## CHAPTER - I <br> INTRODUCTION

### 1.1 Background of the Study

Nepal is a landlocked Country. Its borders are contiguous with the Indian border in the west, south \& east and with Tibet Autonomous Region of the People's Republic of China in the north Nepal is an undeveloped country having very low per capita income and corporate growth rate. The traditional concept of business and commerce is deep rooted in the people and most of them are unaware of modern form of commerce. Majority of population live below the poverty line. The agro-dominated economy is further worsened by the complex geographical situation. Various factors like land locked ness, poor resource mobilization, lack of entrepreneurship, lack of institutional commitment, erratic government policies, political instability, etc. are responsible for the slow pace of development in Nepal.

But after the restoration of democracy in 1990 and universal echo of economic liberalization, Nepal has implemented liberal economic policy. As a result, many more companies are established in different sectors such as industrial, tourism, transportation, trade and mostly in the financial sector whose contribution in economy has great significance.

In Nepal, the first financial intuition was introduced during the prime- minister ship of Ranodip Singh (1933 B.S.) in the name of "Tejrath Adda" for granting loan to employees and public against security of gold silver and other treasures. Banking in true sense started with the inception of Nepal Bank Limited, a semi governmental bank in 1994 B. S. NBL had a responsibility of attracting public out from the dominance of Sahu Mahajans and introducing banking services as well. After 20 years having an objective of developing banking practice, Nepal Rastra Bank started its operations from $14^{\text {th }}$ Baisakh, 2013 B.S. Nepal Bank Limited was only one commercial Bank until 2022 B.S., which has helped to
make banking system more systematic and dynamic during that time. In 2022 B.S (1965 A.D), Rastriya Banijya bank was established which is fully government owned bank. His Majesty's Government with the view of accelerates the Pace of economic development under the structural adjustment program undertook a significant step towards financial librtslization in the year 2043/44 B.S. (1986/87 A.D.) The liberalization policy of the government of Nepal has encouraged the private sector to invest in various fields, which support the domestic overall economic growth. The government of Nepal introduced financial sector reforms in 1980s, which encouraged the healthy competition in the financial sector as well as allowed the entry of foreign banks in the Nepalese market in the forms of joint ventures banks. A foreign joint venture bank was established in 2041 B.S. with the name of Nepal Arab Bank Limited (now NABIL), which was the first joint venture commercial bank in Nepalese financial history. NABIL started knocking the doors of customers breaking the trend of knocking the doors of banks by customers (Bhattarai, 2061: 4-6).

It has been fully established that economic development of any country can be achieved only through a balanced growth in the field of industry, trade commerce and agriculture. And it has equally self-evident that commercial banks play vital role in the development of these fields. Therefore, productivity and competitiveness of commercial banks is very essential.

Till the date there are 30 commercial banks in Nepal. Agriculture Development Bank (ADB) has also been listed in 'A' class financial institutions three years ago. Therefore, there are 29 ' A ' class commercial banks. Till the period of this study, a new commercial bank has also been found to be licensed to practice commercial banking operations in Nepal. The name and the year of establishment of the commercial banks operating in Nepal have been listed below:

## List of Commercial Banks

| Name of the Bank | Year of Establishment (A.D.) |
| :--- | :---: |
| 1. Nepal Bank Limited | 1937 |
| 2. Rastriya Banijya bank | 1965 |
| 3. NABIL Bank Limited | 1984 |
| 4. Nepal Investment Bank Limited | 1985 |
| 5. Standard Chartered Bank Limited | 1986 |
| 6. Himalayan Bank Limited | 1993 |
| 7. Nepal SBI Bank Limited | 1993 |
| 8. Nepal Bangladesh Bank Limited | 1994 |
| 9. Everest Bank Limited | 1994 |
| 10. Bank of Kathmandu Limited | 1995 |
| 11. Nepal Credit \& Commerce bank Limited | 1996 |
| 12. Nepal Industrial and Commercial Bank Limited | 1998 |
| 13. Lumbini Bank Limited | 1998 |
| 14. Machhapuchhre Bank Limited | 1999 |
| 15. Kumari Bank Limited | 2001 |
| 16. Laxmi Bank Limited | 2002 |
| 17. Siddhartha Bank Limited | 2003 |
| 18. Agriculture Development Bank Limited | 1965 |
| 19. Global Bank Limited | 2007 |
| 20. Citizens Bank International Limited | 2007 |
| 21. Prime Commercial Bank Limited | 2007 |
| 22. Bank of Asia Nepal Limited | 2007 |
| 23. Sunrise Bank Limited | 2007 |
| 24. NMB Bank Limited | 2008 |
| 25. Development Credit Bank Limited | 2008 |
| 26. Kist Bank Limited | 2009 |
| 27. Janata Bank Nepal Limited | 2010 |
| 28. Megha Bank Nepal Limited | 2010 |
| 29. Commerze and Trust | 2010 |
| 30. Civil Bank Limited | 2010 |
| Source: |  |
|  |  |

Source: www.nrb.org.np

## Definition of NPA

To define NPA first of all meaning of Assets should be understood. Assets mean the property of a person or a company. This indicates that assets are the property of a company accumulated with the help of sources.

Non Performing Assets (NPA) means the amount of loan that the individual commercial banks had provided and the customer has not paid in until the time already matured. The distributed loan is not returned timely by clients and becomes overdue then, it is known as Non Performing assets for the banks.

Lending is the primary business of any commercial bank and interest earned from them is the main source of income. Once the loan is given, it is supposed that the repayment of interest and principal shall have to be served without any hindrance. But it is not always true. Loans and interests are not always paid so easily by all the customers. Loans leaded to the customers come under the Assets heading of balance sheet; and those loans which are not paid in time are considered as Non performing Loan or Non Performing assets (NPA).

### 1.2 Focus of the Study

Non Performing Assets [NPA] means the amount of loan that the individual commercial bank had provided and the consumer has not paid it until the time is already matured. Once the distributed loan is not returned timely by clients and becomes overdue then, it is known as Non Performing Assets for the bank. Commercial banks are loosing their profitability because of non- performing assets.

The Main earning of commercial banks is from loans and advances but all these loans are not paid in time and those uncovered loans are termed as non performing Assets (NPA). In every commercial bank's profitability is affected by the Non performing assets of the banks. The main focus of this study is to examine the impact of the NPA on profitability of the commercial banks and the proper management of non performing assets of the commercial banks. In same way the study will also be focused on non performing assets regarding made in the past five years of three sample banks.

### 1.3 Statement of the Problem

Nepalese commercial banking industry is still under the developing condition. They have to follow all the rules and regulations or the directives issued by the Rastra Bank of Nepal, the central bank of the country. The core banking business is mobilizing the deposits and utilizing it for lending to industry. Lending business is generally encouraged because it has the effect of funds being transferred from the system to productive purposes, which results into economic growth. However, lending also carries credit risk, which arises from the failure of borrowers to fulfill its contractual obligation during the course of transaction. It is well known that the bank and financial institutions in Nepal face the problem of swelling non-performing assets and the issue is becoming more and more unmanageable. The total NPA in the banking system is 14.2 percent of total loan in year 2063 B.S. (2006A.D.) while it was 18.7 percent of total loan in year 2062 B.S. (2005A.D.) While it is even worse in case of two largest commercial banks: Rastriya Banijya Bank and the Nepal Bank Limited are 45.3 and 25.1 percent respectively in the year 2063 (Annual report of NRB 2062/63: 28-29).

Table 1.1
Non-performing Assets of Commercial Banks
(Amount in Rupees)

| Year | Everest Bank | Nabil Bank | Himalayan Bank |
| :---: | :---: | :---: | :---: |
| $2061 / 62$ | $128,807,745$ | 144506,893 | $1,001,347,320$ |
| $2062 / 63$ | $129,235,790$ | $182,624,480$ | $1,040,757,823$ |
| $2063 / 64$ | $113,178,936$ | $178,293,983$ | $641,615,306$ |
| $2064 / 65$ | $121,003,623$ | $161,085,995$ | $477,229,223$ |
| $2065 / 66$ | $117,985,232$ | $224,817,413$ | $551,309,634$ |

Source: Annual Reports of Concerned Banks of 2061/62 to 2065/66

The amount of NPA of the Everest Bank Limited was increasing to fiscal year 2062/63 from 2061/62 and decreases to year 2063/64. Again it increased in the year 2064/65 and decreased in year 2065/66. The NPA of the Nabil Bank Limited and Himalayan Bank Limited were also increasing to fiscal year

2062/63 from 2061/62 and decreased in year 2063/64. Again it decreased in the year 2064 /65 and increasing to year 2065/66.

The following are the research question of this study:

- What is the overall impact of the NPA on the profitability of the commercial banks under the study?
- Is there any relationship between NPA and the profitability of the commercial banks and the other non-banking assets, [NBA]
- What might be the other factors that influence the non-performing assets of the commercial banks in the banking industry of Nepal?
- Are there any interest factors of the individual commercial banks in the increase of the non-performing assets of them?


### 1.4 Objectives of the Study

The main objective of the study is to examine and study of the non-performing assets in total assets, total deposits and total lending of the Nepalese commercial banks. The other specific objectives of the present study are listed as follows:

- To find out the level of non performing assets in selected commercial bank
- To study and evaluate the relationship between the profitability and the non-performing assets of the selected commercial banks under study.
- To analyze the non performing assets to total loans of the banks under study.
- To examine whether the Nepalese commercial banks are following the NRB directives regarding non- performing assets or not.
- To provide recommendations of overcome the difficulties in managing non- performing assets of the banks with high level of NPA.


### 1.5 Significance of the Study

The proper mobilization and utilization of domestic resources become indispensable for suitable economic development and there is no doubt that commercial banks have pivotal role for the collection of dispersed small savings of Nepalese people and transferring them into meaningful investment. The success and prosperity of the bank relies heavily upon the important sectors of economy as well as to generate more profit by investing in consumer's demand. The main aim of the present study is to find out what sorts of tools and techniques have been used to overcome the problem of conversion of performing assets into the non-performing assets, by the commercial banks in the country and to analyze what other kinds are being used in the present world that the corresponding banks can adopt, if found, under the study.

Loans and advances are the most profitable of all the assets of a bank. These assets constitute primary sources of income to the bank. It means interest earned from such loan and advances occupy major space in income statement of the bank. As a business institute, a bank aims to making huge profit. Since loan and advances are more profitable than any of other assets, the bank is willing to lend as much as its fund as possible. But it has to be careful about the safety of such loans and advances. So it is very important to be reminded that most of the banks failures in the world are due to shrinkage on the value of loans and advances. Hence loan is known as risky assets. Risk of nonrepayment of loan is known as credit risk or default risk. Performing loan/assets has multiple benefits while non-performing loan/assets erode even existing capital. Therefore success of any bank doesn't depend upon how much money at a bank is able to lend, but it depends upon the quality of the loan. So success of a bank depends upon the amount of performing assets/loan. Performing assets are those loans that repay principal and interests to the bank from the cash flow it generates.

It is well known fact that bank and financial institutes in Nepal have been facing the problem of increasing non-performing assets and issues are becomes more and more critical. Unfortunately, nowadays banks have been becoming the victims of high level of NPA, which has been the subject of headache to the banking sector and Nepalese banking industry is not also exception from this truth.

This present study mainly concern with the analysis of level of NPAs in total assets, total deposits and total lending of different commercial banks of Nepal. Therefore, it is significant to find out the level of NPA and to find out whether the banks maintained loan loss provision in accordance to NRB's directives or not. It also examines the effects of NPA in ROE and ROA of the bank. And point out the defects inherent in it and provide package of suggestion for its improvement if found any. Lastly it also provides literature to the scholars and new researchers who want to do further researchers in this field.

### 1.6 Limitations of the Study

This study is simply a partial study for the fulfillment of MBS Degree. This is not far from several limitations, which weakens the study from the viewpoint of reliability and validity.

- Inadequate coverage of banks
- Limited time period covered
- Reliability of statements

The following are some limitations of the study:

1. Profitability of an organization is caused by very many factors but here we study only those factors, which are directly affected by the nonperforming assets of the commercial banks.
2. The whole study is mainly base on secondary data, provided by the concerned banks; the reliability is up to the available data.
3. The study is concerned with non-performing assets of commercial banks.
4. The whole study is based on the data of only five years (F/Y 2061/62 to 2065/66).
5. The study covers only three commercial banks of the Nepalese banking industry.

### 1.7 Organization of the Study

The whole study is divided into the following five different chapters.

## Chapter- I : Introduction

This chapter includes general background of the study, statements of the problems, objectives of the study, significances of the study and the limitations of the study.

## Chapter- II: Review of Literature

This chapter deals with review of the different literature in regards to the theoretical analysis and review of books, articles and thesis related to the study field. Therefore it includes conceptual framework and other related studies.

## Chapter- III: Research Methodology

This chapter includes introduction, research design, population and sample, sources of the information used, period of the study, financial indicators and the statistical tools used.

## Chapter- IV: Data Presentation and Analysis

This chapter includes presentation of the financial variables and statistical tools used while interpreting the data so collected from the different sources.

## Chapter- V: Summery, Conclusion and Recommendations

This chapter briefly represents the summery of the whole study made and the conclusions so made and the recommendations for the effective and smooth running of the concerned commercial banks under the study.

## CHAPTER - II

## REVIEW OF LITERATURE

Literature review is a stocktaking of available literature in one's field of research. Review of literature is an important part of any research work. It provides the boundary line for any research. Previous studies provide the foundation for present study. So, previous studies cannot be ignored. There must be continuity in research.

This continuity in research is insured by linking the present study with past research studies. From this, it is clear that the purpose of literature review is to find out what research studies have been conducted in one's chosen field of study and what remains to be done. The review of literature is a crucial aspect because it denotes planning of the study. The main purpose of literature review is to find out what works have been done in the area of the research problem under stuffy and being undertaken. For review study, the researcher uses different books, reports, journals and research studies published by various institutions, unpublished dissertations submitted by master level students have been reviewed. It is divided in to two heading.

- Conceptual Review
- Review of related studies


### 2.1 Conceptual Review

### 2.1.1 Historical Background of Bank

History shows the requirements of economic development of any country heavily realize upon the banking system of the country (Scott, 1992). During its industrial development period, U.K used bank credit to fulfill its working capital need. In $19^{\text {th }}$ century, during the industrialization process of France and Germany, banks played an important role in industrial finance and growth of the nation. In general meaning bank is an institution that deals with money. A
bank performs several financial, monetary and economic activities which are vital for economy development of a country. It is a monetary institutional vehicle for domestic resource mobilization of the country that accepts deposits from various sources and invests such accumulated resources in the fields of agriculture, trade, commerce etc. Generally, the term "Bank" refers commercial banks. Commercial banks are the foundation of the national economy. They transfer monetary sources from savers to users. They involve in various functions like money creation, creation, credit facilitating, foreign trade facilitating safe keeping of the various etc. Commercial banks have its own role and contribution in the economic development. It is a source of economic development and it maintains economic confidence of various segments and extends credits to the people. These activities of commercial banks are to eliminate poverty, reduce unemployment problem and increase economic growth.

Modern Commercial banks can be identifying by different names, such as business Banks, retails banks, clearing banks, joint venture banks and merchant banks etc. Regardless of the name we give to banks, they all perform the same basic function i.e. they provide a link between lenders those who have surplus money and don not wish to spend immediately with borrowers, there who do not have surplus money but wish to borrow for investment in productive purpose. Basically, by charging a rate of interest to borrowers slightly higher than they pay to lenders, the bank makes their profit. This is known as financial intermediaries. Commercial banks provide the following majors products and services.

- Acceptance of deposits
- Granting of advances
- Remittance collection and distribution
- Cash management
- Issuance of letters of credit and guarantee
- Merchant banking Business
- Credit cards
- Technology based services internet banking services
- Loan distribution
- Automatic teller machines(ATM)
- Handling government business
- Safe keeping services/ Lockers

The first public bank "The Bank of Venice" was established in Italy in 1157 A.D. Different countries in the world fallowed the footsteps of this bank to incorporate banking institutions in their countries. The evolution of "The Bank of England" in the kingdom of England in 1694 A.D. brought remarkable changes in the process of establishing banking institution in the world. The establishment of this bank was a big milestone in the history of banking development. It is believed that the idea of commercial banks rapidly spread all over the world only after the inception of this bank.

In Nepal, development of banking is relatively recent. The history of banking system in Nepal in the form of money lending can trace back in the reigning period of Gunakamdev "The King of Kathmandu" (NBL, 2037).

Tankadhari 'a special class of people' was established to deal with the lending activities of money towards the end of fourteen century at the ruling period of King Jayasthiti Malla (NBL, 2011).

During the prime Ministerial period of 'Rannodip singh' one financial institution we established to give loan facilities to the government staff and loan facilities to the public in general in the term of 5\% interest but Tejarath did not accept money from public ( NBL, 204).

One the $30^{\text {th }}$ Kartik, 1994 Nepal Bank limited was established for the first time to provide modern and organized banking facilities. Up to B.S. 2012 only NBL
provided services to the public as an organized bank. Later, NRB act 2012 was made to establish NRB as central bank to manage, control and develop monetary system in Nepal. NRB was formally established on $14^{\text {th }}$ Baishakh, 2013 and its capital at the starting time was 1 Crore. Similarly, Rastriya Banijya Bank was set up in B.S. 2022 to fulfill the growing needs of the country. The birth of this bank brought a new Landmark in the history of banking facility in Nepal. Like other developed countries Nepal also took the policy to open economy and liberal, to develop good competition in the banking field. Hence, the joint venture banking policy is taken. Today 26 Commercial bank is operating to provide modern banking services and facilities to boost the economic condition of country.

The financial sector reform was initiated in mid 1980 under the liberal economic policy of HMG/N under this policy; HMG/N first opened the banking sectors to foreign investors. In July 1985, commercial banks were allowed for the first time to accept current and fixed deposits on foreign currency (U.S Dollar and sterling Pound). On May 26, 1986, NRB deregulated the commercial banks to fix interest rate at any level above, its minimum prescribed levels.

### 2.1.2 Concepts of Commercial Banks

Commercial banks are the heart of the financial system. They hold deposits of many persons, government establishments and business units. They make funds available through their lending and investing activities to borrowers, individuals, business firms, and government units in doing so they assist both the flow of goods and services from the producers to consumers. They dispense the large portion of medium through which monetary policy is affected. This shows the consequential role in the smooth functioning of the economy.

Commercial banks play the most important role in the modern economic organization. Their businesses mainly consist of receiving deposits, giving
loans and financing the trade of a country. They provide short-term credit i.e., lend money for short period. According to the American Institute of Banking, "Commercial Banks is a corporation that accepts demand deposits subject to check and makes short-term loans to business enterprise regarding of the scope of its other services."

