

**GREEN BANKING PRACTICES AND PERCEIVED FINANCIAL  
PERFORMANCE OF NEPALESE COMMERCIAL  
BANKS IN KATHAMANDU DISTRICT**

**A Thesis**

**Submitted By**

**Keshab Bahadur Bohara**

**Central Department of Management**

**Roll No. : 715/16**

**T.U. Regd. No.: 7-2-177-91-2012**

***Submitted in partial fulfillment of the requirement for the degree of  
Masters of Business Studies (MBS Semester System)***

**In the**

**Faculty of Management**

**Tribhuvan University**

**Kirtipur, Nepal**

**December, 2018**

## **CERTIFICATION OF AUTHORSHIP**

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirement for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the reference section of the thesis.

.....  
Keshab Bahadur Bohara

Date: December, 2018

## RECOMMENDATION LETTER

It is certified that thesis entitled **Green Banking Practices and Perceived Financial Performance of Nepalese Commercial Banks in Kathmandu District** submitted by **Keshab Bahadur Bohara** is an original piece of research work carried out by the candidate under my supervision. Literary presentation is satisfactory and the thesis is in a form suitable for publication. Work evidences the capacity of the candidate for critical examination and independent judgment. Candidate has put in at least 60 days after registering the proposal. The thesis is forwarded for examination.

.....

Dr. Gangaram Biswakarma  
Thesis Supervisor  
Central Department of Management  
Tribhuvan University,  
Kritipur, Kathmandu, Nepal

Date: December, 2018

## APPROVAL SHEET

We, the undersigned, have examined the thesis entitled “**Green Banking Practices and Perceived Financial Performance of Nepalese Commercial Banks in Kathmandu District**” presented by Keshab Bahadur Bohara, a candidate for the degree of **Master of Business Studies** (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

.....

Dr. Gangaram Biswakarma

Thesis Supervisor

.....

Internal Examiner

.....

External Examiner

.....

Asso. Prof. Dr. Sanjay Kumar Shrestha

Chairperson, Research Committee

.....

Asso. Prof. Dr. Ramji Gautam

Head of the Department

Date: December, 2018

## ACKNOWLEDGEMENT

This study entitled “**Green Banking Practices and Perceived Financial Performance of Nepalese Commercial Banks in Kathmandu District**” has been conducted for the partial requirement for the degree of Masters of Business Studies (MBS) of Tribhuvan University. Every project whether big or small is the successful largely due to the effort of a number of wonderful people who have always given their valuable advice or lent a helping hand. I sincerely appreciate the inspiration; support and guidance of all those people who have been instrumental in making this study a success.

My foremost appreciation and thanks goes to my honorable supervisor, Dr. Gangaram Biswakarma sir for his close supervision and professional advice and encouragement during the research work. I am highly indebted and very thankful for his continuous support and constructive suggestions that have enabled this research project to achieve its present form. Moreover, I am also indebted and thankful to him for his patience, motivation, support, instruction and immense knowledge in completing my overall MBS degree. I could not have imagined having a better advisor and mentor for my thesis.

I would like to thanks **Global IME bank** for their financially support and motivate to write this thesis. Thank you once more for your generous sponsorship over the previous season. Your support is not something we take lightly and is very much appreciated.

I would like to express cordial gratitude to Asso. Prof. Dr. Sanjay K. Shrestha (Chairperson, research committee) for his timely and continuous guidance throughout the study. He not only reviewed my work but also suggested valuable advice, inspiration and insights. I also highly appreciate the efforts of all teacher and other members of central department of management, libraries staffs who inspired and provided the needed materials to complete this thesis.

Last but not least, I would like to thank my family members, relatives especially Prem Bahadur Bohara for their effort, cooperate in every step of thesis, advice and other friends for their affection and emotional support that has inspired me to achieve every success including this study. I would also like to take full responsibility of any kind of deficiency presented in this thesis.

## ABSTRACT

In today's society, climate change is a most complicated issue. Nowadays, people are more conversant with global warming and its inherent consequences on human life. It is the matter of concern for the government and the direct polluters and also for other stakeholders like financial institutions. This includes banks, which are playing a fundamental role in the development of the society. Although banking activities are not physically related to the environment, yet it is an external impact of the customers which is substantial for them. To reduce the carbon footprint from the environment substantially, it is required by banks to promote those products, process and technology which adhere to it. Therefore, banks are adopting green strategies into their buildings, operations, and investments and financing strategies.

The concept of Green Banking or Ethical Banking or Green initiatives taken by banks aims to protect the environment by means of promoting environmental-friendly practices and reducing the carbon footprint from banking activities. Environmental friendly practices include introduction of Green Products and Services, namely, Online Banking, Mobile Banking, Banking through ATMs, Green Deposits, Green Mortgages and Loans, Green Credit Cards, and Green Reward Checking Accounts. Banks can reduce their carbon footprints by adopting the certain measures like paperless banking, energy consciousness, using mass transportation system and use of solar and wind energy.

The present study is aimed at determining the benefits of Green Banking, and assessing the awareness and perception of customers and bank employees regarding Green Banking in Kathamandu Nepal. In order to achieve this aim, this study is carried out in Kathamandu Nepal, and on the six banks of Kathamandu that is, GME, NIC, SBI, NMB, ADBL and RBB. A sample of 300 employees is selected to determine the awareness and perception of employees and bank customers towards Green Banking practice. Primary data is collected through a questionnaire while the secondary data is collected through various books and journals. The collected data is analyzed by applying both qualitative and quantitative data analysis techniques.

The study concludes that the customers of the banks are not fully aware of the Green Banking products and services. However, most of the bank's employees are totally aware of the Green Banking service and its products. Moreover, the customers of the banks feel insecure in availing Green Banking services because of the security issues and fear of getting their private information misused.

**Key Words:** Green Investment, Risk Management, Green Human Resource, Green Business Strategy, Green Product and Service.

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## Abbreviation

ATM	Automated Teller Machine
E-banking	Electronic Banking
NMB	National Microfinance Bank
IT	Information Technology
S.D	Standard Deviation
GI	Green Investment
RM	Risk Management
GHR	Green Human Resource
GBS	Green Business Strategy
GPS	Green Product/ Service
ROA	Return on Assets
ROE	Return on Equity
CSR	Corporate Social Responsibility
CFP	Corporate Financial Performance
CSP	Corporate Social Performance
EBL	Everest Bank Limited
BOK	Bank of Kathmandu
NIBL	Nepal Investment Bank ltd
GME	Global Ime Bank
RBB	Rastrya Banijya Bank
ADBL	Agricultural Development Bank ltd
NF	Non-Financial
KYC	Know YourCustomer
SPSS	Statistical Package for Social Science
IDRBT	Institute of Development and Research in Banking Technology

## CHAPTER - I

### INTRODUCTION

#### 1.1 Background of the study

The disastrous impact of recent storms, floods, droughts and excessive heat that many people have experienced around the world, motivate us to think seriously about global warming and its impact and to do whatever we can to address this problem. Governments, enterprises, and people, all have roles to play in combating global warming and building a sustainable environment. A good thing is that there is now greater awareness and a growing commitment to address environmental problems we face. An action to arrest environmental degradation would significantly affect not only current but also future generations and our further progress. So, a proactive multipronged action is necessary by all the industry and business sectors, regulatory agencies and the individuals (IDRBT publication, 2013).

There is no one distinct definition of green banking; however the following will try to bring the meaning of green banking. It means promoting environmentally-friendly practices and reducing carbon footprints from banking activities (Schultz, 2010). There are many differences compared to normal banking, Green Banks give more weight to environmental factors, their aim is to provide good environmental and social business practice, they check all the factors before lending a loan, whether the project is environmental friendly and has any implications in the future, you will awarded a loan only when you follow all the environmental safety standards (Ray, 2008).

##### 1.1.1 Green Banking

Green banking strategies involves two components. First is managing environment risk and second is identifying opportunities for innovative environmentally oriented financial products (IFC, 2007). To manage environmental risk, the banks have to design proper environmental management systems to evaluate the risks involved in the investment projects. The risks can be internalized by introducing differential interest rates and other techniques. Moreover, banks can withdraw themselves from financing high-risk projects. The second component of green banking entails creating financial products and services

that support commercial development with environmental benefits. These includes investment in renewable energy projects, biodiversity conservation, energy efficiency, investment in cleaner production process and technologies, bonds and mutual funds meant for environmental investments (Chandra and Sudepta, 2011).

Benefits of Green Banking are immense as it avoids paper work as transactions or procedures are done online or electronically thus less cutting of trees. It also creates awareness to business people about environmental and social responsibility enabling them to do an environmental friendly business practice. Loans are issued at comparatively lesser rate, the interest of that loan is comparatively less with normal banks because ethical banks give more importance to environmental friendly factors - ecological gains (Mehtar, 2014).

### **1.1.2 Financial performance**

Financial performance is a subjective measure of how well a firm uses assets in running business and generating revenues (Greenwood & Jovanovic, 1990). It simply means the financial health of a firm. Some of the ways of assessing financial performance in order to find out whether a firm is performing poorly or well are profits, liquidity, solvency, financial efficiency and repayment capacity. The main one being profitability which measures the extent to which a business generates profits from the use of land, labor, management and capital. It is measured using return on assets, return on equity and operating profit margin (Oltmans, Danny & Thomas, 1998).

Financial efficiency measures the intensity with which a business uses its assets to generate gross revenues and the effectiveness of production, purchasing, product pricing and financing decisions (Oltmans, Danny & Thomas, 1998).

### **1.1.3 Effect of Green banking and financial performance**

Green banking is expected to be very costly for the organization in the initial years as the organizations will incur large amounts of capital costs. Cost reduction is also expected as there will be a decrease in paper work; there will be more recycling leading to an increase in profits. ROI in green banking is not highly sensitive to the amount of time it takes to deploy capital because many green banks offering recycle and redeploy capital relative quickly. ROI of green banks is sensitive to default risk because defaults are primary to

operating costs for all products. High defaulters lead to high loss coverage and reduced interest income (Booz & Co, 2013).

The bank may have to incur cleanup costs for the damages caused if it financed a project that has adverse effects on the environment. The bank may also suffer credit risk if it financed a project harmful to the environment, and perhaps the project is stalled or forbidden by regulatory authorities leading to a default in payment of the loan by the client. A financial institution may also face reputation risk when it fails to practice green banking causing it to lose business from clients who are sensitive to the environment (Mehtar, 2014).

