation of the study.

- **Chapter – II Review Of Literature**

It discovers what other research in the area of non performing assets has covered and left over in this regard. It avoids needless duplication of research effort. While reviewing literature, various experts, bankers and NRB rules and regulation are being considered.

- **Chapter – III Research Methodology**

Descriptive as well as analytical research methodology is being used to carry out this study. Since the study of impact of non-performing asset is a vague subject, appropriate methodology are adopted to analysis the achievement made so far in the two largest banks out of 25 commercial banks.

- **Chapter – IV Data Presentation And Analysis**

This chapter analyzed the impact of non-performing assets in quantitative approaches. Various financial tools like ration analysis and statistical tools like standard deviation mean and co-relation analysis have been used. Beside these, qualitative improvements, which cannot the quantified, are also the part of analysis.

- **Chapter – V Summary, Conclusion And Recommendations**

Based on above analysis, achievement in terms of quality will be traced after the analysis. The needful recommendation will be cited to get rid of any shortcomings and borrowings.

CHAPTER - II

REVIEW OF LITERATURE

Research is a continuous process it never ends. The procedure and the findings may change but research continues. So for analyzing the data and to find something new a researcher must review and know if there are any studies ahead or not. The purpose of reviewing the literature is to develop some expertise in one's area, to see what new contributions can be made, and to receive some ideas for developing a research design. Thus, the previous studies can not be ignored because they provide the foundation to the present study. In other words, there has to be continuity in research. This continuity in research is ensured by linking the present study with the past research studies. In short there is a significant important of review of literature:

This chapter is related to examine and review some related to books, articles, published and unpublished different economic journals, bulletins, magazines, newspapers, and web sites.

This chapter is divided into following parts:-

i. Conceptual framework
ii. Review of related studies
    - Review of related books
    - Review of related article and journal
iii. Research gap

2.1 CONCEPTUAL FRAMEWORK

2.1.1 Loan and Advances

The main function of the commercial banks is to generate the resources or funds and make loans and advances. It is the most profitable assets of bank. Loans and advances dominate the assets side of balance sheet of any bank. Similarly, earning from such loans and advances occupy a major space in income statement of the bank. It is the asset that fetches income for the bank. The profitability of the banks depends upon the extent to which it grants loan and advances to customers. Loan granted in the form of overdraft, cash credit and direct loan. Loan is granted against adequate security. The banks should have to take in consideration safeties of loans and advances at the time of lending but not only on profitability. At the time of lending the loan, the banks carefully study the lending sectors and make a sound policy for rendering loan. The policy should contain the credit deposit ratio. (CDR), the bank wishes to maintain. CD ratio is very much influenced by the behaviors of bank's liabilities. The higher the volatile deposit's and volatile borrowing lower the volume of loan and vice versa.

2.1.2 Performing loan

Performing loans are those loans that repay principle and interest timely to the bank from the cash flow it generates. In other word, performing loan are the productive assets that generate some profits. Loans have certain time period to return its principle with its interest. If anyone repays loan with its interest on time, is known as the performing loan. It is the most profitable assets of banks. Its helps to rapid growth of banking sector in this fast pace competitive age. Better performing loan are the symbol of success of banks. But many banks are suffering from the non repayment of loan amount.

2.1.3 Non-Performing Assets/Loan

One of the most emerging problems of the commercial banks is to the management of non-performing assets/loan. Due to the effects of non- performing assets/loan, many banks have already closed down. In this fast pace competitive age, the banks should have to operate taking in consideration that thing. Those loans, which don't repay principle and interest on time to the banks, are known as non-performing assets (NPAS). If any advances or credit facilities granted by bank to a borrower becomes non-performing. Then the bank will have to treat all the advance/credit facilities granted to that borrower as non-performing without having any regard to the fact that there may be still exist certain advance/credit facilities having performing status

NPAs have a different meaning that varies from country to country. In some countries, it means that the loan is impaired. In some countries, it means that the payment are due but there are significant different among countries how many days a payment should be in arrears before past due status is triggered. According to current banking Act, the banks have to make provision for bad and doubtful debts. After deducting the band and doubtful debts from the non-performing assets, net non-performing assets can be achieved.

NPA= (NPL+NBA+RNPL+SI+UA) Where;

NPA= Non-Performing Assets

NPL= Non-Performing Loan

NBA= Non- Banking Assets

RNPL= Remaining non performing loan

SI= Suspend Interest

UA= Unutilized Assets

Non-Performing loan (NPL) can be defined as the non-productive assets of the banks. In other words, it is the loan or bad and doubtful debts that doesn't repay timely. Generally the loan, which doesn't repay with in three months, is known as non-performing loan. The loan amount that doesn't covered by the collateral after selling is known as non-banking assets (NBA). Non – performing assets also includes the suspend interest. It is the interest, which become receivable unutilized assets and those investments which don't generate any cash or incomes to the bank are also non- performing assets (NPAS). The proper management of those assets to generate income is known as management of non-performing assets.

Increasing NPAs is the emerging problem of the banks. We know that the some banks are closed down due to the uncontrollable NPAs. In USA, 1016 commercial banks were declared as unsuccessful (bankruptcy) from 1985 to 1990 and 27 banks from 1995 to 2001. However, Nepalese commercial banks face this type of problem till now but they have to take step towards it. For this, appropriate amount of bad and doubtful debts is made provision from their incomes/profits.

2.1.4 Factors Responsible for NPA

Since NPA is a serious problem for today's banking industry, it seems necessary to identify the factors that are responsible for NPA. The factors can be broadly classified into two-those that are internal to the organization and those that are external to the organization.

- **Internal Factors**

a) **Management Inefficiency/Weakness**

The following leads to management inefficiency and weakness:

- The major factor responsible for arising NPA is due to inexperienced by over ambitious people.
- The second factor is faulty planning i.e. cost and time overruns.
- The factor is location error.

- Due to lack of capital/equity also may NPA.
- The Credit analyst the inadequate costing arise the NPA.
- Due to faulty Marketing survey of clients.
- Obsolete Technology.
- The dishonest management of bank has arisen the NPA.
- Due to dissension among Promoters.
- Because of poor Industrial Relations.
- The bank's attitude of dependence on few buyers
- The bank's policy like poor distribution network
- Due to high competition on Market.
- Long delivers at fixed prices

b) **Financial Reasons**

The other factors for arising NPA is financial reasons. The financial reasons may arise due to following points.

- Faulty pricing
- Inadequate funds
- Unplanned expansion
- Diversion of funds
- Poor realization of book debts/receivable
- Delayed credit borrowings
- Inability to identify loss/profit contributing product/areas/centers

c) **Marketing Weakness**

Other internal factors of arising NPA are due to marketing weakness of banks. There are certain factors of marketing weakness which are stated below

- Due to glut (excess supply/ availability)

- Due to excessive competition
- Due to demand recession-domestic and global
- Due to change in fashion and taste
- Due to weak marketing plan and strategy
- Because of the habit of Reactive-not proactive

- **External Factors**

a) **Government Policies And Actions**

The first reason for arising NPA on external factors is government policies and actions. The barriers arise by government policies are stated below:

- Due to credit squeeze of government policies
- The government has implement the delayed decisions
- Due to regulated interest rates
- Because of priority/non-priority sector lending
- Withdrawal of subsidy
- Withdrawal of support price
- Government inaction-dumping of overseas product
- Foreign exchange control regulation
- Inconsistency in policies regarding capital investment/divestment

b) Tax, Tariff, Custom Duties- Both Domestic and Foreign

The second point of arising external factor is tax, tariff, and custom duties both domestic and foreign. There are certain factors of tax, tariff and custom duties which are stated below.

- Adverse change in tax, tariff, vat, custom duties
- Regional trade blocks

- Special duties e.g.; SAD(special additional duty)
- Quantity restriction etc by India

c) **Production Difficulties, Product Obsolescence**

The third reason of external factor is product obsolescence difficulties, product-obsolescence. Which are stated below :

- Irregular supply of raw material, power, fuel, water
- Natural calamities
- Technological advancement
- Environmental regulations
- Product obsolescence

d) **Overall Non – Conductive Industrial Environment/ Insecurity**

The fourth reason of arising external factor is non-conductive dustrial environment / insecurity. Which are stated below,

- Industrial unrest
- General insecurity
- War

e) **Unexpected Economic Downturn**

The fourth reason is unexpected economic downturn like recession; drastically decrease in income of people etc.

2.1.5 Effect of NPA

NPAs has affected the profitability liquidity and competitive functioning of public and private sector banks and finally the psychology of the bankers in respect of their disposition towards, credit delivery and credit expansion.

Increasing Non-Performing Assets (NPAs) has the direct effects to banks, investors and customers. It has also negative impact to the economic health and business of country. It has two types of effects (Batra and Dass 2003:6)

➢ **Internal Effect**

In the one hand, the bank for increasing the profitability can't mobilize the non-performing assets. In the other hand, the banks have to make provision doubtful debts from their profits and other sources. That's why the profit of the banks decreases or may occur losses. As a result, share capital also becomes capital erosion and capital inadequacy. In the present context, capital adequacy ratio Nepal, India, UAE, and Indonesia are 11%, 12.6%, 12.7% and 21.4% respectively. The central bank of the country can take action to their banking activities, which banks have lower capital or capital adequacy ratio. For example, Nepal Development Bank Ltd. is suffering the same problem that can't take deposit due to the action of Nepal Rastra Bank.

When the non-performing assets increase, the banks have to increase the amount of provision for doubtful debts and when the loan is repaid, the profit treated as profit. If the provision for doubtful debts crosses 5% of the total loan amount, the bank have to pay income tax as profit. So, it has direct effect to the cash flow of bank. As a result, the employment of human resources and profit of the bank has also affected.

External Effect

The banks accept deposits from the public and provide loan to the operation of business and other purposes. When the loan does not return with its interest, it becomes non-performing assets and banks will not able to return the deposited amount to their customer. If the banks unable to return the deposited amount the banks are loosed public supports and faiths. Not only that much but also, the banks have to take loan at a higher rate to pay deposit, which directly affects the profitability of banks and which leads the bank bankruptcy and dissolved. It also affects the monetary system and economy of the country.

A. **Impact On Profitability**

The NPAs has negative impacts on the profitability of the banks. Non- Performing assets are the idle assets of the banks, which do not generate any return for the banks. Thus, we can say that the NPAs reduce the profitability of the banks due to the becoming the idle resources. Not only it reduces the profitability of the banks, but also it may the causes for losing the customer's faiths and supports.

B. **Impact On The Outlook Of Banker Towards Credit Delivery**

The psychology of the banks today is to insulate them selves with zero percent risk and turn lukewarm to fresh credit. This has affected adversely credit growth compared to growth of deposits, resulting a low C/D Ratio around 50% to 54% for the industry. It is evident that the existence of collateral security at best may convert the credit extended to productive sectors into an investment against real estate, but will not prevent the account turning into NPA. Further blocked assets and real estate represent the most illiquid security and NPA in such advances has the tendency to persist for a long duration. Nationalized banks have reached a dead-end of the tunnel and their future prosperity depends on an urgent solution of this hovering threat.

C. **Excessive Focus On Credit Risk Management**

The most important business implication of the NPAs is that it leads to the credit risk management assuming priority over other aspects of bank's functioning. The bank's whole machinery would thus be pre-occupied with recovery procedures rather than concentrating on expanding business. A bank with high level of NPAs would be forced to incur carrying costs on a non-income yielding assets. Other consequences would be reduction in interest income, high level of provisioning, stress on profitability and capital adequacy, gradual decline in ability to meet steady increase in cost, increased pressure on net interest margin (NIM) thereby reducing competitiveness, steady erosion of capital resources and increased difficulty in augmenting capital resources. The lesser-appreciated implications are reputation risks arising out of greater disclosures on quantum and movement of NPAs, provisions etc. the non-quantifiable implications can be psychological like 'play safe" attitude and risk aversion, lower morale and disinclination to take decisions at all levels of staff in bank. Two decades of regimented and directed baking to credit delivery has deprived bank managers of the instinct skill and knowledge. Nationalized banking did not produce a spring of talent resources. Directive inputs and course direction came externally from NRB and Finance Ministry which were/are external to the day-to-day affairs and problems of the Nepalese banking industry. The system did not promote initiative and talent, but bred corruption and nepotism. This is the scene of Nepalese Banking struggling hard to transition from old primitive systems and values to modern professional business ethics and corporate good governance.

D. **High Cost of Fund Due To NPA**

Quite often genuine borrowers face the difficulties in raising funds form banks due to mounting NPAs. Either the bank is reluctant in providing the requisite funds to the genuine borrowers or if the funds are provided, come at a very high cost to compensate the lender's losses caused due to high level of NPAs. Therefore, quite often corporate prefer to raise funds through commercial papers (CPs) where the interest rate on working capital charged by banks is higher.

E. **Impact On Banks Scrip On Stock Exchange**

In further of a report, the NRB has said informational asymmetries arising from less onsite/off site inspection, declining performance and shooting NPAs weighed heavily on bank stocks. The NRB has for the first time included stock market behavior of bank scrip in its annual review of the banking sector. As per a NRB Report, despite the various reforms being carried out in Nepalese Stock exchange, much bank scrip remains illiquid and thinly traded. The NRB report says, "Private sector bank stocks whose market performance was affected and attributed the battering the scrip got in the secondary market to their poor performance in general and the concern of the market over their NPAs."

There are various other pressing factors that are relevant from the point of view of Nepalese banking operations with a view to focusing on NPAs and its related effects;

i) Excess liquidity lending default

The banks in Nepal are faced with the problem of increasing liquidity in the system. Further, the Rastriya Banijya Bank (RBB) is increasing the liquidity in the system through various rate cuts.

Banks can get rid of its excess liquidity by increasing its lending but, often shy away from such an option due to the high risk of default. In order to promote certain prudential norms for healthy banking practices, most of the developed economics require all banks to maintain minimum liquid and cash reserves broadly classified into Cash Reserve Ratio (CRR) and the statutory liquidity ratio (SLR). A rate cut (for instance, decrease in CRR) results into lesser funds to be locked up in NRB's vaults and further infuses greater funds into a system. However, almost all the banks are facing the problem of bad loans, non-performing assets, thinning margins, etc. as a result of which, banks are little reluctant in granting loans to corporate. As such, though in its monetary policy NRB announces the bankers no longer warmly greet rate cut but such news.

ii) Importance of credit rating in assessing the risk of default for lenders

Credit rating has been explained by Moody's, a credit rating agency, as forming an opinion of the future ability, legal obligation and willingness of a bond issuer or obligor to make full and timely payments on principal and interest due to the investors. Banks do rely on credit rating agencies to measure credit risk and assign a probability of default. It depends on the information available to the credit rating agency. Besides, there may be conflict of interest, which a credit rating agency may not be able to resolve in the interest of investors and lenders. Stock prices are an important (but not the sole) indicator of the credit risk involved. Stock prices are much more forward looking in assessing the creditworthiness of a business enterprise.

iii) NRB guidelines on NPAs and ICAI Accounting Standard 9 on revenue recognition

In view of the guidelines issued by the Nepal Rastra Bank (NRB), income on NPAs should be recognized only when it is actually realized. As such, a doubt may arise as to whether the aforesaid guidelines with respect to recognition of interest income on NPAs on realization basis are consistent with Accounting Standard 9, 'Revenue Recognition'. For this purpose, the guidelines issued by the NRB for treating certain assets as NPAs seem to be based on an assumption that the collection of interest on such assets is uncertain. Therefore complying with AS 9, interest income is not recognized based on uncertainty involved but is recognized at a subsequent stage when actually realized thereby complying with NRB guidelines as well. In order to ensure proper appreciation of financial statement, banks should disclose the accounting policies adopted in respect of determination of NPAs and basis on which income is recognized with other significant accounting policies.

iv. Usage of financial statements in assessing the risk of default for lenders

For banks and financial institutions, both the balance sheet and income statement have a key role to play by providing valuable information on a borrower's viability. However, the approach of scrutinizing financial statements is a backward looking approach. This is because the focus of accounting is on past performance and current positions. The key accounting ratios generally used for the purpose of ascertaining the creditworthiness of a business entity is that of debt-equity ratio and interest coverage ratio. Highly rated companies generally have low leverage. This is because; high leverage is followed by high fixed interest charges, non- payment of which results into a default.

2.1.6 Loan Loss Provision

There is associated risk in every loan. To minimize the risk from possible losses of them loans bank has to allocate some funds as loan loss provision. Loan loss provision is the accumulated funds that are provided as a safeguard to cover possible losses upon classification of risk inherited by individual loans. The level of provisioning in depended upon the level of NPAs and their quality. Increased portion of NPAs generate additional liability of resources to the financial institutions. In other words higher the NPA, higher the provision as down graded loans need more provision. 1% provision of total credit is minimum requirement as every pass/good loan has to provision by 1%. However, the ratio of provision may differ from nation to nation. In Nepal, NRB has prescribed:

- Pass 1%
- Substandard 25%
- Doubtful 50%
- Loss loan 100%

2.1.7 Principles of Lending Loan and Advances

While granting advances, The precautions to be taken by a banker, and the principles to be taken of. By the way of introduction an attempt is being made in the following paragraph to discuss the general principal to be born in mind by a banker while granting advances.

1. Liquidity

Liquidity implies the ability to produce cash on demand. A bank mainly utilizes its deposit for the purpose of granting advances. These deposits are repayable on demand or on the expiry of a specific period. In either case, the banker must be ready to meet these liabilities whenever necessary. The advances granted by the banker are as liquid as possible.

2. Profitability

Banks are essentially commercial venture. It is true that excessive and unjustifiable profits can only be at the cost of the customer, on so far as higher lending rates push up production costs and in the ultimate analysis, adversely affects society in general. at the same time , the facts remains that while strong operating profits allow for full prudential provisioning high net profits allow for allocation to capital and reserves , which is essential for any bank to maintain its competitive viability and expand its lending operation . Also, the shareholders of a bank are entitled to reasonable dividend. All this indicates that it is their lending operations are sufficiently profitable.

3. Safety and Security

The banker should ensure that the borrower has the ability and will to repay the advances as per agreement. The banker should carefully consider the margin of safety. If it is as unsecured advance, its repayment depends on the creditworthiness of the borrower, and that of guarantor. The banker should consider the charter, capacity and capital (popularly known as 3 Cs) or Reliability, Responsibility, and Resources (popularly known as 3 Cs) of the borrower and the guarantor.