In the Nepalese context, the Nepal Commercial Bank Act, 2031 B.S. (1974A.D.) defines, "A commercial bank is one which exchanges money, deposits money, accepts deposits, grant loans and performs commercial banking functions."

In the like manner, various writers on banking have defined the bank in different ways. Since a modern bank performs number of functions. So, it has become very difficult to give a precious definition of a commercial bank.

### 2.1.3 Joint Venture Bank in Nepal

Joint Venture banking Scenario of Nepalese financial sector is not so long. After the establishment of democratically elected government it introduced liberal and marketing oriented policy which facilitated the establishment of joint venture banks and pointed a new horizon to the financial sector of Nepal. "A joint Venture is forming of two forces between two or more enterprises for the purpose of carrying out of specific operation (industrial or commercial investment, production trade) (Gupta, 1984: 15-25).

Joint Venture banks are the commercial banks formed by joining a two or more enterprises, for the purpose of carrying out of specific operation such as investment in trade, business and industry as well as in the form of negotiation between various group industries or traders to achieve mutual exchange of goods and services.

Nepalese JVBs should take initiation in search of new opportunities to survive in the competitive market and earn profit. There is high liquidity in the market but this seems no profitable place to invest. At the same time, the bank and financial institutions are offering very low deposit interest rate. In this situation Nepalese JVBs are required to explore new opportunities to make investment if they want to survive in the competitive market since commercial can inspire entrepreneurship, the banks should also consider national interest and government emphasis for the economic growth of the country by the development of industry trade and business and to fulfill the objective of profit making.

Nepal Arab bank limited (Nabil Bank Limited) is the first joint venture bank of Nepal. It was established in 1984 A.D. Joint venture which United Arab Emirates Bank, under company Act 1964. Than other two joint venture banks Nepal Indosuez Bank Limited (Nepal Investment Bank Limited) with Indosuez Bank of France and Nepal Grind lays Bank of London were established in 1986 A.D. Himalayan Bank Limited joint venture bank of Pakistan and Nepal SBI Bank Limited with state bank of India was established in 1993 A.D. Everest Bank limited joint venture with Punjab National Bank India (early it is joint venture ventured with United Bank of India Calcutta) and Nepal Bangladesh Bank Limited with IFIC Bank of Bangladesh are established in 1991 A.D. Bank of Kathmandu joint venture with SIAM Commercial Bank Public Co. Thailand was established in 1995A.D and Nepal Bank of Ceylon joint ventured with Ceylon Bank of Srilanka was established in 1997 A.D. All these banks briefly follow the policies of Nepal Rastra Bank. But at Present there are only four joint venture bank in Nepal.

### 2.1.4 Function of Commercial Banks

Banks can be defined according to the functions they perform. A bank is established with the prime objective of profit maximization. To achieve this, the bank carries out functional activities, "Principally, commercial banks
accepts deposits, provide loan, primarily to business firms thereby facilitating the transfer of funds in the economy". Although, in the yester years banks were viewed as acceptor of deposits then provider of loan, but modern commercial banks have to perform overall development of trade, commerce, industry, agriculture including supports for priority and deprived sectors. The growing bank needs and habits of people and competitive environment has made the banking sector challenging and their operation cannot be underemphasized in present context of market globalization. Hence, a bank is a commercial institution licensed as a taker of deposits, concerned mainly with the making and receiving payments on behalf of their customers, accepting deposits, creating money and making short-term loans to private individuals, companies and other organization.

Although profit maximization is a major objective of commercial bank, to achieve this objective commercial bank performs various functions under the mandatory rules and regulations and directives of NRB and the Commercial Bank Act 2031 B.S. (1974 A.D.).

## Primary Functions

## Accepting Deposits

Accepting a deposit is the most important function of commercial banks. Commercial banks collect money from those who want to deposit in different types of accounts such as:

- Fixed Deposit Account
- Current Deposit Account
- Saving Account


## Advancing of Loans

Commercial banks provide the loans required or credit to various sectors of economy such as industry, trade, agriculture, business-deprived sector etc. In
this way bank creates credit facilities. It provides loans from various procedures in different form such as:

- Overdraft
- Cash Credit
- Direct loan with collateral
- Discounting of bills of exchange
- Loans of money at call and short notice


## General Utility Functions

Commercial banks also perform general utility functions such as:

- Issuing of letter of credit to its customers.
- Issuing of bank drafts and traveler's cheque etc., for transfer of funds from one place to another.
- Dealing in foreign exchange and financing foreign trade by accepting or collecting foreign bills of exchange.
- Serving as referred to the financial standing and credit worthiness of its customers.
- Underwriting loans to be raised by public bodies and corporations.
- Providing safety vaults of lockers for the safe custody of valuables and securities of the customers.
- Acting as a trustee and executing the will of the deceased.
- Remittance of money


## Agency Function

Apart from the above functions, commercial banks also perform agency functions for which they act as agent and claim commission on some facilities such as:

- Collection of customer's money from other banks.
- Receipt and payment of dividend, interest.
- Security brokerage service.
- Financial advisory service.
- To underwrite the government and private securities.


### 2.1.5 Some Important Terms

## Loan and Advances

Loan is defined as a thing that is lent esp. a sum of money. Likewise, debt means a sum of money owed to somebody. However, in financial terms loan or debt means principal or interest available to the borrower against the security. Debt means the money that bank owes or will lend to individual or person.

Likewise, the term loan is defined as a lending. Delivery by one party to and receipt by another party of sum of money upon agreement expressed to implied, to repay it with or without interest. Any thing furnished for temporary use to a person at his request on condition that it shall be returned, or it's equivalent in kind, with or without compensation for its use. Loan includes:

- The creation of debt by lender's payment of or agreement to pay money to the debtor or to a third party for the account of the debtor.
- The creation of debt by a credit to an account with the lender upon which the debtor is entitled to draw immediately.
- The creation of debt pursuant to a lender credit card or similar arrangement.
- The forbearance of debt arising from a loan (Koirala, 2006: 35-36).


## Concepts of Non - Performing Assets

Non - Performing Assets [NPA] means the amount of loan that the individual commercial bank had provided and the consumer has not paid it until the time is already matured. Once the distributed loan is not returned timely by clients and becomes overdue then, it is known as Non Performing Assets for the bank. Reduction of NPA has always been a significant problem for every commercial bank. NPA may be defined broadly as the Bad Debt; however, it in terms of banking sector consists of those loans and advances which are not performing
well and likely to be turn as bad debt. NPA as per the current directives of Nepal Rastra Bank, NRB, has been categorized as classified loans and advances. NPA has severe impacts on the financial institutions. On the one hand, the Investment becomes worthless as expected return cannot be realized and on the other, due to the provision required for the risk mitigation the profitability is directly affected. The existence of the bank can be questioned in this situation. Thus, interest along with principal has to be recovered timely and without any obstacles.

To start with performance in terms of profitability in a benchmark for any business enterprises, including the banking industry, however increasing non performing assets have a direct impact on banks profitability as legally banks are not allowed to book income on such assets (Manamohan, 2002: 06).

Loans and Advances dominate the assets side of balance sheet of any bank. Similarly, earning from such loans and advances occupy major space in income statement of the banks. However it is very important to be reminded that most of the bank failures in the world are due to shrinkage in the value of the loan and advances. 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 loans erodes even existing capital.

Performing assets are those loans that repay principal and interest to the bank from the cash flow it generates. Loans are risky assets, though a bank interest most of its resources in granting loans and advances. If an individual bank has around $10 \%$ non-performing assets or loans, it sounds the death knell of that bank other remaining the same. The objectives of bound loan policy are to maintain the financial health of the banks, which result in safety of depositor's money increases in the returns to the shareholders. Since the loan is a risky asset there is inherent risk in every loans, however, the bank should not take risk above the certain degree irrespective of the returns prospects.

### 2.1.6 Classification of NPA

As per the NRB directives NPA are said as classified loans. And this includes sub-standard, doubtful and loss categories as defined by new NRB directives. The circular further says a NPA is a credit facility in respect of which interest has remained unpaid for two quarters.

According to the circulars, the loans are classified based on weakness and dependence on collateral securities into four categories and prescribed the provisioning rate as follows:

Table 2.1
Classification of Loan and Advances

| Classifications of <br> Loan and Advances | Criteria for Provisioning | Provision <br> Rate |
| :--- | :--- | :---: |
| Pass | Not past due and past due for a period up to 3 <br> months. [Performing loans] | $1 \%$ |
| Substandard | Past due for a period of 3 months to 6 months | $25 \%$ |
| Doubtful | Past due for a period of 6 month to 1 years | $50 \%$ |
| Loss | Past due for a period of more than 1 years or <br> advances which have least possibility of <br> recovery. | $100 \%$ |

Source: Nepal Rastra Bank, Directives for Commercial Banks

### 2.1.7 Effects of NPA on Profitability of Banks

Under the circumstances assets that do not earn any income to the bank affect the profits in a number of ways, which are explained as follows (Koirala, 2006: $38-40$ ).

## Profitability Impact

- The resources locked up in NPA are borrowed at a cost and have to earn a minimum returns to service this cost.
- NPA on the one hand do not earn any income but on the other hand drain the profits earned by performing assets through the claim on provisioning requirements.
- Since they do not earn interest they bring down the yield on advances and the net interest margin or spread.
- NPA have a direct impact on assets and returns on equity, the two main parameters for measuring profitability of the commercial banks.
- Return on assets will be affected because while the total assets include the NPA they do not contribute to profits, which are the numerators in the ratio.
- Return on equity is also affected as provisioning eats more and more into profits earned.
- The cost of maintaining these include administration costs, legal costs and cost of procuring the resources locked in them.
- NPA bring down the profits, affects the shareholders value and thus, adversely affect the investor confidence.

As a whole, the impact of NPA can be assessed with the following:

- Lower ROE and ROA
- Lower image and rating of banks
- Disclosure reduces investor's confidences.
- Increases costs/difficulties in raising capital.
- NPA do not generate income.
- They require provisioning.
- Borrowing cost of resources locked in
- Opportunity loss due to non-recycling of funds.
- $100 \%$ risk weight on net NPA for CRR.
- Capital gets blocked in NPA.
- Utilizes capital but does not generate income to sustain the capital that is locked.
- Recapitalization by government comes with string.
- Administration and recovery costs of NPA.
- Effects in employee morale and decision.


### 2.2 Review of Related Studies

On the way of conducting this research work, some books, journals and publications have been studied to formulate ideas about the subject matter. Although, the specific books regarding the NPA could not be found, however, some banking related books have been consulted such as Tannan's Banking Law and Practices in India, (1997). Assessing the gravity of the problem Tannan found that the banks and financial institutions at present face considerable difficulties in recovery of dues from the clients and a significant portion of the funds of the banks and financial institutions is thus, blocked in unproductive assets.

In India for addressing the question of speeding up the process of recovery was examined in great detail by committee set-up by the government under the chairmanship of the Late Shri Tiwari.

Suneja (1992) pointed out the causes of NPA that the risk connected with lending to business depends on an enormous number of factors. For any particular type of business the risk failure is affected. The state of economy trend in demand for the project or service provided competition from any other suppliers, financial resources are too limited and management skills and lacking. Reiterating the difficulties that Suneja says probably the most difficult decision facing a banker is to determine when it becomes necessary to recall a loan and to begin the process of liquidating the security. Further she suggests that if a customer fails to make repayment on the due date, the bank has to consider what steps need be taken to recover the debt.

Ghimire (2056) in her article, "Efficiency Indicators of Commercial Bank" she has made a comparative analysis and found that efficiency indicator of the banks may be viewed on the basis of amount allocated for loan loss provisioning against loan and investment.

Basyal (2057) discussing the financial performance of government owned banks in the article, "Placing RBB and NBL under Management Contracts Rational and Opposition" agreed that the disappointing performance of these two banks has become serious concern to all the stakeholders. Further he mentions that they are having with huge level of NPA, which could be termed as the darkest sides of their operational inefficiency and undisciplined financial behaviour.

Pradhan (2058) in his article, "NPA Some suggestion to tackle them" expressed that unless the growth of NPA is kept in control, it has the potential to cause systematic crisis. He has mentioned that a dream of globalization led to huge investment, which unfortunately could not be utilized properly due to hesitant liberalization policies. Large corporate bodies misused the credits and delayed payments and contributed indirectly for enhancing NPA ratio. He further argues that lack of vision in appraisal of proposal while loan sanctioning, reviewing or enhancing credit limits, absence of risk management policy of financing, concentration of credit in few group of parties and sector, lack of coordination among various financiers, lack of initiatives to take timely action against willful defaulters, indecision on existing out of bad loans for fear of investigating agencies like special policy, CIAA, Public Accounts Committee of the parliament have also contributed in whatsoever measures to the worsening situation of NPA front. He further pointed out that most crucial reason for the increase in the NPA is the shabby and defaulter friendly legal system. Suggesting the remedy of NPA, he adds that administrative system should be strengthened. Legalre forms should be made and Assets Reconstruction Company should be formed. Henderson (2003) CEO of RBB during his interview to New Business Age agrees that the challenging target of RBB turn around in restructuring and collection of NPA.

### 2.3 Review of the Thesis

Ghimire (2005) entitled "Non Performing Assets of Commercial Banks" main objectives are to evaluate the impact of NPA on the profitability of the
commercial banks. He also studied about the internal and the external factors that affect the non-performing assets to increase from the loan and advances. The objective of his study is also to find out the relationship between the nonbanking assets and the non performing assets, in which he was able to find out the internal responsible factors that contribute turning good loan into bad loans, bad intention, weak monitoring and mismanagement are the most responsible factors. Similarly, weak legal provision and credit concentration are also found as the least preferred factors in turning good loans into bad loans. Some factors such as lack of portfolio analysis, not having effective credit policy and shortfall on security were identified as having average effect on NPA growth. In connection to the external factors it has been found that recession, political and legal issues are more relevant factors in turning good loans into bad one. Like wise legal provision for recovery as a reason for increment in NPA in Nepalese Banks have been found the factors having less impact. Supervision and monitoring system have been identified as average factors. It is therefore, can be generalized that economic and industrial recession and not having strong legal provision for loan recovery are the major external factors that have major contribution for the increment of NPA.

It has also been concluded in the study that Nepalese Commercial Banks gave must priority to trade sector for lending its resources, at the same time it is found that service sectors are not being given that much emphasis. He had recommended to the sample banks, Nepal Bangladesh Bank Ltd. Nepal SBI Bank Ltd and Bank of Kathmandu Ltd. as on different headings, subject matter such as financial strength, personal integrity and security, monitoring and control system, avoidance of credit concentration, strong legal system, assets management company, avoidance of undue pressure, etc.

Koirala (2006) entitled "Non Performing Assets and Profitability of Commercial Banks in Nepal" his objectives was to evaluate the impact of NPA on the profitability of the commercial banks. He also studies about the internal
and external factors those influence the performing assets to non performing one. He had taken sample banks as Nabil banks Limited, Himalayan Bank Limited, Nepal Bangladesh Bank Limited, Everest Bank Limited, Nepal SBI Bank Limited and Nepal Investment Bank Limited.

The NPA of Nepal Investment Bank during the study period was increasing. The ratio of NPA to lending was found to be decreasing over the years as it was $8.29 \%$ in fiscal year 2057/58 and decreased to $2.69 \%$ in the fiscal year 2061/62. The net profit was also increasing during the study period.

In case of Everest Bank Limited, the level of NPA was decreased to $1.6 \%$ on the fiscal year 2061/62 which was $6.79 \%$ in the fiscal year 2057/58. The NPA was increasing during this period and despite of the increasing NPA profit of the bank was found to be increasing during study period.

In case of Nepal Bangladesh Bank Limited, the level of NPA was increased from $9.03 \%$ in fiscal year 2057/58 to $19.04 \%$ in fiscal year 2061/62. The NPA of the bank was found to be increased and that causing the gradual decrease in the profitability of the bank.

The NPA of the Nabil Bank Limited was decreased upto one fifth from the fiscal year 2057/58 to fiscal year 2061/62. The level of NPA was found to be decreased from $16.20 \%$ in fiscal year 2057/58 to $1.32 \%$ in fiscal year 2061/62 whereas the ROA was found to be increased from $1.71 \%$ to $3.06 \%$ over the five years period.

In case of the Nepal SBI Bank Limited, the level of NPA was found to be fluctuation in it. Although it was decreasing it was not desirable level. The level of NPA in fiscal year 2057/58 was $8.64 \%$ and in fiscal year 2061/62 it was $6.54 \%$.

The NPA of Himalayan bank Limited was found to be fluctuating during the study period, though it was found to be decreased in fiscal year 2061/62 in comparison to fiscal year 2057/58. The level of NPA was found to be highest for the Nepal Bangladesh Bank Limited in the fiscal year 2061/62, whereas the lowest was found that of Everest Bank Limited in fiscal year 2058/59. In overall the performance of the Nabil Bank was found to be satisfactory as the level of NPA was gradually decreasing over the years covered by this study.

Yadav (2007) in his thesis entitled "A Study on Non Performing Assets with Special Reference to Nepal Bank Limited and Rastriya Banijaya Bank Limited".

His main objectives are specified as below:

- To study the general reasons for assets become NPA in RBB and NBL.
- To point out the level of NPAs in NBL and RBB banks after financial sector reform program.
- To find out the problems of banks due to NPAs.
- To make the recommendations to overcome the problems of two banks regarding the NPAs.

The major findings are as follows:

- The share of RBB and NBL in the assets and liabilities of the banking sector is around $50 \%$. Although international financial experts have been managing these banks, the performance especially for reducing NPA is not satisfactory.
- The management teams were supposed to bring NPA level to 5\% level. The NPA total credit ratios of RBB increased from 20.17\% in FY 1997/98 to $60.15 \%$ in FY 2002/03. It increased by 5\% points in FY 2002/03 than the previous year. Like wise, the NPA / total credit ratio of NBL also increased from $27.46 \%$ to $60.47 \%$ in FY 2002/03, which shows the rising trend.
- Both of them has negative net worth since FY 1998/99 and the net worth figures continuously increased in the last five years. Although financial performance of both the management teams is totally unsatisfactory, they have improved in other areas. People are questioning the returns of such a huge expense. Is it going to be a futile exercise, suppose they brought down the NPA level to a satisfactory level? But what will happen after the management teams leave the banks? Questions are still remaining unanswered.
- The net profit trend of NBL and RBB is highly negative in first three fiscal year because more than $60 \%$ non performing asset. But now, NBL and RBB is earning profit from last two years.
- Total deposit is not correlated with this two banks' loan and advance. This is very serious matter and the main cause of over liquidity.
- Situation of deposit mobilization is poor in NBL and RBB. NBL and RBB were not focusing on the quality of loan rather focusing on the volume of loan.
- After the implementation of financial sector reform NBL and RBB is able to earn profit from 2061/61 and also able to decreasing volume of nonperforming assets. But NBL and RBB have to more focus to improve credit management because NBL and RBB are not able to maintain NPA as the specified standard of NRB i.e. $5 \%$.
- Credit related financial indicators in NBL and RBB seem irrelevant in comparison with the specified standard of NRB.
- Various acts and regulations are enacted for the financial sector reform but implementation of policies and directives like directed sector credit, sufficient provision for loan loss, volume of NPA is vital because of the increasing trend of NPA in commercial banks.