#### **1.1.4 Commercial Bank in Nepal**

Commercial banks are a financial institution which accepts deposits, makes business loans, and offers different services to the customer. Banks also allow for a variety of deposit accounts, such as checking, savings, and time deposit. Banking institutions are run to make a profit and owned by a group of individuals. The dominant privately owned financial institution in Nepal and in the economies of most major countries is the commercial bank. Banks offers the public both deposit and credit services, such as investment advice, security underwriting, selling insurance, and financial planning. Financial activities are run by banks so that their activities should be focused on interest of customers. Banks are putting their focused toward profit. Profit is only possible after delivery of quality service to the customers. Commercial banks are established to improve people's economies welfare and facility, to provide loan to the agriculture, industry and commercial and to offer banking services to the people and the country. There are altogether 28 commercial banks in Nepal.

Commercial banks have to undertake some green growth initiatives environment friendly and do not impact the environment much through their own internal operations. However they are responsible as the major contributors of finance to industries like steel, paper, cement, chemicals, fertilizers, power, textiles etc. that are responsible for creating huge carbon emission. Therefore, banks are adopting a voluntary set of guidelines for managing social and environmental issues related to the financing of developed project within and outside their organizations for the creation of a strong and successful low

carbon economy. However, banks are now playing a vital role towards the green growth through their green banking practices. (Rai, 2016)

Green banking means combining operational improvements, technology and changing client habits in banking business. It means promoting environmental friendly practices and reducing carbon footprint from banking activities. This comes in many forms such as – using online banking instead of branch banking; paying bills online instead of mailing them, opening up CDs and money market accounts at online banks, instead of large multi-branch banks or finding the local bank in the area that is taking the biggest steps to support local green initiatives. Keeping in mind all the points related to environment protection, the role of green banking is expected to be observed at all levels of business process in this globalized world. Main emphasis has been made on analysis of the concept and need of green banking in business process so as to make our environment human friendly and enrich our economic productivity. As such, the need and importance has been discussed in detail in this research papers. This study focuses in order to add value to the understanding of influence of green banking practices over the financial performance of the Nepalese commercial banks (Joshi, 2014).

## **1.2 Statement of problem**

Green banks restrict their business transactions to those business entities who qualify screening process done by green banks. With limited number of customers they will have a smaller base to support them. Many banks in green business are very new and are in startup face, generally it takes 3 to 4 years for a bank to start making money thus it does not help banks during recession. Green banks require talented, experienced staff to provide proper services to customers. Experienced loan officers are needed with additional experience in dealing with green businesses and customers. If banks are involved in those projects which are damaging the environment they are prone to loss of their reputations. There are also few cases where environmental management system has resulted in cost saving, increase in bond value. Credit risks arise due to lending to those customers whose businesses are affected by the cost of pollution, changes in environmental regulations and new requirements on emissions levels. It is higher due to probability of customer default as a result of uncalculated expenses for capital investment in production facilities, loss of market share and third

party claims. It's a new concept and customer will take time to adopt this. Green banking requires a technology which will highly costly. It requires renewable and recycling technique which is costly. Data protection is another challenge for the adoption of green banking. Bank employees need training for all this practice. Green banking survey is a very effective tool to identify the financial performance of the commercial in Nepal. In context of Nepal, green banking in India is concerned, the banking and financial institution are running behind the schedules compared to global trends. Besides few banks, these banks unaware or pretend to be unaware about the green banking practices and sustainability of the banks. Thus, the statements of problem are:

- What are the green banking practices commercial banks in Nepal?
- What is the relationship between green banking and financial performance of commercial banks in Nepal?

### **1.3 Purpose of the Study**

The specific objectives of the study are given below:

- To identify the green banking practices of commercial banks in Nepal.
- To examine the relationship between green banking practices and perceive financial performance of commercial banks in Nepal.
- To examine the green banking practice influence on perceived financial performance of commercial banks in Nepal.

### **1.4 Significance of Study**

This research will help to identify the green banking practices of Nepalese Commercial banks and its impact to the perceive financial performance of those banks through the analysis of different kind of green banking practices and it will help to identify the which of the green banking method is more important to increase the financial sustainability of the banks. The significance of a study may include the meaning of the research work to personally and should include how your research benefits or impacts others in part or whole. It discusses what people or groups of people might benefit from reading of the research.

- First, the study will be useful for Nepalese commercial banks in order to see the impacts of Green banking practices in comparison with the perceive financial performance of banking system.



- It helps in understanding what the green is banking and what actions should the banks take in order to benefits from the opportunities and how to overcome the challenges.
- This study can be used for other researcher as a reference who wants to study further in this or related areas or to serve as a reading material for anyone who is interested.
- This research will alert bankers from tomorrow's problems at today in order to get the intended green banking service can be said it is at infant stage in the country.
- It also helps to policy maker of banks related with green banking practices.

### 1.5 Theoretical framework

A theoretical framework specifies which key variables influence a phenomenon of interest and highlights the need to examine how those key variables might differ and under what circumstance. The theoretical framework is the structure that can hold or support a theory of a research study. The theoretical framework introduces and describes the theory that explains why the research problem under study exists.

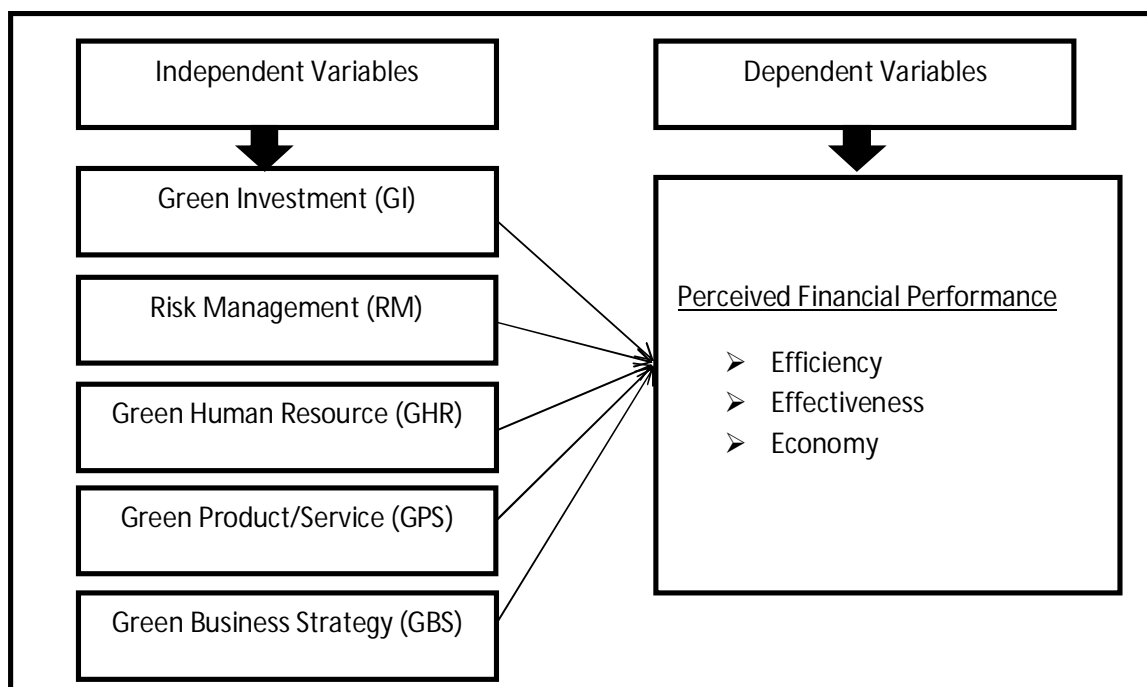


Figure 1.1: Conceptual Framework

## **1.6 Limitation of the study**

The basic limitation of this study is that it only considers green banking practices and it does not take into consideration what perspective does all bankers employees have on the technology.

- It does not include bank customers who do not use the current green banking which would help to compare the attitude of green banking users and non-users towards green banking practice.
- It is also limited only with six banks employees that started green banking practices but it doesn't fully cover other banks those which do not start it.
- Most of the available data of previous research conducted may not explain specific to our country context of the area.

## **1.7 Organization of the study**

The study has divided into five chapters .They are an introduction, literature review, research methodology, presentation and analysis of data and summary, conclusion and recommendation.

### **Chapter I: Introduction**

This chapter deals with introduction which includes background of the study, statement of the problem, objectives of the study, significance of the study, limitation of the study and organization of the study.

### **Chapter II: Literature Review**

The second chapter presents review of previous related research done on e-banking and customer satisfaction, review of related books, journals, articles and previous unpublished master level dissertation etc.

**Chapter III: Research Methodology**

The third chapter explains the research methodology used in the study. It included research design, population and sampling, types and sources of data collection procedure, data analysis tools, techniques, reliability and validity.

**Chapter IV: Data Presentation and Analysis**

Fourth chapter is Data presentation and analysis. This chapter includes Data presentation, Data analysis and Major finding of the study.

**Chapter V: Conclusion and Implementation**

Ultimately, fifth chapter discusses summary of main findings, recommendations and suggestions further these includes reference books, magazines, newspaper, previous dissertation, etc. are shown under bibliography.

## CHAPTER - II

### REVIEW OF LITERATURE

The literature review is a summary of previous research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area of research or interest. Within the review the researcher provides a description, summary and critical evaluation of each source, i.e. the strengths and weaknesses. The literature review may also identify gaps or controversies in the literature and topics needing further research.

The literature review provides the historical background for your research; describes issues, debates, theories, concepts and related research in the field and shows how your research will extend these or address a gap.

#### **2.1 Conceptual Review of Green Banking Practices**

Remus, (2007) a green bank may not be exactly defined as an ethical bank, a socially responsible bank, or a sustainable bank but has similar kind of activities and perception and bank around the world have already excised green banking for once at least. Green banking is like a normal bank, which considers all the social and environmental/ecological factors with an aim to protect the environment and conserve natural resources.

Jain (2013) it is also called as an ethical bank or a sustainable bank. Green practices of banks popularly known as green banking refers to the environment-friendly initiatives taken by the banks to reduce the carbon footprint from their day to day banking activities and also to minimize the external carbon emission. Likewise, sustainable bank is a bank concerned with the social and environmental impacts of its investments and loans. It refers to the initiative taken by banks to encourage environment friendly investments, to give lending priority to those industries which have already turned green or are trying to grow green and thereby help to restore the natural environment.