4. Purposes

The banker has to carefully examine the purpose for which advance has been applied. Of course the exact purpose for which is actually utilized. There is always the possibility that the advance, once granted, may be diverted for purposes other than that indicated by the borrower at the time of application. Thus, there should be proper analysis of purpose.

5. Social Responsibilities

While admitting that banker are essentially commercial venture, a bank should not forget the fact that it is not enough only people of means are given bank finance , the identification of priority sectors for the purpose of extending bank credit should be considered as a positive development in the banking system, aimed at effectively discharging its responsibility towards society . At the same time, this social responsibility should not deter the banks from paying adequate attention to the qualitative aspect of lending. Social responsibility is no doubt highly exacting.

2.2 REVIEW OF RELATED STUDIES

2.2.1 Review of Books

Tatan (2001), in his book **"B anking Law and Practice in India"** has pointed out some aspects regarding industrial sickness and their NPA." It is necessary for the banker to study the statement of accounts received from units so as to be able to notice the signs of sickness in advance. The banker should also keep a close watch over the operations in the accounts of the borrowers to notice any signal of sickness. Generally specking an industrial unit is considered sick if it incurs cash loss for more than two years and likely to do so in the future , if a current ratio is less than 1:1 and there is an erosion of paid up capital , there is reasons to suspect that the industrial unit may become sick. If the unit is not likely to become to become profitable even after the infusion of more funds, the industrial unit may be classified as a sick. A close watch on the operations in the account of the industrial unit can also reveal the sign of industrial sickness. This can be noticed from frequent overdrawing from the account , return of bills purchased or discounted , failure to route the sales of goods through the account, drawing of accommodation bills, delay in submission of stock statement , return of goods as defective indicate the sign of sickness and banker should be put on guard".

In his book he has highlighted some guidelines to deal the industrial sickness. “Once industrial sickness is noticed the question which arises is how to deal the sick units. This wills depend upon the analysis on the factors responsible for industrial sickness. The bank would revive the industrial sick units through an appropriate program provided the banks are convinced that in course of time the industrial units are likely to be viable. Therefore, the bank should obtain technical, economic and financial feasibility reports prepared by experts. On the basis of their reports, an assessment can be made to find out whether the unit could be viable if it is found that the unit is technically and economically viable provide additional finances are made available to the unit, the bank can prepare plan to provide the necessary working capital or term finance to the unit either in its own or jointly with any financial institution. If it is found that the unit is otherwise viable in all respect but management is not competent, the bank may consist on a change of management or provide assistance to manage the unit. It is not always possible to revive all sick units. If the units have become insolvent or there is no chance of success, mere extra funds put into the units would not help. It would, therefore, be advisable to start recovery proceeding or to take the unit into liquidation. If unit are very large, some times the government may take over the management of such units or nationalize them. It may be advisable to grant some concessions to the units for their rehabilitation. The concession may be in the form of reduced margin requirements, concessional rate of interest, rescheduling of term loan installment and relaxation of usual norms for fresh working capital finance”.

Vaidya, Shakespeare (1998), in his book **"Project Failure and Sickness in Nepal, challenges to investors for investment Risk Management"** has discussed about the early warning system for investment risk management. In this book the author has also envisaged number of example about crisis created by banks in the world. As per his view, banking sector cannot ignore any sector of the economy and the basis of its good and bad, there is vital role of financial institution in regards to bad accounts.

In this book, he has cited that, "Nepalese financial institutions have made significant progress especially during this decade, although they are still far behind the development market. In spite of having great risk management i.e. focused on collateral rather than on project, credit culture is a new aspect both to the investors and corporate. Unless we have a credit culture, they will end up nowhere. How to identify a good bank? Huge deposits, high technology, strong marketing, broad branching network etc. Finally we arrive the point – collection of the loans, on the whole, private sector banks have lower non performing assets (NPA) than their public sector counterparts. NPAs are the loans that cannot be or have been recovered. The government owned banks suffer acutely from this, as they have to lend to various priority sectors, at the whims of their political masters and then forget every thing about the money forever.

With the growing number of financial institutions, market economy, economic liberalization etc industrial sickness in Nepal has phenomenal proportions in the last few years. Much of the amounts of almost all leading financial institution are blocked in sick company, which can be witnessed from the auction notice published regularly in newspaper. Credit risk is the first risk, which keeps the bank moving in the market. The loans provided against the securities result in losses that can eventually erode bank's capital. Because owner's capital is usually no more than ten percent of the volume of loans and risky securities, and often much less than that, it cannot absorb too many defaults on loans and securities before bank capital simply becomes inadequate to absorb further losses. At this point, the bank fails and will close unless the regulatory authorities elect to keep it a float with government loans until a buyer can be found or until the bank becomes viable by reducing its nonperforming assets."

"Banks and financial institution invoke penal measure when an installment of a term loan is defaulted; this is simply a banking procedure to offend the borrowers in case of defaults; however it is not the complete panacea for project failures. The follow up machinery to enquire into the reasons for the default is generally slow in movement or maximum time would have already consumed when banks normally acknowledge the failure of the projects. The consequence is that by the time, lending institution is able to ascertain the causes for the first default, more installments are overdue.

Delays in implementation schedule, cost escalation in mid – stream, inadequate cash generation or siphoning of fund are few of the factors responsible for default. A lending institution unless it has an effective monitoring system, may miss these signs of potential sickness. The first default should be ample evidence that something is out of order and the term lending institution should take immediate steps to review the position detail before go out of hand."

Finally he concludes " in order to safeguard the banks from the financial crisis likely to be arose form the project failure and sick units, that is , nonperforming loans , the government needs to do a number of things and fast, it must bring a broad rules for poor financial institution , transferring bad loans to bridge bank or loam recovery agency, remove ,any non performing loans from even healthier bank's balance sheets, beef up regulation, supervision and disclosure, improve ability to banks to sell the collateral that backs soured loans and recapitalize the banking system.

KC, Shekhar and Lekshmy Shekhar in their book **"Banking Theory and Practice"** has expressed different aspects of loan and advances. In their view, loan and advances are the most profitable banker's earnings are mainly derived from these assets.

"The item 'advance and loan' comes next in the order of liquidity. For all practical purposes, we may say that they are not shift able. Of course, this is the most profitable asset and the profit is mainly derived from these asses. As rule, a commercial banker will generally lead only foe short-term commercial purposes. It is not his duty to provide long-term loans for investment purposes. It is not his duty to provide long-term loans for investment purposes. Such loans are provides by specialized agencies like industrial banks. The reason advanced in support of this view is that in the case of long-term loans the banker will find it difficult to realize them when emergencies arise. For instance, in the case of a mortgage, the mortgaged property may cover the loan with a safe margin. But when the bank needs liquid cash most, it may find it difficult to convert the mortgaged property into liquid cash. Herein lays the meaning of the off quoted statement. "The art of banking lies in knowing the differences between a mortgage and a bill of exchange."

Certain general principles may be laid down which should guide a banker when he/she is making loan and advances. Before granting a secured loan, he/she should carefully consider the margin of safety offered by the security, possibility of fluctuation in its values and shift ability. If it is an unsecured loan its repayment entirely depends on the credit of the customer and as such, the cardinal principles, which a banker should consider, are 'character, capacity, and capital of the customer

Dahal, Bhuvan and Sarita (2002) in their book "**A Hand Book to Banking"** has expressed the different aspects of banking. In their view, the banks lend and recover the loan amount in different fields/sectors of the society.

"A bank is judged on the basis of Capital, Assets Quality, Management, Earning, Liquidity and Sensitivity to market risk (CAMEL). Almost all the government banks are running at loss. Though almost all the private sector banks are showing profit, it is very difficult to call them sound if appraised from CAMELS approach. Some banks have very low Capital Adequacy Ratio (CAR) while some banks have piled up non-performing assets (NPAs). Similarly, banks don't have proper system in place for management of market risks. The people have been raising questions over the correctness of credit classification and provisioning of some banks. Should the suspicion come true, it will prove very costly to the depositors, creditors and national economy as a whole. It would be prudent to advice NRB to strictly implement it's recently introduction directive so that other banks avert the fate of NBL, RBB and NIDC". (Dahal and Dahal, 2002:21)

"Performing assets are those loans that repay principal and interest to the bank from the cash flow it generates. Loans are risky asses though a bank invests most of its resources in granting loans and advances. If an individual bank has around 10% non-performing assets/loan, (NPA/Ls) it sounds the death knell of that bank ceteris paribus (all other things remain constant). The objective of sound loan policy is to maintain the financial health of the bank, which results in safety of depositors' money and increase in the returns to the shareholders. Since the loan is a risk asset, there is inherent risk in every loan. However, the bank should not take risk above a certain degree irrespective of returns prospect."

In their opinion, loan and advances dominate the assets side of the balance sheet of any bank and earning from such loan and advances occupy a major space in income statement. Hence loan is known as risky asses. Risk of non-repayment of loan is known as credit or default risk. Performing loans have benefits to the society while non-performing loan erodes even existing capital. If loan is given to disable project not only lenders and borrower but also the whole society gets benefits but society loses its scarce capital if loan is given to project, which is not viable.

2.2.2 Review of Articles /Journals

Chhetri, Deependra B., (2057) stated in his article titled **"Non- Performing Assets: A Need for Rationalization"** that to provide connation of the NPA and its potential sources, implication of NPA in financial sector in the South East Asian Resign. He has also given possible measure to contain NPA. "Loan and Advances of financial institution are mean to be serviced either part of principle of the interest of the amount borrowed in stipulated time as agreed by the parties at the time of loan settlement. Since the date becomes past dues, the loans becomes non-performing assets. The book of the account with lending institution should be effectively operative by means of real transaction effected on the part of the debtor in order to remain loan performing." (Chhetri, 2057:17)

As per his opinion, the definition of NPA differs from country to country. In some of the developing countries of Asia Pacific Economic Cooperation (APEC) forum, a loan is classified as non-performing only after it has been arrear for at least 6 months; similarly, it is after three months in India, Loans thus defaulted are classified into different categories having their differing implication on the assets management of financial institution. He also stated that NPAs are classified according to international practice into three categories namely substandard, doubtful and loss depending upon the temporal position of loan default.

"Thus the degree of NPA assets depends solely on the length of time the assets has been in the form of none obliged by the loanee. The more time it has elapsed the worsted condition of asses is being perceived and such assets are treated according."

As per Mr. Chhetri's view, failure of business for which loan was used, defective and below standard credit appraisal system, credit program sponsored by Government, slowdown in economy/recession, diversion of fund are some of the lending to accumulation of NPAs.

He said that there is serious implication of NPAs, on financial institution. He further added that the liability of credit institution dose not limit to the amount declared as NPA but extend to extra amount that requires by regulation of supervisory authority in the form of provisioning as the amount required for provisioning depends upon the level of NPAs create a psyche of worse environment especially in the financial institution like waiving interest, rescheduling the loan, writing off the loan, appointing private recovery agent, taking help of tribunals and law of land etc NPAs can be reduced.

Finally he concluded that financial institutions are beset with the burden of mounting level of NPAs in developing countries. "Such assets debar the income flow of the financial institution while claiming additional resources in the form of provisioning thereby hindering gainful investment. Rising level of NPAs can't be taken as stimulus but the vigilance demanded to solve the problem like this, eventually will generate vigor to gear up the banking and financial activities in more active way contributing to energizing growth.

Tiwari, Gopal (2004), the article titled' "Financial sector hobbled with chaos, fragility" was published in the Himalayan times. He states that Nepal's financial sector is moving like a 'sinking boat'. According to him financial institution have failed in delivering beneficial services to needy people by developing credit giving centers in rural areas with out which sustained economic growth is impossible. On the other hand banks and financial institution have enough liquidity but they are finding it difficult to find suitable places for investment.

"Problem such as insecurity lack of market research from banks, low investment opportunities, weak operational policies for carrying out financial transaction, among others have contributed to the problem of this sector .Despite central banks directives regulating banks and financial institution, private and government banks are functioning haphazardly.----- Nepal bank limited (NBL) and Rastriya Banijya Bank (RBB), the two largest banks, occupy about 50 percent of the country's banking assets. An effective reform of these two is key to improved performance of the whole sector. The process currently underway to reform these two institutions, despite paying huge amounts to foreign experts, has not given expected results. ---- Besides NBL and RBB, the non-performing assets (NPA) of some private banks also very high. If the government and central bank allow the financial sector reforms to focus only on RBB and NBL, it might become a futile effort. The current management of RBB and NBL has not been able to reduce their NPL even after two years, which have crossed over 60%. Earlier KPMG had calculated NPL at 30- 35 percent. The central bank itself says, despite efforts NBL has high NPLs and negative capital of RS 9.75 billion".

At last he suggests that the forthcoming budget should not remain a document merely but should address financial sector ills with a wide vision. He further recommended that in order to create a well regulated, prudent, market oriented, competitive and strong financial system in Nepal, the government should look to build up on its indigenous strength and improve upon its regional lies to improve its efficiencies

Shrestha, Shiv Raj (2056), director of NRB in his article titled 'Modus Operandi of Risk Appraisal in Bank Lending' has tried to highlight different aspects of credit risk management. As per his view, as the effective risk management is central to good banking, the tradeoff between risk and return is one of the prime concern of any investment decision whether long – term or short term. He concludes, "Effective credit risk management allows a bank to reduce risks and potential NPAs. It also offers other benefits. Once a bank understands their risks and their costs, they will be determining their most profitable business, thus price products according the risk. Therefore, the bank must have an explicit credit risk strategy and support by organizational changes, risk management technique and fresh credit process and systems. There are five crucial areas that management should focus on.

- Credit sanctioning and monitoring process
- Approach to collateral.
- Credit risk arises from new business opportunities
- Credit exposures relative to capital or total advances Concentration on correlated risk factors.

Apart from these, the bank management should regularly review all assets quality issues including portfolio composition, big borrower exposures and development in credit management policy and process.” Improving risk management will not be easy or quick. However, Nepalese banker loves little choice. Hope fully, the bank adopt good risk management practices and will be able to reap both Strategic and optional benefit.

Kathmandu Post (2003), in a titled ‘Loan Loss Provision Rises Notably’ which is published in the Kathmandu post, the reporter had made an endeavor to highlight some facts and figures regarding loan loss provision of commercial banks.” The banking sector is witnessing a huge surge in loan loss provisioning reserves lately. The increment is primarily a result of a directives issued by Nepal Rastra Bank (NRB) in 2001 that introduces stringent loan provisioning criteria for commercial banks. As per data recently released by the central bank , that total loan loss provision in the country’s banking sector increased from around Rs 8.75 billion in mid – April 2001 to Rs 13.18 billion in mid – April 2003. The increment is over 51 percent. As per the latest NRB figures a remarkable surge has been seen in loan provision of Nepal Bank Ltd (NBL). Against the provision of Rs 1.7 million in April 2002, the loan provision amount surged to a whopping of Rs. 7.33 billion in a year” it further states that apart from the two technically insolvent government invested banks, loan provision of other joint venture private banks has also risen significantly and the notable increments seen in the loan loss provisioning amounts is due to the eight – point prudential directives that the central bank issued in mid – 2001 to all commercial banks.

The reporter concludes, “The directives laid down stringent guide lines relating to loan loss provision to ensure a good health of the overall banking system. The directive requires loans to be provisioned to the extent of cent percent if payment is defaulted for one year. Likewise, the directives requires loans to be provisioned if the extent of 25 percent if payment is defaulted for over three months and 50 percent of the period default extent beyond six months. The earlier directive required progressive provisioning of loans, but allowed a maximum of three years, unlike the present system of just a year, for loans to be provisioned to the extent of cent percent."

The Boss (2003), in the magazine titled, 'Unavailability of wider arrays or sophisticated banking product' published in the boss, it reported that Nepali banking sector is primarily focusing on plain vanilla banking product such as loans deposits , letter of credit s, guarantees, remittances, etc. there are value – added products like funded – risk participation and private labeling in the trade finance areas, options and other derivative products in global market / treasury area and remittance securitization in Nepal's most lucrative area of remittance . If our South Asian counterparts like Bangladesh, Pakistan, Srilanka and India are aggressively using these products, there is no reason why we cannot replicate these products in Nepal.

Nepal does not have electronic clearing system for realization of cheques and drafts on a real time basis. On the treasury front, unavailability of dealing room at the central bank and electronic dealing screen at treasuries of banks can be considered another hindrance. Although few banks have offered internet banking services, we still have a long way to go. The report concludes, the major problem that our banking sector is facing today has been due to high percentage of non performing loans, the major cause for which is non compliance of basic credit principles. Many other issues on non- compliance of corporate governance have come into light. Although this sector is comparatively more professional and transparent than other sectors, still there are some major problems which we need to over come.

Bhattarai, Krishna D. (2003), has presented an article about the "Non- Performing Assets (NPA) Management". According to him, a loan is a very easy term for a borrower when he has already taken and for a lender not availed. It is equally difficult for a borrower to avail and for lender to recover. From a banker's view, it is just like a stone to roll down from the top of the hill while sanctioning, but too difficult to roll back the same stone to the top of the hill while recovering. A loan not recovered within the given timeframe either in the form of interest servicing or principal repayment is called non-performing loan. There are other parameters as well to quantify a NPL. Security not to the extent of loan amount with specified safety margin, value of security not realizable, possession not as per the requirement of bank, conflict of charges are some of the reasons which causes difficulties while recovering the loan.

According to him, NPL of a bank is like a cancer in a human body, which will collapse the entire bank if not taken care in time. This is an important discipline in banking to prevent the entire NPL or avoid situation for a loan to turn into NPL. Loan for banks is very essential to generate revenue for operational expenses as well as to provide return to the shareholders.

When a loan advanced from good money turns into a bad loan, the chances of shareholders return as well as the survival of the bank is at stake. Ailing banks cannot portray a better image in public. When a public looses the confidence on a bank and does not deposit, the bank will be in the verge of extinction. Therefore, deposits are the essence for a bank. A loan disbursed as good loan does not turn into bad overnight. It has certain course to turn into bad. An efficient bank management can recover the loan before turning it into bad and can save itself from the unwanted catastrophe

In conclusion, a borrowing may reflect one or all the above signals that may cause harm to the bank. There are few ways to protect bank from intentional defaulter but for those default caused by situations we can reschedule or restructure their facilities and help them to meet their debt obligation as per the cash flow they are having. Even an authentic loan that has been sanctioned with a good intention may turn into bad due to lack of proper management and carelessness. The bank will have to face heavy consequences in such a case. When a good loan, with all effort to protect it, turns into bad and the borrower’s ability is not sufficient to repay it, he then tries to hide it from the bank and wants to be relieved temporarily. Such situations give some signals to the bank and these signals are called danger signals.