Pradhan (2008) has conducted a research on "A Study on Non Performing Assets of Commercial Bank With References to SCBNL, RBB, Everest bank, NB Bank and NBBL". Main objective of his study are to find out the proportion of
non performing loan and the level of NPA in total assets, total deposit and total lending in the selected commercial bank relationship between loan loss provisions in the commercial bank impact of non performing assets in the performance of commercial bank.

He has concluded improper credit policy, political pressure to lend, lack of supervision and monitoring, economics low down, overvaluation of collateral are the major cause of occurring NPA. In recent year, not only the private sectors bank but also public sector's banks are trying to maintain their loan and advances to control over becoming ht non performing assets. To overcome the NPA from public banks, they should try to recover their loan and interest amount on time and also make a suitable loan loss policy.

He has concluded "high level of non performing assets not only decrease the profitability of the banks but also affect the entire financial as well as operational health of the organization. If the NPA doesn't control immediately, it will be main causes for shutdown of the banks in future.

He suggest that reduce the NPA problem immediate remedial action for taking enough collateral, so that the bank at least can able to recover its principle and interest amount in case of being unable to repay by the borrower, proper financial analysis should be done before lending to the borrowers bank should provide appropriate training regarding loan management, risk management, credit appraisal etc to the employee. Bank should apply precautions before granting any loan and advances to decrease the bad loans.

### 2.4 Research Gap

From the study of previous thesis it has found that increasing Non-performing assets is one of the major challenges faced by Nepalese commercial banks in the present context. Some researchers had done in which matter relating to loan loss provision for Non-performing assets or not. Some researcher had done
what is the internal and external factors affects the Non performing assets to increase from the loan advances. This thesis based on secondary data provided by concerned Nepalese commercial banks up to the fiscal year 2065/66. Hence this thesis had attempted to fill this research gap by taking the reference of Everest Bank Limited, Nabil Bank Limited, and Himalayan Bank. This research will be able to deliver some of the present issue, latest information and data relating to Non-performing assets.

## CHAPTER - III

## RESEARCH METHODOLOGY

Research methodology refers to the numerous process adapted by the researchers during the research period. It is the technique to solve the research problem in systematic manner. This includes many techniques and is crucial for every research work. The main objective of this research work is to evaluate the level of non forming assets in selected commercial bank i.e. Everest Bank, Nabil Bank and Himalayan Bank.

Research is a systematic inquiry for seeking facts and methodology is the method of doing research in well manner. So research methodology means the analysis of specific topic by using proper method. Research methodology is a way to systematically solve the research problem (Kothari, 1990: 10).

Research methodology refers to the various methods of practices applied by the researcher in the entire aspect of the study. This chapter includes the research design, population and sample, sources of data and analysis of data. This study will seek the conclusion to the point that what kind of position, Concerned banks have got and suggested the precious and meaningful points so that all concerned can fruitful from this research work.

### 3.1 Research Design

A research design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Kothari, 1992:25). Research Design is the plan, structure and strategy of investigation conceived so ass to obtain answers to the research question and to control variances.

The main objective of this study is to analyze the relationship between NPA and Profitability of the commercial banks and provide suggestion on the basis
of findings. To fulfill this purpose, the study follows the analytical and descriptive research design. It also analyses the loan loss provision maintained by commercial banks.

In order to achieve the predetermined objectives of the study, secondary data have been used. This study tries to make comparison and establish relationship between two or more variables. So the research design of this study is based on descriptive and analytical study.

### 3.2 Population and Sample

The method of selecting for study a small portion of the population to draw conclusion about characteristics of the population is known as sampling. Sampling may be defined as the selection of part of the population on the basis of which judgment or inference about the Universe is made

There are many financial institutions in Nepal however we study about the nonperforming assets of commercial banks operating in Nepalese banking industry. The population of the study is the total numbers of commercial banks operating banking business in Nepal that is 30 banks and 3 banks are the sample of the study.

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

1. Everest Bank Limited
2. Nabil Bank Limited
3. Himalayan Bank Limited

### 3.3 Sources of Data

The study is mainly based on secondary data. The secondary sources of data collections are those that have been used from published on used by someone previously. The secondary sources of data are Balance Sheet, Profit \& Loss Account and Literature Publication of the concerned banks. The NEPSE report
of the concerned bank has furnished some important data to this research work. Some supplementary data and information have been collected from the authoritative source like Nepal Rastra Bank, Central Library of T.U., Shanker Dev Campus Library, Nepal Commerce Campus, Library, Nepal Stock Exchange Limited, Security Exchange Board, Economic Survey, different journals, magazines and other published and unpublished reports documented by the authorities.

In order to fulfill the objectives of this research work, all the secondary data are compiled, processed and tabulated in time series. And to judge the reliability of data provided by the banks and other sources, they were compiled with the annual report of auditors. Formal and informal talks to the concerned head of the department of the bank were also helpful to obtain the additional information of the related problem.

### 3.4 Nature of Data

In case of primary data, some personal views and ideas of individual's respondent are collected. But in case of entire study secondary data used are basically of the following nature. Most of the data taken for the analysis is collected in the form of published by the concerned banks through their annual reports. Since all the banks which are taken into account for the study are listed in NEPSE, the figures are all most reliable and suitable too.

### 3.5 Data Analysis Tools

Analysis and presentation of the data is the core of each and every research work. This study requires some financial and statistical tools to accomplish the objectives of the study. The financial and statistical tools are most reliable. In this study various financial, statistical and accounting tools have been used. These tools make the analysis more effective, convenience, reliable and authentic. The various results obtained with the help of financial, accounting and statistical tools are tabulated under different headings. Then they are
compared with each others to interpret the results. Two kinds of tools have been used to achieve the certain goals.

- Financial Tools
- Statistical Tools


### 3.5.1 Financial Tools

The financial tools used for analyzing the data were profitability and asset management ratios under ratio analysis. The formulas of key indictors used in this study were Returns on Assets (ROA), Return on Loans \& Advances, Return on fixed assets, Total lending to Total Deposit Ratio etc.

### 3.5.2 Statistical Tools

Some important statistical tools have been used to present and analyze the data for achieving the objectives. In this research, following statistical tools are used.

## Average

Average is defined as sum of observations divided by their number in the selected sample.

$$
\begin{aligned}
\text { Average }(\text { mean }) & =\frac{\text { Sum of Observations }}{\text { Number of Values }} \\
& =\bar{X}=\frac{\sum X}{N}
\end{aligned}
$$

## Coefficient of Correlation (r)

The correlation coefficient indicates the linear relationship between two or more variables. The measures of correlation called the "correlation coefficient" can be summarized in one figure, the degree and direction of movement. It can be calculated by using the method of Karl Person's correlation coefficient, because it is one of the widely used mathematical methods of calculation, the correlation coefficient between two variables.

In symbolically, it is defined as:

$$
\mathrm{r}=\frac{\sum \mathrm{XY}-\sum \mathrm{X} \cdot \sum \mathrm{Y}}{\sqrt{\mathrm{X}^{2}}-\left(\sqrt{\mathrm{X})^{2}} \sqrt{\sum \mathrm{Y}^{2}-\left(\sum \mathrm{Y}\right)^{2}}\right.}
$$

## Assumptions

- If $\mathrm{r}=1$, there is positively perfect correlation between the two variables.
- If $r=-1$, there is negatively perfect correlation between the two variables.
- If $r=0$, the variables are uncorrelated.

The nearer the value of $r$ to +1 , the closer will be the relationship between two variables and the nearer the value of $r$, the lesser will be the relation.

## Probable Error (P.E)

The probable error of the correlation coefficient helps to interpret its value. P.E., which is the measure of testing the reliability of correlation coefficient, denotes it. If $r$ be the calculated value of $r$ from a sample of $n$ pair of observation the P.E. is denoted by:

$$
\text { P.E. }=\frac{0.6745\left(1-\mathrm{r}^{2}\right)}{\sqrt{\mathrm{n}}}
$$

It can be interpreted to know weather its calculated value of $r$ is significant or not in the following ways.

- If $\mathrm{r}<\mathrm{PE}$, it is Insignificants perhaps there is no evidence of correlation
- If $\mathrm{r}>6 \mathrm{PE}$, it is significant.

It is other causes, nothing can be concluded. The probable error of correlation may be used to determine the limits within which the population correlation coefficient lies. The limits for population correlation are $\mathrm{r}+\mathrm{PE}$

## CHAPTER - IV

## DATA PRESENTATION AND ANALYSIS

### 4.1 Introduction

In this chapter, efforts have been made to present and analyze the collected data. Data collected from various sources were classified and tabulated as requirement of the study and in accordance to the nature of the data. Different arithmetical and statistical tools are used to analyze the data collected under the study. To make easier and clearer to the understanding of the study, data are presented in the tables and figures also.

Simple percentage is used to analyze the data using arithmetical tools. Karl's Pearson's correlation coefficient is used to analyze the data as statistical tool. Nowadays Non-Performing Assets (NPA) have been occupying major space in the total assets and total lending of the bank. It stands around $15 \%$ in the Nepalese banking system while it is even worse in case of two large commercial banks, Rastriya Banijya Bank (RBB) and Nepal Bank Limited (NBL). The NPA of RBB is found $45.3 \%$ while that of NBL is $25.1 \%$ of the total lending. In this way it shows that commercial banks have been suffering by high level of NPA, and the efforts of the banks have been diverted to reduce it.

Keeping this fact into consideration, a provision has set up by Nepal Rastra Bank in Fiscal year 2057/58 to control the level of NPA of Nepalese commercial banks. According to that provision, every bank has to classify its total loan and advances (including purchased and discounted bills) as pass loan, substandard loan, doubtful loan and bad loan, on the basis of overdue against schedule. Commercial banks are also directed to maintain loan loss provision as stated in section 11 of directives no. 2 of NRB's directives for commercial banks 2059. Main purpose was to find out the level of NPA in Nepalese commercial banks and to take necessary steps to control the level of NPA in future.

Here in the study, data of five fiscal years starting from F/Y 2061/62 to 2065/66 have been presented to study and analyze the level of NPA in total assets, total lending and total deposits of the commercial banks. Data are also presented to examine or analyze the efforts to NPA on the profitability of the banks under study.

### 4.2 Data Presentation and Analysis of Sample Banks

### 4.2.1 Data Presentation and Analysis of Everest Bank Limited

Table 4.1
Relation between NPA, Net Profit, Total Lending and Total Deposit

| Fiscal /Year | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ | $\mathbf{2 0 6 5 / 6 6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| NPA To Total Lending | 1.63 | 1.27 | 0.8 | 0.64 | 0.48 |
| Total Lending to Total Deposit | 78.24 | 73.44 | 77.44 | 78.56 | 73.43 |
| Net Profit to Total Assets | 1.46 | 1.49 | 1.38 | 1.66 | 1.73 |

Source: Annex 1
Figure 4.1
Relation between NPA, Net Profit, Total Lending and Total Deposit


From Table 4.1 and Figure 4.1, it can be said that the ratio between the Non performing assets and total lending was found to decreasing over the five years period. In the fiscal year 2061/62 it was found to be at $1.63 \%$, which decreased to $1.27 \%$ to the following year, and in the fiscal year 2063/64 it was found to
be decreased rather than previous year. In the fiscal year 2064/65 the non performing assets to total lending ration was found $0.64 \%$, which decreased to 0.48 \% to the fiscal year 2065/66.

The total lending to total deposit ratio was found to be fluctuating over the five years period. In fiscal year 2061/62 it was found to be $78.24 \%$ and was found to be decreased in the following years and had reached to $77.44 \%$ and $78.56 \%$ in the fiscal year 2063/64, and 2064/65 respectively. And finally it was decreased to $73.43 \%$ for the end of year 2065/66.

And the net profit to total assets ratio was also found to be fluctuating over the five years period. It was found to be $1.46 \%$ in the fiscal year 2061/62 and it becomes to $1.73 \%$ for the fiscal year 2065/66.

Table 4.2
Relation between Net Profit and Total NPA

| Fiscal Year | Net Profit | Total NPA |
| :---: | :---: | :---: |
| $2061 / 62$ | $170,807,797$ | $128,807,745$ |
| $2062 / 63$ | $237,290,936$ | $129,235,790$ |
| $2063 / 64$ | $296,409,281$ | $113,178,936$ |
| $2064 / 65$ | $451,218,613$ | $121,003,623$ |
| $2065 / 66$ | $638,732,757$ | $117,985,232$ |

Source: Annex 1

In Table 4.2 shows that the status of non-performing assets (NPA) and net profit of the bank in different years, in fiscal year 2061/62 to 2065/66. In fiscal year 2061/62 the NPA amount to Rs. 128,807,745 i.e. NPA increased by Rs 24043376 (i.e. $22.95 \%$ ) in comparison of previous year. As the result the net profit of the banks increased by 18.97 \% at the end of fiscal year 2061/62 reached amounted to Rs 170807797.

Similarly, in fiscal year 2062/63, he NPA increased by 0.33 \% i.e. Rs 428045 and reached to amount Rs 129235790. The net profit highly increased by
amount Rs 66483139 i.e. 38.92 \% in comparison with previous year's net profit and reached to Rs 237290936.

In fiscal year 2063/64 the banks NPA decreased by 12.42 \% i.e. Rs 16056854. As the result the net profit of the banks increased by $24.91 \%$ at the end of fiscal year 2063/64.

Again, in fiscal year 2064/65, the NPA increased by 6.91 \% i.e. Rs 7824687 and the net profit highly increased by amount Rs 154809332 i.e. 52.23 \% in comparison with previous year's net profit. The bank is able to earn more profit although the level of NPA also increased.

In fiscal year 2065/66, the NPA decreased by $2.49 \%$ i.e. Rs. 3018391 and reached to amount Rs. 117985232. As the result the net profit of the banks increased by 41.56 \% at the end of fiscal year 2065/66.

To make clearer the data of Table 4.2 also presented on the Figure 4.2:
Figure 4.2
Relation between Net Profit and Total NPA


## Loan Loss Provisioning of Everest Bank Limited

The loan loss provision maintains by Everest Bank Ltd. is presented in the following table 4.3.

Table 4.3
Loan Loss Provisioning of Everest Bank Limited

| Types of Loan | Requirement as per Directives | Loan Loss Provision by the Bank |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2061/62 | 2062/63 | 2063/64 | 2064/65 | 2065/66 |
| Pass loan | $1 \%$ of pass loan | 1 | 1 | 1 | 1 | 1 |
| Sub-standard loan | $25 \%$ of sub-standard loan | 25 | 25 | 25 | 25 | 25 |
| Doubtful loan | $50 \%$ of doubtful loan | 50 | 50 | 50 | 50 | 50 |
| Bad loan | 100\% of bad loan | 100 | 100 | 100 | 100 | 100 |

Source: Annex 2

Commercial bank has to maintained loan loss provision as per the NRB's directives for the commercial bank. EBL maintained loan loss provision as per the NRB's directives in fiscal year 2061/62 to 2065/66.

### 4.2.2 Data Presentation and Analysis of Nabil Bank Limited

$$
\text { Table } 4.4
$$

Relation between NPA, Net Profit, Total Lending and Total Deposit

| Ratio / Year | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ | $\mathbf{2 0 6 5 / 6 6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| NPA to Total Lending | 1.32 | 1.38 | 1.12 | 0.74 | 0.8 |
| Total Lending to Total Deposit | 75.05 | 68.63 | 68.13 | 68.18 | 74.97 |
| Net Profit to Total Assets | 3.02 | 2.84 | 2.47 | 2.01 | 2.35 |

Source: Annex 1

Figure 4.3

## Relation between NPA, Net Profit, Total Lending and Total Deposit



From Table 4.4 it can be said that the ratio between the Non performing assets and total lending was found to decreasing trend, although it has been slightly increased to $1.38 \%$ for the year 2062/63. In the fiscal year 2063/64 it was found to be decreased rather than previous year. In the fiscal year 2064/65 the non performing assets to total lending ration was also found to be decreased i.e.0.74 $\%$, which increased to $0.8 \%$ to the fiscal year 2065/66.

The total lending to total deposit ratio was also following decreasing trend. It was found to be $75.05 \%$ for the end of year 2061/62. It was decreased in the fiscal year 2062/63, 2063/64, 2064/65 and reached to $68.63 \%, 68.13 \%$, and $68.18 \%$ respectively. It has been slightly increased to $74.97 \%$ for the year 2065/66.

And the net profit to total assets ratio was also found to be decreasing during the study period. It was $3.02 \%$ for the fiscal year 2061/62 which was decreased to $2.84 \%, 2.47 \%, 2.01 \% \& 2.35 \%$ for the fiscal year $2062 / 63$ to $2065 / 66$ respectively. .

Table 4.5
Relation between Net Profit and Total NPA

| Fiscal Year | Net Profit | Total NPA |
| :---: | :---: | :---: |
| $2061 / 62$ | $518,635,749$ | $144,506,893$ |
| $2062 / 63$ | $635,262,439$ | $182,624,480$ |
| $2063 / 64$ | $673,959,698$ | $178,293,983$ |
| $2064 / 65$ | $746,468,394$ | $161,085,995$ |
| $2065 / 66$ | $1,031,053,098$ | $224,817,413$ |

Source: Annual Reports of the Concern Bank of Fiscal Year 2061/62 to 2065/66

In Table 4.5, shows that the status of non-performing assets (NPA) and net profit of the bank in different years. In fiscal year 2061/62 the bank had NPA amount to Rs $144,506,893$ and bank's net profit amount to be Rs 518,635,749. In fiscal year 2062/63 the NPA amount to Rs. 182,624,480 i.e. NPA increased by Rs 38117587 (i.e. $26.38 \%$ ) in comparison of previous year. As the result the bank increase its profit by Rs 116626690 i.e. $22.49 \%$ in comparison of previous year and net profit reached amounted to Rs 635262439 at the end of fiscal year 2062/63. In fiscal year 2063/64, the NPA decreased by $2.37 \%$ i.e. Rs 4330497 and reached to amount Rs 178293983. The net profit increased by amount Rs 72508696 i.e. 10.76 \% in comparison with previous year's net profit and reached to Rs 673959698.

Similarly, in fiscal year 2064/65, the NPA decreased by $9.65 \%$ i.e. Rs 17207988 and the net profit increased by amount Rs 72508696 i.e. 10.76 \% in comparison with previous year's net profit. In fiscal year 2065/66, the NPA highly increased by $39.56 \%$ i.e. Rs. 63731418 and net profit also highly increased by $38.12 \%$ i.e. Rs. 284584704 in comparison with previous year's.