Welford,(2004) shows cleaner or greener activities are also existed in many developing countries like Taiwan, Thailand and China. (Jeucken, 2014) compared three world regions Europe, North America and Oceania analyzed some important differences between regions countries and banks with regard to sustainable banking. It results

showed that a defensive position towards the environmental issue is adopted by 53% of the banks and many of banks are unaware of the role that they can play for sustainable development and perceive financial performance. Brazil has followed a path of combined voluntary and mandatory approaches to sustainable banking driven by the need for stronger efforts in environmental conservation and to foster sustainable development and perceive financial performance. China adopted a policy –based approach to sustainable banking to help tackle profound environmental problems and support the transition to a green, inclusive and resilient sustainable growth path (IFC, 2014).

### **2.1.1 Green Investment**

Climate change presents risks and opportunities for the financial sector in both emerging and advanced economies. Financial institutions cannot afford to be outside of the transition path to low-carbon economies. Energy subsidies, emission standards, and carbon prices will all have a direct impact on the financial positions of these institutions' clients, making climate risk an important element of any credit decision. Financial institutions will also need to understand the climate risks associated with their non-green assets and design measures to mitigate them. Yet there are also significant opportunities for financial institutions to provide innovative financing products for energy efficiency upgrades, renewable power generation, green buildings, green transport, and climate-smart agriculture and architecture. And there is a growing community of investors seeking new climate and environment friendly opportunities, which financial institutions can use to diversify their funding base and reduce their funding costs (IFC 2016).

Green Bonds are any type of bond instrument where the proceeds are applied to finance or re-finance new or existing green projects. Such projects generally include renewable energy, energy efficiency, clean transportation, sustainable water management, climate change adaptation, sustainable agriculture and forestry, and pollution prevention and control.

### **2.1.2 Risk Management**

Gumbus and Johnson(2014) Banks are in the business of managing risk, not avoiding it. Risk is the fundamental element that drives financial behavior. Without risk, the financial system would be vastly simplified. However, risk is omnipresent in the real world. Financial Institutions, therefore, should manage the risk efficiently to survive in this

highly uncertain world. The future of banking will undoubtedly rest on risk management dynamics. Only those banks that have efficient risk management system will survive in the market in the long run. The effective management of credit risk is a critical component of comprehensive risk management essential for long-term success of a banking institution.

Credit risk is the oldest and biggest risk that a bank, by virtue of its very nature of business, inherits. This has, however, acquired a greater significance in the recent past for various reasons. Foremost among them is the wind of economic liberalization that is blowing across the globe. India is no exception to this swing towards market-driven economy. Better credit portfolio diversification enhances the prospects of the reduced concentration credit risk as empirically evidenced by direct relationship between concentration credit risk profile and NPAs of public sector banks. A bank's success lies in its ability to assume and aggregate risk within tolerable and manageable limits (Gumbus and Johnson, 2014).

### **2.1.3 Green Human Resource**

The green recruitment and selection process and practices of banks are increasing day-by-day. The banking sector of Bangladesh has taken some remarkable steps to boost up green HR practices. However, the numbers are a few. The repetition problem while practicing green HR in banks should be eliminated so that all stakeholders' cumbersome can be eradicated from the process. The central bank can initiate policy guidelines to practice green HR by the commercial banks of Bangladesh. However, all head of HR and HR practitioners should initiate green HR process and practice within the in-house environment of banks in Bangladesh, which are really absent in the banking sector of Bangladesh. However, the developed green recruitment and selection process model can be similarly applied to every organization in the world. Finally, the green recruitment and selection process and practices can be studied in the other sector also with similar importance. (Tazul& Islam, 2014) Green Recruitment and Selection Process Model: Evidence from the Banking Sector of Bangladesh.

#### **2.1.4 Green Product and Service**

Green Banking is a practical way of future sustainability and a long-term business strategy that aims for sustainable environmental conservation rather than profit. The study highlights that it is the banks' responsibility to educate their customers about green products and greener financing options. It is only through more extensive provision of a wider variety of Green Banking products and services that the banks in Mauritius will be able to increase awareness of and improve the general perception of customers regarding green banking. Furthermore, it can be deduced that green banks are at foundation mode in Mauritius. Although they have started implementing green practices, but still a lot of channels are not used by the Mauritian banks to green their activities. They should expand the use of environmental information in their business operations, credit extension and investment decisions. More commercial banks not only the major ones, must go for Green Banking adoption. From the mean analysis obtained for influence of Green Banking products and services on bank customers, it can be noticed that advertising for e-statements, internet banking, and mobile banking amongst others was not influenced greatly by respondents. Moreover, the majority of the respondents rated positively to the efficiency of green projects/CSR that is implemented by green banks in Mauritius (Cappelli, 2017).

#### **2.1.5 Green Business Strategy**

The major form of green banking strategy to promote green image stems from the development of eco-friendly products and services to cater more for their environmental responsibility and to the evolving customer's expectation. The innovative basket of green products comprises of automatic payments, electronic statements, electronic and telephone banking. In addition, green banks do not restrict them to products and services but also reach out to invest more in their infrastructure and technology. The motive for green infrastructure is mainly to cut down carbon emissions and to become more efficient (Cappelli, 2017).

## **2.2 Conceptual Review of Perceived Financial Performance**

Psychological well-being is influenced by the "surrounding contexts of people's lives" and has consistently been found to be associated with positive outcomes. Given the turbulent surrounding contexts facing SME owners in South Africa, the primary objective of this study was to investigate their level of psychological well-being and to establish the influence thereof on the financial performance of their businesses. A survey using a structured questionnaire was used to gather the necessary data. The population consisted of all owners of SMEs operating within the borders of the Eastern Cape province of South Africa. Criterion and convenience sampling were used and questionnaires were administered by field workers. In total 495 questionnaires were useable for statistical analysis. Scale validity and reliability was assessed, descriptive statistics calculated and Pearson's product moment correlations established. Multiple regression analysis was undertaken to investigate the hypothesized relationships. The results show that the participating SME owners have high levels of positive psychological well-being and that their businesses are performing financially. The results also suggest that the more SME owners display the attributes associated with environmental mastery, self-acceptance and autonomy, the more likely their SMEs are to perform financially (SEM, 2018).

### **2.2.1 Economy**

Green economies depend on renewable, sustainable forms of energy. These systems operate with the end goal of cutting carbon emissions, restoring biodiversity, relying on alternative energy sources and generally preserving the environment. This report from the United Nations Environment Program: Examples of the Green Economy in Practice gives a few examples of societies that are embracing this system (Investopedia Staff, 2018).

Green growth is a similar concept to green economy that has been promoted in recent years, especially in some regions of the world (e.g. Asia). The use of the word "growth" suggests the particular importance many countries attach to the quantitative expansion of their economies to accommodate growing populations, rising development aspirations and poverty reduction. Several institutions, including the World Bank, the OECD, the Global Green Growth Institute (GGGI) and the United Nations Economic Commission



for Asia and Pacific (UN-ESCAP), consider green economic issues under the concept of green growth and several definitions have been developed for this term. According to the Organization for Economic Co-operation and Development (OECD 2011), green growth means fostering economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies. The definition clearly underscores that green policies do not need to slow economic growth. The Green Economy concept places a bit more emphasis on finite environmental limits.

### **2.2.2 Efficiency**

Efficiency refers to the degree of a process (or set of processes) whether it relates to the level of success of processing within an organization, the cost effectiveness of a market, or the erosion of income by expense. Efficiency measurement determines how banks provide an optimal combination of financial services with a set of inputs. On the one hand, one is asking oneself bank capability to efficiently and technically produce, financial services for economic agents. On the other hand, banks as financial companies look for profitability. Therefore, they are constrained from achieving maximum profit, due to regulatory restrictions (minimum reserve, capital adequacy requirements, etc). Their management has substantial control on the cost of inputs, whereas the output side is beyond their control (Worthington, 1998).

### **2.2.3 Effectiveness**

The degrees to which objectives are achieved and the extent to which targeted problems are solved. In contrast to efficiency, effectiveness is determined without reference to costs and, whereas efficiency means "doing the thing right," effectiveness means "doing the right thing."

Effectiveness An output of specific review/analyses (e.g., the WASC Educational Effectiveness Review or its Reports on Institutional Effectiveness) that measure the achievement of a specific educational goal or the degree to which a higher education institution can be expected to achieve specific requirements. It is different from efficiency, which is measured by the volume of output or input used. As a primary

measure of success of a programme or of a higher education institution, clear indicators, meaningful information, and evidence best reflecting institutional effectiveness with respect to student learning and academic achievement have to be gathered through various procedures. Engaging in the measurement of educational effectiveness creates a value-added process through quality assurance and accreditation review and contributes to building, within the institution, a culture of evidence. (Vlasceanu, 2004)

### **2.3 Review of Previous Thesis**

David (2015), this study was green banking system of commercial banks India. The main objective of assess the impact of various green banking systems offered by commercial bank. This study impact of bank deals on the purpose of gaveling housing loan in implementing the green banking system. It is inferred that problem in implementing green banking system is influenced by the types of green banking services and promotional measures taken for green banking system positively. It relevant with processes, products, services, strategies greening infrastructure and its origin.

Jain and Harshila (2017), Green banking: Study on customer awareness in public and private sector banks. Objective of this study is assessing the awareness level of customer and banking staff regarding green banking. According to employee, Lack of awareness among customers about benefits of green banking is found to be the main reason for customers not to use green banking in their daily bank services.

Verma (2012), stated that Indian banking is gradually coming to realize that there is need for a shift from the 'profit, profit and profit motive to 'planet, people and profit'. GB involves pursuing of financial and business policies that are not hazardous to environment and help to protect environment. The purposes of GB are to use resources with responsibility avoiding waste and giving priority to environment and society.

The Role of Green Banking is Sustainable Growth (Bahl, 2012) this report indicates that the India's growth account and obligation to cut its cards can be created by banks in the form of small carbon intensity by 20-25 percent from 2005 level by charitable donations as a percentage of online banking 2020 provides tremendous opportunities for Indian activity to help the environment banks from funding sustainable projects to offering innovative products and services in the areas of green. Initially, these commitments to environmental and social guidelines will cause a huge financial burden for Indian banks.

Therefore, for sustainable banking, Indian bank should adopt green banking as a business model without any additional postponement. She described green banking as banking conducted in selected area and technique that helps in reduction of internal carbon footprint and external carbon missions. The research paper highlighted the means to create awareness in internal and external sub-systems and impart education to attain sustainable growth through green banking.

Bihari (2011), this study was green banking-towards socially responsible banking in India. The main objective to highlight the green banking initiatives being taken by the Indian banking industry. Indian banks are beginning to recognize that they have a social responsibility to fulfill as they emerge from the shadow of traditional banking.