A bank must be one-step further than its customers must. It must collect all the relevant information that are required by the borrower for the establishment of a business and be rigid to give loan than to give his own money without any security. When a borrowing unit is not able to serve the debt from the source explored, the documentations are merely a decree to enforce legal action against him. Nevertheless, what gets realized when everything is lost. A jail and punishment does not satisfy the interest of bank. Therefore, he is of the view that the bank should always keep in mind the formula Know Your Customers (KYC) before giving loans.

The security given by a borrower may be ample for the exposure. However, the borrower from other source of business may not be able to generate substantial earning to service the debt. Bank has the right to auction the property and liquidate the loan but in doing so realization from the auction of the property is always less than the value of the assets. This will serve neither the purpose of bank nor the borrower instead cause loss to both.

2.3 RESEARCH GAP

From the above study, it can be said that the NPA is one of the challenging problem of commercial bank in Nepal, which is followed by increasing loan loss provisioning. It is found that some research in the related topic but no research was found in detail research and analysis on impact of non –performing assets. Hence the research has attempted to fill the gap by taking reference of Lumbini Bank Limited, Nepal Bangladesh Bank limited, Himalayan bank Limited and Bank of Kathmandu . This study will try to show the present issues, latest information on bank's NPA's and other ratios, data and real picture of loan advance of Nepalese Commercial Bank.

After reviewing the relevant literatures, the next chapter concentrates in the research methodology applied in the study.

CHAPTER - III

RESEARCH METHODOLOGY

Research as the name implies means to search or study about a phenomenon. It is a repeated action to find or investigate something in a scientific manner. This research in a study about non performing assets of commercial banks of Nepal. It seeks to find out facts about non performing assets and relationships by defining and redefining problems, formulating hypothesis, collecting, organizing and evaluating data, making deductions and conclusions to determine whether they fit the formulated hypothesis.

3.1 RESEARCH DESIGN

The basic objective of this study is to find out the effect of non performing asset in the commercial banks of Nepal. This study is an exploratory as well as descriptive study and is a kind of research. Extensive study of non performing loans, its effect in different aspect if bank, factor responsible for it, its scope and challenges has been carried out using a secondary data. Descriptive approach has been used to describe the concept of non performing assets and analytical approach has been used to depict and to analyze the current situation. The data and information collected from the survey are rearranged, tabulated, analyzed and interpreted accordingly to the need of the study for attaining the stated objectives.

3.2 POPULATION AND SAMPLE

The term 'population' for research means all the member of any well defined class of people, event or object. It means that the entire group of people, events or things of interest that a researcher wished to investigate. Sample, on the other hand is the representative part of population selected from it with the objective of investigating its properties. If some elements are selected with the intention of finding out something about the population from which they are taken then that group of element is called a sample. Thus, a sample is just a portion of the universe selected with a view to draw conclusions about the universe under study. Hence, it is a representative selection of a population that is examined to gain statistical information about the whole. At present, the total number of object in the general topic deals with the commercial banks. There are all together 30 commercial banks in Nepal. O ut of these total commercial banks some selected banks are selected as the sample. For this study Nepal Bangladesh Bank, Himalayan Bank and Nepal Investment Bank are taken as sample.

Table 3.1 below clearly describes about total population, target population and sampled drawn.

List of Commercial Banks in Nepal

Table 3.1

SN	Names	Operation Date(A.D.)	Head Office
1	Nepal Bank Limited	15-Nov-37	Kathmandu
2	Rastriya Banijya Bank	23-Jan-66	Kathmandu
3	Agricusture Development Bank Ltd.	2-Jan-68	Kathmandu
4	Nabil Bank Ltd.	16-Jul-84	Kathmandu
5	Nepal Investment Bank Limited	27-Feb-86	Kathmandu
6	Standard Chartered Bank Nepal Ltd.	30-Jan-87	Kathmandu
7	Himalayan Bank Ltd.	18-Jan-93	Kathmandu
8	Nepal SBI Bank Ltd.	7-Jul-93	Kathmandu
9	Nepal Bangladesh Bank Ltd.	6-May-94	Kathmandu
10	Everest Bank Ltd.	18-Oct-94	Kathmandu
11	Bank Of Kathmandu Ltd.	12-Mar-95	Kathmandu

12	Nepal Credit & Commercical Bank Ltd	14-Oct-96	Siddarthanager,Rupandehi
13	Lumbini Bank Ltd.	17-Jul-98	Narayangadh,Chitwan
14	NIC Bank Ltd.	21-Jul-98	Biratnagar,Morang
15	Machhapuchchhre Bank Ltd.	3-Oct-00	Pokhara,Kaski
16	Kumari Bank Ltd.	3-Apr-01	Kathmandu
17	Laxmi Bank Ltd.	3-Apr-02	Birgunj,Parsa
18	Siddhartha Bank Ltd.	24-Dec-02	Kathmandu
19	Global Bank Ltd.	2-Jan-07	Birgunj,Parsa
20	Citizens Bank International Ltd.	21-Jan-07	Kathmandu
21	Prime Commercial Bank Ltd.	24-Sep-07	Kathmandu
22	Sunrise Bank Ltd.	12-Oct-07	Kathmandu
23	Bank of Asia Nepal Ltd.	12-Oct-07	Kathmandu
24	Development Credit Bank Ltd.	23-Jan-01	Kamaladi,Kathmandu
25	NMB Bank Ltd.	26-Nov-96	Babarmahal,Kathmandu
26	Kist Bank Ltd.	21-Feb-03	Anamnagar,Kathmandu
27	Commerze & Trust Bank Ltd.		Kathmandu
28	Janta Bank Ltd.		Kathmandu
29	Mega Bank Ltd.		Kathmandu
30	Civil Bank Ltd.		Kathmandu

(Sources; NRB banking and financial statistics)

The following are the banks, which are taken as sample for the study are

- Nepal Bangladesh Bank
- Himalayan Bank Limited
- Nepal Investment Bank Limited

These banks are taken as sample because these banks hold very food example of NPA. Out of these banks we can say that the Nepal Bangladesh Bank can be worst case's example, Nepal Investment Bank can be best case's and Himalayan Bank can be most likely case's example.

3.3 SOURCES OF DATA

Making study more reliable and justifiable, secondary data has been used in this study. The annual reports of the subjected banks are the major sources of the data for the study. However, beside the annual reports of the respective banks, the following sources of data are also considered.

1. NRB reports
2. Annual reports of the selected commercial banks
3. Various publications dealing in the subject matter of study
4. Various Articles published in the newspaper
5. Different websites

Another source like interviews, desertion, remarks by the specialist of the subject, those are capable in providing valuable data and conclusion, should be considered in the study.

3.4 DATA PROCESSING PROCEDURES & ANALYSIS

Data collected from various sources were in raw form. They were classified and tabulated as per the nature of the study and in accordance of the data. Applying different financial and statistical tool made data analysis. Further to represent the data in simple form bar diagrams and graphs have also been used.

3.4.1 Financial Tools

While adopting financial tools, a ratio is used as a bench mark for evaluating the financial position and performance of any firm. "Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account" (Pandey, 2000: 108)." financial analysis is the use of financial statement to analyze a company's financial position and performance and to assess future financial performance" (Wild, Subramanyam and Halsey, 2003:13).

3.4.1.1 Ratio Analysis

Ratio analysis is the widely used tool of financial analysis. A ratio is simply one number expressed in terms of another and as such it express the numerical or quantitative relationship between two variables . Ratio analysis reflects the relative strengths and weakness of any organization also indicates the operating and financial growth of the organization. It summaries the financial figures and make quantitative judgment about the financial performances and positions. The relationship between two accounting figures expressed, mathematically is known as financial ratio (Pandey, 2000:108) to make analysis, we can use various ratios. But only those ratios have been calculated which are related to the subject matter.

- ✓ **Loan and Advances to Total Assets Ratio**

The loan and advances to total assets ratio measures the amount of loan and advances in the total assets. It means that it shows the proportion of loan and advances to total assets. High degree of loan and advances indicates the good position of the organization that of good mobilization of deposits of fund. In inverse, low degree of loan and indicated that use of fund properly. Loan is the risky assets. Thus higher loan and advances to total assets ratio shows high risk and inversely low loan and advances to total assets ratio shows low risk. Risk consist the uncertainty and future is uncertain. Thus, the loan and advances may or may not be recovered with its interest. This ratio can be calculated as follows:

$$\text{Loan and Advances to Total Ratio} = \frac{\text{Loans and Advances}}{\text{Total assets}}$$

- **Loan and Advances to Total Deposit Ratio (CD Ratio)**

The main objective of commercial banks is to make deposit and lend it in the secure field. The loan and advance to deposit shows the relationship between the loan and advance and total deposit. It shows how much fund of deposit is provided as loan and advance. This ratio is used to find out how successfully the bank are utilizing their deposit fund in credit or loan for profit generating purpose as loan and advances yield high rate of return. Higher CD ratio implies the better utilization of total deposits and better earning. Hence 70% to 80% CD ratio is considered as more appropriate. This ratio can be calculated as follows:

$$\text{Loan and Advances to Total Deposit Ratio} = \frac{\text{Loans and Advances}}{\text{Total deposit}}$$

- **Non- performing Assets to Total Loans and Advances Ratio**

This ratio determines the non- performing assets in the total loan advances portfolio. Greater ratio implies the bad quality of loan of the bank. Hence lower non-performing assets to loans and advances ratio are preferable. As per international standard only 5% NPA is allowed but in the context of Nepal 10%
NPA is acceptable. It is calculated as under:

$$\text{NPA to Total Loans and Advances Ratio} = \frac{\text{Non- performing Assets}}{\text{Total Loans and Advances}}$$

- **Provision Held to Non- performing Assets Ratio**

This ratio describes the proportion of provision held to non- performing assets of the bank. This ratio measures up to what extent of risk inherent in NPA is covered by the total loan provision. Higher ratio signifies that the banks are safeguard against future contingencies that may create due to non – performing assets. So, higher the ratio better is the financial strength of the bank. This ratio is calculated as follows:

$$\text{Provision Held to Non- performing Assets Ratio} = \frac{\text{Total Loan Loss Provision}}{\text{Total Non Performing Assets}}$$

- ✓ **Non – performing Assets to Total Assets**

This ratio indicates the ratio between the non – performing assets and total assets. Higher NPA to total assets implies ratio implies the bad effect in banks performance and it decreases the profitability of the banks and lower ratio implies the better performance of the bank and it increases the profitability of banks. This ratio can be calculated as follows:

$$\text{NPA to Total Assets} = \frac{\text{Total Non Performing Assets}}{\text{Total Assets}}$$

- ✓ **Provision Held to Loans and Advances**

This ratio indicates the ratio between provisions held and total loans and advances of the bank. It describes how much provision is held for a loan and what amount of loan in a bank can go bad. This ratio can be calculated as follows:

$$\text{Provision Held to Loans and Advances} = \frac{\text{Total Loan Loss Provision}}{\text{Total Loans and Advances}}$$

- ✓ **Return on Loan and Advances**

This ratio indicates the proportion of the over total loans and advances. It describes how efficiently the bank has employed its resources in the form of loan and advances of the bank, higher the ratio better is the performance of the bank and vice versa . It is calculated as follows:

$$\text{Return on Loans and Advances} = \frac{\text{Net Profit}}{\text{Loans and Advances}}$$

3.4.2. Statistical Tools

The statistical tool is essential to measure the relationship of two or more variable. It is the mathematical technique used to facilitate the analysis and interpretation of the performances of the organizations. It helps to compare the performance, strengthen, weakness of the organizations. It also helps to present the data, show the relation and deviation or differences of variables of organizations, in this study, the following statistical tools are used:

- ✓ **Arithmetic Mean**

Arithmetic meant or simply a 'Mean' of a set of observation is the sum of all the observation divided by the number of observation (Bajaracharya, 1996:177). It is the best value, which represent to the whole group. Mean is the arithmetic average of a variable. Arithmetic mean of a series is given by:

$$\text{Mean } (\sum) = \frac{\sum X}{N}$$

Where, X = sum of the variable 'X'

N= No of observation

- ✓ **Standard Deviation**

The standard deviation is the absolute measures of dispersion in which the drawbacks present in other measures of dispersion are removed. It is said to be the best measure of dispersion as it satisfies most of the requisites of a good measure of dispersion (Bajracharya, 1996:177). Standard deviation is defined as the positive square root of the mean of square of the deviation takes from the arithmetic mean. It indicates the ranges and size of deviation n from the middle or mean. It measures the absolute dispersion. Higher the standard deviation higher will be the variability and vice versa.

Dispersion measures the variation of the data from the central value. In other word, it helps to analyze the quality of data regarding its variability. It can be:

$$\text{Standard Deviation } (\sigma) = \sqrt{\left(\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2\right)}$$

- ✓ **Coefficient of Variation**

Standard deviation is the absolute measure of dispersion. The relative measure of dispersion based on the standard deviation is known as the coefficient of standard deviation (Bajracharya, 1996:177). It is independent of unit. So, two distributions can bitterly be compared with the help of C.V for their variability. Less the C.V, more will be the uniformity, consistency etc. and more the C.V less will be the uniformity, consistency etc. it is calculated as under:

$$\text{Coefficient of variation (CV)} = \frac{\sigma}{X} \times 100$$

✓ **Correlation Coefficient (r)**

Correlation coefficient is defined as the association between the dependent variable and independent variable. It is a method of determining the relationship between these two variables. If the two variables are so related change in the value of independent variable cause the change in the value of dependent variable then it is said to have correlation coefficient.

$$\text{Correlation Coefficient (r)} = \frac{\sum XY}{\sqrt{\sum X^2}\sqrt{\sum Y^2}}$$

The Karl Pearson Coefficient of Correlation always falls between -1 to +1. The value of correlation on coefficient in -1 signifies the negative correlation and +1 signifies the positive correlation coefficient. The following general rules are mentioned for interpreting the value of r.

When r = 1, there is positive perfect correlation between the two variables

When r = -1, there is a negatively perfect correlation between the two variables.

When r = 0, the variables are uncorrelated.

Near the value of r to +1, closer will be the relationship between two variables and nearer the value of r to 0, lesser will be the relationship.

✓ **Probable Error**

Probable error of the correlation coefficient denoted by P.E. is the measure of testing the reliability of the calculated value of r. if r be the calculated value of r

From a sample of n pair of observations, then P.E. is defined by

$$\text{P.E.} = \frac{0.6745\,(1-r^2)}{N}$$

Where, r = correlation coefficient

N= no of observation

It is used in interpretation whether calculated value of r is significant or not.

i. If r< P.E., it is insignificant. So, perhaps there is no evidence of correlation.
ii. If r>6 P.E., it is significant.

In other cases, nothing can be concluded.

The probable error of correlation coefficient may be used to determine the limits with in which the population correlation coefficient lies. Limits for population correlation coefficient are r$\pm$ P.E.

- ✓ **Trend Analysis**

One of the most popular and mathematical method of determining the trend of time series is the least square method. By using this method, we can estimate the future trend values of different variables. Hence, for the estimation of linear trend line following formula is used.

$Y= a + b X$

Where,

Y= Trend value a= Y Intercept

b= slope of trend line of the amount of change in Y Variable that is an associate with change in 1 unit in X variable

X= Time variable

- ✓ **Diagram and Graphical Representation**

Diagram and graphs are visual aids that give a bird eye view of a given set of numerical data .They represent the data in simple and reality comprehensive form. Hence, the various bars, charts and graphs are used to present the data and data analysis in this study.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

In this chapter, raw form of data which were collected from various sources are processed and changed into an understandable presentation using financial as well as statistical tools supported by diagram and graphs as mentioned in the previous chapter. Similarly, the process of transforming of data is undertaken for the examination and interpretation of such data to draw conclusion. Therefore, this chapter is the heart of the study, as all the findings, conclusions and recommendation are going to be derived from the calculations and analysis done in this section

4.1 RATIO ANALYSIS

4.1.1 Loans and Advances to Total Assets Ratio

Loans and advances of any commercial banks represent the major portion in the volume of Total Assets, the ratio of loans and advances to total assets ratio measures the volume of loans and advances in the structure of total assets.

The higher degree if this ratio indicates the good performance of banks in mobilizing its funds by way of lending function. However in its reverse side, the high degree of this ratio is representative of low liquidity ratio either.