To make clearer the data of Table 4.5 also presented on the Figure 4.4:

## Figure 4.4

Relation between Net Profit and Total NPA


## Loan Loss Provisioning of Nabil Bank Limited

The loan loss provision maintains by Nabil Bank Ltd. is presented in the Table 4.6.

Table 4.6
Loan Loss Provisioning of Nabil Bank Limited

| Types of | Requirement as | Loan Loss Provision by the Bank |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loan | per Directives | 2061/62 | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ | $\mathbf{2 0 6 5 / 6 6}$ |
| Pass loan | $1 \%$ of pass loan | 2.18 | 1.64 | 0.77 | 1.35 | 1.01 |
| Sub-standard <br> loan | 25\% of sub- <br> standard loan | 31.10 | 67.94 | 47.31 | 48.78 | 39 |
| Doubtful loan | $50 \%$ of doubtful <br> loan | 73.21 | 47.00 | 49.20 | 49.95 | 51 |
| Bad loan | $100 \%$ of bad <br> loan | 97.05 | 94.55 | 86.46 | 88.16 | 91 |

Source: Annex 2

Commercial banks have to maintained loan loss provision as per the NRB's directives for the commercial bank.

In the fiscal year 2061/62, Loan loss provision for pass loan, sub standard loan and doubtful loan as per NRB's directives, they are 1 percent of pass loan $25 \%$
of sub standard loan and $50 \%$ of doubtful loan respectively. The bank made 2.18 \% loan loss provision for pass loan, $31.10 \%$ of sub standard loan and 73.20 \% of doubtful loan respectively which were higher than requirement. It was found that the bank unable to maintain loan loss provision for bad loan as per the NRB's directives. The bank made 97.05 \% provisioned for bad loan.

In the fiscal year 2062/63, Loan loss provision for pass loan and sub standard loan as per NRB's directives, they are 1 percent of pass loan $25 \%$ of sub standard loan respectively. The bank made $1.64 \%$ loan loss provision for pass loan and $67.94 \%$ of sub standard loan respectively which were higher than requirement. It was found that the bank unable to maintain loan loss provision for bad loan and doubtful loan as per the NRB's directives. The bank made $97.05 \%$ and $47.00 \%$ provisioned for bad loan and doubtful loan respectively. In the fiscal year 2063/64, Loan loss provision for pass loan, doubtful loan and bed loan (i.e. $0.77 \%, 49.20 \% \& 86.46 \%$ ) were found lower than the NRB's directives. The bank provisioned for sub standard loan was $47.31 \%$ which was higher than requirement.

In the fiscal year 2064/65 Loan loss provision for pass loan and sub standard loan were found higher than the NRB's directives i.e. $1.35 \%$ \& 48.78\%. But bank provision for doubtful loan and bad loan were $49.95 \%$ \& $88.16 \%$ which were lower than requirement.

In fiscal year 2065/66, Loan loss provision for pass loan, substandard loan and doubtful loan were $1.01 \%, 39 \%$ and $51 \%$ which was higher than the requirement as per NRB's directives. But loan loss provision for and bad loan was found lower than the NRB's directives

It is found that the bank could not maintained loan loss provision, perfectly in accordance to the NRB's directives. The bank maintained higher than requirement for one class loan when lower for another class. Therefore, the
bank should give priority to maintain loan loss provision as requirement as per NRB's directives.

### 4.2.3 Data Presentation and Analysis of Himalayan Bank Limited

Table 4.7
Relation between NPA, Net Profit, Total Lending and Total Deposit

| Ratio / Year | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ | $\mathbf{2 0 6 5 / 6 6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| NPA to Total Lending | 7.44 | 6.6 | 3.61 | 2.36 | 2.16 |
| Total Lending to Total Deposit | 54.21 | 59.5 | 59.22 | 63.67 | 73.58 |
| Net Profit to Total Assets | 1.12 | 1.55 | 1.47 | 1.76 | 1.91 |

Source: Annex 1
Figure 4.5
Relation between NPA, Net Profit, Total Lending and Total Deposit


From Table 4.7 it can be said that the ratio between the Non performing assets and total lending was found to decreasing trend. It was found to be $7.44 \%$ for the fiscal year 2061/62 which were found to be highly decreased i.e.3.61\%, $2.36 \%$ \& 2.16\% at the end of fiscal year 2063/64, 2064/65 and 2065/66 respectively. The decreasing trend of NPA to total lending ratio indicates the effectiveness in the management of NPA.

The total lending to total deposit ratio was following increasing trend. It was found to be $54.21 \%$ for the fiscal year 2061/62 which increased to $59.5 \%$ for
the end of year 2062/63. It decreased in the fiscal year 2063/64 and reached to 59.22 \%.Again it were increased in 2064/65 and 2065/66 i.e. 63.67\%, $73.58 \%$ respectively. And the net profit to total assets ratio was also found to be increasing trend over the five years period. It was $1.12 \%$ for the fiscal year 2061/62 which increased to $1.91 \%$ for the fiscal year 2065/66. Increasing trend of the profit in comparison to total assets of the bank was showing good management of the bank.

Table 4.8
Relation between Net Profit and Total NPA

| Fiscal Year | Net Profit | Total NPA |
| :---: | :---: | :---: |
| $2061 / 62$ | $308,275,171$ | $1,001,347,320$ |
| $2062 / 63$ | $457,457,696$ | $1,040,757,823$ |
| $2063 / 64$ | $491,822,905$ | $641,615,306$ |
| $2064 / 65$ | $635,868,519$ | $477,229,223$ |
| $2065 / 66$ | $752,834,735$ | $551,309,634$ |

Source: Annual Reports of the Concern Bank of Fiscal Year 2061/62 to 2065/66

In Table 4.8 shows that the status of non-performing assets (NPA) and net profit of the bank in different years. In fiscal year 2061/62, the bank had NPA amount to Rs 1001347320 and bank's net profit amount to be Rs 308275171. In fiscal year 2062/63 the NPA amount to Rs. 1040757823 i.e. NPA increased by Rs 39410503 (i.e. 3.94 \%) in comparison of previous year. As the result the bank increase its profit by Rs 149182525 in comparison of previous year and net profit reached amounted to Rs 457457696 at the end of fiscal year 2062/63. The profit was increased for the following years and the non performing assets were decreasing during the study period except 2065/66.

To make clearer the data of Table 4.8 also presented on the Figure 4.6:
Figure 4.6
Relation between Net Profit and Total NPA


## Loan Loss Provisioning of Himalayan Bank Limited

The loan loss provision maintains by Himalayan Bank Ltd. is presented in the
Table 4.9.

## Table 4.9

Loan Loss Provisioning of Himalayan Bank Limited

| Types of | $\begin{array}{c}\text { Requirement as per } \\ \text { Loan }\end{array}$ | Directives |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |$)$

Source: Annex 2

Commercial banks have to maintained loan loss provision as per the NRB's directives for the commercial bank.

In fiscal year 2061/62, the bank able to maintain only in pass loan as per NRB's directives. But loan loss provision for substandard loan, was found 60.2 \% which was higher than the NRB's directives i.e. $25 \%$ and doubtful loan \&
bad loan were found to be lower then requirement i.e. $47.23 \%, 99.54 \%$ which were lower than the NRB's directive i.e. $50 \%, 100 \%$.

In fiscal year 2062/63, the bank also able to maintain in pass loan as per NRB's directives. But bank provisioned 57.78 \%, 68.16 \% and 100.26 \% respectively for the substandard, doubtful and bad loan which was highly higher than that of requirement.

In fiscal year 2063/64, the bank able to maintain in pass loan and doubtful loan as per requirement. But bank unable to maintain in substandard and bad loan as per NRB's directives. Loan loss provision for substandard loan was $25.46 \%$ which was higher than the requirement and bad loan was $99.48 \%$ which was lower than as per NRB's directives.

In fiscal year 2064/65, the bank was able to maintain in substandard and doubtful loan as per NRB's directives. Loan loss provision for pass loan was higher than the requirement as per NRB's directives i.e. 1.02 \%and bed loan was lower than as per NRB's directives.

Fiscal year 2065/66, Loan loss provision for sub standard loan, doubtful loan and bad loan were $44.19 \%$, $50.86 \% \& 99.52 \%$ which are not match as per NRB's directives. The bank only able to maintain pass loan as per NRB's directives which was 1 percent. $1 \%$.

It is found that the bank could not maintained loan loss provision, perfectly in accordance to the NRB's directives. The bank maintained higher than requirement for one class loan when lower for another class. Therefore, the bank should give priority to maintain loan loss provision as requirement as per NRB's directives.

### 4.3 Performing and Non- Performing assets of commercial banks in Total

 Assets, Total Lending \& Total DepositTable 4.10
Performing and Non- Performing Assets of Commercial Banks in
Total Assets, Total Lending \& Total Deposit

| Bank | Assets |  | Lending |  | Deposit |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of PA <br> to TA | \% of NPA <br> to TA | \% of PA <br> to TL | \% of NPA <br> to TL | \% of PA <br> to TD | \% of NPA <br> to TD |
| EBL | 65.8 | 0.64 | 99.03 | 0.97 | 75.48 | 0.74 |
| Nabil | 60.14 | 0.65 | 98.93 | 1.07 | 70.23 | 0.76 |
| HBL | 52.9 | 2.36 | 95.56 | 4.44 | 59.34 | 2.64 |

Source: Annex 1

Up to the fiscal year 2061/62, Everest Bank Ltd had performing assets amounted Rs 7771282526 which was increased by 28.77 \% and reached to Rs 10007018658 in the end of fiscal year 2062/63. It further increased every year and reached amount to 24351570294 for the fiscal year 2065/66.

The total assets of the Everest Bank were increasing during the five years period. The percentage of performing assets to total asset was $66.24 \%$ at the end of fiscal year 2061/62 but it was decreased in the fiscal year 2062/63 and reached to $62.70 \%$. The percentage of performing assets to total asset was increased in the fiscal year 2063/64 \& 2064/65 by 65.18 \% \& $68.91 \%$ respectively but it decreased to 65.96 \% in fiscal year 2065/66. The average percentage of performing assets to total assets of the five years periods was found to be $65.8 \%$.

The total lending was increasing trend during the study period. The percentage of performing assets to total lending was 98.28 \% in the fiscal year 2061/62 and it increased and reached to $98.73 \%$ for the end of fiscal year 2062/63.It was further increased to fiscal year 2065/66 and reached to $99.52 \%$. The average percentage of performing assets to total lending of five years was 99.03 \%.

The percentage of performing assets to total deposit was $76.96 \%$ in the fiscal year 2061/62 and it was decreased to $72.50 \%$ at the end of the year 2062/63.It was increased 76.81 \% \& 78.03 \% in the fiscal year 2063/64 \& 2064/65 Respectively but it was decreased in the year 2065/66 and reached $73.08 \%$. 75.48 \% was the average percentage of performing assets to total deposit of five years period. This trend of performing assets indicated that the bank could able to increase its performing loan through regular control and supervision of its lending.

The total non performing assets (NPA) of Everest Bank Ltd had Rs 128807745 in the fiscal year 2061/62 and it increased and reached amount to Rs. 129235790 at the end of fiscal year 2062/63.But it was decreased to Rs. 113178936 at the end of fiscal year 2063/64.Again it increased in fiscal year 2064/65 and reached to Rs. 121003623. But again it decreased to Rs. 117985232 at the end of fiscal year 2065/66.

The percentage of NPA to total assets of Everest Bank ltd for the year ended 2061/62 was 1.10 \% which was decreased in the fiscal year 2062/63 and reached to $0.81 \%$. It was decreasing for the following three years and reached 0.32 \% in the fiscal year 2065/66. The average percentage of NPA to total assets of five years was $0.64 \%$.

The percentage of NPA to total lending of Everest Bank Ltd for the year ended 2061/62 was 1.63 \% which was decreasing for the following four years and it was reached to $0.48 \%$ in the fiscal year 2065/66 and the average percentage of NPA to total lending of five years was 0.97 \%.

The Percentage of NPA to total deposits of Everest Bank ltd for the year ended 2061/62 was 0.74 \% Similarly, like the percentage of NPA to total lending the percentage of NPA to total deposits was decreasing following five years and reached $0.35 \%$ in the fiscal year 2065/66. The average percentage of NPA to total deposits was 0.74 \%.

In the fiscal year 2061/62, Nabil Bank Ltd had performing assets amounted Rs 10802229684 which was increased every year during the study period and reached amount to 27774194658 for the fiscal year 2065/66.

The total assets of the Nabil Bank were increasing during the five years period. The percentage of performing assets to total asset was decreased from $62.85 \%$ for the year ended 2061/62 to $58.65 \%$ at the end of fiscal year 2062/63 and again it was decreased to 57.70 \% at the end of fiscal year 2063/64. But it was increasing in the following two years and reached to $63.31 \%$ in the fiscal year 2065/66. The average percentage of performing assets to total assets of the five years periods was found to be $60.14 \%$.

The total lending was increasing trend during the study period. The percentage of performing assets to total lending was $98.68 \%$ for the year 2061/62. It slightly decreased in the fiscal year 2062/63 to 98.62 \%.But it increased to the fiscal year 2064/65. Again it slightly decreased to fiscal year 2065/66 and reached to $99.20 \%$. The average percentage of performing assets to total lending of five years was $98.93 \%$.

The percentage of performing assets to total deposit was $74.06 \%$ in the fiscal year 2061/62..Then it decreased to $67.37 \%$ to the end of the year 2063/64. It was increasing following two year and reached to $74.37 \%$ in fiscal year 2065/66. The average percentage of performing assets to total deposit of five years period was $70.23 \%$.

The total non performing asset (NPA) of Nabil Bank Ltd was Rs 144506893 in the year 2061/62 and it was decreasing during the five years period and reached amount to Rs. 224817413 for the fiscal year 2065/66.

The percentage of NPA to total assets of Nabil Bank ltd for the year ended 2061/62 was $0.84 \%$ which decreased during the study period and reached to
$0.51 \%$ in the end of fiscal year 2065/66. The average percentage of NPA to total assets of five years was $0.65 \%$.

The percentage of NPA to total lending of Nabil Bank ltd for the year ended 2061/62 was $1.32 \%$ which increased to $1.38 \%$ for the years 2062/63. It decreased for the following two years and reached to $0.74 \%$ in the end of fiscal year 2064/65 and it slightly increased to $0.80 \%$ in the fiscal year 2065/66. The average percentage of NPA to total assets of five years was $1.07 \%$.

The percentage of NPA to deposit of Nabil Bank Ltd for the year ended 2061/62 was $0.99 \%$ which decreased during the three years study period and reached to $0.50 \%$ in the end of fiscal year 2064/65 and it slightly increased to $0.60 \%$ in the year 2065/66. The average percentage of NPA to total assets of five years was $0.76 \%$.

In the Fiscal year, Himalayan Bank had performing assets Rs. 12449820947 which increased every year during the study period and reached amount to 24968209447 for the fiscal year 2065/66.

The total assets of the Himalayan Bank were increasing during the five years period. The percentage of performing assets to total asset increased from 45.41 $\%$ for the year ended 2061/62 to $63.50 \%$ at the end of fiscal year 2065/66. The average percentage of performing assets to total assets of the five years periods was found to be $52.90 \%$.

The total lending was increasing during the study period. The percentage of performing assets to total lending was $92.56 \%$ for the end of the fiscal year 2061/62 and which increased during the five years period and reached to 97.84 \% for the end of fiscal year 2065/66 and the average percentage of performing assets to total lending of five years was $95.56 \%$. This trend of performing assets indicates that the bank could able to control and supervise its lending properly.

Similarly, like a percentage of performing assets to total lending, the percentage of performing assets to total deposit was increasing trend for the five years period. The percentage of performing assets to total deposit was $50.17 \%$ for the end of the fiscal year 2061/62 and which increased during the five years period and reached to 71.99 \% for the end of fiscal year 2065/66 and the average percentage of performing assets to total lending of five years was 59.34 \%

The total non performing assets (NPA) of Himalayan Bank Ltd had Rs 1001347320at the end of fiscal year 2061/62 which increased by $3.94 \%$ and reached to Rs 1040757823 in the fiscal year 2062/63. Unfortunately it decreased for following two years and reached Rs. 477229223 at the end of fiscal year 2064/65. In the fiscal year 2065/66 total NPA was again increased by $15.52 \%$ and reached to Rs 551309634.

The percentage of NPA to total assets of Himalayan Bank ltd for the year ended 2061/62 was $3.65 \%$ which was decreasing following fours and reached to $1.32 \%$ for the year ended 2064/65.It slightly increased in the fiscal year 2065/66 and reached to 1.40 \%.The average percentage of NPA to total assets of fives years was $2.63 \%$.

Similarly, the percentage of NPA to total lending as well as percentage of NPA to total deposit was same trend. During the study period the percentage of NPA to total lending and percentage of NPA to total deposit were decreasing trend. This trend of non performing assets indicates that the bank could able to control towards NPA during the five years period. Because of good control, supervision and concentration, the bank could recover its lending (NPA). Decreasing trend of percentage of non performing assets (NPA) indicates the good financial position as well as assets management of the bank.

# 4.4 Percentage Performing and Non Performing Assets of Commercial Banks in Total Loan 

Table 4.11
Percentage Performing and Non - Performing Assets of
Commercial Banks in Total Loan

| Banks | Performing Asset |  | Non Performing Asset |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | PL /TL | RL /TL | SL /TL | DL /TL | BL /TL |
| EBL | 97.17 | 1.86 | 0.05 | 0.04 | 0.89 |
| Nabil | 98.80 | 0.50 | 0.43 | 0.14 | 0.51 |
| HBL | 92.70 | 2.87 | 0.51 | 1.23 | 2.70 |

Source: Annex 3

Up to fiscal year 2061/62 Everest Bank Ltd had total loan and advances amounted Rs 7900090271 which was increased every years during the study period i.e. five years period and it had become to Rs 24469555526 in the fiscal year 2065/66.

The percentage of pass loan to total loan of Everest Bank was increasing trend for the five years period. It was $94.34 \%$ in the fiscal year 2061/62 which was increased to $99.10 \%$ in the fiscal year 2065/66. The average percentage of pass loan to total loan of five years was $97.17 \%$.

The percentage of restricted loan to total loan of Everest Bank was 4.03 \% in the fiscal 2061/62 which decreased to $0.42 \%$ in the fiscal year 2065/66. The average percentage of restricted loan to total loan of two years was $1.86 \%$.

The percentage of substandard loan to total loan of Everest Bank was decreasing trend for the five years period. It was $0.06 \%$ for the fiscal year 2061/62 which was decreased to 0.01 in the fiscal 2065/66 and the average percentage of substandard loan to total loan of five years period was $0.05 \%$.