Biswas, Nigamananda (2011), this study on Sustainable Green Banking Approach: The Need of the Hour. The main objective to highlight the major benefits, confronting challenges, strategic aspects of Green Banking. It is found that there has not been much initiative in this regard by the banks in India, though they play an active role in India's emerging economy. Banks should go green and play a pro-active role to take environmental and ecological aspects as part of their ending principle, which would force industries to go for mandated investment for environmental management, use of appropriate technologies and management systems.

Nath, Nayak & Goel (2014), this study on Green banking practices: The main objective to highlight the green rating standards given by RBI. This methodology has taken secondary data collected from the sources such as articles, research papers, annual reports, sustainability reports, company's official websites, etc. The banks should change their routine operations through the adoption of paperless banking, online banking, mobile banking and mass transportation system, green cards made up of recycled plastic and efficient use of resources

Islam, Das (2013), this study on Green Banking practices in Bangladesh. The main objective has to analyze the green banking practices in Bangladesh. The study is conducted only based of secondary data and these data are collected from annual report Green banking practices in Bangladesh are not at a satisfactory level. In line with global development and response to the global warming, Green banking plays significant roles.

Government as well as every bank should take initiatives in respect of green banking practices for protecting our environment. Bangladesh bank will emphasize with significance of green banking activities/practices of a bank while according permission for opening new bank branches and approval for launching new bank. Government should also encourage the general people about the green banking practices.

Rauth and Malhotra (2015), this study on Green Banking Strategies: Sustainability through Corporate Entrepreneurship. The main objective has to analysis the various models of green banking practices adopted by Indian companies to grow. The research methodology is based on case study method. The findings of the research study show that the banks which are adopting the green banking practices influence the performance of the organization.

Robert, Sroufe and Remani (2018), this study on Management, Social Sustainability, Reputation, and Financial Performance Relationships: An Empirical Examination of U.S. Firms. The main objective to analysis of financial performance of US firms. The research in this study uses a sample of *Fortune* 500 firms simultaneously listed in the Newsweek Green rankings, The Corporate Knights Global 100, and the 100 Best Corporate Citizens lists and secondary source. The results of this study advance construct and item development involving sustainability management and social sustainability practices while testing relationships to measures of financial performance.

Bussoli & Conte (2018), this study was the virtuous circle between corporate social performance and corporate financial performance in the European banking sector. The main objective analyses the relationship between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP) in the European banking sector. This study has taken panel data analysis is used to verify the research hypotheses. The main findings show a positive influence of CSP on CFP, confirming the good management approach. However, the results demonstrate a negative influence of CFP on CSP, which generates the impossibility of confirming the theoretical assumptions of the slack resources approach. Therefore, the existence of a virtuous circle deriving from the integration of the two approaches is not supported.

Khawaspatil and More (2013) have intended to find the importance of green banking India. According to Ball in the year 2012 banks to promote different types of environment friendly products which will ensure the protection of our environment and the profitability of banks in Swiss Journal of Research in Business and Social Sciences, (Islam and Das, 2013) have conducted a study highlighting the mobile banking, online banking, green financing, and guidelines for green banking is a new term in Bangladesh, it is a mature issue in developed countries. So banks should consider the environmental issues of the country as a social responsible person not only to face the impact of globalization but also to face competition.

Jha and Bhome (2013) did the empirical study on the steps that can be taken for going green in the banking sector and to check the awareness among bank employees, associates and the general public about green banking concept. They did this study by collecting data from 12 bank managers, 50 bank employees and 50 general customers. The authors were of the opinion that online banking, green loans, power saving equipment's, green credit card, use of solar and wind energy and mobile banking were some of the strategies that should be followed for going green. (Farooqi, 2013) the performance and success of commercial banks depends upon the satisfaction of customers. In this competitive era, commercial banks have to strive hard for acquiring and retaining their customer's e-CRM which is the latest tool and perceived one of the important remedy for banking problems. It gives emphasis upon acquiring, retaining, maintaining and growing profitable customers. When the traditional concept of CRM seen in context of e-business. it translate into e-CRM which essentially deals with managing customer over the web.

Pulicheri and Rajasekar (2013), on their research paper discussed about the green banking is being heard more often today. Green banking can benefit the environment either by reducing the carbon footprint of consumers or banks. On-line banking is an example of an initiative of green banking. When a bank's customers go on-line, the environmental benefits work both ways.

Sharma (2014), in their study A Study on Customer Awareness on Green Banking initiatives in selected Public and Private sector banks with special reference to Mumbai identified the opinion and awareness of bank employees and customers as regards to

green banking concept in Public and Private sector banks. They found that green initiatives like Communication through press, Bank environmental policy, Concession on energy savings, Solar ATMs, Green CDs is not familiar in green initiatives by the bank as per the respondents. According to RBI (IRDBT, 2014) green banking is to make internal bank process, physical infrastructure and IT infrastructure as effective and efficient as possible, with zero minimal impact on the environment. They had introduced green rating standards for Indian banks, which are termed as Green Coin Ratings. Under this rating system, banks are judged on the basis of carbon emissions from their operations and on the amount of recycling, refurbishment and reuse material being used in their building furnishings and in the systems used by them like servers, computers, printers, networks, etc.

Chaurasi (2014), in his paper Green Banking practices in Indian Banks highlighted the benefits, confronting challenges, strategic aspects of green banking and also the status of Indian banks regarding green Banking adoption. He found that there has not been much initiative in this regard by the bank in India. Bank should go green and play a proactive role to take environment and ecological aspects as part of their lending principle, which would force industries to go for mandated investment for environmental management, use of appropriate Technologies and management systems. (Yadav and Pathak 2014) in their paper Environmental Sustainability through Green Banking: A study on private and public sector banks in India, study of the various green banking approach adopted by Private and Public Sector Banks in India for environmental sustainability and phases of green marketing initiatives of the banks using Case Study Approach. They found that except ICICI Bank, Public sector banks have taken more green initiatives as compared to Private sector Banks.

Ragupathi (2015) explored the ways to Go Green through Green Banking. According to authors, Green Banking means promoting environmental-friendly practices and reducing your carbon footprint from your Banking activities. This comes in following forms: Avoiding Branch Banking and using online Banking, Paying bills online, Instead of opening up accounts at large multi-branch banks, online bank accounts should be opened, finding the local bank which supports local Green initiatives in your area. The author concluded that the concept of Green Banking is mutually beneficial to the banks,

industries and the economy. Not only Green Banking ensures the Greening of the industries, but it also facilitates in improving the asset quality of the banks in future.

Biswakarma (2017) has conducted in his study on, sustainability and green banking practices: understanding the strategic convergence in Nepalese banks-SEM approach. The main objective of this study was to explore the green banking practices of Nepalese banks. This study has used a sample of 350 employees where considered for the study. However, 309 questionnaires were returned and used in this research. 350 samples are taken into consideration of the 30 items questionnaire and 10 case each items.

They founded in this study sustainability has become the strategic imperative of the twenty-first century (Galpin, Whittington and bell, 2015). The model presented here provides a framework that can be used as a guide for practicing managers who seek to create and maintain a culture of sustainability in banking sector. This paper concluded that green banking practices clearly has direct and positive impact on banking sustainability. The greener steps the bank makes in its activities get it to the sustainable and greener future that each one of them can work towards to greener global environment.

Joshi (2005) has conducted in her study entitled, “Investment Policy of Commercial Bank in Nepal (A comparative study of EBL with NABIL & BOK Ltd).” The main objective of the study was to discuss fund mobilization & investment policy of NABIL and BOK Ltd, to evaluate liquidity, efficiency and profitability, risk position, the growth ratios of loan and advance, total investment with other financial variables.

Through her research Ms. Joshi has found that the liquidity position of EBL is comparatively better than NABIL and BOK. EBL is comparatively average or in between successful in compared to NABIL and BOK. Total interest earned to total outside assets of EBL is lowest at all. But overall analysis of profitability ratios, EBL is average profitable in comparison to other compared banks.

Sedai (2007) in his dissertation “An analysis on lending policy and strength of Nepal Investment Bank Ltd” highlighted that aggregate performance of NIBL is satisfactory and pushing upward. Lending strength of NIBL in term of exposure of loan and advances

is good and appreciable. The contribution made by bank in industrial as well as agriculture sector of the economy is highly appreciable and its bust up towards national prosperity. The ratio of loan and advances to total asset, loan and advance to shareholder's equity indicate a good performance of NIBL in its lending activities.

Looking at the asset management ratio the performance of NIBL seems good in the area of lending, productivity and impact on national economy. The activity ratio also reflects to the soaring performance of NIBL. The decreasing loss loan provision ratio indicates that bank is good enough to judgment in their value customer. The better activity ratio of this bank been a major contributor in managing the lending portfolio according to the demand of the profit oriented business. The high volume of lending activity of NIBL has put this bank in the top position in absolute term. Thus looking at the various summaries and findings, we can conclude that the bank has accelerated its performance in the year 2002/3 and has continued till 2004/5 and the bank has the potentiality to become a leading bank in Nepal.

Limbu (2008), in his dissertation, Credit Management of NABIL Bank Limited highlighted that aggregate performance and condition of Nabil bank. In the aspect of liquidity position, cash and bank balance reserve ratio shows the more liquidity position. Cash and bank balance to total deposit has fluctuating trend in 5 years study period. Cash and bank balance to current deposit is also fluctuating. The average mean of Cash and bank balance to interest sensitive ratio is able to maintain good financial condition.

## **2.5 Research Gap**

The review of relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make this study meaningful and purposeful. There are various researchers conduct on lending practice, inventory management, financial performance and cash management of various commercial banks. In order to perform those analysis researchers have used various ratio analysis. The past researches in measuring financial performance of bank have focused on the limit ratios, which are incapable of solving the problems. Actually, perceive financial performance management is determined by various factors. In this research various green banking practice are systematically analyzed and generalized. Past Researchers are not properly



analyzed about status of Green banking practice and its impact on perceive financial performance of commercial banks in Nepal. In this study financial performance of commercial bank is measuring by various financial and non-financial variables, trend analysis and various statistical tools as well and financial tools are used for analyzing survey data. Since the researcher have used data only one fiscal year but all the data are current and fact. This study tries to define perceive financial performance by applying and analyzing various financial tools like coefficient of correlation and trend analysis. Probably this will be the appropriate research in the area of financial performance of bank and financial institutions.

Most of research in international area like India, Bangladesh, china and western countries has covered or focused of green banking practices as determinants of sustainability of banks. However, to the best of author's knowledge, very few studies focused on banking sustainability in alignment with their green banking practices in Nepal. At the same time, research in the area that explores sustainability is new emerging issues in management of organization globally. Therefore, having identified this gap in the extant literature, the present study that along with significant, investigates the relationship and impact green banking practices and sustainability of banks in Nepal. It is a valuable attempt to plug the gap.