Granting the loans and advances always carries a certain degree or risk. Thus this asset of banking business is regarded as risky asset, the low ratio shows low productivity and high degree of safety in liquidity and vice versa. The interaction between risk and return determine this ratio

Table 4.1

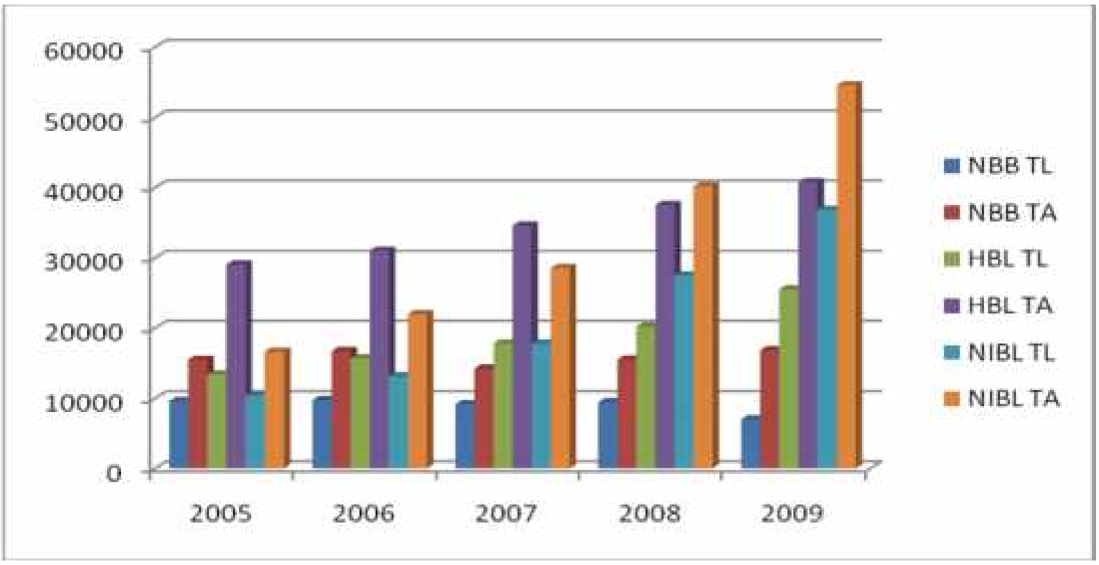
Total Loan and Advances (TL) to Total Assets (TA)									
	NBB			HBL			NIBL		
	TL	TA	Ratio	TL	TA	Ratio	TL	TA	Ratio
2005	9626	15540	61.94	13451	29103	46.22	10453	16638	62.83
2006	9796	16722	58.58	15762	31065	50.74	13171	22007	59.85
2007	9196	14282	64.39	17793	34645	51.36	17769	28573	62.19
2008	9470	15584	60.77	20233	37527	53.92	27529	40205	68.47
2009	7026	16830	41.75	25519	40791	62.56	36827	54635	67.41
	Mean		57.49			52.96			64.15
	SD		9.04			6.04			3.65
	CV		15.73			11.41			5.69

Table 4.1 shows the loans and advances to total assets of three banks for five consecutive years. Here, ratio of HBL and NIBL is in increasing trend where as ratio of NBB is fluctuating. The mean ratio of NBB, HBL and NIBL is 57.59, 52.96 and 64.15 respectively. Among the entire bank, NIBL has the highest mean ratio whereas HBL has the lowest. It indicated that NIBL is mobilizing its fund more satisfactorily than other bank. It can be interpreted as it has highest degree of investment in risky assets and HBL has the lowest. The SD of 3 banks is 9.04, 6.04 and 3.65 respectively and CV is 15.73%, 11.41% and 5.69%. It can be interpreted that NBB has highest degree of deviation and highest degree of variation.

The above table can also be presented in a bar diagram which is as follows:

Figure 4.1

Total Loan and Advances (TL) to Total Assets (TA)



From the figure 4.1, it can be interpreted that NIBL's TA has increased drastically in 5 years whereas there is very slow growth in HBL's and NBB's TA. Similar is the case with TL. There is significant growth in TL of NIBL where as TL of NBB has declined in later years and TL of HBL has very slow growth. It can be interpret that NIBL has the highest loan and advance to total assets ratio than other and HBL has the least loan and advance to total ratio during the period of study.

4.1.2 Loans and Advances to Total Deposit Ratio

Loans and Advances to total deposit ratio is often called credit deposit ratio (CD ratio). The core banking function is to mobilize the funds obtained the depositors to borrowers and earns profit and CD ratio is the fundamental parameter to ascertain fund deployment efficiency of commercial bank. In other words this ratio is calculated to find it how successfully the banks are utilizing their total deposits on credit or loans and advances for profit generating purpose as loans and advances yield high rate of return. Greater CD ratio implies the better utilization of total deposits and better earning, however, liquidity requirement also needs due consideration. Hence 70%-80% CD ratio is considered as appropriate. This ratio is calculated by dividing total credit or loans and advances by total deposit of bank.

<u>Table 4.2</u>

Total Loan and Advances (TL) to Total Deposit									
	NBB			HBL			NIBL		
	TL	Deposit	Ratio	TL	Deposit	Ratio	TL	Deposit	Ratio
2005	9626	12126	79.38	13451	24831	54.17	10453	14255	73.33
2006	9796	13015	75.27	15762	26456	59.58	13171	18927	69.59
2007	9196	9464	97.17	17793	29906	59.50	17769	24489	72.56
2008	9470	10883	87.02	20233	31805	63.62	27529	34452	79.91
2009	7026	9996	70.29	25519	34681	73.58	36827	46698	78.86
	Mean		81.82			62.09			74.85
	S.D		10.54			7.25			4.38
	C.V		12.88			11.67			5.86

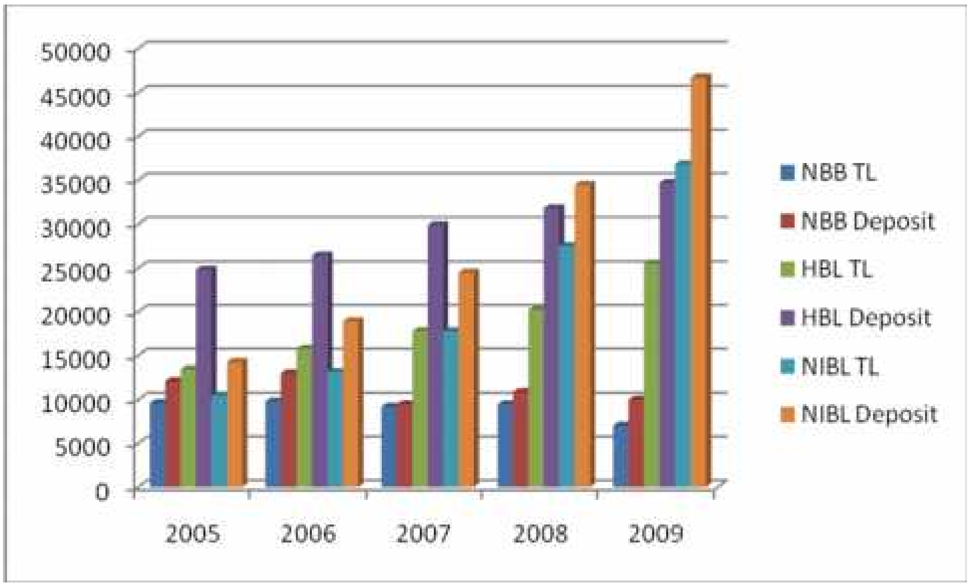
The table 4.2 exhibits the loan and advances to total deposit ratio of commercial banks for 5 consecutive yrs. The NBB has fluctuating ratio which has increases maximum up to 97% in year 2007 and minimum is 70% in 2009. The ratio of HBL and NIBL is in increasing trend. The ratio of HBL has increased from 54% to 74% whereas ratio of NIBL has increased from 73% to 79% in 5 years. It shows that NIBL has better utilization of its deposited fund in loans and advances than other bank.

The mean ratio of NBB, HBL and NIBL is 81.82, 62.09 and 74.85 respectively. Among all, NBB has highest mean ratio which shows that the NBB lend higher amount in the form of loan and advances. The HBL has the lower mean ratio among them. It provides lower amount in the form of loan. Thus it can be said that the management of HBL is risk averse as compare to other banks. NIBL have moderate mean ratio. The S.D of NBB, HBL and NIBL is 10.54, 7.25 and 4.38 respectively. So NBB's data has high variation from an average mean. Similarly C.V of NBB is also highest compare to other two banks which proves its data has high degree of deviation.

Above Total Loans and advances to total deposit can be presented in bar diagram also which is as follows:

Figure 4.2

Total Loan and Advances (TL) to Total Deposit



From the figure 4.2, it can be interpreted that deposit of NIBL is highest in comparison with other two banks whereas deposit of NBB is lowest. There is a significant growth in total loans and advanced of NIBL and HBL whereas it has decreased in the case of NBB. So it can be concluded that NBB has the highest ratio of total loans and advances to total deposit. So NBB lends higher amount in the form of loan and advances compare to all other.

4.1.3 Loan Loss Provision to Total Loans and Advances Ratio

The ratio of loan loss provision to total loans and advances describes the quality of assets that a bank is holding. Nepal Rastra Bank has given directives to commercial banks to classify its loans and advances into the category of pass, sub- standard, doubtful and loss on the basis of maturity of principal, to make the provision of 1, 25, 50 and 100 percentages respectively.

Loan loss provision signifies the cushion against future contingency create by the default of the borrower in payment of loans and ensures the continued solvency of the banks. Since high provision has to be made for non- performing loan, higher provision for loan loss reflects increasing non- performing loan in volume of total loans and advances. The low ratio signifies the good quality of assets in the volume of loans and advances. It indicates how efficiently it manages loan and advances and makes efforts to cope with probable loan loss. Higher ratio implies, higher portion of NPL in the total loan portfolio.

Table 4.3

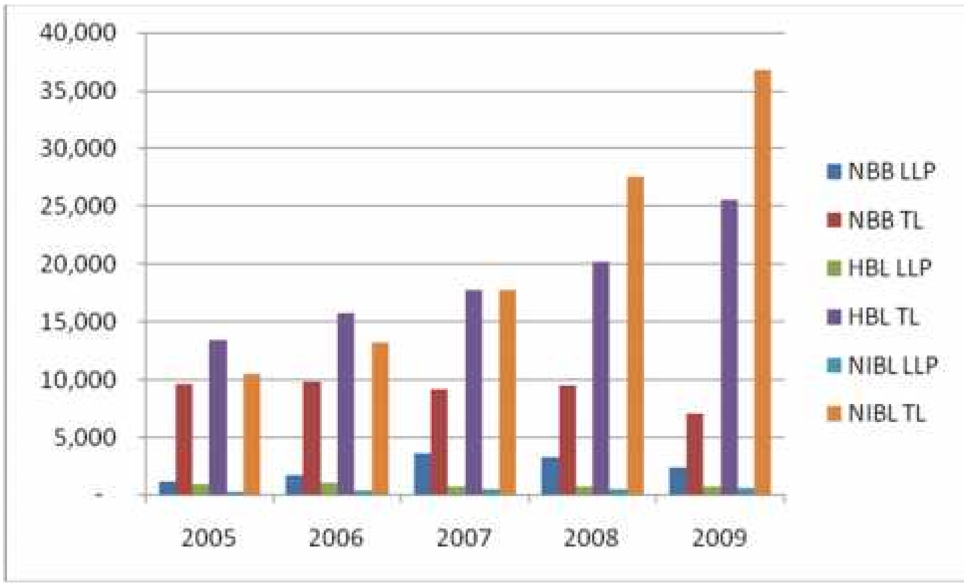
Loan Loss Provision(LLP) to Total Loan and Advances Ratio (TL)									
	NBB			HBL			NIBL		
	LLP	TL	Ratio	LLP	TL	Ratio	LLP	TL	Ratio
2005	1,185	9,626	12.31	937	13451	6.97	256	10453	2.45
2006	1,691	9,796	17.26	1,029	15762	6.53	374	13171	2.84
2007	3,634	9,196	39.52	760	17793	4.27	443	17769	2.49
2008	3,301	9,470	34.86	679	20233	3.36	537	27529	1.95
2009	2,376	7,026	33.82	708	25519	2.77	584	36827	1.59
	Mean		27.55			4.78			2.26
	S.D		11.98			1.88			0.49
	C.V		43.48			39.35			21.82

The table 4.3 exhibits the ratio of loan loss provision to loans and advances of the banks for the five consecutive years. The table shows that ratio of HBL and NIBL is in decreasing trend whereas ratio of NBB is increasing. Ratio of NBB Has increased drastically in year 2007. Higher LLP is indicative of poor and ineffective credit policy and higher proportion on non-performing assets. Hence the greater ratios of NBB suggest that there are higher proportion of NPL in the total loans and advances.

The standard deviation of NBB, HBL and NIBL is 11.98, 1.88 and 0.49 and their CVs are 43.48%, 39.35% and 21.82% respectively. Here we can clearly see that NBB has higher deviation and higher variation during the study period.
This can also be interpreted in the diagram below:

Figure 4.3

Loan Loss Provision (LLP) to Total Loan and Advances Ratio (TL)



The figure 4.3 clearly indicated that NIBL has the lowest LLP and NBB has the highest. In case of TL, it can be clearly seen that TL of all 3 banks are in equal level during the study period. So it can be concluded that ratio of LLP to TL is highest in NBB than other 2 banks.

4.1.4 Non- Performing assets to Total Loan and Advance

This ratio determines the proportion of non-performing assets in the total loan and advances portfolio. As per NRB directives the loan falling under category of substandard, doubtful and loss are regarded as non- performing assets or loan. The higher ratio implies the bad quality of loan or assets of banks in the form of loan and advances where as lower ratio implies the better quality of assets of banks in the form of loan and advances. Hence, lower ratio is preferable as per international standard only 5% NPAs is allowed but in the case of Nepal, maximum 10% NPAs is acceptable. The table presented below, exhibits the ratio of non- performing assets to loan and advances of 3 banks NBB, NIBL and HBL for five consecutive years.

Table 4.4

Non Performing Asset (NPA) to Total Loan and Advances(TL)									
	NBB			HBL			NIBL		
	NPA	TL	Ratio	NPA	TL	Ratio	NPA	TL	Ratio
2005	1,832	9,626	19.03	1,001	13451	7.44	281	10453	2.69
2006	2,927	9,796	29.88	1,041	15762	6.60	272	13171	2.07
2007	3,646	9,196	39.65	642	17793	3.61	422	17769	2.37
2008	2,945	9,470	31.10	476	20233	2.35	310	27529	1.13
2009	1,356	7,026	19.30	551	25519	2.16	302	36827	0.82
	Mean		27.79			4.43			1.81
	S.D		8.73			2.45			0.81
	C.V		31.41			55.19			44.45

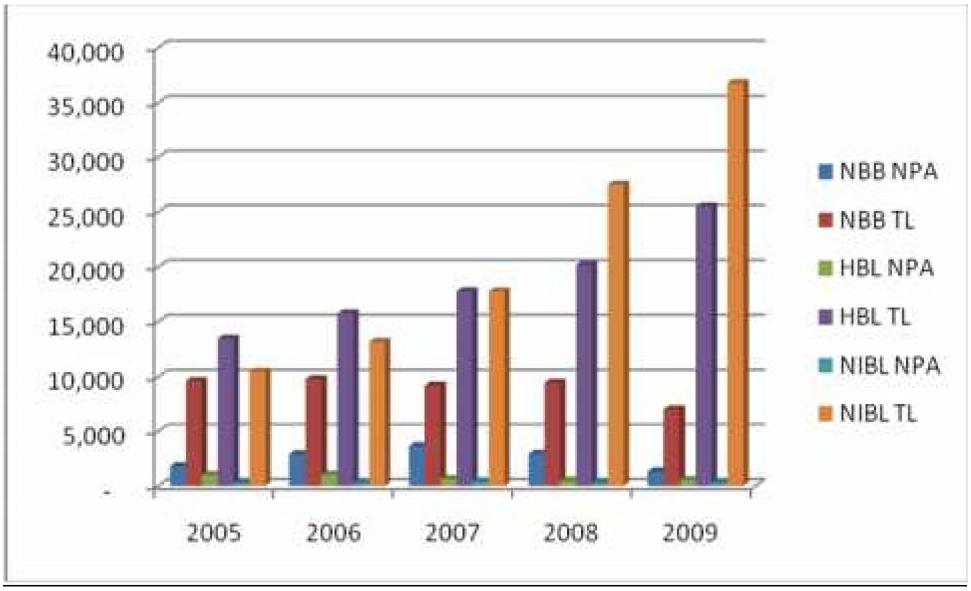
The table 4.4 exhibits the ratio of Non -performing assets to loans and advances of NBB, HBL and NIBL for five consecutive years. The figure represented in the above table shows that all three banks have fluctuating level of NPA. Among this also, NBB has the highest level of NPA. Lower NPA shows effective credit management of bank and its effort of recovering bad debts through establishment of recovery cell. The mean ratio of NBB, HBL and NIBL is 27.79, 7.43 and 1.81 respectively. Here it is clearly seen that NBB has higher NPA than the acceptable standard of 10%. It proves that credit management in NBB is not as effective as of two other banks i.e. HBL and NIBL. Over all these, three banks should manage their NPL level below the prescribed standard.

S.D of NBB, HBL and NIBL is 8.73, 2.45 and 0.81 and C.V is 31.41%, 55.19% and 44.45% respectively. Thus it signifies that NBB has highest deviation and HBL has higher degree of variation. Here among three banks, NIBL is moderate in term of variability and deviation. Since NPL is one of the causes of banking crisis, bank should give serious attention to this matter.

This can also be interpreted with the help of the following diagram:

Figure 4.4

Non Performing Asset (NPA) to Total Loan and Advances (TL)



From the figure 4.4, it is clearly seen that although there is drastic increase in TL of NIBL, its NPA is the least. There is decrease in TL of HBL and consistent increase in the same of HBL. So we can say that, NIBL has effective credit management system than two other banks during the period of study.

4.1.5 Provision Held to Non – Performing Assets

This ratio determines the proportion of provision held to non performing assets of the bank. Every bank should have to make provision for the loan to minimize the risk of not recovering the loan from the customer on time. So, this ratio measures up to what extent of risk inherent in NPA is covered by the total loan loss provision. Higher ratio signifies that the banks are safeguarded against future contingencies that may create due to non performing loan or in other words banks are cushion of provision to cope the problem that may be cause due to NPL. Hence higher ratio shows the better financial position of the bank.