The percentage of doubtful loan to total loan of Everest Bank was found to be fluctuating over the five years period. It was $0.03 \%$ for the fiscal year

2061/62which was decreased to $0.01 \%$ in fiscal year 2062/63 and increased to 0.02 \% in fiscal year 2063/64. Again it decreased to $0.01 \%$ in fiscal year 2064/65 and increased to 0.12 in fiscal year 2065/66. The average percentage of doubtful loan to total loan of five years period was $0.19 \%$.

The percentage of bad loan to total loan of Everest Bank was in a decreasing trend for the five years period. It was 1.55 \% in the fiscal year 2061/62 which decreased to $0.36 \%$ and the average percentage of bad loan to total loan of five years period was $0.89 \%$.

Up to fiscal year 2061/62 Nabil Bank Ltd had total loan and advances amounted Rs 10946736577 which increased by Rs 2332045682 (i.e.21.30 \%) of the previous year. During the study period, total loan of the bank was increasing every year and reached to Rs 27999012071 at the end of fiscal year 2065/66.

The percentage of pass loan to total loan of Nabil Bank was $97.45 \%$ in fiscal year 2061/62 which decreased in the following two years and reached to 98.34 \% in fiscal year 2063/64. It was increased to 99.21 \% in the fiscal year 2064/65 and it was slightly decreased to 99.17 \% in the fiscal year 2065/66.

Restricted loan to total loan was found to be decreasing trend during the studying period. It was $1.23 \%$ in fiscal year 2061/62 which decreased to 0.03 \% in the fiscal year 2065/66. The average percentage of restricted loan to total loan of five years was $0.50 \%$.

The percentage of substandard loan to total loan of Nabil Bank had 0.20 \% in the fiscal year 2061/62 which increased and reached to $0.75 \%$ in fiscal year 2063/64 and decreased to $0.30 \%$ in the fiscal year 2064/65. Again it increased to $0.40 \%$ in fiscal year 2065/66 and the average percentage of substandard loan to total loan of five years was $2.14 \%$.

The percentage of doubtful loan to total loan of Nabil Bank had $0.02 \%$ in the fiscal year 2061/62 which decreased to $0.16 \%$ in the fiscal year 2065/66 and the average percentage of doubtful loan to total loan of five years was $0.69 \%$. The percentage of bad loan to total loan of Nabil Bank had $1.10 \%$ in the fiscal year 2061/62 which decreased to $0.23 \%$ in the fiscal year 2065/66. The average percentage of bad loan to total loan of five years was $0.51 \%$.

Up to fiscal year 2061/62, Himalayan Bank Ltd had total loan and advances amounted Rs 13451168267 which was increased every years during the study period i.e. five years period it had become to Rs 25519519081 in the fiscal year 2065/66.

The percentage of pass loan to total loan of Himalayan Bank had 87.89 \% in the fiscal year 2061/62 which was increased to following four years during study period and reached to 96.66 \% in fiscal year 2065/66. The average percentage of pass loan to total loan of five years was $92.70 \%$.

The percentage of restricted loan to total loan of Himalayan Bank was decreasing trend during five years studying period. It was $4.67 \%$ at the end of the fiscal year 2061/62 and reached to $1.18 \%$ for the end of the fiscal year 2065/66. The average percentage of restricted loan to total loan of five years was $2.87 \%$.

The percentage of substandard loan to total loan of Himalayan Bank had 0.52 \% for the fiscal year 2061/62. It increased 0.68 \% in the fiscal year 2062/63 which decreased to 0.27 \% in fiscal year 2064/65 and increased to $066 \%$ in fiscal year 2065/66.The average percentage of substandard loan to total loan of five years period was $0.51 \%$.

The percentage of doubtful loan to total loan and bad loan to total loan of Himalayan Bank were $1.80 \%$ and 5.13 \% in the fiscal year 2061/62
respectively which were decreased to following four years and reached to 0.76 \% and $0.74 \%$ in the fiscal year 2065/66.The average percentage of doubtful loan to total loan and bad loan to total loan of five years period were $1.23 \%$ and $2.70 \%$ respectively.

### 4.5 Correlation Analysis

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to other variable. Two or more variable are said to be correlated if change in the value of one variable appears to related or linked with the change in the value of other variable. Correlation is an analysis of the covariance between two or more variables and correlation analysis deals to determine the degree to the closeness of the relationship between the different variables. In the correlation analysis, only one variable is treated as the dependent variable and one or more variables are treated as independent.

Correlation Analysis generally used to describe the degree to which one variable is related to another, in statistics is used in order to depict the covariance between two or more variables. It helps to determine whether

- A positive or negative relation exists
- The relation is significant or insignificant
- Establishes cause and effect relation if any


### 4.5.1 Correlation between NPA and ROA of the Commercial Banks

The statistical tool, 'correlation analysis' is preferred in this study to identify the relationship between NPA and ROA and whether the relationship is significant or not. Here NPA denotes the percentage of NPA in total lending of the bank and ROA denotes the net profit as percentage of total assets of the banks.

Table 4.12
Correlation between NPA and ROA of the Commercial Bank

| Bank | Coefficient of <br> Correlation <br> (r) | Relationship | Coefficient of <br> Determination <br> $\left(\mathbf{r}^{2}\right)$ | Probable <br> error (P.E.) $)$ | Significant/ <br> Insignificant |
| :--- | :---: | :---: | :---: | :---: | :--- |
| EBL | -0.63 | negative | 0.40 | 0.18 | insignificant |
| Nabil | 0.93 | positive | 0.86 | 0.41 | significant |
| HBL | -0.84 | negative | 0.71 | 0.09 | significant |

Source: Annex 4

In Table 4.12 the correlation coefficient between the Non Performing Assets to Returns on Assets shows that there is negative relationship between these two variables. The established theory also states that the Profit and Non Performing assets also flow in the opposite direction. When the amount of NPA is lesser, profit would be high and whenever the amount of NPA is more then profit goes on decreasing, which is explained by the above table.

EBL has the correlation coefficient of -0.63 which is categorized as having moderate degree of negative correlation. And $40 \%$ of the profitability is affected by the NPA to the respective banks and rest is affected by the other factor. And the test so made for these bank is found to be insignificant as the correlation is lesser than Probable error (P.E.) multiplied by six times.

Nabil Bank and HBL have the correlation coefficient of 0.93 and $-.84 \%$ which are categorized as having high degree of positive and negative correlation. 86 \% and $71 \%$ of the relationship is affected by the NPA in the increment of the profitability of the bank. As coefficient of determination of the Nabil bank and HBL were found to be $86 \%$ and $71 \%$ remaining $14 \%$ and $29 \%$ for the individual bank is affected by other factor. Further more, the value of P.E. are 0.41 and 0.09 for bank indicating significant relationship between them respectively.

### 4.5.2 Correlation between NPA and Total Deposit of the Commercial Banks

The statistical tool, 'correlation analysis' is preferred in this study to identify the relationship between NPA and Total lending and whether the relationship is significant or not.

Table 4.13

## Correlation between NPA and Total Deposit of the Commercial Bank

| Bank | Coefficient of <br> Correlation <br> $(\mathbf{r})$ | Relationship | Coefficient of <br> determination <br> $\left(\mathbf{r}^{\mathbf{2}}\right)$ | Probable <br> Error <br> $($ P.E. $)$ | Significant/ <br> insignificant |
| :--- | :---: | :---: | :---: | :---: | :--- |
| EBL | -0.63 | negative | 0.40 | 0.18 | insignificant |
| Nabil | 0.74 | positive | 0.55 | 0.14 | insignificant |
| HBL | -0.79 | negative | 0.62 | 0.11 | significant |

Source: Annex 5

In table 4.13 the correlation coefficient between Total Lending and NPA shows that there is negative relationship between these two variables. When the amount of Total Lending is increases the amount in NPA is more and vice versa.

EBL has the correlation coefficient of -0.63 which is categorized as having moderate degree of negative correlation. And $40 \%$ of the profitability is affected by the NPA to the respective banks and rest is affected by the other factor. And the test so made for these bank is found to be insignificant as the correlation is lesser than Probable error (P.E.) multiplied by six times.

Nabil bank has the correlation coefficient of 0.79 which is categorized as having high degree of positive correlation. $55 \%$ of the total lending is affected by the NPA to the respective bank and rest is affected by the other factor. And the test so made for this bank is found to be insignificant as the correlation is less than Probable error ( P.E.) multiplied by six times.

HBL has the correlation coefficient of $-0.79 \%$ which is categorized as having high degree of negative correlation. And $62 \%$ of the total lending is affected by the NPA to the respective bank and rest is affected by the other factor. Since the P.E. for the HBL is less than the coefficient of correlation bank indicating significant.

### 4.6 Major Findings

This study is concerned to find out the level of NPA and its effects on the returns on assets and the other factors of the Nepalese commercial bank. This study especially focuses on three commercial banks of Nepal, viz. Everest, Nabil and Himalayan only, out of the 30 commercial banks operating in the banking industry of Nepal.

The case of Everest Bank Limited (EBL), total NPA and net profit have been found to be increasing, NPA to total lending ratio have been found decreasing over the years as it was $1.63 \%$ in the fiscal year 2061/62 and decreased to 0.48 \% in the fiscal year 2065/66. The total lending to total deposit ratio is found to be decreasing over the five years period it was $78.24 \%$ in the fiscal year 2061/62 and slightly decreased to 73.43 \% in fiscal year 2065/66. The net profit to total assets ratio is found to be increasing over the years as it was 1.46 $\%$ in the fiscal year 2061/62 and decreased to $1.73 \%$ in the fiscal year 2065/66.

In case of Nabil Bank Limited (NBL), total NPA and net profit have been found to be increasing, NPA to total lending ratio have been found decreasing over the years as it was $1.32 \%$ in the fiscal year 2061/62 and increased to 0.80 \% in the fiscal year 2065/66. The total lending to total deposit ratio was 75.05 \% in the fiscal year 2061/62 and slightly decreased to 74.97 \% in fiscal year 2065/66. The net profit to total assets ratio is found to be decreasing over the years as it was $3.02 \%$ in the fiscal year 2061/62 and decreased to $2.35 \%$ in the fiscal year 2065/66.

In case of the Himalayan Bank Limited (HBL), total NPA have been decreased and net profit have been found to be increasing, NPA to total lending ratio have been found decreasing over the years as it was $7.44 \%$ in the fiscal year 2061/62 and increased to $2.16 \%$ in the fiscal year 2065/66. The total lending to total deposit ratio is found to be increasing over the five years period. The net profit to total assets ratio is found to be increasing over the years as it was 1.12 $\%$ in the fiscal year 2061/62 and decreased to $1.91 \%$ in the fiscal year 2065/66.

The percentage of performing assets to total assets of the EBL have been found to be high among the sample banks, which was $65.80 \%$ and the HBL have been found to be 52.90 \% which was lower than other banks. Among the sample banks the percentage of non performing assets to total assets of the EBL was found low which was $064 \%$ and it was found to be $2.36 \%$ of the HBL which was high.

The percentage of performing assets to total lending was found higher in EBL and lower in HBL which was $99.03 \%$ and 95.56 \% respectively. The percentage of non performing assets to total lending was found lower in EBL and higher in HBL among the sample banks.

The percentage of performing assets to total deposit of EBL have been found to be 75.48 \% which was higher than other banks and it was $59.34 \%$ of the HBL. The percentage of non performing assets to total deposit was $0.74 \%$ of EBL and $2.64 \%$ of HBL respectively which was lower and higher ratio.

The average ratio of pass loan to total loan of five years have been found higher in Nabil Bank Ltd and lower in HBL which was 98.80 \% and 92.70 \% respectively. The average ratio of restricted loan to total loan of five years has been found higher in HBL which was 2.87 \%.

The average ratio of non performing assets to total loan of five years was found lower in Everest Bank Limited. The average ratio of substandard loan to total loan and bad loan to total loan of five years have been found lower in EBL and higher in HBL. The average ratio of doubtful loan to total loan of five years was found higher in HBL and lower in Nabil Bank Ltd.

The correlation coefficient between ROA and level of NPA is found to be negative for each of the bank except that the Nabil Bank under the study period. Nabil Bank has high degree of positive correlation coefficient i.e. the ROA is directly dependent on the level of NPA, higher the NPA the more will be the returns on assets of banks and vice versa. HBL has high degree of negative correlation i.e. the ROA is indirectly dependent on the level of NPA, higher the NPA the lower will be the returns on assets and vice versa.

EBL has the moderate degree of negative correlation. Only $40 \%$ of return is affected by level of NPA and remaining is affected by other factor. Nabil bank has high degree of positive correlation i.e. the total lending is directly dependent on the level of NPA, higher the NPA the more will be the total lending of banks and vice versa. HBL has high degree negative correlation coefficient. $62 \%$ on the lending is affected by the level of NPA and remaining only $38 \%$ is affected by other factors.

## CHAPTER -V <br> SUMMARY CONCLUSION AND RECOMMENDATIONS

### 5.1 Summary

A commercial bank means the bank, which deals with exchanging currency, accepting deposits, giving loans doing other various commercial transactions. Therefore, the major function of commercial bank is to accept deposits and provide loans.

There is not so long history of commercial bank in Nepal. Nepal Bank Limited established in 1994 B.S. was the first commercial bank of the Nepal. But now there are twenty seven commercial banks all over the country and they have been expanding their services by establishing branches in every corner of the country.

The assets of commercial bank indicate the manner in which the funds entrusted to the bank are employed. The successful working of the bank depends on ability of the management to distribute the fund among the various kind of investment known as assets outstanding loan advance of the bank. These assets constitute primary source of income to the bank. As being a business unit a bank aims at making huge profit since loan and advances are more profitable than any other assets of the bank, it is willing to lend as much as its fund as possible. But the bank has to be careful about the repayment of loan and interest giving loan. If the bank is too timid, it may fail to obtain the adequate return on the fund, which is confined to it for use. Similarly, if the bank is too liberal, it may easily impair its profits by bad debts. Therefore, bank should not forget the reality that most of the bank failures in the world are due to shrinkage in the value of the loan and advances.

Despite of being loan and advances more profitable than 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 assets on the basis of overdue aging schedule. If the dues in the form of principal and the interest are not paid, by borrower within a maturity period, that amount of principal and interest is called non performing loan or assets. It means NPA could wreak branch profitability both through loss of interest income and need to write off the principal loan amount. Performing assets have multiple benefits to the company as well as to the society while non performing assets erode even existing capital of the bank.

Escalating level of NPA has been becoming great problem in banking business in the world. In this context, Nepal can not be run off from this situation. The level of NPA in Nepalese banking system 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 and the issue of becoming more and more unmanageable day by day. it is well known from different financial reports, newspapers and news that the total NPA in Nepalese banking system is about 32 Billion while it is very worse in case of two largest commercial banks RBB and NBL (Nepal Rastra Bank, 2006: 06).

Therefore, this study is concerned to find out the level of NPA and its effects on the returns on assets and the other factors of the Nepalese commercial bank. This study especially focuses on three commercial banks of Nepal, viz. Everest, Nabil and Himalayan only, out of the 30 commercial banks operating in the banking industry of Nepal.

The level of NPA is found to be highest for the HBL in the fiscal year 2062/63, which was Rs1,040,757,823 where as the lowest, was found that of EBL in the fiscal year 2063/64 which was Rs 113,178,936. In overall, the performance of the HBL is found to be satisfactory as the level of NPA is gradually decreasing and net profit is gradually increasing over the years covered by this study period.

In case of Everest Bank limited and Nabil Bank Limited, they able to increase net profit of the bank although they can not control the level of non performing assets. The level of NPA was also increasing during the study period. The level of non performing assets plays vital role in increment and decrement of profit of the commercial banks.

Every commercial Bank should follow the NRB directives. Commercial bank has to maintain loan loss provision as per NRB directives for the commercial bank. According to NRB directives, loan loss provision for pass loan should be $1 \%$ of pass loan, for substandard loan it should be $25 \%$ of substandard loan, for doubtful loan it should be $50 \%$ of doubtful loan and for bad loan it should be $100 \%$ of bad loan.

Every commercial bank is trying to exactly meet the NRB's directives regarding non performing assets. But the sample banks of the study could not maintained loan loss provision perfectly accordance to the NRB directives for all classed. The bank maintained higher the loan loss provision requirement for one class loan when lower another class loan.

Everest Bank Limited could maintain loan loss provision, perfectly in accordance to NRB directives with compare to another sample bank of the study. Therefore it can conclude the EBL able to maintain the loan loss provision. The remaining sample banks should give priority to maintain the loan loss provision as requirement as per NRB's directives.

The percentage of performing assets to total assets of the HBL has found to be high among the sample banks, which was $65.80 \%$ and the HBL have been found to be 52.90 \% which was lower than other banks. Among the sample banks the percentage of non performing assets to total assets of the EBL was found low which was $0.64 \%$ and it was found to be $2.36 \%$ of the HBL which was high.

The percentage of performing assets to total lending was found higher in EBL and lower in HBL which was $99.03 \%$ and 95.56 \% respectively. The percentage of non performing assets to total lending was found lower in EBL and higher in HBL which was $0.97 \%$ and $4.44 \%$ respectively among the sample banks.

The percentage of performing assets to total deposit of EBL has been found to be 75.48 \% which was higher than other banks. The percentage of non performing assets to total deposit of HBL has been found to be $2.64 \%$ which was higher than other banks.

The average ratio of pass loan to total loan of five years have been found higher in Nabil Bank Limited and lower in HBL which was 98.80 \% and 92.70 \% respectively. The average ratio of restricted loan to total loan of five years has been found higher in HBL which was 2.87 \%.

The average ratio of non performing assets to total loan of five years was found lower in Everest Bank Limited. The average ratio of substandard loan to total loan and doubtful loan to total loan of five years have been found lower in EBL. The average ratio of bad loan to total loan of five years was found higher in HBL and lower in Nabil Bank Limited.

### 5.2 Conclusion

The profitability of Nepalese commercial bank is affected by non performing assets of bank. When the level of non performing assets is increasing then the profit of the bank is decreasing and vice versa. Therefore the NPA and profitability of the bank have negative correlation.

The level of NPA is found to be highest for the HBL in the fiscal year 2062/63, which was Rs1,040,757,823 where as the lowest, was found that of EBL in the fiscal year 2063/64 which was Rs $113,178,936$. In overall, the performance of
the HBL is found to be satisfactory as the level of NPA is gradually decreasing and net profit is gradually increasing over the years covered by this study period.

Every commercial bank is trying to exactly meet the NRB's directives regarding non performing assets. In overall, Everest Bank Limited could maintain loan loss provision, perfectly in accordance to NRB directives with compare to another sample bank of the study. Therefore it can conclude the EBL able to maintain the loan loss provision as per NRB's directives. The remaining sample banks should give priority to maintain the loan loss provision as requirement as per NRB's directives.