## **CHAPTER - III**

### **RESEARCH METHODOLOGY**

In order to achieve the objective of the study, certain method of research has to be used. This chapter is, therefore, devoted to describe the methods used for carrying out the research. It covers the type of research design used for under taking, population and sample, sampling process, source of data, data collection procedures and analytical tools used to analyze the data and develop the relationship between green banking practice and perceive financial performance of commercial banks in Nepal.

#### **3.1 Research Design**

This research design is aimed at appraising the green banking practice in selected commercial banks in Nepal. Research design is an overall frame work or plan for the activities to be undertaken during the courses of a research study. The research design serves as framework for the study, guides the data collection and analysis of data, the research instruments to be utilized and sampling plan to be followed. The study has focused on green banking practices and perceives financial performance of employees in Global ime bank, NIC Asia bank, SBI bank, NMB bank, RBB bank and ADBL banks.

The study has used both descriptive and exploratory research design to test the research hypothesis. The overall research work is conducted through collection of primary data. Primary data were collected through questionnaire filled up by employees. The questionnaire was simple and understandable to all level of employees, which focused on the employee of selected banks only.

#### **3.2 Population and Sample**

The population of the study constitutes both officer (i.e. Manager, Assistant Manager, Chief Executive) and assistant level (i.e. Senior Assistant, supervisor, Junior Assistant) employees working in six banks operated in Kathmandu valley. It constitutes the employees working in both corporate and branch offices of the banks operated in Kathmandu valley. Till now there are twenty eight commercial banks in Nepal. Out of

them two domestic bank, two joint venture bank and two public bank are taken for research study on the based on their branch. Among them only six commercial bank (i.e. Domestic banks: Global IME bank, NIC Asia bank, Joint venture banks: SBI bank, NMB bank and Public banks: RBB bank and ADBL bank) had been taken as the sample for the study because of their similar nature.

**Table:3.1**  
**Sample of Study**

Banks	No. of employees			Total
	Above Officer	Officer	Assistant	
GME	2	15	33	50
NIC	2	15	33	50
SBI	2	15	33	50
NMB	2	15	33	50
RBB	5	16	29	50
ADBL	5	16	29	50
Total	18	92	190	300

Source: Survey 2018

The available literatures in the field of study area have suggested that the tendency of retention among the higher level and lower level position is high as compare to middle level position. Pursuant to the available base from the literature, employees working at theses level have not been covered under the study. Therefore, the total population of the respondents covers 300 employees working in six banks.

### **3.3 Sources and tools of data collection**

To carry out the research primary data have been used on this study.

#### **Primary Data**

The primary data are those that are collected a fresh and for the first time and thus happen to be original in character. Primary data has been collected through interview method and questionnaire distributed and collected from the respondents.

### **3.4 Data collection Procedure**

This study, data was obtained from the respondents through a structured questionnaire. The researcher had visited to the sampled banks in Kathmandu valley. The researcher also meets to the Branch manager and their employees of the respective banks for asking after taken permission from Head of Department and then fill-up administering the questionnaire to the employee. The research supervisor, experts and professionals who are experienced in research were also requested to examine the questionnaire to check whether there are any items that need to be changed or rephrased, as well as the appropriateness of the time set for. This process helped refine the questionnaire, enhance its legibility and minimize the chances of misinterpretation it.

The researcher personally collects the data from the respondents of individual and in groups. While collecting the data the researcher told the title, purpose of research, reasons to select the topic and methods to fill the questionnaire and then distribute the questionnaire to the employee of six banks. Some respondents filled the questionnaire at the same time and rest of the questionnaire is collected after four -five days of distribution.

### **3.5 Method of data Analysis**

The collected data was analyzed using quantitative data analysis methods. Descriptive analysis such as frequencies and percentages was used to present quantitative data in form of tables. Data from questionnaire was coded and entered into the computer using Statistical Package for Social Science (SPSS Version 20.0) for analysis. It helps to calculate the standard deviations, correlations and frequency distribution of each independent and dependent variable against the five independent variables using the regression model. The mean, percentage and standard deviation are the most commonly used descriptive statistics. Measures of central tendency were used in this study to give a description of the data.

### **3.6 Instrumentation of data collection**

The data is collected by using the research questionnaires for the purpose of collecting primary data. The questionnaire is structured and there are multiple choices, single

responses and likert scale. Self-administered questionnaires were presented to respondents. Data has been collected through direct questionnaire. In this study questionnaires were developed to study different variables determining retention process. “The questionnaire should investigate attitudes, beliefs, feelings, behavior, knowledge and demographic characteristics” (Webb, 2002). A questionnaire usually consists of a number of measurement scales and elicits demographic information from respondents (Micheal, 2008). The questions and design of the questionnaire should be adapted to the educational levels and background of the respondents (Ghauri & Gronhaug, 2005). Questions in the questionnaire are quite clear, short and complete, relevant and appropriate, precise, explicit and understandable in the present study. The questions are closed-ended, “which offer the respondent a range of possible answers from which the respondent must select his/her appropriate choice” (Welman, Kruger, & Mitchell, 2005). Because of the fact that every respondent is asked to answer the same set of structured and predetermined questions, coding, data treatment and interpretation is relatively easy. The questionnaire contains only close-ended questions in order to create less time consuming when filling in the answer. Most of the close-ended questions are measured using 5-point scales anchored by 1 (strongly agree) and 5 (strongly disagree) to create an easy to answer and unbiased questionnaire.

### **3.7 Reliability and Validity**

In order to reduce the possibility of getting incorrect answers, attention is needed to be paid to the validity and the reliability for the validation of tools researcher had constructed the questionnaire form which was based on conceptual framework. To ensure the validity of the instruments, the researcher consulted with literature. The tools were being fixed for the final study. Reliability can be defined as the degree to which measures are free from error and therefore yield consistent result. For reliability, obtained data were calculated using the Statistical Package for Social Sciences (SPSS) programmer, version 20.0 setting at 0.05.

## CHAPTER - IV

### RESULTS

This chapter presents detail research results discussions in response to the research objectives that were set in chapter one as well as research questions. The main purpose of this study was to examine the relationship between green banking practices and perceive financial performance of commercial banks. This chapter is mainly concerned with the analysis and interpretation of data, which was collected from three hundred employees from commercial banks in Kathmandu district. The data gathered from different sources were analyzed and interpreted under five dimensions: green investment (GI), risk management (RM), green human resource management (GHR), green products and services (GPS) and green business strategies (GBS).

In this chapter, the data collected from the questionnaire for the study were analyzed and interpreted. A set of questionnaire which is given in appendix consisting of closed ended questions was developed as a research tool. The closed ended questions related to the impact of green banking practice with its five dimensions were to be analyzed on a 5-point likert scale i.e. Strongly agree, agree, neutral, disagree, and strongly. The data were analyzed by using the Statistical Package for Social Sciences (SPSS) programme, version 20.0. The data is presented in tables beginning with demographic variables and then research questions that are formulated to guide the research. The first part of the chapter considered the demographic background of the respondents focusing on job position, gender, age, academic qualification, and working experience. The second part presented the findings from the study in relation to the research question.

#### **4.1. Demographic Characteristics of Respondents**

The study collected information on demographic characteristics. Detailed results on each of the demographic characteristics are presented.

##### **4.1.1. Job Position of the Respondents**

Table 4.1 Job Position of the respondents

Position	Frequency	Percent
Assistant	190	63.3
Officer	92	30.7
Above Officer	18	6.0
Total	300	100.0

Source: Survey 2018

In analyzing the job position structure majority of the respondents were assistant, officer and above officer. In particular, the data showed that out of 300 respondents, 190 (63.3%) of the respondents were assistant while 92 (30.7%) were officer and 18 (6 %) was above officer. which was presented in above table 4.2.

#### 4.1.2. Gender of the Respondents

Table 4.2

Gender of the respondents

Gender	Frequency	Percent
Male	160	53.3
Female	140	46.7
Total	300	100.0

Source: Survey 2018

In analyzing the gender structure majority of the respondents were Male. In particular, the data showed that out of 300 respondents, 160 (53.3%) of the respondents were male while 140 (46.7%) were female which was presented in above table 4.2.

#### 4.1.3. Age of the Respondents

Table 4.3

Respondents of Ages

Age	Frequency	Percent
Less than 20 year	2	.7
20-30 year	192	64.0
30-45 years	80	26.7
Over 45 year	26	8.7
Total	300	100.0

Source: Survey 2018

The demographic variable of the respondent's age examined. The results showed that, the majority of respondents were in the age bracket of less than 20 year, 2 (0.7%) This was followed by those who aged between 20-30 years 192 (64%). Followed by 80 (26.7%) were between the ages of 30-45 years. And 26(8.7%) were the age of over 45. This could be as a result that most of the bank employee is Youngers which was displayed in table no 4.3.

#### 4.1.4. Academic Qualification of respondents

Table 4.4

Responses of academic qualification

Qualification	Frequency	Percent
Bachelor	44	14.7
Master's	242	80.7
Above Master's	14	4.7
Total	300	100.0

Source: Survey 2018

The next sample characteristic examined was the educational level of the respondents. Analysis showed that, the majority of the respondents were master's holders. There were 242 (80.7%) masters holders while 44 (14.7%) were bachelor's degree holders, 14 (4.7%) were above master's holders. For such assessment, the education level of the respondents seemed to be satisfactory. This research study findings show that level of education matters in easy understanding of the technology. Therefore, there is a strong relationship between the factor of level of education and use of technology.

#### 4.1.5. Working Experience of respondents

Table 4.5

Respondents of Working Experience

Experience	Frequency	Percent
Less than 1 year	54	18.0
1-3 year	86	28.7
3-5 year	66	22.0
Above 5 year	94	31.3
Total	300	100.0

Source: Survey 2018

The demographic characteristic was the working experience of the respondents. From the above table we can see that the highest respondents are from the group of employees that is 94 which means 31.3% and lowest respondents are from the group of less than 1 year is



54 i.e. 18.0% of the respondent. Besides that 86(28.7%) are of 1-3 year, 66(22.0%) are of 3-5 year working experiences respectively. This was presented in above table 4.5.

## **4.2 Descriptive Analysis**

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis data. Descriptive statistics are used to present quantitative descriptive in manageable form. It helps us to simplify large amount of data in a sensible way. Each descriptive statistic reduces lots of data into a simpler summary. Here descriptive analysis incorporates calculation of statistical measure such as mean, standard deviation, and correlation. It's presented logically as per the study objectives. All the questionnaires were measured on five point Likert scale and anchored by "strongly agree"= 1, to "strongly disagree" =5. These values help the researcher to analyze the data with respect to frequencies and percentage relating to research questions and variables in order get better insight to the respondent's behavior cross-tabulation of different variable was analyzed.