<u>Table 4.5</u>

Loan Loss Provision(LLP) to on Performing Asset (NPA)									
	NBB			HBL			NIBL		
	LLP	NPA	Ratio	LLP	NPA	Ratio	LLP	NPA	Ratio
2005	1,185	1,832	64.68	937	1,001	93.61	256	281	91.10
2006	1,691	2,927	57.77	1,029	1,041	98.85	374	272	137.50
2007	3,634	3,646	99.67	760	642	118.38	443	422	104.98
2008	3,301	2,945	112.09	679	476	142.65	537	310	173.23
2009	2,376	1,356	175.22	708	551	128.49	584	302	193.38
	Mean		101.89			116.39			140.04
	S.D		46.95			20.41			43.52
	C.V		46.08			17.54			31.08

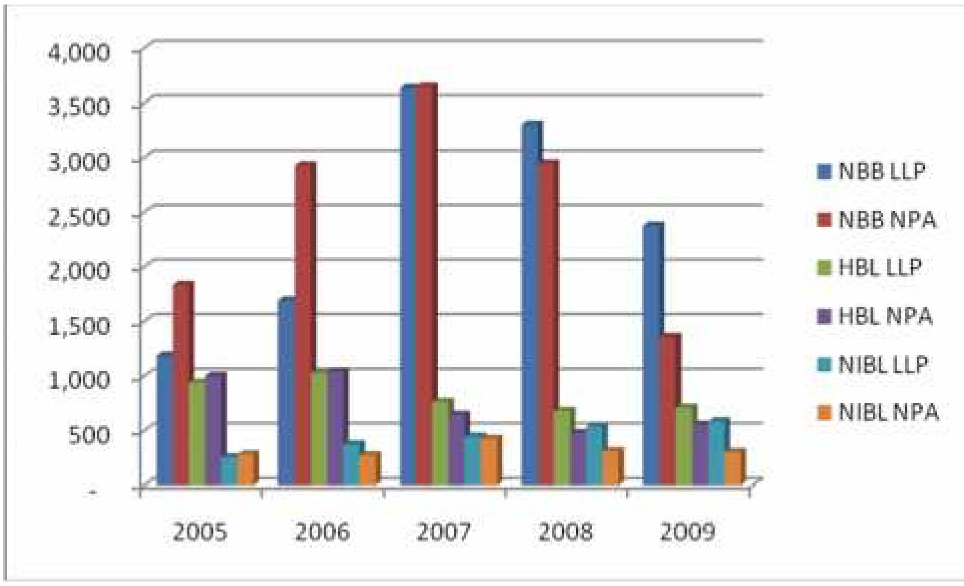
The table 4.5 exhibits the ratio of provision held to Non- performing Asset of three banks for five consecutive years. Here we can see that NIBL has highest ratio which is 194.38 in the rear 2009. NBB bank has least ratio as compare to two banks. HBL shows moderate ratio with increasing trend. The other two banks also have this ratio in increasing trend. The mean ratio of NBB, HBL and NIBL are 101.89, 119.39 and respectively. Higher mean ratio indicates banks have adequate provision against non performing assets. From here we can conclude that NIBL has better safeguard for future contingencies

The standard deviation of NBB, HBL and NIBL are 46.95, 20.41 and 43.52 respectively. And their CVs are 46.08%, 17.54% and 31.08% respectively. Thus it signifies that NBB's data had more variation and more deviation than other two banks. The HBL has lowest deviation and variation for that same period. We can conclude that NIBL is more safeguard against future contingencies that may create due to non-performing loan.

The above LLP and NPA can also be illustrated with the help of following diagram.

Figure 4.5

Loan Loss Provision (LLP) to on Performing Asset (NPA)



From the figure 4.5, we can see the NBB has the highest ratio in the year 2007. Its ratio has always remained higher than two other banks throughout the study period. But in later year it has managed to decrease its NPA. Among three banks, NIBL has the lowest ratio and HBL has moderate.

4.1.6 Non-Performing Assets to Total Assets Ratio

This ratio represents the proportion between the non- performing assets and total assets of banks. It shows the how much assets is non-performing or idle in the total assets of banks. Higher NPA, to total assets ratio indicates the works performance, which reduces the profit ability of the banks. Lower ratio indicates the better performance and higher profitability of the banks. Thus, lower NPA to total assets ratio is better for the banks that exhibits the better profitability.

Table 4.6

Non Performing Asset (NPA) to Total Asset (TA)									
	NBB			HBL			NIBL		
	NPA	TA	Ratio	NPA	TA	Ratio	NPA	TA	Ratio
2005	1,832	15540	11.79	1,001	29103	3.44	281	16638	1.69
2006	2,927	16722	17.50	1,041	31065	3.35	272	22007	1.24
2007	3,646	14282	25.53	642	34645	1.85	422	28573	1.48
2008	2,945	15584	18.90	476	37527	1.27	310	40205	0.77
2009	1,356	16830	8.06	551	40791	1.35	302	54635	0.55
	Mean		16.36			2.25			1.15
	S.D		6.74			1.07			0.48
	C.V		41.20			47.38			41.53

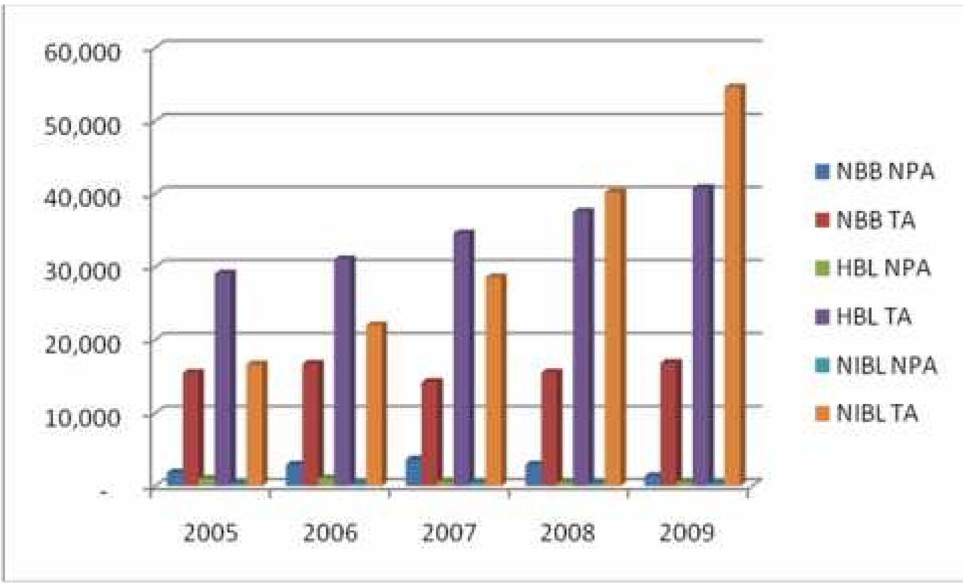
The table 4.6 presented above exhibits the ratio of provision held to total non-performing assets of three banks for 5 consecutive yrs. Throughout the study period, the NBB has the highest ratio in yr 2007. HBL and NIBL's ratio had decreased every year whereas NBB has fluctuating ratio which had increased and then decreased time and again. So we can say that among 3 banks, in NBB there is high amount of idle assets in the bank.

The mean ratio of NBB, HBL and NIBL are 16.36, 2.25 and 1.15 respectively. The ratio of NBB is significantly high in comparison with other banks and portrays that the bank has adequate provision against non-performing loan but the ratio of NIBB is comparatively lower. HBL has moderate ratio among them. The S.D of NBB, HBL and NIBL are 6.74, 1.07 and 0.48 respectively. Similarly there CV is 41.20%, 47.38% and 41.53% respectively. This is signified that NBB has the highest deviation and HBL has the highest variation for the study period.

The above provision held to non-performing assets ratio can be presented in bar diagram also, which is as follows;

Figure 4.6

<u>Non Performing Asset (NPA) to Total Asset (TA)</u>



From the figure 4.6, it can be clearly seen that there is drastic increase in TA of NIBL. TA of HBL is highest in the initial year but after 2008, NIBL's TA has exceeded HBL's TA. NPA of NIBL is least as seen in figure and NPA of NBB is highest. NPA of NBB is highest in the year 2007.

4.1.7 Return on Loans and Advances

This ratio indicates how efficiently the bank has employed its resources in the form of loans and advances. It also measures the earning capacity of its loans and advances. The ratio is calculated by dividing net profit (loss) by loans and advances. Net profit refers to that profit which is obtained after all types of deduction like employee bonus, tax, provision etc. Hence this ratio measures bank's profitability with respect loans and advances. Higher the ratio better is the performance of the bank.

Table 4.7

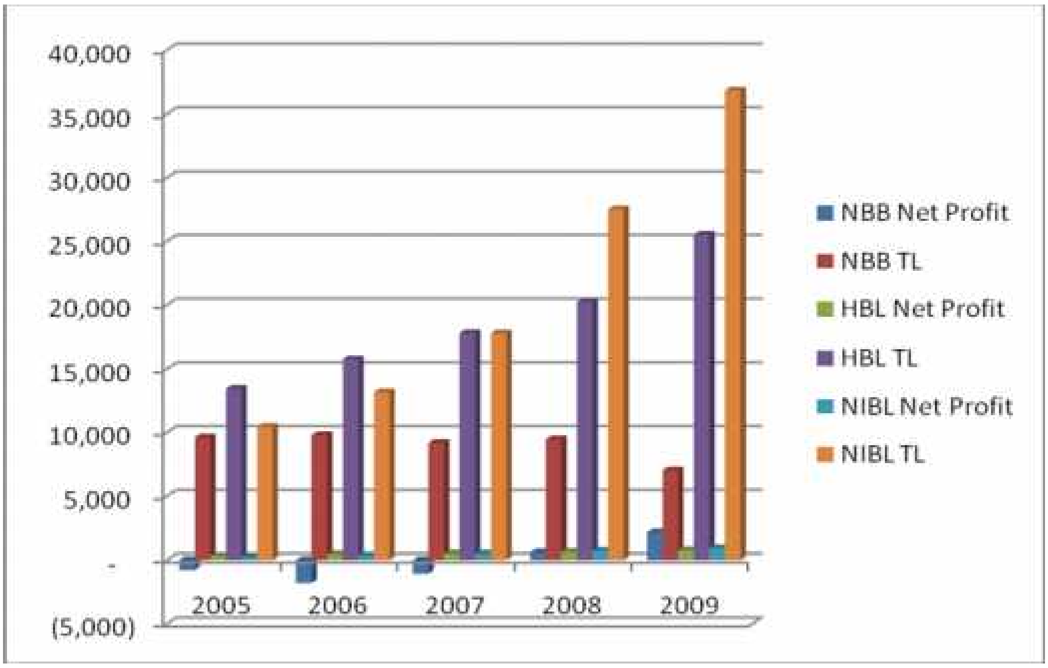
Return on Loans and Advances									
	NBB			HBL			NIBL		
	Net Profit	TL	Ratio	Net Profit	TL	Ratio	Net Profit	TL	Ratio
2005	(782)	9,626	-8.12	308	13451	2.29	232	10453	2.22
2006	(1,797)	9,796	-18.34	457	15762	2.90	351	13171	2.66
2007	(1,062)	9,196	-11.55	492	17793	2.77	501	17769	2.82
2008	596	9,470	6.29	635	20233	3.14	697	27529	2.53
2009	2,158	7,026	30.71	752	25519	2.95	914	36827	2.48
	Mean		-0.20			2.81			2.54
	S.D		19.48			0.32			0.22
	C.V		9660			11.36			8.79

Here in table 4.7, it is clearly seen that NBB is in loss for 3 consecutive year and had came to profit only in year 2008. So its 3 years return on loans and advances is also negative. The return on loan and advances of NIBL and HBL is in fluctuating trend. The highest ratio is of NBB in 2009 with the ratio of 30.71. Here although the ratio of NBB was negative in the starting it is the highest among other 2 bank. So we can say that NBB has improved drastically in these five years in terms of profit. Although ratios of other two banks have increased in 5 years but the increase amount is very less.

The mean ratio of NBB, HBL and NIBL is -0.2, 2.81 and 2.54. Although NBB has highest return in latest year among three banks, its mean ratio is still negative because of the loss suffered by it in the previous year. So because of this also, its data is more deviated and more dispersed. It can be clearly seen from below figure:

Figure 4.7

Return on Loans and Advances



From the figure 4.7 itself, it is clear that, NP of NBB has increased significantly in these 5 years but NP of HBL and NIBL has a very slow growth as compared to NBB. Among three banks NIBL's TL is highest, so because of this its ratio has not been able to increase drastically. It can be said that HBL and NIBL are going steadily whereas NBB had just recovered from the loss and moving in the path of profit.

4.2 CORRELATION COEFFICIENT ANALYSIS

4.2.1 Correlation between Deposit and Loan and Advances

The correlation between total deposit and an advance describes the degree of relationship between two items. Deposit is one of the major items of liability and loan & advance is the major item of assets of balance sheet for commercial banks. In this case, the deposit is the independent variable and loan & advance is the dependent variables. How a unit increase in deposit impact the volume of Loan and Advances is measured by this correlation.

Table 4.8

Correlation between Deposit and Loan and Advances

Banks	Correlation Coefficient(r)	Probable Error(P.E)	6× P.E
NBB	0.59	0.19	1.188
HBL	0.98	0.014	0.084
NIBL	0.99	0.0011	0.0066

The table 4.8 describes the relationship between total deposits and loans and advances. In all banks, there is positive correlation between deposit and loans and advances but there is high degree of positive in NIBL and HBL. The respective value of NBB, HBL and NIBL are 0.59, 0.98 and 0.99 respectively. Here we can see that the value of (r) in HBL and NIBL is more than six times P.E, so it can be interpreted that the correlation between these two variables is certain and significant. Where as in NBB bank the value of r is less than six times P.E, therefore there is no evidence of correlation and correlation coefficient between these two variables i.e. in NBB increase in deposit has not lead to increase in loans and advances.

4.2.2 Correlation between Loan Loss Provision and Loan and Advances

The correlation between loan loss provision (LLP) and loan & advances measures the degree of relationship between these two variables. How a unit increment in loan and advances affect the loan loss provision is measured by this correlation. . Here loan & advances is independent variable and loan loss provision is dependent variable.

Table 4.9

Correlation between LLP and Loan and Advances

Banks	Correlation Coefficient (r)	Probable Error (P.E)	6× P.E
NBB	-0.13	0.29	1.78
HBL	-0.76	0.12	0.76
NIBL	0.94	0.03	0.21

Table 4.9 shows the relationship between loans and advances and LLP. Here the correlation coefficient of NBB is -0.13 which shows that LLP and total loans and advances are negatively related but it is less than 6*PE. So it can be said that there is no evidence of correlation. Similar is the case with HBL. Its r is -0.76 which is less than PE or 6*PE. So because of this here also there is no evidence of correlation. But in case of NIBL, LLP and loans and advances are positively correlated and its PE and 6*PE is also less than r, so we can say that in this case LLP and loans and advances are positively correlated. When loans and advances increases LLP also increases and vice-versa.

4.2.3 Correlation between Loan Loss Provision (LLP) and Non- Performing Assets

The correlation describes the relationship between LLP and NPA. How a unit change in NPA effect the LLP is exhibited by this correlation. Here non performing assets are independent variable and LLP is dependent variable. As earlier mentioned NPA are the loan falling on the category of substandard, Doubtful and loss and the respective provisioning requirement is 25%, 50%, and100%. Higher the NPL higher will be the provisioning amount.

Table 4.10

Correlation between LLP and Non Performing Loan

Banks	Correlation Coefficient (r)	Probable Error (P.E)	6× P.E
NBB	0.61	0.19	1.13
HBL	0.98	0.008	0.048
NIBL	0.22	0.28	1.72

Table 4.10 explains the relationship between LLP and NPA. Correlation coefficient of NBB, HBL and NIBL bank are 0.61, 0.98, and 0.22 respectively. It shows that in all bank LLP and NPA are positively correlated. But in NIBL and NBB 6*PE is greater than r so there is no evidence of correlation between LLP and NPA in these bank. But in HBL 6*PE is less than R which shows in HBL, LLP and NPA are positively correlated.

4.2.4 Correlation between Non-Performing assets and loan and advances

This correlation coefficient shows the degree of relationship between the NPA and loan & advance. The loan & advance is independent variable and NPA is dependent variable. It shows how a unit of change of loan & advance effects to the NPA and what is the relation between them. It means how the NPA is affected due to the change (increase or decrease) of loan and advance of banks.

Table 4.11

Correlation between NPA and loan & advance

Banks	Correlation Coefficient (r)	Probable Error (P.E)	6× P.E
NBB	0.61	0.18	1.11
HBL	-0.79	0.11	0.66
NIBL	0.041	0.30	1.80

Here NPA and loans and advances are positively correlated in case of NBB and NIBL and it is negatively correlated in case o HBL. After doing error test it can be seen that incase of NBB and NIBL r is greater than 6*PE which signifies that correlation between them is significant and reliable. In case of HBL r is less than 6*PE so here correlation is not reliable. So we can say, in NBB and NIBL increase in loans and advances have caused increase in NPA as well.

4.3 TREND ANALYSIS

Trend analysis is a statistical tool which helps forecast the future values of different variables on the basis of past tendencies of variable. Trend analysis informs about the expected future values of various variables. Amongst the various methods to determine trend the least square method is widely used in practices. Hence in this study also least square method has been adopted to measure the trend behaviors of these selected banks. However, trend analysis is based on the assumption that past tendencies continues in the future. Under this heading the trend values of following variables is forecasted for next five years bases on the tendencies of past five years.

4.3.1 Trend analysis of Loan Loss Provision

Here, the calculated values of average loan loss provision (a), rate of change of loan loss provision (b) and expected loan loss provision for 5 years from FY 2010 to 2014 are as follows.

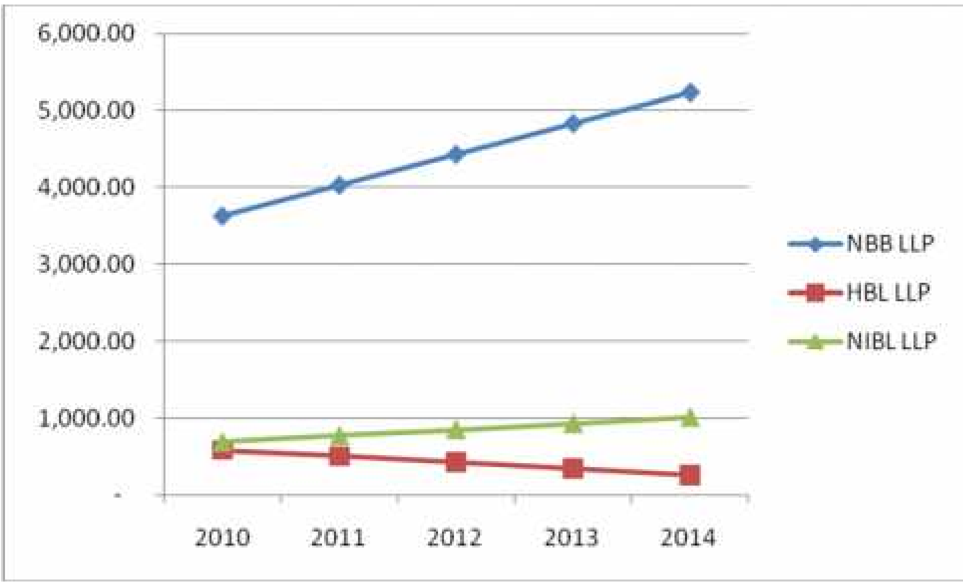
Table 4.12

Expected Trend Values of Loan Loss Provision

Financial Year Ending Mid July							
Banks	**a**	**b**	2010	2011	2012	2013	2014
NBB	2437.40	399.20	3635.00	4034.20	4433.40	4832.60	5231.80
HBL	822.60	(80.80)	580.20	499.40	418.60	337.80	257.00
NIBL	438.80	81.90	684.50	766.40	848.30	930.20	1012.10

Figure 4.12

Expected Trend Values of Loan Loss Provision



The table and figure 4.12 shows the expected trend values of loan loss provision of three banks for next five years based in the tendencies of past five years. Here NBB's average LLP is 2437.40 million. The expected LLP of NBB increases from 3635 million in year 2020 to 5231.80 million in years 2014 according to trend analysis result. Similarly average LLP of NIBL is 438.80 million and it increases from 684.50 million to 1021.10 million from 2010 to 2014. Average LLP of HBL is 822.60 million and it here according to this result; it decreases at the rate of 80.80 million and finally reaches to 257 million from 580.2 million.