### 5.3 Recommendations

High level of non performing assets not only decreases the profitability of the banks but also entire financial as well as operational health of the country. If the NPA were not controlled immediately, it would be proved as a curse for the banks in near future. Therefore, following are some of the recommendations, which will help to reduce the level of NPA of the Nepalese commercial banks:

- Corporate structure of bank plays key role in the effective loan management. Being loan a risky asset, efforts should be made to have proper control in every steps of loan management. The banks should establish separate department for credit appraisal, documentation, disbursement, inspection and recovery of loan which have possibility of finding mistakes of one department by the others, so that the effectiveness can be achieved.
- Loan must be given if the banker is satisfied that the borrower can repay money from the cash flow generated from operating activities. However, the banks want to ensure that their loan is repaid even in case of failure of business. To prevent banks from such happenings, the bank take collateral is disposed for the recovery of loan. Therefore the bank should take proper valuation of collateral so that the bank at least will be able to
recover its principal and interest amount in case of failure of the borrower to repay the loan.
- Lack of proper financial analysis of the borrower by the banks, is one of the major causes behind increasing NPA of Nepalese commercial banks. Therefore, proper financial analysis should be performed before giving loan to the borrower.
- Those banks, which have high level of NPA, should take necessary action towards recovering their bad loan as possible. In case of doubtful to repay the loan by the borrower, the bank should dispose off the collateral taken from them and recover the principal and the interest amount there of.
- Diversification of the loan should be managed by the individual banks. In the context of Nepal it is provided to the borrower so often go to the bank not in the new sector. Default by older borrower can be found, which should be avoided.
- Control mechanism of the bank should be managed properly. Black listed customers should not be given the new loan, as it would lead to the same situation to the bank.
- Political influences in the loan disbursement should be avoided as it may lead to worse condition to the bank as it may increase the non performing loan of the bank.
- Every commercial bank should maintain loan loss provision as per NRB's directives regarding non performing assets.


## BIBLIOGRAPHY

## Books:

Baidhya, S. (1997). Banking Management. Kathmandu: Monitor Nepal
Baxley, J.B. (1987). Banking Management. New Delhi: Subject Publication.
Benerjee, S.K. (1989). Financial Management. New Delhi: S. Chand \& Company Ltd.

Bhalla, V. K. (1997). Investment Management. (4 $4^{\text {th }}$ Edition). New Delhi: S. Chand \& Company Ltd.

Bidani, S.N. (2003).Managing Non -Performing Assets. New Delhi: Vision Books Publisher.

Gupta, S.P. (1988). Statistical Methods. New Delhi: Sultan Chand \& Sons.
Joshi, P.R. Research Methodology Kathmandu: Buddha Academic Publishers \& Distributors (P) Ltd.

Kothari, C.R. (1984). Quantitative Techniques. (3rd Revised Edition). New Delhi: Vikash Publishing House Pvt. Ltd.

Pandy I.M. (1966). Financial Management. New Delhi: Vikash Publishing House Pvt. Ltd.

Sharma, P.K. \& Chaudhary, A.K. (2005). Statistical Method. Kathmandu: Khanal Books Prakashan.

Shrestha, K.N. \& Manandhar, K.D. (2001). Statistics \& Quantitative Techniques for Management. Kathmandu: Valley Publishers.

Wolfe, H.K. \& Pant, P.R. (2003). Social Science Research \& Thesis Writing. Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

## Reports:

Everest Bank Limited (2061/62 to 2065/66). Annual Reports on Shareholders. Kathmandu.

Himalayan Bank Limited (2061/62 to 2065/66). Annual Reports on Shareholders. Kathmandu.

Nabil Bank Limited (2061/62 to 2065/66). Annual Reports on Shareholders. Kathmandu.

## Thesis:

Ghimire, G. (2005). Non Performing Assets of Commercial Banks: Cause \& Effects An Unpublished Master Degree Thesis Submitted to Faculty of Management, T.U.

Koirala, S. (2006). Non Performing Assets \& Profitability of Commercial Banks in Nepal. An Unpublished Master Degree Thesis Submitted to Faculty of Management, T.U.

Pradhan, K. (2008). A Study on Non Performing Assets of Commercial Banks in Nepal. An Unpublished Master Degree Thesis Submitted to Faculty of Management, T.U.

Yadav, U. (2007). A Study on Non Performing Assets with Special Reference to Nepal Bank Limited \& Rastriya Banijya Bank Limited. An Unpublished Master Degree Thesis Submitted to Faculty of Management, T.U.

## Websites:

http:/www.everestbankltd.com
http:/www.himalayanbankltd.com
http:/www.nabilbankltd.com
http:/www.nrb.org.com/np

## ANNEXURE

Annex - 1

## Everest Bank Limited

Calculation of Performing Assets to Total Asset, Total Lending \& Total Deposit

| Year | Total assets | Total Lending | Total Deposit | Performing assets | $\begin{gathered} \hline \% \text { of PA } \\ \text { to TA } \end{gathered}$ | $\begin{gathered} \% \text { of PA } \\ \text { to TL } \end{gathered}$ | $\begin{gathered} \text { \% of PA } \\ \text { to TD } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | (4/1* | (4/2* | (4/3* |
|  | T.A (1) | T.L.(2) | T.D. (3) | P.A. (4) | 100) | 100) | 100) |
| 2061/2062 | 11,732,516,418 | 7,900,090,271 | 10,097,690,989 | 7,771,282,526 | 66.24 | 98.37 | 76.96 |
| 2062/2063 | 15,959,284,687 | 10,136,254,448 | 13,802,444,988 | 10,007,018,658 | 62.70 | 98.73 | 72.50 |
| 2063/2064 | 21,432,574,300 | 14,082,686,087 | 18,186,253,541 | 13,969,507,152 | 65.18 | 99.20 | 76.81 |
| 2064/2065 | 27,149,342,884 | 18,836,431,762 | 23,976,298,535 | 18,709,121,394 | 68.91 | 99.32 | 78.03 |
| 2065/2066 | 36,916,848,654 | 24,469,555,526 | 33,322,946,246 | 24,351,570,294 | 65.96 | 99.52 | 73.08 |
| Summation |  |  |  |  | 328.99 | 495.13 | 377.39 |
| Mean |  |  |  |  | 65.80 | 99.03 | 75.48 |

Calculation of Non Performing Assets to Total Asset, Total Lending \& Total Deposit

| Total Lending | Total Deposit | Non Performing <br> Assets | $\%$ of NPA to <br> TA | $\%$ of NPA to <br> TL | $\%$ of NPA to <br> TD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| T.L.(2) | T.D. (3) | P.A. (4) | $(4 / 1 * 100)$ | $(4 / 2 * 100)$ | $(4 / 3 * 100)$ |
| $7,900,090,271$ | $10,097,690,989$ | $128,807,745$ | 1.10 | 1.63 | 1.28 |
| $10,136,254,448$ | $13,802,444,988$ | $129,235,790$ | 0.81 | 1.27 | 0.94 |
| $14,082,686,087$ | $18,186,253,541$ | $113,178,936$ | 0.53 | 0.80 | 0.62 |
| $18,836,431,762$ | $23,976,298,535$ | $121,003,623$ | 0.45 | 0.64 | 0.50 |
| $24,469,555,526$ | $33,322,946,246$ | $117,985,232$ | 0.32 | 0.48 | 0.35 |
| Summation |  |  |  |  | 3.20 |
| Mean |  |  |  |  | 0.64 |

Calculation of Net Profit to Total Assets \& Total Lending to Total Deposits

| Year | Total assets | Total Lending | Total Deposit | Net Profit | $\%$ of NP to <br> TA | $\%$ of TL to <br> TD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T.A (1) | T.L.(2) | T.D. (3) | N.P (3) | $(3 / 1 * 100)$ | $2 / 3 * 100$ |
| $2061 / 2062$ | $11,732,516,418$ | $7,900,090,271$ | $10,097,690,989$ | $170,807,797$ | 1.46 | 78.24 |
| $2062 / 2063$ | $15,959,284,687$ | $10,136,254,448$ | $13,802,444,988$ | $237,290,936$ | 1.49 | 73.44 |
| $2063 / 2064$ | $21,432,574,300$ | $14,082,686,087$ | $18,186,253,541$ | $296,409,281$ | 1.38 | 77.44 |
| $2064 / 2065$ | $27,149,342,884$ | $18,836,431,762$ | $23,976,298,535$ | $451,218,613$ | 1.66 | 78.56 |
| $2065 / 2066$ | $36,916,848,654$ | $24,469,555,526$ | $33,322,946,246$ | $638,732,757$ | 1.73 | 73.43 |
| Summation |  |  |  |  |  | 7.72 |
| Mean |  |  |  |  |  | 1.54 |

## Nabil Bank Limited <br> Calculation of Performing Assets to Total Asset, Total Lending \& <br> Total Deposit

| Year | Total assets | Total Lending | Total Deposit | Performing <br> assets | $\%$ of <br> PA to | $\%$ of <br> PA to | $\%$ of <br> PA to |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


|  |  |  |  |  | TA | TL | TD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T.A (1) | T.L.(2) | T.D. (3) | P.A. (4) | $\left(4 / 1^{*}\right.$ | $\left(4 / 2^{*}\right.$ | $\left(4 / 3^{*}\right.$ |
|  | $100)$ | $100)$ | $100)$ |  |  |  |  |
| $2061 / 2062$ | $17,186,330,816$ | $10,946,736,577$ | $14,586,608,707$ | $10,802,229,684$ | 62.85 | 98.68 | 74.06 |
| $2062 / 2063$ | $22,329,971,078$ | $13,278,782,259$ | $19,347,399,440$ | $13,096,157,779$ | 58.65 | 98.62 | 67.69 |
| $2063 / 2064$ | $27,253,393,008$ | $15,903,023,765$ | $23,342,285,327$ | $15,724,729,781$ | 57.70 | 98.88 | 67.37 |
| $2064 / 2065$ | $37,132,759,149$ | $21,759,460,334$ | $31,915,047,467$ | $21,598,374,339$ | 58.17 | 99.26 | 67.67 |
| $2065 / 2066$ | $43,867,397,504$ | $27,999,012,071$ | $37,348,255,840$ | $27,774,194,658$ | 63.31 | 99.20 | 74.37 |
| Summation |  |  |  |  |  | 300.68 | 494.64 |
| 3 | 351.15 |  |  |  |  |  |  |
| Mean |  |  |  |  |  | 60.14 | 98.93 |
| 70.23 |  |  |  |  |  |  |  |

Calculation of Non Performing Assets to Total Asset, Total Lending \& Total Deposit

| Year | Total assets | Total Lending | Total Deposit | Non <br> Performing <br> Assets | $\begin{gathered} \text { \% of } \\ \text { NPA } \\ \text { to } \\ \text { TA } \end{gathered}$ | $\begin{gathered} \hline \% \text { of } \\ \text { NPA } \\ \text { to } \\ \text { TL } \end{gathered}$ | $\begin{gathered} \% \text { of } \\ \text { NPA } \\ \text { to } \\ \text { TD } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T.A (1) | T.L.(2) | T.D. (3) | P.A. (4) | (4/1* | (4/2* | (4/3* |
|  |  |  |  |  | 100) | 100) | 100) |
| 2061/2062 | 17,186,330,816 | 10,946,736,577 | 14,586,608,707 | 144,506,893 | 0.84 | 1.32 | 0.99 |
| 2062/2063 | 22,329,971,078 | 13,278,782,259 | 19,347,399,440 | 182,624,480 | 0.82 | 1.38 | 0.94 |
| 2063/2064 | 27,253,393,008 | 15,903,023,765 | 23,342,285,327 | 178,293,983 | 0.65 | 1.12 | 0.76 |
| 2064/2065 | 37,132,759,149 | 21,759,460,334 | 31,915,047,467 | 161,085,995 | 0.43 | 0.74 | 0.50 |
| 2065/2066 | 43,867,397,504 | 27,999,012,071 | 37,348,255,840 | 224,817,413 | 0.51 | 0.80 | 0.60 |
| Summation |  |  |  |  | 3.26 | 5.36 | 3.81 |
| Mean |  |  |  |  | 0.65 | 1.07 | 0.76 |

Calculation of Net Profit to Total Assets \&
Total Lending to Total Deposits

| Year | Total assets | Total Lending | Total Deposit | Net Profit | $\%$ of NP <br> to TA | $\%$ of TL <br> to TD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T.A (1) | T.L.(2) | T.D. (3) | N.P (3) | $\left(3 / 1^{*} 100\right)$ | $2 / 3^{*} 100$ |
| $2061 / 2062$ | $17,186,330,816$ | $10,946,736,577$ | $14,586,608,707$ | $518,635,749$ | 3.02 | 75.05 |
| $2062 / 2063$ | $22,329,971,078$ | $13,278,782,259$ | $19,347,399,440$ | $635,262,439$ | 2.84 | 68.63 |
| $2063 / 2064$ | $27,253,393,008$ | $15,903,023,765$ | $23,342,285,327$ | $673,959,698$ | 2.47 | 68.13 |
| $2064 / 2065$ | $37,132,759,149$ | $21,759,460,334$ | $31,915,047,467$ | $746,468,394$ | 2.01 | 68.18 |
| $2065 / 2066$ | $43,867,397,504$ | $27,999,012,071$ | $37,348,255,840$ | $1,031,053,098$ | 2.35 | 74.97 |
| Summation |  |  |  |  |  | 12.70 |
| Mean |  |  |  |  | 354.96 |  |

Himalayan Bank Limited
Calculation of Performing Assets to Total Asset,
Total Lending \& Total Deposit

| Year | Total assets | Total Lending | Total Deposit | Performing assets | $\begin{gathered} \text { \% of } \\ \text { PA to } \\ \text { TA } \\ \hline \end{gathered}$ | $\begin{gathered} \text { \% of } \\ \text { PA to } \\ \text { TL } \end{gathered}$ | $\begin{gathered} \text { \% of } \\ \text { PA to } \\ \text { TD } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T.A (1) | T.L.(2) | T.D. (3) | P.A. (4) | (4/1* | (4/2* | (4/3* |


|  |  |  |  | $100)$ | $100)$ | $100)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 2062$ | $27,418,157,873$ | $13,451,168,267$ | $24,814,011,984$ | $12,449,820,947$ | 45.41 | 92.56 | 50.17 |
| $2062 / 2063$ | $29,460,389,672$ | $15,761,976,082$ | $26,490,851,640$ | $14,721,218,259$ | 49.97 | 93.40 | 55.57 |
| $2063 / 2064$ | $33,519,141,111$ | $17,793,723,863$ | $30,048,417,756$ | $17,152,108,557$ | 51.17 | 96.39 | 57.08 |
| $2064 / 2065$ | $36,175,531,637$ | $20,179,613,169$ | $31,842,789,356$ | $19,702,383,946$ | 54.46 | 97.64 | 61.87 |
| $2065 / 2066$ | $39,320,322,069$ | $25,519,519,081$ | $34,681,345,179$ | $24,968,209,447$ | 63.50 | 97.84 | 71.99 |
| Summation |  |  |  |  | 264.51 | 477.82 | 296.69 |
| Mean |  |  |  |  | 52.90 | 95.56 | 59.34 |

Calculation of Non Performing assets to Total Asset, Total Lending \& Total Deposit

| Year | Total assets | Total Lending | Total Deposit | Non Performing Assets | $\begin{gathered} \% \text { of } \\ \text { NPA } \\ \text { to } \\ \text { TA } \end{gathered}$ | \% of NPA to TL | $\begin{gathered} \% \text { of } \\ \text { NPA } \\ \text { to } \\ \text { TD } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T.A (1) | T.L.(2) | T.D. (3) | P.A. (4) | (4/1* | (4/2* | (4/3* |
|  |  |  |  |  | 100) | 100) | 100) |
| 2061/2062 | 27,418,157,873 | 13,451,168,267 | 24,814,011,984 | 1,001,347,320 | 3.65 | 7.44 | 4.04 |
| 2062/2063 | 29,460,389,672 | 15,761,976,082 | 26,490,851,640 | 1,040,757,823 | 3.53 | 6.60 | 3.93 |
| 2063/2064 | 33,519,141,111 | 17,793,723,863 | 30,048,417,756 | 641,615,306 | 1.91 | 3.61 | 2.14 |
| 2064/2065 | 36,175,531,637 | 20,179,613,169 | 31,842,789,356 | 477,229,223 | 1.32 | 2.36 | 1.50 |
| 2065/2066 | 39,320,322,069 | 25,519,519,081 | 34,681,345,179 | 551,309,634 | 1.40 | 2.16 | 1.59 |
| Summation |  |  |  |  | 11.82 | 22.18 | 13.19 |
| Mean |  |  |  |  | 2.36 | 4.44 | 2.64 |

Calculation of Net Profit to Total Assets \& Total Lending to Total Deposits

| Year | Total assets | Total Lending | Total Deposit | Net Profit | $\%$ of NP <br> to TA | $\%$ of TL to <br> TD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T.A (1) | T.L.(2) | T.D. (3) | N.P (3) | $\left(3 / 1^{*} 100\right)$ | $2 / 3^{*} 100$ |
| $2061 / 2062$ | $27,418,157,873$ | $13,451,168,267$ | $24,814,011,984$ | $308,275,171$ | 1.12 | 54.21 |
| $2062 / 2063$ | $29,460,389,672$ | $15,761,976,082$ | $26,490,851,640$ | $457,457,696$ | 1.55 | 59.50 |
| $2063 / 2064$ | $33,519,141,111$ | $17,793,723,863$ | $30,048,417,756$ | $491,822,905$ | 1.47 | 59.22 |
| $2064 / 2065$ | $36,175,531,637$ | $20,179,613,169$ | $31,842,789,356$ | $635,868,519$ | 1.76 | 63.37 |
| $2065 / 2066$ | $39,320,322,069$ | $25,519,519,081$ | $34,681,345,179$ | $752,834,735$ | 1.91 | 73.58 |
| Summation |  |  |  |  |  | 7.82 |
| Mean |  |  |  |  | 1.569 .88 |  |