### **4.2.1 Responses of respondent on green banking practice and perceive financial performance**

The researcher in this section wants to find out the responses of respondent on electronic banking products through the data collected from questionnaire during the research process. Here, descriptive analysis incorporates calculation of statistical measures such as frequency, mean and standard deviation. Questions dealt with ranking system on five point scale Likert anchored "Strongly Agree" =1, "Agree" = 2, "Neutral"= 3, "Disagree"= 4 and "Strongly Disagree"= 5.

#### 4.2.2 Status of green investment

Table 4.6

Status of green investment

ObservationStatements	N	Mean	S.D.
Our bank increases the proportion of investment in environment project like solar energy. Hydropower and other similar projects.	300	1.87	.787
Our bank provides reasonable interest loan (Green loan) to consumer who initiate environmental project in social or individual level.	300	2.21	.920
Our bank encourages investment to the economic activities that help to recover environmental degradation.	300	2.25	.859
Our bank encourages investment to that project which helps to prevent deterioration of environment.	300	2.15	.816
Our bank encourages investment to those project that are not harmful to the environment.	300	2.17	1.037
Green Investment (GI)	300	2.131	.6599

Source: Survey 2018

It exhibits the descriptive statistics that which effective green investment depends on encourages green investment. Which is affected by the services provide by the bank to its customer. The table 4.6 shows the response of respondent on the first statement showed that the use of green investment is solar energy, Hydropower and other similar projects with the lower mean of 1.87. This statement had high agree response from the respondent which shows that they are highly satisfy with the use of green investment as per the view of solar energy, Hydropower and other similar projects. The second statement i.e. use of encourages green investment is secure for them had least response on agree and strongly agree which results the higher mean of 2.25. According to these results conclude that most of the respondents of bank encourage investment to the economic activities that help to recover environmental degradation.

### 4.2.3 Status of Risk Management

Table 4.7

Status of Risk Management

Observation Statements	N	Mean	S.D.
Addressing environment issues in financial operations are a part of sound risk management in our bank.	300	2.15	.845
Our bank works with various national and international NGOs for insight & expertise on environmental management issues and performance.	300	2.82	.989
Our bank encourages projects which take care of performance and use of natural renewable resource.	300	2.29	.891
Our bank considers environmental risk management in business decisions.	300	2.21	1.081
Our bank carries environmental rating of the investment proposal.	300	2.55	.831
Risk Management (RM)	300	2.401	.6642

Source: Survey 2018

The descriptive analysis for the risk management in table 4.7 that describes the variables for risk management which includes five attributes. Among the five attributes, “Addressing environment issues in financial operations are a part of sound risk management in our bank”, has the lowest mean of 2.15 with standard deviation of 0.845 and minimum value of 1 and maximum value of 5 which is close to agree with 5 scale point. This indicates that there is no significance between the risk management and their performance. Among the five attribute, “Our bank works with various national and international NGOs for insight & expertise on environmental management issues and performance”, has the highest mean of 2.82 with the scale of minimum 1 to maximum of 5. Its average mean of RM is 2.401 so that it shows positive relation.

#### 4.2.4 Status of Green Human Resource Management

Table 4.8

Status of green human resource management

Observation Statements	N	Mean	S.D.
Our bank follows green practices (online advertisement tools, use of email, video based telephone interviews) while recruiting and selecting staffs.	300	2.21	1.099
Our bank conduct green banking training and capacity building program for the employees.	300	2.44	1.044
In our bank employees actively participate in the green training programs.	300	2.51	1.020
Green events like seminars, symposiums, discussion meetings etc. are conducted in our bank.	300	2.68	1.056
Academic training and workshops on green banking.			
Environmental and social risk management was conducted in our bank.	300	2.50	.959
Green Human Resource (GHR)	300	2.467	.853

Source: Survey 2018

The descriptive analysis for the green human resource management in table 4.8 that describes the variables for green human resource management which includes five attributes. Among the five attributes, “Our bank follows green practices (online advertisement tools, use of email, video based telephone interviews) while recruiting and selecting staffs”, has the lowest mean of 2.21 with standard deviation of 1.099 and minimum value of 1 and maximum value of 5 which is close to agree with 5 scale point. This indicates that there is no significance between the green human resource management and their performance. Among the five attribute, “Green events like seminars, symposiums, discussion meetings etc. are conducted in our bank”, it has the highest mean value is 2.68 with the five point scale of minimum 1 to maximum of 5. Its average mean is 2.467 which create positive relation between GHR and financial performance.

#### 4.2.5 Status of Green Product and Services

Table 4.9

Status of green product and services

Observation Statements	N	Mean	S.D.
Our bank achieves lasting growth by offering sustainable financial products or services.	300	2.24	.901
Our bank focused on green products/services as our concern for green banking initiatives.	300	2.35	.911
Green products/services are more in demand by customers.	300	2.70	1.05
Green products/services have low perceived financial risk.	300	2.58	.913
Our bank develop environment friendly product that combine social concern.	300	2.30	1.02
Green Product and Services (GPS)	300	2.433	.755

Source: Survey 2018

The descriptive analysis for the green product and service in table 4.9 that describes the variables for green product and service which includes five attributes. Among the five attributes, “Our bank achieves lasting growth by offering sustainable financial products or services”, has the lowest mean of 2.24 with standard deviation of .901 and minimum value of 1 and maximum value of 5 which is close to agree with 5 scale point. This indicates that there is no significance between the green human resource management and their performance. Among the five attribute, “Green products/services are more in demand by customers”, has the highest mean of 2.70 with the scale of 1 to 5. Its average mean shows 2.43 so that can be significance with financial performance.

#### 4.2.6 Status of Green Business Strategy

Table 4.10

Status of green business strategy

Observation Statements	N	Mean	S.D.
Each year our bank determine a set of yearly green target.	300	2.41	.851
Our bank prepare necessary budget for pursuing the strategic plan in synergy with green target.	300	2.51	1.05
Our bank use online transaction (E-banking, mobile banking) for green banking.	300	1.91	.935
Our bank provide reasonable interest loan to promote green banking.	300	2.11	.919
Our bank use video conferencing instead of physical movement in order to promote green banking.	300	2.41	.882
Green Business Strategy (GBS)	300	2.271	.645

Source: Survey 2018

The descriptive analysis for the green business strategy in table 4.10 that describes the variables for green business strategy which includes five attributes. Among the five attributes, “Our bank use online transaction (E-banking, mobile banking) for green banking”, has the lowest mean of 1.91 with standard deviation of .935 and minimum value of 1 and maximum value of 5 which is close to agree with 5 scale point. This indicates that there is no linked between the green human resource management and their performance. Among the five attribute, “Our bank prepare necessary budget for pursuing the strategic plan in synergy with green target”, has the highest mean value is 2.51 with the five point scale of minimum 1 to maximum of 5. Its average mean is 2.27 which is significance with highest mean value.

#### 4.2.7 Status of Efficiency

Table 4.11

Status of efficiency				
Observation Statements	N	Mean	S. D	
On almost all the green banking programmes/projects activities are done the same as before, but with fewer resources in term of money, staff, space etc.	300	2.39	.872	
Green banking practices always look forward to getting out much in relation to how much they put in.	300	2.28	.811	
Green banking always ensures that in every process there is best use of resource by getting it right first time.	300	2.31	.835	
Every staff in the green banking practice endeavors to optimally use resources on time in the attainment of my bank objectives, targets and tasks.	300	2.30	.945	
Efficiency (E)	300	2.320	.696	

Source: Survey 2018

The descriptive analysis for the efficiency in table 4.11 that describes the variables for efficiency which includes four attributes. Among the five attributes, “Green banking practices always look forward to getting out much in relation to how much they put in.”, has the lowest mean of 2.28 with standard deviation of 0.811 and minimum value of 1 and maximum value of 5 which is close to agree with 5 scale point. This indicates that there is no linked between the green human resource management and their performance. Among the five attribute, “On almost all the green banking programmes/projects activities are done the same as before, but with fewer resources in term of money, staff, space etc.”, has the highest mean value is 2.39 with the five point scale of minimum 1 to maximum of 5.

#### 4.2.8 Status of Effectiveness

Table 4.12

Status of effectiveness

Observation Statements	N	Mean	S.D
On all the green banking programmes/ projects the officers always look out the impact which is the output of all these functions either contributes to or influences financial performance as a whole.	300	2.27	0.792
There is satisfaction on all green banking programmes / projects which is exhibited by how the service is perceived by both senior management and the internal staff on these projects.	300	2.36	0.795
There is a high level of modernization exhibited by the extent to which the bank has adopted green banking practices that would be regarded as being innovative and forward looking.	300	2.45	0.854
All staff at the green banking practice strive to achieve the intended results in terms of quality in accordance with the set targets and performance standards for service delivery.	300	2.33	1.031
Effectiveness (ETN)	300	2.3517	0.691

Source: Survey 2018

The descriptive analysis for effectiveness in table 4.12 that describes the variables for effectiveness which includes four attributes. Among the five attributes, “On all the green banking programmes/ projects the officers always look out the impact which is the output of all these functions either contributes to or influences financial performance as a whole.”, has the lowest mean of 2.27 with standard deviation of 0.792 and minimum value of 1 and maximum value of 5 which is close to agree with 5 scale point. This indicates that there is no linked between the green human resource management and their performance. Among the five attribute, “There is a high level of modernization exhibited by the extent to which the bank has adopted green banking practices that would be regarded as being innovative and forward looking.”, has the highest mean of 2.45 with the scale of minimum 1 to maximum of 5.



### 4.2.9 Status of Economy

Table 4.13

Status of economy

Observation Statements	N	Mean	S. D
The green banking practice aims at minimizing the cost of resources for all the available programmes/projects.	300	2.35	.911
The bank pays the price that is exactly for what goes into providing green service or product.	300	2.50	.879
The green banking practices generates cost savings on most of its procurements. That is, it does less with fewer resources.	300	2.37	.798
The green banking takes bulk discounts by buying/procuring in large quantities	300	2.31	.974
In the green banking cost is more significant than the quality of the service.	300	2.21	.906
In green banking quality of services is more significant than the costs.	300	2.03	.767
I always safeguard the public property/ assets entrusted to me to ensure that there is no damage.	300	2.11	.867
I always ensure that there is proper and economical utilization of public funds.	300	1.83	.824
Economy (Eco)	300	2.217	.562

Source: Survey 2018

The descriptive analysis for the economy in table 4.13 that describes the variables for economy which includes eight attributes. Among the eight attributes, “I always ensure that there is proper and economical utilization of public funds.” has the lowest mean of 1.83 with standard deviation of 0.824 and minimum value of 1 and maximum value of 5 which is close to agree with 5 scale point. This indicates that there is no linked between the green human resource management and their performance. Among the five attribute, “The bank pays the price that is exactly for what goes into providing green service or product.” has the highest mean value is 2.50 with the five point scale of minimum 1 to maximum of 5.