According to this result we can drive conclusion that here HBL will be successful in decreasing LLP in years to come whereas in NBB and NIBL it will increase. In this also, in NIBL it will increase at slower rate whereas in case of NBB it will increase at higher rate. We know that higher the non performing loan higher will be the LLP and vice versa so if this result happens we can say that HBL's credit management policy will be better in future as a result of which it reduce its LLP.

4.3.2 Trend analysis of NPA

The trend analysis of NPA shows that the behavior of NPA in the banks. It means that it shows the increasing decreasing trend of NPA. The following table presents the trend value of NPA for five consecutive yrs, which is presented below.

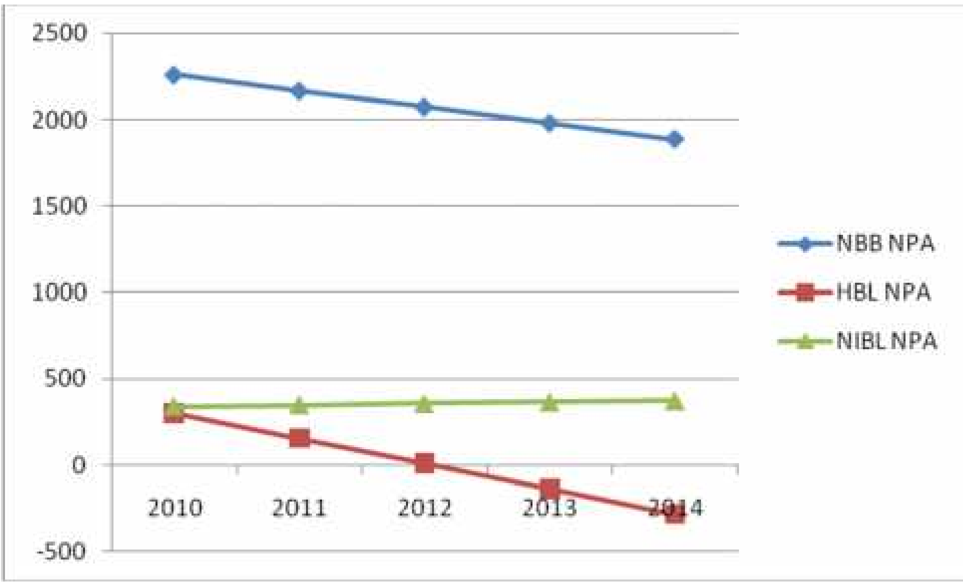
Table 4.13

Expected Trend Value of Non-Performing Loan

Financial Year Ending Mid July							
Banks	**a**	**b**	2010	2011	2012	2013	2014
NBB	2541.20	(93.40)	2261.00	2167.60	2074.20	1980.80	1887.40
HBL	742.20	(146.50)	302.70	156.20	9.70	(136.80)	(283.30)
NIBL	317.40	8	341.40	349.40	357.40	365.40	373.40

Figure 4.13

Expected Trend Value of Non-Performing Loan



The above table and figure 4.13 shows the trends of NPA of NBB, HBL and NIBL for 5 consecutive years. According to the above trend analysis, NBB and HBL's NPA will decrease at the rate of 93.4 million and 146.50 million respectively whereas NIBL's NPA will increase at the rate of 8 million. It is well known fact that NPA cannot be negative so we can say that seeing this trend these banks will be able to decrease its NPA in the coming future.

4.3.3 Trend Analysis of Net Profit

The calculated values of average Net Profit (a), rate of change of Net Profit (b), and expected Net Profit for 5 years from FY 2010 to 2014 of the three banks are as follows:

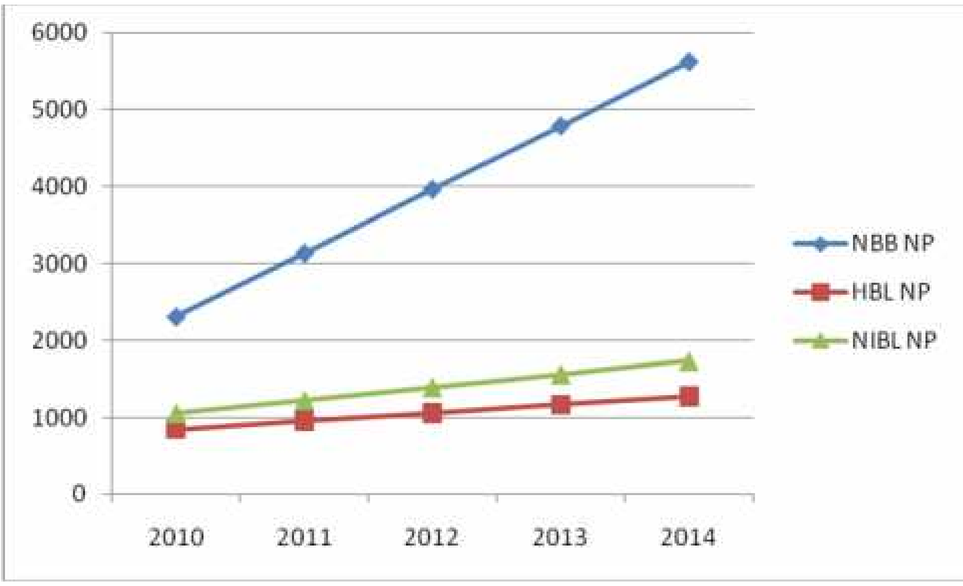
Table 4.14

Expected Trend Values of Net Profit

Financial Year Ending Mid July							
Banks	**a**	**b**	2010	2011	2012	2013	2014
NBB	(177.40)	827.30	2304.5	3131.80	3959.10	4786.40	5613.70
HBL	528.80	106.60	848.60	955.20	1061.80	1168.40	1275.00
NIBL	539.00	171.00	1052.00	1223.00	1394.00	1565.00	1736.00

Figure 4.14

Expected Trend Values of Net Profit



The table and figure 4.14 clearly shows that all banks have increasing trend of NP in years to come. NBB's NP will increase at the rate of 827.30 million every year if this trend continuous which will make its profit higher than other two bank. The NP of HBL and NIBL will increase at the rate of 106.60 million and 171 million respectively in every year. NBB was in loss till the year 2007 and has come into profit after its management was taken over by NRB. So because of this also, its profit increased drastically in 2008 and 2009. But it can't be said that its profit will increase at the same rate every year but it is sure that its |NP will increase. Seeing this we can say that future of these banks are good.

4.3.4 Trend analysis of Loans and Advances (TL)

Here, the calculated values of average loans and advances (a), rate of change of loans and advances (b) and expected loans and advances for 5 years from FY 2010 to 2014 are as follows.

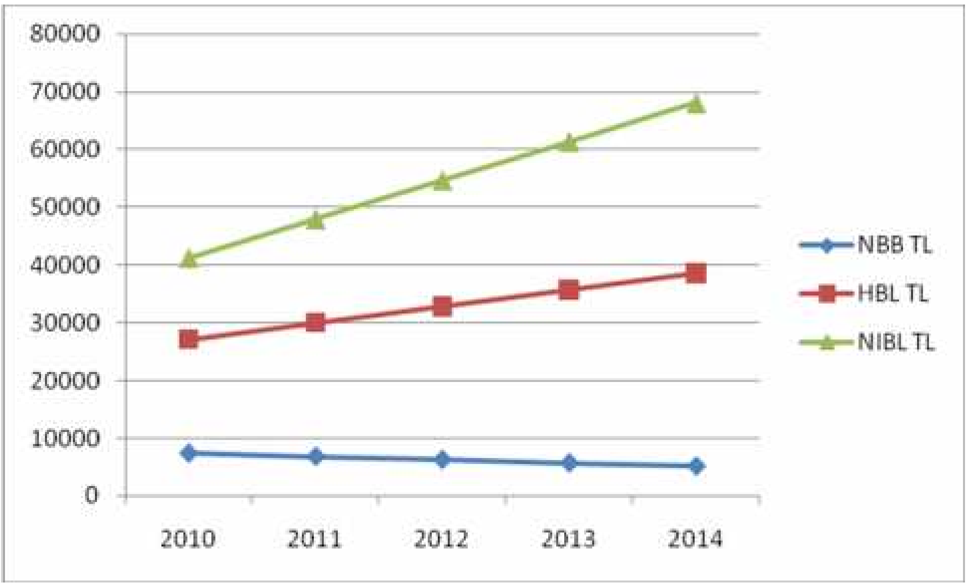
Table 4.15

Expected Trend Values of Loan and Advances

Financial Year Ending Mid July							
Banks	**a**	**b**	2010	2011	2012	2013	2014
NBB	9022.80	(522.60)	7365.00	6812.40	6259.80	5707.20	5154.60
HBL	18551.60	2860.70	27133.70	29994.40	32855.10	35715.80	38576.50
NIBL	21149.8	6710.60	41281.60	47992.20	54702.80	61413.40	68124.00

Figure 4.15

Expected Trend Values of Loan and Advances



The above table and diagram shows the expected trend values of loans and advances of three banks for next five years based in the tendencies of past five years. Here NBB's average loan and advances is 9022.80 million which is lowest among other two comparing bank where HBL's average is 18551.60 million and NIBL's is 21149.80 million. as per our trend analysis's result, its loans and advances will decrease at the rate of 522.60 million every year and ultimately reaches to 5154.60 million in year 2014 from 7365 million in the year 2010. HBL's loans and advances will increase at the rate of 2860.70 million every year at it reaches from 27133.70 million from the year 2010 to 38576.50 million in 2014. Similarly, NIBL's loans and advances will increase at the rate of 6710.60 million per year which is highest among three banks and it ultimately reaches to 68124 million in the year 2014 from 41281.60 in 2010.

4.4. COMPARATIVE ANALYSIS OF NPA IN VARIOUS NEPALESE BANK (Which is in operation from past 5 years)

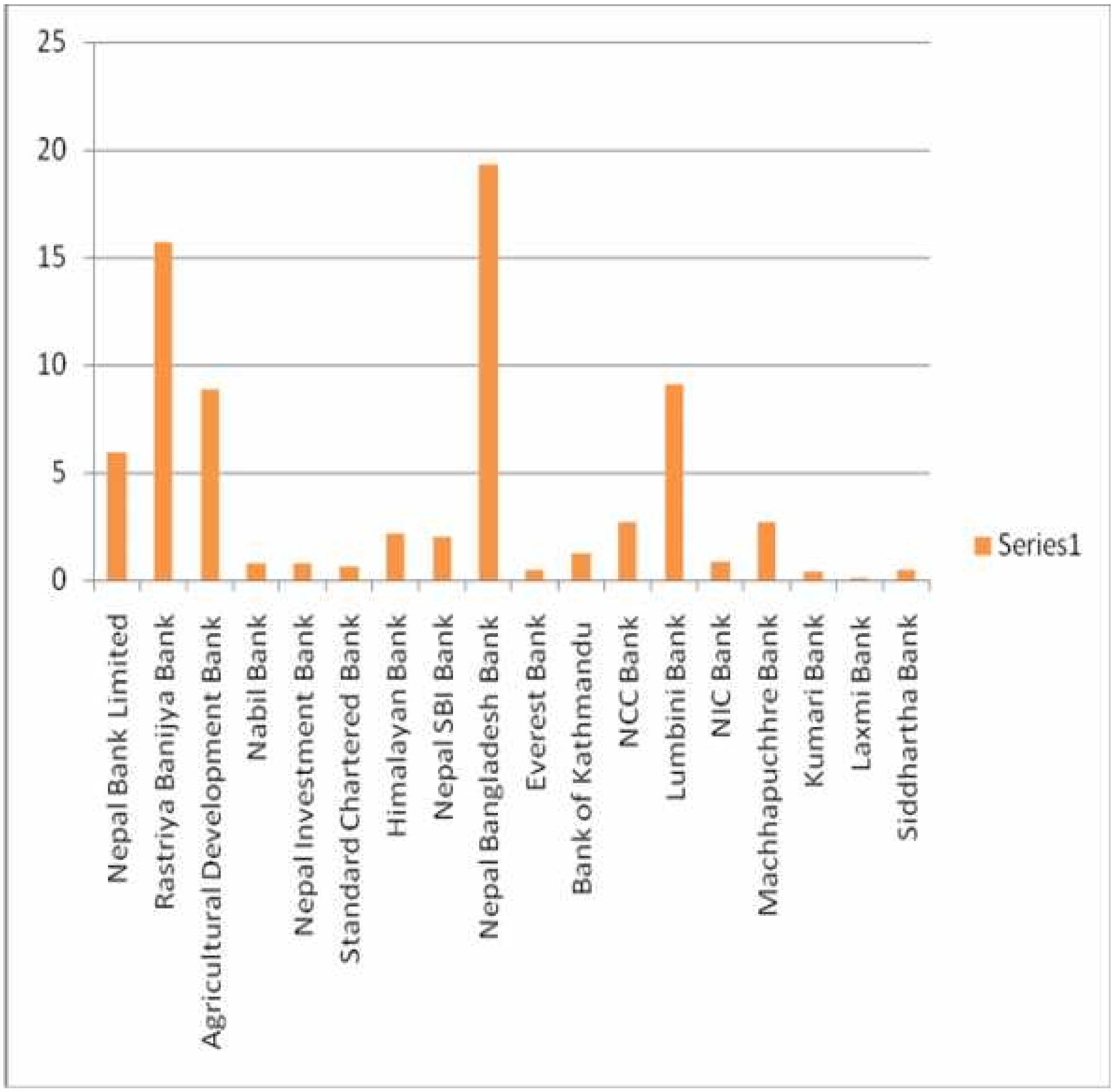
Table 4.16

Comparison of NPA Percentage

SN	NAME	NPA % IN 2009
1	Nepal Bank Limited	5.91
2	Rastriya Banijya Bank	15.68
3	Agricultural Development Bank	8.83
4	Nabil Bank	0.80
5	Nepal Investment Bank	0.82
6	Standard Chartered Bank	0.66
7	Himalayan Bank	2.16
8	Nepal SBI Bank	2.02
9	Nepal Bangladesh Bank	19.30
10	Everest Bank	0.48
11	Bank of Kathmandu	1.27
12	NCC Bank	2.74
13	Lumbini Bank	9.06
14	NIC Bank	0.90
15	Machhapuchhre Bank	2.75
16	Kumari Bank	0.43
17	Laxmi Bank	0.05
18	Siddhartha Bank	0.45

Figure 4.16

Comparative analysis of NPA in various Nepalese Bank (Which is in operation from past 5 years)



4.5 COMPARATIVE ANALYSIS OF NPA IN VARIOUS NEPALESE BANK (Which is in operation from past 5 years)

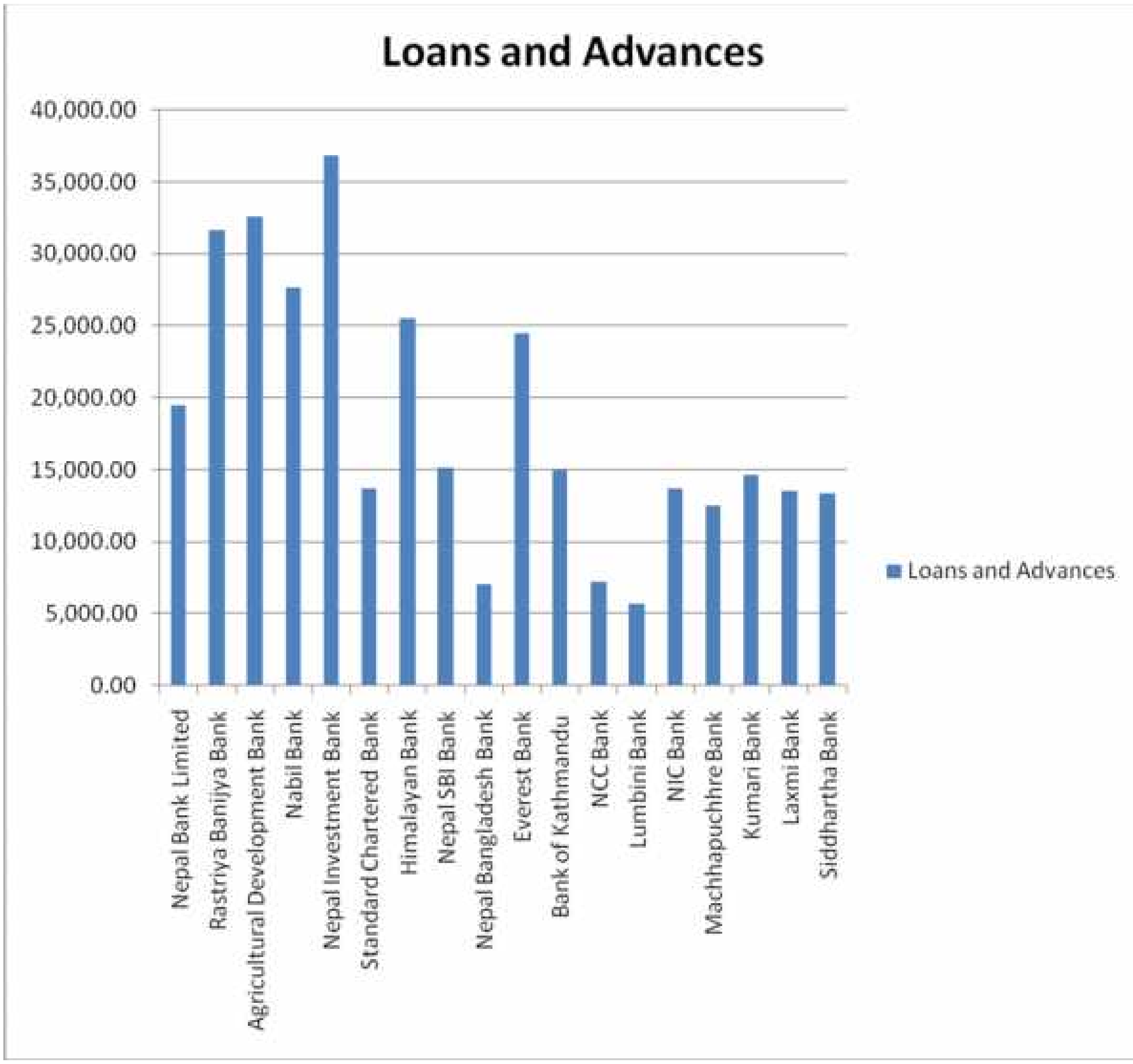
Table 4.17

(Rs in millions)