Annex 2
Everest Bank Limited
Loan Loss Provision Maintained by Everest Bank

| Year | Pass loan( PL) |  |  | Sub-standard loan (SL) |  |  | Doubtful loan (DL) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | P L | Provision | $\begin{array}{\|c\|} \hline \text { \% Provision } \\ \text { for PL } \end{array}$ | S L | $\begin{array}{\|c\|} \hline \text { Provision } \\ \text { for SL } \end{array}$ | Provision for SL | D L | $\begin{array}{\|c\|} \hline \text { Provision } \\ \text { for DL } \end{array}$ | $\begin{gathered} \% \text { Provi } \\ \text { for D } \end{gathered}$ |
|  | 1 | 2 | 3=2/1*100 | 4 | 5 | 6=5/4*100 | 7 | 8 | $9=8 / 7$ |
| 2061/6 | 7,453,205,999 | 74,532,060 | 1.00 | 4,408,738 | 1,102,184 | 25.00 | 1,977,471 | 988,735 |  |
| 2062/63 | 9,757,195,136 | 97,571,951 | 1.00 | 10,669,326 | [2,667,331 | 25.00 | 683,784 | 341,892 |  |
| 2063/64 | 13,750,623,016 | 137,506,230 | 1.00 | 4,218,482 | 1,054,621 | 25.00 | 2,353,289 | 1,176,645 |  |
| 2064/65 | 18,555,269,076 | 185,337,297 | 1.00 | 6,306,745 | 1,576,686 | 25.00 | 745,926 | 372,963 |  |
| 2065/6 | 24,248,590,58 | 242,485,906 | 1.00 | 1,360,792 | 340,198 | 25.00 | 28,514,320 | 14,257,160 |  |

## Nabil Bank Limited

Loan Loss Provision Maintained by Nabil Bank

| Year | Pass loan( PL) |  |  | Sub-standard loan (SL) |  |  | Doubtful loan (DL) |  |  | Bad loan (BL) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | P L | Provisi on for PL | \%Provi sion for PL | S L | $\left\|\begin{array}{c} \text { Provisi } \\ \text { on for } \\ \text { SL } \end{array}\right\|$ | \%Provi sion for SL | D L | $\left\|\begin{array}{c} \text { Provisi } \\ \text { on } \\ \text { for } D L \end{array}\right\|$ | \%Provi sion for DL | B L | $\left.\begin{array}{\|c\|} \hline \text { Provisi } \\ \text { on } \\ \text { for } B L \end{array} \right\rvert\,$ | \%Provis ion for BL |
|  | 1 | 2 | $\begin{gathered} 3=2 / 1 * 1 \\ 00 \end{gathered}$ | 4 | 5 | $\begin{gathered} 6=5 / 4 * 1 \\ 00 \end{gathered}$ | 7 | 8 | $\begin{gathered} 9=8 / 7 * 1 \\ 00 \end{gathered}$ | 10 | 11 | $\begin{gathered} 12=11 / 10 \\ * 100 \end{gathered}$ |
| $\begin{gathered} 2061 / \\ 62 \end{gathered}$ | $\begin{array}{\|c\|} \hline 10,802,22 \\ 9,684 \end{array}$ | $\begin{gathered} 235,345 \\ , 571 \end{gathered}$ | 2.18 | $\begin{gathered} 22,072, \\ 562 \\ \hline \end{gathered}$ | $\begin{gathered} 6,865,4 \\ 63 \end{gathered}$ | 31.1 | $\begin{gathered} 1,934,0 \\ 92 \end{gathered}$ | $\begin{gathered} 1,415,9 \\ 26 \end{gathered}$ | 73.21 | $\begin{gathered} 120,500,1 \\ 239 \end{gathered}$ | $\begin{gathered} 116,939 \\ , 615 \end{gathered}$ | 97.05 |
| $\begin{array}{\|c\|} \hline 2062 / \\ 63 \end{array}$ | $\begin{gathered} 13,096,15 \\ 7,779 \end{gathered}$ | $\begin{gathered} 214,301 \\ , 301 \end{gathered}$ | 1.64 | $\begin{gathered} 62,665, \\ 914 \end{gathered}$ | $\begin{gathered} 42,573 \\ 904 \end{gathered}$ | 67.94 | $\begin{gathered} 29,565, \\ 952 \end{gathered}$ | $\begin{gathered} 13,896 \\ 064 \\ \hline \end{gathered}$ | 47 | $\begin{gathered} 90,392,6 \\ 14 \end{gathered}$ | $\begin{array}{\|c\|} \hline 85,467, \\ 837 \end{array}$ | 94.55 |
| $\begin{gathered} 2063 / \\ 64 \end{gathered}$ | $\begin{array}{\|c\|} \hline 15,638,48 \\ 1,983 \end{array}$ | $\begin{gathered} 119,704 \\ , 599 \end{gathered}$ | 1 | $\begin{gathered} 119,70 \\ 4,599 \end{gathered}$ | $\begin{gathered} 56,636 \\ 400 \end{gathered}$ | 47 | $\begin{gathered} 14,471 \\ 646 \end{gathered}$ | $\begin{gathered} 7,119,4 \\ 43 \end{gathered}$ | 49 | $\begin{gathered} 44,117,7 \\ 38 \end{gathered}$ | $\begin{gathered} 38,145 \\ 522 \end{gathered}$ | 86 |
| $\begin{gathered} \hline 2064 / \\ 65 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 21,587,74 \\ 3,031 \\ \hline \end{array}$ | $\begin{gathered} 291,714 \\ , 142 \\ \hline \end{gathered}$ | 1 | $\begin{array}{\|c\|} \hline 66,221, \\ 308 \\ \hline \end{array}$ | $\begin{gathered} 32,305, \\ 327 \\ \hline \end{gathered}$ | 49 | $\begin{gathered} \hline 42,575, \\ 949 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 21,265 \\ 253 \\ \hline \end{array}$ | 50 | $\begin{gathered} 52,288,7 \\ 38 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 46,096 \\ 041 \\ \hline \end{array}$ | 88 |
| $\begin{gathered} \hline 2065 / \\ 66 \end{gathered}$ | $\begin{array}{\|c\|} \hline 27,766,99 \\ 7,848 \end{array}$ | $\begin{gathered} 280,444 \\ , 516 \end{gathered}$ | 1.01 | $\begin{gathered} \hline 113,30 \\ 5,139 \end{gathered}$ | $\begin{gathered} 44,073 \\ 679 \end{gathered}$ | 39 | $\begin{gathered} 45,756, \\ 398 \end{gathered}$ | $\begin{gathered} 23,525, \\ 833 \end{gathered}$ | 51 | $\begin{gathered} 65,755,8 \\ 76 \end{gathered}$ | $\begin{gathered} 59,837, \\ 274 \end{gathered}$ | 91 |

## Himalayan Bank Limited

Loan Loss Provision Maintained by Himalayan Bank

| Pass loan( PL) |  |  | Sub-standard loan (SL) |  |  | Doubtful loan (DL) |  |  | Bad loan (B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P L | Provision for PL | $\%$ Provision for PL | B L | B L | B L | D L | Provision <br> for DL | $\%$ Provision for DL | B L | Provisi <br> for $B$ |
| 1 | 2 | $3=2 / 1 * 100$ | 4 | 5 | $6=5 / 4 * 100$ | 7 | 8 | 9=8/7*100 | 10 | 11 |
| 21,694,843 | 117,648,411 | 1.00 | 69,549,651 | 41,866,119 | 60.20 | 242,116,379 | 114,358,189 | 47.23 | 689,681,290 | 686,498, |
| 55,103,815 | 141,354,553 | 1.01 | 107,227,888 | 61,953,985 | 57.78 | 228,498,188 | 155,755,034 | 68.16 | 705,031,747 | 706,896, |
| 97,714,159 | 167,225,322 | 1.00 | 72,076,059 | 18,349,848 | 25.46 | 194,976,256 | 97,488,128 | 50.00 | 374,562,991 | 372,599, |


| $57,600,250$ | $196,490,075$ | 1.02 | $53,919,981$ | $13,479,995$ | 25.00 | $214,476,314$ | $107,238,157$ | 50.00 | $208,832,928$ | 208,746, |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $66,641,209$ | $247,686,763$ | 1.00 | $167,831,185$ | $74,157,874$ | 44.19 | $194,699,043$ | $99,025,370$ | 50.86 | $188,779,406$ | 187,880, |

## Annex 3

## Everest Bank Limited

|  | Performing Assets |  |  |  | Non Performing Assets |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Pass Loan | $\begin{aligned} & \frac{8}{x} \\ & \underset{a}{x} \\ & \underset{a}{2} \end{aligned}$ | Restructe <br> d Loan |  | Sub- <br> standard <br> Loan |  | $\begin{array}{\|c\|} \text { Doubtfu } \\ 1 \text { Loan } \end{array}$ | $\frac{8}{\frac{8}{4}}$ | Bad <br> Loan |  | Total <br> Loan |
| $\begin{gathered} 2061 / 6 \\ 2 \end{gathered}$ | $\begin{gathered} 7,453,205 \\ 999 \end{gathered}$ | 94.34 | $\begin{gathered} 318,076,5 \\ 27 \end{gathered}$ | $5 \left\lvert\, \begin{gathered} 4.0 \\ 3 \end{gathered}\right.$ | $\begin{gathered} 4,408,73 \\ 8 \end{gathered}$ | $\begin{gathered} 0.0 \\ 6 \end{gathered}$ | $\begin{gathered} 1,977,4 \\ 71 \end{gathered}$ | $\begin{gathered} 0.0 \\ 3 \end{gathered}$ | $\begin{gathered} 122,421, \\ 536 \end{gathered}$ | 1.55 | $\left\{\begin{array}{c} 7,900,090 \\ 271 \end{array}\right.$ |
| $\begin{gathered} 2062 / 6 \\ 3 \end{gathered}$ | $\begin{gathered} 9,757,195 \\ 136 \end{gathered}$ | 96.26 | $\left\{\begin{array}{c} 249,823,5 \\ 22 \end{array}\right.$ | $5 \begin{gathered} 2.4 \\ 6 \end{gathered}$ | $\begin{array}{\|c\|} \hline 10,669,3 \\ 26 \end{array}$ | $\begin{gathered} 0.1 \\ 1 \end{gathered}$ | 683,784 | 0.0 <br> 1 | $\begin{gathered} 117,882, \\ 680 \end{gathered}$ | 1.16 | $\begin{array}{\|c\|} \hline 10,136,25 \\ 4,448 \end{array}$ |
| $\begin{gathered} 2063 / 6 \\ 4 \end{gathered}$ | $\left\lvert\, \begin{gathered} 13,750,623, \\ 016 \end{gathered}\right.$ | $97.64$ | $\begin{gathered} 218,884,1 \\ 35 \end{gathered}$ | $1 \begin{gathered} 1.5 \\ 5 \end{gathered}$ | 4,218,482 | $\begin{gathered} 0.0 \\ 3 \end{gathered}$ | $\left\lvert\, \begin{gathered} 2,353,28 \\ 9 \end{gathered}\right.$ | $\begin{gathered} 0.0 \\ 2 \end{gathered}$ | $\begin{gathered} 106,607, \\ 165 \end{gathered}$ | 0.76 | $\begin{array}{\|c\|} \hline 14,082,68 \\ 6,087 \end{array}$ |
| $\begin{gathered} 2064 / 6 \\ 5 \end{gathered}$ | $\left\lvert\, \begin{gathered} 18,555,269 \\ 076 \end{gathered}\right.$ | 98.51 | $\begin{gathered} 153,852,3 \\ 18 \end{gathered}$ | $\begin{array}{c\|c} 0.8 \\ 2 \end{array}$ | 6,306,745 | $\begin{gathered} 0.0 \\ 3 \end{gathered}$ | 745,926 | $\begin{gathered} 0.0 \\ 1 \end{gathered}$ | $\begin{gathered} 120,257, \\ 697 \end{gathered}$ | 0.64 | $\begin{array}{\|c\|} \hline 18,836,43 \\ 1,762 \end{array}$ |
| $\begin{gathered} 2065 / 6 \\ 6 \end{gathered}$ | $\begin{gathered} 24,248,59 \\ 0,584 \end{gathered}$ | 99.10 | $\begin{gathered} 102,979,7 \\ 10 \end{gathered}$ | $7 \begin{gathered} 0.4 \\ 2 \end{gathered}$ | 1,360,792 | $\begin{gathered} 0.0 \\ 1 \end{gathered}$ | $\begin{gathered} 28,514,3 \\ 20 \end{gathered}$ | $\begin{gathered} 0.1 \\ 2 \end{gathered}$ | $\begin{gathered} 88,110,1 \\ 20 \end{gathered}$ | 0.36 | $\begin{array}{\|c\|} \hline 24,469,55 \\ 5,526 \end{array}$ |
| Sum | $\begin{array}{\|c\|} \hline \mathbf{7 3 , 7 6 4 , 8 8} \\ \mathbf{3 , 8 1 1} \end{array}$ | $\begin{gathered} 485.8 \\ 5 \end{gathered}$ | $\begin{gathered} 1,043,616 \\ 212 \end{gathered}$ | $5, \begin{gathered} 9.2 \\ 8 \end{gathered}$ | $\begin{array}{\|c\|} \hline 26,964,0 \\ 83 \end{array}$ | $\begin{gathered} 0.2 \\ 3 \end{gathered}$ | $\begin{gathered} 34,274, \\ 790 \end{gathered}$ | $\begin{gathered} 0.1 \\ 9 \end{gathered}$ | $\begin{gathered} 555,279 \\ 198 \end{gathered}$ |  | $\begin{gathered} \text { 75,425,01 } \\ 8,094 \end{gathered}$ |
| Avera <br> ge |  | 97.17 |  | $\begin{gathered} 1.8 \\ 6 \end{gathered}$ |  | $\begin{gathered} 0.0 \\ 5 \end{gathered}$ |  | $\begin{gathered} 0.0 \\ 4 \end{gathered}$ |  | 0.89 |  |

Nabil Bank Limited

|  | Performing Asset |  |  |  | Non Performing Asset |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Pass Loan | $\begin{aligned} & \stackrel{\theta}{\theta} \\ & \stackrel{*}{\theta} \\ & \underset{\theta}{\theta} \\ & \hline \end{aligned}$ | Restruct ed Loan |  | Substandard Loan | $\underset{\sim}{\underset{\sim}{*}}$ | Doubtfu 1 Loan | $\stackrel{\stackrel{\rightharpoonup}{\theta}}{\stackrel{\theta}{*}}$ | Bad <br> Loan |  | Total Loan |
| $\begin{array}{\|c\|} \hline 2061 / 6 \\ 2 \end{array}$ | $\begin{gathered} 10,802,229 \\ 684 \end{gathered}$ | $\begin{gathered} 98.6 \\ 8 \end{gathered}$ | $\begin{gathered} 134,200 \\ 518 \end{gathered}$ | $\begin{gathered} 1.2 \\ 3 \end{gathered}$ | $\begin{gathered} 22,072,56 \\ 2 \end{gathered}$ | $\begin{array}{\|c\|} \hline 0.2 \\ 0 \end{array}$ | $\begin{gathered} \hline 1,934,09 \\ 2 \end{gathered}$ | 0.02 | 120,500, | 1.1 | $\begin{gathered} 10,946,736 \\ 577 \end{gathered}$ |
| 2062/6 | $\begin{gathered} 13,096,157, \\ 779 \end{gathered}$ | $\begin{gathered} 98.6 \\ 2 \end{gathered}$ | $\begin{gathered} \hline 85,293,6 \\ 32 \end{gathered}$ | $\begin{gathered} 0.6 \\ 4 \end{gathered}$ | $\begin{gathered} 62,665,91 \\ 4 \end{gathered}$ | $\begin{array}{\|c\|} \hline 0.4 \\ 7 \end{array}$ | $\begin{gathered} 29,565,9 \\ 52 \end{gathered}$ | 0.22 | 90,392,6 | 0.6 | $\left\lvert\, \begin{gathered} 13,278,782 \\ 259 \end{gathered}\right.$ |
| 2063/6 | $\begin{gathered} 15,638,481 \\ 983 \end{gathered}$ | $\begin{gathered} 98.3 \\ 4 \end{gathered}$ | $\begin{gathered} 86,247,7 \\ 99 \end{gathered}$ | $\begin{gathered} 0.5 \\ 4 \end{gathered}$ | $\begin{gathered} 119,704,5 \\ 99 \end{gathered}$ | $\begin{gathered} 0.7 \\ 5 \end{gathered}$ | $\begin{gathered} 14,471,6 \\ 46 \end{gathered}$ | 0.09 | $44,117,7$ <br> 38 | 0.2 | $\begin{gathered} 15,903,023, \\ 765 \end{gathered}$ |
| $\begin{array}{\|c\|} \hline 2064 / 6 \\ 5 \end{array}$ | $\begin{gathered} 21,587,743 \\ 031 \end{gathered}$ | $\begin{gathered} 99.2 \\ 1 \end{gathered}$ | $\begin{gathered} \hline 10,631,3 \\ 08 \end{gathered}$ | $\begin{gathered} 0.0 \\ 5 \end{gathered}$ | $\begin{gathered} 66,221,30 \\ 8 \end{gathered}$ | $\begin{array}{\|c\|} \hline 0.3 \\ 0 \end{array}$ | $\begin{gathered} 42,575,9 \\ 49 \end{gathered}$ | 0.20 | 52,288,7 | 0.2 | $\begin{gathered} 21,759,460 \\ 334 \end{gathered}$ |
| $\begin{array}{\|c} \hline 2065 / 6 \\ 6 \end{array}$ | $\begin{gathered} 27,766,997, \\ 848 \end{gathered}$ | $\begin{gathered} 99.1 \\ 7 \end{gathered}$ | $\begin{gathered} 7,196,81 \\ 0 \end{gathered}$ | $\begin{gathered} 0.0 \\ 3 \end{gathered}$ | $\begin{gathered} 113,305,1 \\ 39 \end{gathered}$ | $\begin{array}{\|c\|} \hline 0.4 \\ 0 \end{array}$ | $\begin{gathered} 45,756,3 \\ 98 \end{gathered}$ | 0.16 | $\begin{gathered} 65,755,8 \\ 76 \end{gathered}$ | 0.2 | $\begin{gathered} 27,999,012 \\ 071 \end{gathered}$ |
| Sum | $\begin{gathered} 88,891,610 \\ 325 \end{gathered}$ | $\begin{gathered} 494 . \\ 02 \end{gathered}$ | $\begin{array}{\|c} \hline 323,570 \\ 067 \end{array}$ | $\begin{gathered} 2.4 \\ 9 \end{gathered}$ | $\begin{gathered} 383,969,5 \\ 22 \end{gathered}$ | $\begin{gathered} 2.1 \\ 4 \end{gathered}$ | $\begin{gathered} 134,304 \\ 037 \end{gathered}$ | 0.69 | $\begin{gathered} 373,055 \\ 205 \end{gathered}$ | 2.5 | $\begin{gathered} 89,887,015, \\ 006 \end{gathered}$ |
| Averag e |  | $\begin{gathered} 98.8 \\ 0 \end{gathered}$ |  | $\begin{gathered} 0.5 \\ 0 \end{gathered}$ |  | $\begin{gathered} \hline 0.4 \\ 3 \end{gathered}$ |  | 0.14 |  | 0.5 1 |  |