### 4.3 Inferential Analysis

Inferential statistics analysis is procedures that use to allow researcher to generalized observation made with sample to the larger population from which they are selected. It enables use of one or more samples of observation to infer values of a population. It

produces new information by making prediction and generalization based on samples.

#### 4.3.1 Correlation Analysis

Correlation analysis between Variables was studied to find relations among them. Pearson's correlation was carried for variables. This section deals with the what extent variables under study are correlated to each other. A positive correlation reveals that the direction of relationship is positive with one increasing in action to other increase. Meanwhile, a negative correlation reveal an inverse; an increase in one when the other decreases.

Table 4.14 Correlation between green banking practice between perceive financial performance and non-financial performance

		E	ETN	ECO	PFP
GI	Pearson Correlation	.492**	.312**	.459**	.473**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	300	300	300	300
RM	Pearson Correlation	.463**	.385**	.365**	.461**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	300	300	300	300
GHR	Pearson Correlation	.416**	.354**	.293**	.406**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	300	300	300	300
GPS	Pearson Correlation	.452**	.335**	.255**	.400**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	300	300	300	300
GBS	Pearson Correlation	.315**	.437**	.467**	.455**
	Sig. (2-tailed)	.000	.000	.000	.000
N		300	300	300	300

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Survey 2018

The correlation analysis of different variables in table 4.14 shows the relationship between the dependent variables and the independent variables. The relationship between green banking practice at commercial banks of Nepal and other five independent variables i.e. green investment, risk management, green human resource management, green product and services and last another green business strategy.

➤ **Correlation between Green Investment with Perceived Financial Performance:**

The correlation coefficient between green investment and the efficiency (E) was found to be (0.492) which is positively correlated and p-value recorded as 0.000 which is highly significant. Thus it can be concluded that there is a positive and significant relationship between green investment and the efficiency. Therefore there is the strong relationship between green investment and Efficiency. It is also same relation with perceived financial performance (Efficiency0.492, Effectiveness0.312 and Economy0.459) which is 0.476 and (0.473). This means that changes in green investment are strongly correlated with the changes in Efficiency (i.e. 0.492). It has the strong relationship with the efficiency with the 1%. These results conclude that there is a strong relation between the green banking practice and perceived financial performance.

➤ **Correlation between Risk Management with Perceived Financial Performance:**

The correlation coefficient between Risk management (RM) and the Efficiency (E) were found to be (0.463) which is positively correlated and p-value recorded as 0.000 which is highly significant. Thus it can be concluded that there is a positive and significant relationship between Risk management and the efficiency. Therefore there is the strong relationship between Risk management and efficiency. It is also same relation with perceived financial performance (Efficiency0.463, Effectiveness0.385 and Economy0.365) which is (0.461). This means that changes in risk management are strongly correlated with the changes in efficiency (i.e.0.463). It has the strong relationship with the efficiency with the 1%. These results conclude that there is a strong relation between the green banking practice and perceived financial performance.

➤ **Correlation between Green Human Resource with Perceived Financial Performance:**

The correlation coefficient between green human resources (GHR) and the efficiency (E) were found to be 0.416 which is positively correlated and p-value recorded as 0.000

which is highly significant. Thus it can be concluded that there is a positive and significant relationship between GHR and efficiency. Therefore there is the strong relationship between GHR and efficiency. It is also same relation with return on perceived financial performance (Efficiency0.416, Effectiveness0.354 and Economy0.293) which is (0.406). This means that changes in green human resource are strongly correlated with the changes in efficiency (i.e. 0.416). It has the strong relationship with the efficiency with the 1%. These results conclude that there is a strong relation between the green banking practice and perceived financial performance.

➤ **Correlation between Green Product and Service with Perceived Financial Performance:**

The correlation coefficient between green product and service (GPS) and the Efficiency (E) was found to be (0.452) which is positively correlated and p-value recorded as 0.000 which is highly significant. Thus it can be concluded that there is a positive and significant relationship between GPS and efficiency. Therefore there is the strong relationship between GPS and efficiency. It is also same relation with perceived financial performance (Efficiency0.452, Effectiveness0.335 and Economy0.255) which is (0.40). This means that changes in GPS are strongly correlated with the changes in efficiency (i.e. 0.452). It has the strong relationship with the efficiency with the 1%. These results conclude that there is a strong relation between the green banking practice and perceived financial performance.

➤ **Correlation between Green Business Strategy with Perceived Financial Performance:**

The correlation coefficient between green business strategy (GBS) and the economy (Eco) was found to be (0.467) which is positively correlated and p-value recorded as 0.000 which is highly significant. Thus it can be concluded that there is a positive and significant relationship between GBS and Economy. Therefore there is the strong relationship between GBS and Economy. It is also same relation with perceived financial performance (Efficiency0.315, Effectiveness0.437 and Economy0.467) which is (0.455). This means that changes in GBS are strongly correlated with the changes in economy (i.e. 0.467). It has the strong relationship with the economy with the 1%. These results conclude that there is a strong relation between the green banking practice and perceived financial performance.

### 4.3.2 Regression Analysis

In order to test the statistical significance and robustness of the results, this study relies on primary data analysis based on the regression model specified in the chapter three. It basically deals with regression results from various specifications of the model to examine the estimated relationship of perceived financial performance (Efficiency, Effectiveness and Economy) as dependent variable and Green investment, Risk Management, Green Human Resource, Green Product and Services and Green Business Strategy as independent variables. The regression results have been presented in tables below.

Table 4.15

Regression Analysis of Impact of green banking practice on Perceived Financial Performance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.590 <sup>a</sup>	.348	.337	.46786

a. Predictors: (Constant), GBS, GI, GPS, RM, GHR

Source: Survey 2018

The impacts of green banking practice on perceived financial performance (PFP) indicate by table 4.19. It provides the R and R<sup>2</sup> values. The R value represents the simple correlation and is 0.59 (R Column), which indicates a high degree of correlation. The R<sup>2</sup> value indicates how much of the total variation in the dependent variables, GI, RM, GHR, GPS and GBS can be explained by the independent variable. In this case 34.8 % can be explained.

ANOVA <sup>a</sup>					
Model	Sum of Squares	DF	Mean Square	F	Sig.
Regression	34.353	5	6.871	31.388	.000 <sup>b</sup>
Residual	64.353	294	.219		
Total	98.706	299			

a. Dependent Variable: NFP

b. Predictors: (Constant), GBS, GI, GPS, RM, GHR

Source: Survey 2018

The analysis ANOVA table 4.19 indicates that the regression model predicts the dependent variable significantly well. This indicates the statistical significance of the

regression model that was run. Here,  $p < 0.000$ , which is less than 0.05, and indicates that, overall the regression model statistically significantly predicts the outcome variable (i.e. it is good fit for the data).

Model	Coefficients <sup>a</sup>				t	Sig.
	Unstandardized		Standardized			
	B	Std. Error	Beta			
(Constant)	.813	.125			6.513	.000
GI	.239	.060	.275		4.017	.000
RM	.137	.076	.158		1.792	.074
GHR	.017	.062	.025		.268	.789
GPS	.009	.053	.012		.175	.861
GBS	.255	.056	.286		4.525	.000

a. Dependent Variable: NFP

Source: Survey 2018

The analysis of coefficients indicate by table 4.19, it is observed that the beta for green investment is 0.239, risk management is .137, green human resource 0.017, green product/services is 0.009 and green business strategy is 0.225. The negative sign in front of the beta of these variables signify an indirect relationship between the explained variables whereas positive sign signify a proportional relationship between the explained variables. From the above table 4.18 these results conclude that there is positive relationship between green investment, risk management, green human resource, green product and services and green business strategy with perceive financial performance. Green investment and green business strategy with perceive financial performance is statistically significant at 0.000 which are less than the alpha significance level equal to 0.05. So, Green Investment and Green Business Strategy are having highest degree of relationship with the non-financial performance.

#### 4.4 Findings

This chapter presented the primary data collected by use of questionnaires and granted by employee of commercial bank and it has been discussed side by side relying on the

research objectives and research questions. The basic objective of this study is to analyze the relationship between green banking practices and perceive financial performance of commercial banks. The analysis revealed that a green banking practice have been introduced by commercial banks. But the researcher has only considers the five dimensions of green banking practices i.e. Green investment, risk management, green human resource, green product and services and green business strategy. From the analysis, these are the most widely patronized products by the employee. This result was presented in above tables.

The observation of this study revealed that there were 53.3% male and 46.7% were female. It was observed that the highest levels were master's degree and lowest number was of above master's degree. These findings show that employees differ in education level from those with high level of education to lower ones. Most employee of green banking practice in Kathmandu which is of age between 20-30 years. The analysis was based on 300 questionnaires which were properly filled by the employees of six lead commercial banks. This was accounted for 100% response rate. The respondents were asked to rate statements on a 5 point likert scale ranging from 1 to 5 with 1 being 'Strongly Agree', 2 being 'Agree' 3 being 'neutral', 4 being 'disagree' and 5 being 'Strongly Disagree'. On the basis of data analysis of 300 employees and 6 bank employees of 6 banks i.e. GME, NIC, NMB, SBI, ADBL and RBB (2 domestic, 2 public and 2 private banks) from Kathmandu cities of Nepal certain findings are established which are highlighted below:

- This study was found that employee are getting diverted from traditional banking activities and replacing traditional banking by adopting Green Banking services like internet banking, mobile banking, Banking through ATMs.
- This study was found that their commercial banks provide almost all kinds of Green Banking services ranging from Online Banking, Mobile Banking, Banking through ATMs, Green Deposits, Green Mortgages and Loans to Green Credit Cards and Green Reward Checking Accounts.
- Thus it can be interpreted that the banks are taking initiatives to reduce the carbon footprint and to help the government in making the earth a better place to live.