SN	NAME	Loans and Advances
1	Nepal Bank Limited	19,482.25
2	Rastriya Banijya Bank	31,606.96
3	Agricultural Development Bank	32,566.53
4	Nabil Bank	27,589.93
5	Nepal Investment Bank	36,827.16
6	Standard Chartered Bank	13,679.76
7	Himalayan Bank	25,519.14
8	Nepal SBI Bank	15,131.75
9	Nepal Bangladesh Bank	7,025.65
10	Everest Bank	24,469.56
11	Bank of Kathmandu	14,945.72
12	NCC Bank	7,183.68
13	Lumbini Bank	5,681.39
14	NIC Bank	13,679.39
15	Machhapuchhre Bank	12,467.19
16	Kumari Bank	14,593.57
17	Laxmi Bank	13,463.35
18	Siddhartha Bank	13,330.80

Figure 4.17

Comparative Analysis of NPA in Various Nepalese Bank (Which Is In Operation From Past 5 Years)



4.6 CONCLUDING REMARKS

As per the analysis of data, following major finding have been obtained. The average loans and advances to total asset ratio of NBB, HBL and NIBL bank during the study period are 57.49%, 52.96% and 64.15 % respectively. The relatively low ratio of HBL is the indication of risk adverse attitude of the management or in other word we can say that they are investing low in the risky assets, i.e. loans and advances. They have higher proportion of their investment on risk free of nominally asset like Treasury bill, National saving Bonds etc. Here NBB bank has highest ratio in term of loans and advances. In case of deviation and variation also NBB bank has highest ratio.

Loans and Advances to total deposit ratio indicates the firm's fund mobilizing power in gross. The main sources of banks lending and investment is its deposits, thus this ratio measures how well the deposits have been mobilized. The average ratio of NBB, HBL, and NIBL bank are 81.82%, 62.09% and 74.85% respectively. Here NBB bank has highest ratio in comparison to NIBL and HBL. HBL has lowest ratio and NIBL has moderate ratio. In case of deviation and variation, NBB leads in both of them and has highest deviation and variation.

Loan Loss provision ratio indicates that NBB highest ratio which is 27.55% in average followed by HBL of 4.78% and NIBL of 2.26%. Higher ratio is an indication of higher non performing loan in the total loans and advances. Here NBB has higher ratio which is the result of higher proportion of NPL in the total loan. NIBL has least ratio n compare to two banks. In case of deviation and variation also, NBB is in the topmost level.

The analysis of non-performing assets to total loans reveals average NPA of NBB, HBL and NIBL. Their ratios are 27.79%, 4.43% and 1.81% respectively. Here, NBB has significantly higher proportion of the non-performing asset in the total loans portfolio, which exhibits critical conditions of bank. But its trend is in decreasing after taking management is taken by NRB. HBL and NIBL have very low proportion of NPA as compared to NBB. All these banks should have effective credit management and should make effort in recovering bad debit through the Establishment of Recovery cell. During the study period NBB has highest deviation and HBL has highest variation. Whereas NCC is in moderate among other two bank.

The average ratio of provision held to non-performing assets measures up to what extent of risk inherent in NPA is covered by the total loan loss provision. The ratio of NBB, HBL and NIBL is 101.89%, 116.39% and 140.04% respectively. Here NIBL has higher ratio in comparison to other two banks which shows that the bank has adequate provision against non-performing loan whereas this ratio of NIBL bank lowest and ratio of HBL is moderate. In case of deviation and variation in data, NBB is in the foremost.

Ratio of NPA to total assets represents the proportion between the non- performing assets and total assets of banks. It shows the how much assets is non-performing or idle in the total assets of banks. According to our study, mean ratio of NBB, HBL and NIBL are 16.36%, 2.25% and 1.15% respectively. Standard deviation analysis shows that NBB's data are more deviated than two other banks and HBL's data are more variated than two other banks. From here we can make out that among three banks, NIBL has lowest amount of idle assets in their total asset. We can say NIBL's performance is good and they have better credit policy.

The main objectives of commercial bank are to earn profit through mobilization of fund. Higher ratio indicates that bank is generating profit. HBL has higher ratio which is 2.81% in comparison to NIBL and NBB. NBB bank has negative ratio of -0.20% which means this bank is failure to earn return on loans and advances. In case of deviation and variation NBB has higher deviation and variation.

While analyzing correlation between loans and advance and deposit, it has been found that all bank's loans and advances and deposits are positively correlated. The correlation of NBB, HBL and NIBL are 0.59, 0.98 and 0.99 respectively. As correlation coefficient of HBL and NIBL is greater than 6 times P.E it is significant but in NBB correlation coefficient is less than 6 times P. E so it is insignificant.

The correlation coefficient between LLP and loans and advances of NBB, HBL And NIBL are -0.13, -0.76 and 0.94 respectively which shows LLP and loans and advances are negatively correlated incase of NBB and HBL and it is positively correlated incase of NIBL. Among these three banks, NBB and HBL have r less than values of 6 times P.E. Therefore, correlation coefficient is insignificant and there is no evidence of correlation. This increase in provision of NBB and HBL is due to increment in its non performing loans. But in case of NIBL r is greater than 6 times PE, so correlation here is significant and increase in LLP is due to increase in total loans and advances.

The correlation coefficient (r) between LLP and NPA of NBB, HBL and NIBL are 0.61, 0.98 and 0.22 respectively. Here in all bank LLP and NPA are positively correlated. But in NIBL and NBB 6*PE is greater than r so there is no evidence of correlation between LLP and NPA in these bank. But in HBL 6*PE is less than R which shows in HBL, LLP and NPA are positively correlated.

The correlation between NPA and loans and advances shows how a unit of change of loan & advance effects to the NPA and what is the relation between them. Here correlation of NBB, HBL and NIBL are 0.61, -0.79 and 0.041 respectively. After doing error test it can be seen that incase of NBB and NIBL r is greater than 6*PE which signifies that correlation between them is significant and reliable. In case of HBL r is less than 6*PE so here correlation is not reliable.

Trend analysis has done on the basis of data of past five years and forecast has made for next five years. In the trend analysis of LLP, it is found that NBB and NIBL's trend value is increasing positively at the rate of 399.20 million per year and 81.90 million per year. Whereas LLP of HBL decreases at the rate of 80.80 million per year. The expected LLP of NBB increases from 3635 million in year 2010 to 5231.80 million in years 2014. Similarly LLP of NIBL increases from 684.50 million to 1021.10 million from 2010 to 2014. Whereas LLP of HBL decreases from 684.50 million to 257 million from year 2010 to 2014.

From the trend analysis of NPA, it is found that NPA of NBL and HBL will decrease at the rate of 93.40 million and 146.50 million per year whereas NPA of NIBL will increase at the rate of 8 million per year. The decreasing trend shows that the banks have put its effort towards recovering bad debts. Increasing trend on the other hand can be due to increase in loans and advances or increase in bad debts.

From the trend analysis of net profit, it is found that the NP of HBL and NIBL will increase and will finally reach to 1275 million and 1736 million in the year 2014 respectively whereas NP of NBB will decrease at the rate of 177.40 million per year. NBB was in heavy loss till the year 2007 and had come in profit in 2008 only. So because of this continuous loss till 2007, its trend value has also come in negative. But seeing today's trend we can now say that NBB has high chance of earning profit in years to come.

As per our trend analysis's result of total loans and advances, NBB's loans and advances will decrease at the rate of 522.60 million every year and ultimately reaches to 5154.60 million in year 2014 from 7365 million in the year 2010. HBL's loan and advances will increase at the rate of 2860.70 million every year and it will reach from 27133.70 million from the year 2010 to 38576.50 million in 2014. Similarly, NIBL's loans and advances will increase at the rate of 6710.60 million per year which is highest among three banks and it ultimately reaches to 68124 million in the year 2014 from 41281.60 in 2010.

CHAPTER -V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

In this chapter the whole study and findings are summarizes with conclusion and suggest some recommendation bases on the result of the analysis of data.

5.1 SUMMARY

Financial institutions are the backbone of the economic development if any country. In other word national development of any country depends upon the economic development of that country and economic development is supported by financial infrastructure of that country. Bank came to existence mainly with the objective of collecting the idle fund and mobilizing them to productive sector causing overall economic development.

The assets of commercial bank indicate the manner in which the fund entrusted to the bank is employed. The successful working of the bank depend on ability of the management to distribute the fund among the various kinds of investments known as loan and advances. Loan and advances are the most profitable assets of a bank. These assets constitute primary sources of income to the bank. As being a business institution a bank aims at making huge profit. Since loan and advance are more profitable than any other assets of the banks, banks willing to lend as more as possible. But bank has to be careful about the safety of such loan and advances. It means the bank has to be careful about the repayment of loan and interest before giving loan. If a bank is too timid it may fail to obtain the adequate return on the fund. Similarly, if the bank is too liberal, it may easily impair his profit by bad debts. Therefore, banks should not forget the reality that most of the ban failures in the world due to shrinkage in the value of the loan and advances

Despite of being loan and advances more profitable those other assets, it creates risk of non-repayment for the bank, such risk is known as credit risk or default risk. Therefore like other assets the loan and advances are classified into performing and non-performing on the basis of overdue aging schedule. If the due in the form of principal and interest are not paid by the borrower for a certain period is called non-performing loan or assets. It means NPAs could wreck banks profit ability both through loss of interest income and write off the principal loan amount. Non-performing loan are also known as non-performing assets (NPAs) performing assets have multiple benefits to the company as well as to the society while non- performing assets erode even existing capital of the banks. NPAs have been becoming great problem in banking business in the world. In this context Nepal can't be run off from such situation. The level of NPA in Nepalese banking business is very alarming. It is well known fact that the bank and financial institution in Nepal have been facing the problem of swelling non- performing assets (NPAs) and the issue is becoming more and more unmanageable day by day. Recently also, development bank is in verge of liquidation because of NPA problem. So the impact of NPA cannot be ignored.

This research is aimed of studying the non-performing assets of private commercial banks. For this purpose, descriptive and analytical research design was adopted out of total population of 27commercial bank, three private banks were taken as sample using judgment sampling method, and they are NBB, HBL and NIBL. In this study secondary data are used. Besides this, newspaper, relevant thesis, journals, articles, related website etc. are also taken for this research. The data collected from various sources are recorded systematically and presented in appropriate forms of table and charts and appropriate mathematical, statistical, financial and graphical tools have been applied to analyze the collected data in suitable manner. The data of five consecutive yrs of the three banks have been analyzed to meet the objective of the study.

NIBL has highest proportion of loan and advances to total assets of bank but the HBL has the lowest proportion of loan and advances during the study period. It indicates the risk adverse attitude of the management of HBL. NBB has moderate ratio. But in case loan and advances to total deposit ratio, NBB has the highest proportion among where as HBL show the lowest ratio. So we can say NBB and NIBL is the highest loan provider.

NBB has the highest LLP as compared to other two banks. From this we can say that NBB's non performing loan is higher than HBL and NIBL. Higher LLP is indicative of poor and ineffective credit policy and higher proportion on non-performing assets. So NBB has made higher provision for loan loss. Moreover there is higher NPA in total loan and advances of NBB which comes around 27.79% on average. This ratio is higher than the acceptable standard of minimum 10%. HBL and NIBL has 4.43% and 1.81% of NPA in TL which below the acceptable standard.

On the basis of NPA to total assets ratio also NBB has the highest NPA and NIBL has the lowest. NBB has negative return during study period except in year 2008-2009. It may be caused from the NPAs because they are investing most of the parts of their resources in loan and advances. But at the same period HBL and NIBL have the positive return because of their proper lending of resources. Among them HBL has the highest mean return which show the better performer of banks. It may be from the proper lending function, low deposit cost, high fee based income, high foreign currency deposit, exchange earning etc.

While analyzing correlation between loans and advance and deposit, it has been found that all bank's loans and advances and deposits are positively correlated. As correlation coefficient of HBL and NIBL is greater than 6 times P.E it is significant but in NBB correlation coefficient is less than 6 times P. E so it is insignificant. There is positive correlation coefficient between LLP and loans and advances in case of NIBL but negative correlation between them in case of NBB and HBL. Among these three banks, NBB and HBL have r less than values of 6 times P.E. Therefore, correlation coefficient is insignificant and there is no evidence of correlation. This increase in provision of NBB and HBL is due to increment in its non performing loans. But in case of NIBL r is greater than 6 times PE, so correlation here is significant and increase in LLP is due to increase in total loans and advances. Incase if correlation coefficient LLP and NPA, all three banks positive correlation among them But in NIBL and NBB 6*PE is greater than r so there is no evidence of correlation between LLP and NPA in these bank. But in HBL 6*PE is less than R which shows in HBL, LLP and NPA are positively correlated.

The correlation between NPA and loans and advances shows how a unit of change of loan & advance effects to the NPA and what is the relation between them. Here correlation of NBB, HBL and NIBL are 0.61, -0.79 and 0.041 respectively. After doing error test it can be seen that incase of NBB and NIBL r is greater than 6*PE which signifies that correlation between them is significant and reliable. In case of HBL r is less than 6*PE so here correlation is not reliable.

Trend analysis of LLP of NBB and NIBL shows the increase in its LLP in the course of 5 years but same analysis shows decrease in HBL's LLP. The non performing assets trend of NBB and HBL shows decreasing trend whereas NPA of NIBL shows increasing trend but the increase amount per year is very slow. Similarly, the trend analysis of NP and loans and advances shows that NP of all three banks will increase in the coming 5 years.

Nepalese banking is highly affected by the vicious circle of NPA. The major factors leading to non performing assets are :- improper credit appraisal system , ineffective credit monitoring and supervision system , economic depression, borrower's misconduct, overvaluation of collateral , political pressure to lend creditworthy parties etc. setting up recovery cell , hiring assets management company , introducing effective laws to recover the bad loans etc are some measures to resolve the problem of NPA . Proper loan classification and loan loss provisioning also helps to confront the problem s of NPA. The latest directives regarding loan classification and loan loss provisioning is very important for maintaining sound financial health of the banks.

5.2 CONCLUSION

The banking sector is facing various problems. One of them, the banking has been becoming huge victim of huge nonperforming assets (NPAs). NPAs are one of the serious problems faced by commercial banks.

The main objective of commercial banks is to collect the idle funds from public and mobilize it into productive sector, which will cause the overall economic development. The banks should have to take in consideration the interest of depositors, shareholders, and society. Lending is the one of the main function of commercial banks which is the most income generating assets. As saying "high risk, high return" it gives high return than it also high risk. To minimize this risk banks should have to make loan loss provision for safety. If lending is high then high amount of loan loss provision is required as per NRB directive.

Nepalese banks have to remain focused in their efforts to recover their bad loans or non-performing assets, to sustain the positive trend of improving assets quality. Better risk management techniques, compliance with core principles for effective banking supervision skill building and training and transparency in transaction could be the solution. Due to instable political condition, insecurity, ineffective credit policy, and political pressure to lend non viable project, overvaluation of collateral and even without collateral disbursement are the major factors causing of mounting nonperforming assets in banks mainly in government owned banks. Commercial banks investment has been found lower productivity due to the lack of supervision regarding whether there is proper utilization of their investment or not. Lack of farsightedness in policy formulation and absence of strong commitment towards its proper implementation has also caused many problems to commercial banks. Proper classification and close review of loans enable banks to monitor loan portfolio and take remedial step to safe guard deterioration of its credit quality. Furthermore, establishment of proper rules and laws are also essential to solve the problem on NPL. The guidelines in themselves are not important unless properly implemented. The rules and regulation are only the tools of NRB to supervise and monitor the financial institution. NRB need to monitor the concerned authorities in order to ensure that they are being followed.

It is found that NBB has highest amount of loans and advances, NPA and LLP during the study period. While NIBL has the lowest among three banks. Comparing these three banks, we can say that HBL and NIBL have better performance than NBB in the study period. But seeing recent trend NBB is also improving a lot in all respect. It's NP has increased by more than 200% from FY 2007/08 to FY 2008/09. Before 2007, its performance was below satisfactory level and its NPL were also mounting. This bank has shown lots of improvements after its management were taken by NRB. HBL and NIBL's performance is above average in the whole study period. These banks have managed to put their NPA consistently in the same level. Moreover their deposit and loans are increasing in the consistent level.

From this study we can also conclude that there is positive correlation between NPA and performance of the bank. From all the study, we can clearly see that when there is proper credit management in bank, then its overall performance will increase which will result in increase of its net profit.

5.3 RECOMMENDATIONS

Based on the above findings and conclusion the following recommendations have been forwarded.

During the study period NBB has high rate of non performing assets loan accompanied by higher provision. The bank was in loss till the year 2007 but after its managements was taken over by NRB, its financial position changed drastically and it came in profit from the year 2008. But still its NPA is high. NPA should be decreased by taking remedial action such as implementation of proper laws, to recover the bad loans especially by big and willful defaulter, hiring assets Management Company to break the vicious circle of non performing loan.

It has been observed that the size of loan and advance of all three banks are decreasing. This low investment affects the performance of banks in long run. Therefore, these banks should focus on recovery of bad loans but should also find out the new areas of investment to explore resources which may ultimately increase the performance of the bank and which will support the national development as well.