Himalayan Bank Limited

|  | Performing Asset |  |  |  |  | P | rforming | As |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Pass <br> Loan | $\begin{aligned} & \stackrel{8}{\theta} \\ & \stackrel{y}{*} \\ & \underset{a}{3} \\ & \hline \end{aligned}$ | Restructe <br> d Loan |  | Substandard <br> Loan | $\begin{aligned} & \stackrel{\theta}{\theta} \\ & \stackrel{\rightharpoonup}{*} \\ & \underset{\sim}{3} \end{aligned}$ | Doubtful Loan | $\stackrel{\stackrel{\rightharpoonup}{7}}{\stackrel{\rightharpoonup}{6}}$ | Bad <br> Loan |  | Total <br> Loan |
| $\begin{array}{\|c\|} \hline 2061 / 6 \\ 2 \end{array}$ | $\begin{gathered} 11,821,694 \\ , 843 \end{gathered}$ | $\begin{gathered} 87.8 \\ 9 \end{gathered}$ | $\begin{gathered} 628,126,10 \\ 4 \end{gathered}$ | $4.67$ | $\begin{gathered} 69,549,65 \\ 1 \end{gathered}$ | $\begin{gathered} 0.5 \\ 2 \end{gathered}$ | $\begin{gathered} 242,116,3 \\ 79 \end{gathered}$ | $1.80$ | $\begin{gathered} 689,681,2 \\ 90 \end{gathered}$ | 5.13 | $\begin{gathered} \hline 13,451,16 \\ 8,267 \end{gathered}$ |
| $\begin{array}{\|c\|} \hline 2062 / 6 \\ 3 \end{array}$ | $\begin{gathered} 14,055,103 \\ , 815 \end{gathered}$ | $\begin{gathered} 89.1 \\ 7 \end{gathered}$ | 666,114,44 | 4.23 | $\begin{gathered} 107,227,8 \\ 88 \end{gathered}$ | $\begin{array}{\|c\|} \hline 0.6 \\ 8 \end{array}$ | $\begin{gathered} 228,498,1 \\ 88 \end{gathered}$ | 1.45 | $\begin{gathered} \hline 705,031,7 \\ 47 \end{gathered}$ | 4.47 | $\begin{gathered} \hline 15,761,97 \\ 6,082 \end{gathered}$ |
| $\begin{array}{\|c\|} \hline 2063 / 6 \\ 4 \end{array}$ | $\begin{gathered} 16,697,714 \\ , 159 \end{gathered}$ | $\begin{gathered} 93.8 \\ 4 \end{gathered}$ | $\begin{gathered} 454,394,39 \\ 8 \end{gathered}$ | $2.55$ | $\begin{gathered} 72,076,05 \\ 9 \end{gathered}$ | $\begin{gathered} 0.4 \\ 1 \end{gathered}$ | $\begin{gathered} 194,976,2 \\ 56 \end{gathered}$ | $1.10$ | $\begin{array}{\|c\|} \hline 374,562,9 \\ 91 \end{array}$ | 2.11 | $\begin{gathered} 17,793,72 \\ 3,863 \end{gathered}$ |
| $\begin{array}{\|c\|} \hline 2064 / 6 \\ 5 \\ \hline \end{array}$ | $\begin{gathered} 19,357,600 \\ , 250 \end{gathered}$ | $\begin{gathered} 95.9 \\ 3 \end{gathered}$ | $\begin{gathered} 344,783,69 \\ 6 \end{gathered}$ | 1.71 | $\begin{gathered} 53,919,98 \\ 1 \end{gathered}$ | $\begin{array}{\|c\|} \hline 0.2 \\ 7 \end{array}$ | $\begin{gathered} 214,476,3 \\ 14 \end{gathered}$ | 1.06 | $\begin{array}{\|c\|} \hline 208,832,9 \\ 28 \end{array}$ | 1.03 | $\begin{gathered} 20,179,61 \\ 3,169 \end{gathered}$ |
| $\begin{gathered} 2065 / 62 \\ 6 \end{gathered}$ | $\begin{gathered} 24,666,641 \\ , 209 \end{gathered}$ | $\begin{gathered} 96.6 \\ 6 \end{gathered}$ | $\begin{gathered} 301,568,23 \\ 8 \end{gathered}$ | 1.18 | $\begin{gathered} 167,831,1 \\ 85 \end{gathered}$ | $\begin{array}{\|c\|} \hline 0.6 \\ 6 \end{array}$ | $\begin{gathered} 194,699,0 \\ 43 \end{gathered}$ | 0.76 | $\begin{array}{\|c\|} \hline 188,779,4 \\ 06 \end{array}$ | 0.74 | $\begin{gathered} 25,519,51 \\ 9,081 \end{gathered}$ |
| Sum | $\begin{gathered} \text { 86,598,754 } \\ , 276 \end{gathered}$ | $\begin{array}{\|c\|} \hline 463 . \\ 48 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 2,394,986 \\ 880 \end{array}$ | $\begin{gathered} 14.3 \\ 4 \end{gathered}$ | $\begin{gathered} 470,604,7 \\ 64 \end{gathered}$ | $\begin{gathered} 2.5 \\ 3 \end{gathered}$ | $\begin{gathered} 1,074,766 \\ , 180 \end{gathered}$ | 6.17 | $\begin{array}{\|c\|} \hline 2,166,888, \\ 362 \end{array}$ | 13.4 | $\begin{array}{\|c} 92,706,00 \\ \mathbf{0 , 4 6 2} \end{array}$ |
| Avera ge |  | $\begin{gathered} 92.7 \\ 0 \end{gathered}$ |  | 2.87 |  | 0.5 1 |  | 1.23 |  | 2.70 |  |

## Annex 4

## Calculation of Karl Person's Correlation Coefficient between Total Lending and

## Total NPA of Everest Bank Limited

X = Net Profit to Total Assets
$\mathrm{Y}=$ NPA to Total Lending

| Fiscal Year | X | Y | $\mathrm{X}^{2}$ | $\mathrm{Y}^{2}$ | XY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 62$ | 1.46 | 1.63 | 2.1316 | 2.6569 | 2.3798 |
| $2062 / 63$ | 1.49 | 1.27 | 2.2201 | 1.6129 | 1.8923 |
| $2063 / 64$ | 1.38 | 0.8 | 1.9044 | 0.64 | 1.104 |
| $2064 / 65$ | 1.66 | 0.64 | 2.7556 | 0.4096 | 1.0624 |
| $2065 / 66$ | 1.73 | 0.48 | 2.9929 | 0.2304 | 0.8304 |
| Sum | $\Sigma \mathrm{X}=$ | $\Sigma \mathrm{Y}=$ | $\Sigma \mathrm{X}^{2}=$ | $\Sigma \mathrm{Y}^{2}=$ | $\Sigma \mathrm{XY}=$ |
|  | 7.72 | 4.82 | 12.0046 | 5.5498 | 7.2689 |

Karl Person's Correlation Coefficient (r)

$$
\begin{aligned}
& =\frac{N . \Sigma X Y-\Sigma X . \Sigma Y}{\sqrt{N . \Sigma X^{2}-(\Sigma X)^{2}} \cdot \sqrt{N . \Sigma Y^{2}-(\Sigma Y)^{2}}} \\
& =\frac{5 \times 7.2689-7.72 \times 4.82}{\sqrt{5 \times 12.0046-(7.72)^{2}} \sqrt{5 \times 5.5498-(4.82)^{2}}} \\
& =\frac{-0.8659}{1.38}=-0.63
\end{aligned}
$$

Probable Error (P.E.) $=\frac{0.6745\left(1-\mathrm{r}^{2}\right)}{\sqrt{\mathrm{n}}}$

$$
\begin{aligned}
& =\frac{0.6745\left(1-(-0.63)^{2}\right)}{\sqrt{5}} \\
& =\frac{0.4068}{2.2361}=0.1819
\end{aligned}
$$

Calculation of Karl Person's Correlation Coefficient between Total Lending and

## Total NPA of Nabil Bank Limited

X = Net Profit to Total Assets
$\mathrm{Y}=$ NPA to Total Lending

| Fiscal Year | X | Y | $\mathrm{X}^{2}$ | $\mathrm{Y}^{2}$ | XY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 62$ | 3.02 | 1.32 | 9.1204 | 1.7424 | 3.9864 |
| $2062 / 63$ | 2.84 | 1.38 | 8.0656 | 1.9044 | 3.9192 |
| $2063 / 64$ | 2.47 | 1.12 | 6.1009 | 1.2544 | 2.7664 |
| $2064 / 65$ | 2.01 | 0.74 | 4.0401 | 0.5476 | 1.4874 |
| $2065 / 66$ | 2.35 | 0.8 | 5.5225 | 0.64 | 1.88 |
| Sum | $\Sigma \mathrm{X}=$ | $\Sigma \mathrm{Y}=$ | $\Sigma \mathrm{X}^{2}=$ | $\Sigma \mathrm{Y}^{2}=$ | $\Sigma \mathrm{XY}=$ |
|  | 12.69 | 5.36 | 32.8495 | 6.0888 | 14.0394 |

## Karl Person's Correlation Coefficient (r)

$$
\begin{aligned}
& =\frac{N . \Sigma X Y-\Sigma X . \Sigma Y}{\sqrt{N . \Sigma X^{2}-(\Sigma X)^{2}} \cdot \sqrt{N . \Sigma Y^{2}-(\Sigma Y)^{2}}} \\
& =\frac{5 \times 14.0394-12.69 \times 5.36}{\sqrt{5 \times 32.8495-(12.69)^{2}} \sqrt{5 \times 6.0888-(5.36)^{2}}} \\
& =\frac{2.1786}{2.3449}=0.93
\end{aligned}
$$

Probable Error (P.E.) $=\frac{0.6745\left(1-\mathrm{r}^{2}\right)}{\sqrt{\mathrm{n}}}$

$$
\begin{aligned}
& =\frac{0.6745\left(1-(0.93)^{2}\right)}{\sqrt{5}} \\
& =\frac{0.09112}{2.2361}=0.0407
\end{aligned}
$$

Calculation of Karl Person's Correlation Coefficient between Total Lending and
Total NPA of Himalayan Bank Limited
X = Net Profit to Total Assets
$\mathrm{Y}=$ NPA to Total Lending

| Fiscal Year | X | Y | $\mathrm{X}^{2}$ | $\mathrm{Y}^{2}$ | XY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 62$ | 1.12 | 7.44 | 1.2544 | 55.3536 | 8.3328 |
| $2062 / 63$ | 1.55 | 6.6 | 2.4025 | 43.56 | 10.23 |
| $2063 / 64$ | 1.47 | 3.61 | 2.1609 | 13.0321 | 5.3067 |
| $2064 / 65$ | 1.76 | 2.36 | 3.0976 | 5.5696 | 4.1536 |
| $2065 / 66$ | 1.91 | 2.16 | 3.6481 | 4.6656 | 4.1256 |
| Sum | $\Sigma \mathrm{X}=$ | $\Sigma \mathrm{Y}=$ | $\Sigma \mathrm{X}^{2}=$ | $\Sigma \mathrm{Y}^{2}=$ | $\Sigma \mathrm{XY}$ |
|  | 7.81 | 22.17 | 12.5635 | 122.1809 | 32.1487 |

## Karl Person's Correlation Coefficient (r)

$$
\begin{aligned}
& =\frac{N \cdot \Sigma X Y-\Sigma X \cdot \Sigma Y}{\sqrt{N \cdot \Sigma X^{2}-(\Sigma X)^{2}} \cdot \sqrt{N \cdot \Sigma Y^{2}-(\Sigma Y)^{2}}} \\
& =\frac{5 \times 32.1487-7.81 \times 22.17}{\sqrt{5 \times 12.5635-(7.81)^{2}} \sqrt{5 \times 122.1809-(22.17)^{2}}} \\
& =\frac{-12.4042}{14.7468}=-0.84
\end{aligned}
$$

Probable Error (P.E.) $=\frac{0.6745\left(1-\mathrm{r}^{2}\right)}{\sqrt{\mathrm{n}}}$

$$
\begin{aligned}
& =\frac{0.6745\left(1-(-0.84)^{2}\right)}{\sqrt{5}} \\
& =\frac{0.1986}{2.2361}=0.0888
\end{aligned}
$$

## Annex 5

## Calculation of Karl Person's Correlation Coefficient between Total Lending and

## Total NPA of Everest Bank Limited

$\mathrm{X}=$ Total lending of Bank
$\mathrm{Y}=$ Total NPA of Bank Amount in 100 million

| Fiscal Year | X | Y | $\mathrm{X}^{2}$ | $\mathrm{Y}^{2}$ | XY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 62$ | 79.0009 | 1.29 | 6241.14 | 1.6641 | 101.91 |
| $2062 / 63$ | 101.3625 | 1.29 | 10274.36 | 1.6641 | 130.76 |
| $2063 / 64$ | 140.8269 | 1.13 | 19832.22 | 1.2769 | 159.13 |
| $2064 / 65$ | 188.3643 | 1.21 | 35481.11 | 1.4641 | 227.92 |
| $2065 / 66$ | 244.6956 | 1.18 | 59875.94 | 1.3924 | 288.74 |
| Sum | $\Sigma \mathrm{X}=$ <br> 754.2502 | $\Sigma \mathrm{Y}=6.1$ | $\Sigma \mathrm{X}^{2}$ <br> $=131704.77$ | $\Sigma \mathrm{Y}^{2}$ <br> $=7.4616$ | $\Sigma \mathrm{XY}=$ <br> 908.46 |

Karl Person's Correlation Coefficient (r)

$$
\begin{aligned}
& =\frac{N . \Sigma X Y-\Sigma X . \Sigma Y}{\sqrt{N . \Sigma X^{2}-(\Sigma X)^{2}} \cdot \sqrt{N . \Sigma Y^{2}-(\Sigma Y)^{2}}} \\
& =\frac{5 \times 908.46-754.2502 \times 6.1}{\sqrt{5 \times 131704.77-(754.2502)^{2}} \sqrt{5 \times 7.4616-(6.1)^{2}}} \\
& =\frac{-58.62}{193.71} \quad=-0.63
\end{aligned}
$$

Probable error (P.E.) $=\frac{0.6745\left(1-\mathrm{r}^{2}\right)}{\sqrt{\mathrm{n}}}$

$$
\begin{aligned}
& =\frac{0.6745\left(1-(-0.63)^{2}\right)}{\sqrt{5}} \\
& =\frac{0.4068}{2.2361} \quad=0.1819
\end{aligned}
$$

## Total NPA of Himalayan Bank Limited

$\mathrm{X}=$ Total lending of Bank
$\mathrm{Y}=$ Total NPA of Bank Amount 100 in million

| Fiscal Year | X | Y | $\mathrm{X}^{2}$ | $\mathrm{Y}^{2}$ | XY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2061 / 62$ | 134.51 | 10.01 | 18092.9401 | 100.2001 | 1346.4451 |
| $2062 / 63$ | 157.62 | 10.41 | 24844.0644 | 108.3681 | 1640.8242 |
| $2063 / 64$ | 177.94 | 6.42 | 31662.6436 | 41.2164 | 1142.3748 |
| $2064 / 65$ | 201.8 | 4.77 | 40723.24 | 22.7529 | 962.586 |
| $2065 / 66$ | 255.2 | 5.51 | 65127.04 | 30.3601 | 1406.152 |
| Sum | $\Sigma \mathrm{X}=$ | $\Sigma \mathrm{Y}=$ | $\Sigma \mathrm{X}^{2}$ | $\Sigma \mathrm{Y}^{2}$ | $\Sigma \mathrm{XY}=$ |
|  | 927.07 | 37.12 | $=180449.928$ | $=302.8976$ | 6498.3821 |

Karl Person's Correlation Coefficient (r)

$$
\begin{aligned}
& =\frac{N . \Sigma X Y-\Sigma X . \Sigma Y}{\sqrt{N \cdot \Sigma X^{2}-(\Sigma X)^{2}} \cdot \sqrt{N \cdot \Sigma Y^{2}-(\Sigma Y)^{2}}} \\
& =\frac{5 \times 6498.3821-927.02 \times 37.12}{\sqrt{5 \times 180449.928-(927.07)^{2}} \sqrt{5 \times 302.8976-(37.12)^{2}}} \\
& =\frac{-1919.0719}{2417.629} \quad=-0.79
\end{aligned}
$$

Probable Error (P.E.) $=\frac{0.6745\left(1-r^{2}\right)}{\sqrt{n}}$

$$
\begin{aligned}
& =\frac{0.6745\left(1-(-0.79)^{2}\right)}{\sqrt{5}} \\
& =\frac{0.2535}{2.2361} \quad=0.1134
\end{aligned}
$$

Calculation of Karl Person's Correlation Coefficient between Total Lending and

## Total NPA of Nabil Bank Limited

$\mathrm{X}=$ Total lending of Bank
$\mathrm{Y}=$ Total NPA of Bank Amount 100 in million

| Fiscal Year | X | Y | $\mathrm{X}^{2}$ | $\mathrm{Y}^{2}$ | XY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2058 / 59$ | 109.47 | 1.45 | 11983.6809 | 2.1025 | 158.7315 |
| $2059 / 60$ | 132.79 | 1.83 | 17633.1841 | 3.3489 | 243.0057 |
| $2060 / 61$ | 159.03 | 1.78 | 25290.5409 | 3.1684 | 283.0734 |
| $2061 / 62$ | 217.59 | 1.61 | 47345.4081 | 2.5921 | 350.3199 |
| $2062 / 63$ | 279.99 | 2.25 | 78394.4001 | 5.0625 | 629.9775 |
| Sum | $\Sigma \mathrm{X}=$ | $\Sigma \mathrm{Y}=$ | $\Sigma \mathrm{X}^{2}=$ | $\Sigma \mathrm{Y}^{2}=$ | $\Sigma \mathrm{XY}=$ |
|  | 898.87 | 8.92 | 180647.214 | 16.2744 | 1665.108 |

## Karl Person's Correlation Coefficient (r)

$$
\begin{aligned}
& =\frac{N . \Sigma X Y-\Sigma X . \Sigma Y}{\sqrt{N . \Sigma X^{2}-(\Sigma X)^{2}} \cdot \sqrt{N . \Sigma Y^{2}-(\Sigma Y)^{2}}} \\
& =\frac{5 \times 1665.108-898.87 \times 8.92}{\sqrt{5 \times 180647.214-(898.87)^{2}} \sqrt{5 \times 16.2744-(8.92)^{2}}} \\
& =\frac{307.6196}{414.75} \quad=0.74
\end{aligned}
$$

Probable Error (P.E.) $=\frac{0.6745\left(1-\mathrm{r}^{2}\right)}{\sqrt{\mathrm{n}}}$

$$
\begin{aligned}
& =\frac{0.6745\left(1-(0.74)^{2}\right)}{\sqrt{5}} \\
& =\frac{0.3051}{2.2361}=0.1365
\end{aligned}
$$