The bank has to offer training programs with related subject like NPA, the art of dealing with people, influencing them, winning them and finally retaining them.

The establishment of asset management company (AMC) which helps the commercial banks in collecting their debts and improving their credit rating efficiency should be initiated. It is high time for the bank to undertake systematic and effective approach to mitigate the burden of NPA. In Nepalese context, following points are recommended for reducing the volume of NPA.

1. A Good credit policy is the key to the success of a loan function of a bank. The root cause for a loan to turn bad is a bad credit appraisal from the bank. Thus a sound credit appraisal has to be done especially by the credit department.

   Internationally used models like COMPARI model and 5 Cs Model can be used.

   The COMPARI Model

   This model identifies the major areas to be analyzed before disbursing loans to a borrower. The areas being:

C	-	character	:	Integrity and credibility of the borrower.
A	-	ability	:	Borrower’s ability to manage business.
M	-	Margin	:	Is the return reasonable for risk?
P	-	purpose	:	What is the money needed for?

A	-	amount	:	How much is needed?
R	-	repayment	:	How and when will we get the money Back?
I	-	insurance	:	Are we insured?

The 5 cs Model

C = Character
C = Capacity
C = Capital
C = Conditions
C = Collateral

2. During the credit analysis, the major focus should be on the 'character' of the client and the purpose of him to request for the loan, rather than the collateral, he is supposed to pledge / mortgage. The loan officer must be convinced that the customer has a will defined purpose for requesting bank credit and a serious intention repay. Once the purpose is known, the officer must determine of it is consistent with the bank's current loan policy. Responsibility, truthfulness, serious purpose, and serious intention to repay all monies owed make up what a loan office calls character.

   The mindset of the bankers that starts analyzing a client's request by finding as many possibilities as possible of the client not paying back the loan should be changed.

3. Effective and regular follow up of the end user of fund sanction is required to ascertain any embezzlement or diversion of fund. This process can be undertaken every quarter so that any account converting NPA can be properly ascertained.

4. In developed countries, they have well functioned Asset Recovery/Reconstruction Company where NPA are sold upon agreed price. In Nepal, there is absence of such mechanism. So such mechanism must be developed where even if the assets goes

bad, banks and financial institution have no problem in disposing it.

5. Timely decision on genuine requirement of a genuine client should be done and the bank should be willing to help the client explore his business.

6. The trend of disbursing a loan merely on the recommendations from the higher management staff and political influences should be stopped.

7. The constant counseling and training to the credit analysis and staff have to be done.

8. Depending on the situation reliable and creditworthy clients can be given appropriate incentives that help them settle the loan.

9. Almost care should be taken the financial analysis of the client. Cash flow rather than profit is what should be concerned the bank

10. Since banking is also a business, customer satisfaction should always be the first concern for the bank.

11. The accounting policies must be transparent and must be best auditing practices.

12. Every person means the bank staff must know their responsibility of their work rather than their selfishness. They must have strong commitment and support the rule and regulations.

13. Must take timely action against willful defaulter.

14. Internal and external undue influence should be eradicated.
15. Prompt action to recover loan must be taken.

Lastly, the ethical policy of “giving life is better than killing “should not be forgotten. In other words, recovering loan is better than auction should be kept in mind.

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Appendix 1

Let X_1 X_2 and X_3 denote the ratio NBB, HBL and NIBL respectively

Total Loan and advances To Total Assets Ratio

Year	X_1	X_2	X_3	$(X_1$-€$X_1)^2$	$(X_2$-€$X_2)^2$	$(X_3$-€$X_3)^2$
2005	61.94	46.22	62.83	19.80	45.43	1.74
2006	58.58	50.74	59.85	1.19	4.93	18.49
2007	64.39	51.36	62.19	47.61	2.56	3.84
2008	60.77	53.92	68.47	10.76	0.92	18.66
2009	41.75	62.56	67.41	247.75	92.16	10.63
Total	**287.43**	**264.80**	**320.75**	**327.11**	**146.00**	**53.36**

$$\overline{X_1} \text{ X } \frac{287.43}{5} \text{ X } 57.49$$

$$SD \text{ X } \sqrt{\frac{\int x_1 \text{ Z } \overline{x}_1 \text{Å}^2}{N \text{ Z} 1}} \text{ X } \sqrt{\frac{327.11}{5 \text{ Z} 1}} \text{ X } \sqrt{\frac{327.11}{4}} \text{ X } 9.04$$

C.V.= $\frac{\pm}{\overline{X}} x\,100 \text{ X } \frac{9.04}{57.49} x100 \text{ X } 15.73\ \%$

$$\overline{X_2} \text{ X } \frac{264.80}{5} \text{ X } 52.96$$

$$SD = \sqrt{\frac{\sum (x_2 - \overline{x}_2)^2}{N - 1}} = \sqrt{\frac{146}{5 - 1}} = \sqrt{\frac{146}{4}} = 6.04$$

$$\text{C.V.} = \frac{\sigma}{\overline{X}} x\ 100 = \frac{6.04}{52.96} x\ 100 = 11.41\ \%$$

$$\overline{X}_3 = \frac{320.75}{5} = 64.15$$

$$SD = \sqrt{\frac{\sum (x_3 - \overline{x}_3)^2}{N - 1}} = \sqrt{\frac{53.36}{5 - 1}} = \sqrt{\frac{53.36}{4}} = 3.65$$

$$\text{C.V.} = \frac{\sigma}{\overline{X}} x\ 100 = \frac{3.65}{64.15} x100 = 5.69\ \%$$

Appendix 2

Loan and Advances to Total Deposit Ratio

Year	X_1	X_2	X_3	$(X_1-\text{€}X_1)^2$	$(X_2-\text{€}X_2)^2$	$(X_3-\text{€}X_3)^2$
2005	79.38	54.17	73.33	5.95	62.73	2.31
2006	75.27	59.58	69.59	42.90	6.30	27.67
2007	97.17	59.50	72.56	235.62	6.71	5.24
2008	87.02	63.62	79.91	27.04	2.34	25.60
2009	70.29	73.58	78.86	132.94	132.05	16.08
Total	**409.13**	**10.45**	**374.25**	**443.55**	**210.10**	**76.90**

$$\overline{X_1} \; X \; \frac{409.13}{5} \; X \; 81.82$$

$$SD \; X \sqrt{\frac{\int x_1 \; Z \; \overline{x}_1 \text{Å}^2}{N \; Z1}} \; X \sqrt{\frac{443.55}{5 \; Z1}} \; X \sqrt{\frac{443.55}{4}} \; X10.54$$

$$\text{C.V.} = \frac{\pm}{\overline{X}} x\,100 \quad X \; \frac{10.54}{81.82} x100 \quad X \; 12.88\ \%$$

$$\overline{X_2} \; X \; \frac{310.4}{5} \; X \; 52.96$$

$$SD = \sqrt{\frac{\sum (x_2 - \overline{x}_2)^2}{N - 1}} = \sqrt{\frac{210.10}{5 - 1}} = \sqrt{\frac{210.10}{4}} = 7.25$$

$$\text{C.V.} = \frac{\sigma}{\overline{\overline{X}}} x\,100 = \frac{7.25}{62.09} x100 = 11.67\ \%$$

$$\overline{X_3} = \frac{374.25}{5} = 74.85$$

$$SD = \sqrt{\frac{\sum (x_3 - \overline{x}_3)^2}{N - 1}} = \sqrt{\frac{76.90}{5 - 1}} = \sqrt{\frac{76.90}{4}} = 4.38$$

$$\text{C.V.} = \frac{\sigma}{\overline{\overline{X}}} x\,100 = \frac{4.38}{74.85} x100 = 5.86\ \%$$

Appendix 3

Loan Loss Provision to Loans and Advances Ratio

Year	X_1	X_2	X_3	$(X_1-\overline{X}_1)^2$	$(X_2-\overline{X}_2)^2$	$(X_3-\overline{X}_3)^2$
2005	12.31	6.97	2.45	232.26	4.80	0.04
2006	17.26	6.53	2.84	105.88	3.06	0.34
2007	39.52	4.27	2.49	143.28	0.26	0.05
2008	34.86	3.36	1.95	53.44	2.02	0.10
2009	33.82	2.77	1.59	39.31	4.04	0.45
Total	**137.77**	**23.90**	**11.32**	**574.17**	**14.18**	**0.98**

$$\overline{X}_1 = \frac{137.77}{5} = 27.55$$

$$SD = \sqrt{\frac{\sum (x_1 - \overline{x}_1)^2}{N-1}} = \sqrt{\frac{574.17}{5-1}} = \sqrt{\frac{574.17}{4}} = 11.98$$

$$\text{C.V.} = \frac{\sigma}{\overline{X}} \times 100 = \frac{11.98}{27.55} \times 100 = 43.48\ \%$$

$$\overline{X}_2 = \frac{23.90}{5} = 4.78$$

$$SD = \sqrt{\frac{\sum (x_2 - \overline{x}_2)^2}{N - 1}} = \sqrt{\frac{14.18}{5 - 1}} = \sqrt{\frac{14.18}{4}} = 1.88$$

$$\text{C.V.} = \frac{\sigma}{\overline{X}} x\, 100 = \frac{1.88}{4.78} x100 = 39.35\ \%$$

$$\overline{X}_3 = \frac{11.32}{5} = 2.26$$

$$SD = \sqrt{\frac{\sum (x_3 - \overline{x}_3)^2}{N - 1}} = \sqrt{\frac{0.98}{5 - 1}} = \sqrt{\frac{0.98}{4}} = 0.49$$

$$\text{C.V.} = \frac{\sigma}{\overline{X}} x\, 100 = \frac{0.49}{2.26} x100 = 21.82\ \%$$

Appendix 4

Ratio of Non-Performing assets to Total loan and advance

Year	X_1	X_2	X_3	$(X_1-\bar{X}_1)^2$	$(X_2-\bar{X}_2)^2$	$(X_3-\bar{X}_3)^2$
2005	19.03	7.44	2.69	76.74	9.06	0.77
2006	29.88	6.60	2.07	4.37	4.71	0.07
2007	39.65	3.61	2.37	140.66	0.67	0.31
2008	31.10	2.35	1.13	10.96	4.33	0.46
2009	19.30	2.16	0.82	72.08	5.15	0.98
Total	**138.96**	**22.16**	**9.08**	**304.81**	**23.92**	**2.59**

$$\overline{X}_1 = \frac{138.96}{5} = 27.79$$

$$SD = \sqrt{\frac{\sum(x_1 - \overline{x}_1)^2}{N-1}} = \sqrt{\frac{304.81}{5-1}} = \sqrt{\frac{304.81}{4}} = 8.73$$

$$C.V. = \frac{\sigma}{\overline{X}} x\, 100 = \frac{8.73}{27.79} x100 = 31.41\ \%$$

$$\overline{X}_2 = \frac{22.16}{5} = 4.43$$

$$SD \ X \sqrt{\frac{f x_2 \ Z \ \overline{x}_2 \ A^2}{N \ Z 1}} \ X \sqrt{\frac{23 \ .92}{5 \ Z 1}} \ X \sqrt{\frac{23 \ .92}{4}} \ X \ 2 .45$$

C.V.= $\frac{\pm}{\overline{\overline{X}}} x \, 100 \quad X \ \frac{2 .45}{4 .43} x 100 \quad X \ 55 \ .19 \ \%$

$$\overline{X}_3 \ X \ \frac{9 .08}{5} \ X 1 .81$$

$$SD \ X \sqrt{\frac{f x_3 \ Z \ \overline{x}_3 \ A^2}{N \ Z 1}} \ X \sqrt{\frac{2 .59}{5 \ Z 1}} \ X \sqrt{\frac{2 .59}{4}} \ X \ 0 .81$$

C.V.= $\frac{\pm}{\overline{\overline{X}}} x \, 100 \quad X \ \frac{0 .81}{1 .81} x 100 \quad X \ 44 \ .45 \ \%$

Appendix 5

Ratio of Provision Hold to Non Performing Assets.

Year	X_1	X_2	X_3	$(X_1-\overline{X}_1)^2$	$(X_2-\overline{X}_2)^2$	$(X_3-\overline{X}_3)^2$
2005	64.68	93.61	91.10	1384.58	518.93	2395.12
2006	57.77	98.85	137.50	1946.57	307.65	6.45
2007	99.67	118.38	104.98	4.93	3.96	1229.20
2008	112.09	142.65	173.23	104.04	689.59	1101.58
2009	175.22	128.49	193.38	5377.29	146.41	2845.16
Total	**509.43**	**581.98**	**700.19**	**8817.41**	**1666.54**	**7577.51**

$$\overline{X}_1 = \frac{509.43}{5} = 101.89$$

$$SD = \sqrt{\frac{\sum (x_1 - \overline{x}_1)^2}{N-1}} = \sqrt{\frac{8817.41}{5-1}} = \sqrt{\frac{8817.41}{4}} = 46.95$$

$$\text{C.V.} = \frac{\sigma}{\overline{X}} x\, 100 = \frac{46.95}{101.89} x 100 = 46.08\ \%$$

$$\overline{X}_2 = \frac{581.98}{5} = 116.39$$

$$SD \; X \sqrt{\frac{\mathit{f} x_2 \; Z \; \overline{x}_2 \; A^2}{N \; Z \, 1}} \; X \sqrt{\frac{1666 \;\; .54}{5 \; Z \, 1}} \; X \sqrt{\frac{1666 \;\; .54}{4}} \; X \; 20 \; .41$$

C.V.= $\frac{\pm}{\overline{X}} \, x \, 100 \quad X \; \frac{20 \; .41}{116 \;\; .39} \, x 100 \quad X \, 17 \; .54 \; \%$

$$\overline{X}_3 \; X \; \frac{700 \;\; .19}{5} \; X \, 140 \;\; .04$$

$$SD \; X \sqrt{\frac{\mathit{f} x_3 \; Z \; \overline{x}_3 \; A^2}{N \; Z \, 1}} \; X \sqrt{\frac{7577 \;\; .51}{5 \; Z \, 1}} \; X \sqrt{\frac{7577 \;\; .51}{4}} \; X \; 43 \; .52$$

C.V.= $\frac{\pm}{\overline{X}} \, x \, 100 \quad X \; \frac{43 \;\; .52}{140 \;\; .04} \, x 100 \quad X \; 31 \;\; .08 \; \%$

Appendix 6

Non Performing Assets to Total Asses Ratio

Year	X_1	X_2	X_3	$(X_1-\overline{X}_1)^2$	$(X_2-\overline{X}_2)^2$	$(X_3-\overline{X}_3)^2$
2005	11.79	3.44	1.69	20.88	1.42	0.29
2006	17.50	3.35	1.24	1.30	1.21	0.01
2007	25.53	1.85	1.48	84.09	0.16	0.11
2008	18.90	1.27	0.77	6.45	0.96	0.14
2009	8.06	1.35	0.55	68.89	0.81	0.36
Total	**81.78**	**11.26**	**5.73**	**181.61**	**4.56**	**0.91**

$$\overline{X}_1 = \frac{81.78}{5} = 16.36$$

$$SD = \sqrt{\frac{\sum (x_1 - \overline{x}_1)^2}{N-1}} = \sqrt{\frac{181.61}{5-1}} = \sqrt{\frac{181.61}{4}} = 6.74$$

$$\text{C.V.} = \frac{\sigma}{\overline{X}} \times 100 = \frac{6.74}{16.36} \times 100 = 41.20\ \%$$

$$\overline{X}_2 = \frac{11.26}{5} = 2.25$$

$$SD = \sqrt{\frac{\sum (x_2 - \bar{x}_2)^2}{N - 1}} = \sqrt{\frac{4.56}{5 - 1}} = \sqrt{\frac{4.56}{4}} = 1.07$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} x\, 100 = \frac{1.07}{2.25} x100 = 47.38\ \%$$

$$\bar{X}_3 = \frac{5.73}{5} = 1.15$$

$$SD = \sqrt{\frac{\sum (x_3 - \bar{x}_3)^2}{N - 1}} = \sqrt{\frac{0.91}{5 - 1}} = \sqrt{\frac{0.91}{4}} = 0.48$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} x\, 100 = \frac{0.48}{1.15} x100 = 41.53\ \%$$

Appendix 7

Ratio of Return on Loans and Advances

Year	X_1	X_2	X_3	$(X_1-\overline{X}_1)^2$	$(X_2-\overline{X}_2)^2$	$(X_3-\overline{X}_3)^2$
2005	-8.12	2.29	2.22	62.73	0.27	0.10
2006	-18.34	2.90	2.66	329.06	0.01	0.01
2007	-11.55	2.77	2.82	128.82	0.00	0.08
2008	6.29	3.14	2.53	42.12	0.11	0.00
2009	30.71	2.95	2.48	955.43	0.02	0.00
Total	**-1.01**	**14.05**	**12.71**	**1518.16**	**0.41**	**0.19**

$$\overline{X}_1 = \frac{-1.01}{5} = -0.20$$

$$SD = \sqrt{\frac{\sum (x_1 - \overline{x}_1)^2}{N-1}} = \sqrt{\frac{1518.16}{5-1}} = \sqrt{\frac{1518.16}{4}} = 19.48$$

$$\text{C.V.} = \frac{\sigma}{\overline{X}} x\,100 = \frac{19.48}{-0.20} x100 = 9660\ \%$$

$$\overline{X}_2 = \frac{14.05}{5} = 2.81$$

$$SD = \sqrt{\frac{\sum (x_2 - \overline{x}_2)^2}{N - 1}} = \sqrt{\frac{0.41}{5 - 1}} = \sqrt{\frac{0.41}{4}} = 0.32$$

$$\text{C.V.} = \frac{\sigma}{\overline{X}} x\,100 = \frac{0.32}{2.81} x100 = 11.36\ \%$$

$$\overline{X}_3 = \frac{12.71}{5} = 2.54$$

$$SD = \sqrt{\frac{\sum (x_3 - \overline{x}_3)^2}{N - 1}} = \sqrt{\frac{0.19}{5 - 1}} = \sqrt{\frac{0.19}{4}} = 0.22$$

$$\text{C.V.} = \frac{\sigma}{\overline{X}} x\,100 = \frac{0.22}{2.54} x100 = 8.79\ \%$$