- Green Banking services that are provided by their banks. They said that the Green Banking services save their lot of time and also save them with all the paperwork which makes their activities and bank work a complex procedure. Further, they also said that as the Green Banking services are available 24\*7 so it can be easily accessible at any time even during holidays.
- Banks are adopting Green Banking services to save environment from carbon footprints from banking activities.
- Majority of the employees assured that Green Banking system had changed the working environment of banks to a greater extent as evident from removal of traditional practices by the banks and adoption of new online practices.
- Green Investment and Green Business Strategy are having highest degree of relationship with the non-financial performance.
- Green Investment, Green Product / Services and Green Business Strategy are having highest degree of relationship with the efficiency (E).
- Green Investment, Risk Management, Green Human Resource, Green Product/services and Green Business strategy highly correlated with perceived financial performance.
- Other variable like perceived financial performance (Economic, Efficiency and Effectiveness) are also positive correlation with green banking practice. It means that all variable impact on high degree significance on perceived financial performance.

#### **4.5 Discussion**

The research contributed in understating the green banking practice and perceives financial performance of commercial banking sector in Nepal. It confirms previous research study in the topic with an empirical support from Nepal. The main purpose of the study was to understand and identify the factors that supports in green banking practice and sustainability at commercial banks of Nepal. This study investigated the different factors that can influence the sustainability in commercial banks.

The research used the data collected from the survey conducted within Kathmandu valley are used to examine the data covering 300 samples across the commercial banks employee in Nepal. The present scenario of green banking practice in Nepalese



Commercial Banks has a moderate environment for their green banking practices in Nepal. Most of the respondent agreed that basically determinants were less than the 3 and not in near to 4 and 5, so that the respondent can feel the moderate environment. Within the individual dimensions of Green investment, risk management, green human resource, green product/service and green business strategy are highest concern, with the mean value of 2.13, 2.40, 2.46, 2.43 and 2.27 respectively. Similarly, Employee's has medium level of agreeableness towards green banking practice (Survey 2018). However, medium side of agreeableness on using the current greening banking practices soon.

The result of the study shows that out of five variables of green banking practice five variables i.e. green investment, risk management, green human resource, green product/service and green business strategy is consistent with the previous empirical studies. Sustainable development contrast with the previous empirical studies, this research discussion added raises the issue in Nepalese context.

This study focuses on the interface between green banking practices and perceives financial performance in Nepalese context. The result of this study suggests that green banking practices are practiced at moderate level in Nepalese banks, i.e. Green Investment, Risk Management, Green HRM and Green Business Strategy, Green Product / Services are moderately practiced in Nepalese banks. The banks are focus moderately focused on green products/services as our concern for green banking initiatives and on develop environment friendly product that combine social concern. Likewise, lesser, the banks encourage investment to the economic activities that helps to recover environmental degradation. Strategically, the Nepalese banks are weaker in sense of strategic plan in synergy with green targets. There is a poor practice on green banking training and capacity building program, green banking, and environmental and social risk management were conducted in our bank. This study does support partially with different views than that of the Jeucken and Bouma (1999), Weber (2017), Islam and jha (2013), Welford (2004), IFC (2014), shows cleaner or greener activities are also existed in many developing countries.

In terms of relationship between green banking practices, it indicates that there is a comparatively strong correlation between green investments, risk management, green

HRM, green business strategy and green product / services is having a significant effect over the perceive financial performance of bank.

Green Banking is a practical way of future sustainability and a long-term business strategy that aims for sustainable environmental conservation rather than profit (Deka, 2015). The study highlights that it is the banks' responsibility to educate their customers about green products and greener financing options. It is only through more extensive provision of a wider variety of Green Banking products and services that the banks in Mauritius will be able to increase awareness of and improve the general perception of customers regarding green banking (Nayak & Goel, 20114). Furthermore, it can be deduced that green banks are at foundation mode in Mauritius. Although they have started implementing green practices, but still a lot of channels are not used by the Mauritian banks to green their activities. They should expand the use of environmental information in their business operations, credit extension and investment decisions. More commercial banks not only the major ones, must go for Green Banking adoption. From the mean analysis obtained for influence of Green Banking products and services on bank customers, it can be noticed that advertising for e-statements, internet banking, and mobile banking amongst others was not influenced greatly by respondents. Moreover, the majority of the respondents rated positively to the efficiency of green projects/CSR that is implemented by green banks in Mauritius (Robert & Malhotra 2015). The study found that the existence of green consumers in Mauritius gives opportunities for banks to expand their business in an environmental friendly product. Banks can expand the concept of green through green marketing as a communication means with their clients about campaign activities for programs that consider the environment thereby reinforcing the image as an environmental friendly bank

## **CHAPTER - V**

### **CONCLUSIONS**

After the analysis and interpretation of collected data as per the design of study, this is the concluding chapter an attempt has been made to drive conclusion. This chapter deals with the conclusion and implication derived from the study, relationship between green banking practices and perceive financial performance of commercial banks of Nepal. It consists of two sections. First section provided the conclusion of the study and final section consists of the implication to solve the problem observed during the study.

#### **5.1 Conclusions**

The study is finished by giving all the answers for the research questions raised in the Chapter 1. This means the research objectives are done. Based on the findings of this study, recommendations have been given on the green banking practice and perceive financial performance of commercial banks in Nepal. The limitations of the study as well as suggestions for further research have also been discussed. The following part gives the conclusions for the study by presenting the main points to answer the research questions:

The first objective of the research was to identify of the green banking practices of commercial banks in Nepal. The findings of the research states that green banking promotes environmental friendly practices and reduces carbon footprints from banking activities. This comes in many forms using online banking instead of branch banking, paying bills online, instead of mailing them open up CDs and money market counts at online banks (Mobile banking, internet banking, ATM card, Credit card, online fund transfer etc.), support green initiatives. Green banking helps to create effective, time saving, easy to use of banking service and far reaching market based solution to address a range of environmental problems, including climate change, deforestation, air quality issues and bio diversity loss while at the same time identifying and securing opportunities that benefit to banking customers.

The second objective was to examine the relationship between green banking practices and perceive financial performance of commercial banks in Nepal. Which determinants of green banking is more impact among to perceived financial performance. The result has shown positive and significant contribution by the influencing factors such as green investment, risk management, green human resource, green product/services and green business strategy.

There are many factors that determine perceive financial performance of commercial banks but with the observed determinants the green investment and green business strategy have shown more impact on perceive financial performance. Similarly green investment, green product/service and green business strategy have significance relationship with the efficiency.

The third objective was to examine the green banking practice influence on perceive financial performance of commercial banks in Nepal. This finding of research state that perceive financial performance influence by green investment, green human resource, risk management, green product/service and green business strategy. Out of them perceive financial performance was highly influence by green investment and green business strategy.

## **5.2 Implication**

All the commercial banks should carry out the programs that will motivate to the other banks to work more effectively and with much more effort. The green banking policies and organizational philosophy should reflect the factors that contribute towards to green banking practices.

### **5.2.1 Managerial Implication**

While banking sector are acknowledging the importance of perceive financial performance globally, Nepalese banking sector remains a challenge to be greener and sustainable. These banks should emphasize towards the implementation of an effective strategy to achieve a financial performance state in term of green banking practices. As demonstrated by this empirical study of the Nepalese commercial banks, the integrated implementation of the studied components of the model proposed by this study are indispensable to implement the integrated perceive financial performance in terms of the social, ecological and economic aspects. The implementation of green banking practices should be embedded deeply to foster a culture of perceives financial performance. The green banking practice should be initiated with social, ecological and economic visions and goals. Research has shown that an organization's culture operates at multiple levels (Dvjrom.2010), and developing and maintaining a culture of perceive financial performance, requires leaders to address each of these levels.

A go green and win-win-win situation comes out of the environment, society and firms, always contingent fostering culture of perceive financial performance. The commercial banks

should also focus on environmental policies and strategically align with perceived financial performance. Countries such as Brazil, Bangladesh and Nigeria have also introduced regulations and guidelines focusing on the impact of the banking sector on environment and sustainable development (Robbins, 2015). The banks can manage environmental risk by designing proper environmental management systems to evaluate the risks involved in the investment projects. They should stress upon green investment, risk management, green business strategy, green product/service (mortgage loan credit card and online banking) including the green human resource management too.

### **5.2.2 Research Implication**

The further research would be focused on the more sample. They will do their research activities by putting more variables than this research variable. This study has covered only six commercial banks of Nepal. It does not cover other banks, financial institutions and other sectors of the economy. In the same way, further study may be a comparative one such as Development banks with financial institutions, or all commercial banks with other banks or banking industry with other industry. The further study can be conducted in the same topic and same areas after the certain time duration to measure the green banking practice on the basis of government policies. so that researchers can conduct whether there is any change in demographical characteristics, response on green banking factors and perceived financial performance, relationships between green banking practice and demographic characteristics, impact of green banking practice on Nepalese investor and green banking practice predictability of the corporate social responsibility (CSR) or not. That can be new topic for the further researcher.

Adoption of green approach is more than just becoming environment-friendly as it is associated with many social benefits like reduction in the risk, as well as, the cost of the bank, enhancement of banks reputations and contribution to the common goal of protecting environmental besides enhancing the reputation of the bank. In a broad sense, Green Banking serves the commercial objective of the bank as well as the corporate social responsibility. Thus, it has become important for Banks to realize their responsibilities towards the environment as well as the society and face the global market by competing and surviving with the Green Banking system.

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## APPENDIX: QUESTIONNAIRE

**CENTRAL DEPARTMENT OF MANAGEMENT  
TRIBHUVAN UNIVERSITY KRITIPUR, KATHMANDU  
MASTERS OF BUSINESS STUDIES SPECIALIZATION ON FINANCE**

Dear Respondent,

This is a questionnaire designed to assist the researcher to complete the academic research project on *Green Banking practices and perceived Financial Performance of Nepalese Commercial Banks in Kathamandu Distirct* which is a partial fulfillment of the requirements for the award of a Master of Business Studies Specialization on Finance of Tribhuvan University.

Please take a few minutes of your time to complete this questionnaire. Your honest answers will be completely anonymous, but your views, in combination with those of others are extremely important in building knowledge on the effects of green banking practices on financial performance of commercial banks in Nepal Kindly answer all questions.

The researcher thanks you for your participation and if you have questions about the research or would like to receive a copy of the abstract of the completed project, please write to: **Mr. Keshab Bahadur Bohara, Munilek-04, Dadeldhura**, Mobile 9848740557 or Email: ***bkeshab557@gmail.com*** Therefore, attach your business card on returning of a completed questionnaire.

### **Part I: Personal Information**

**Please mark "" in appropriate boxes or fill the details in the space provided.**

1. Bank:

Prabhu Bank		NMB Bank		ADBL Bank	
NIC Asia Bank		SBI Bank		RBB Bank	

2. Job Position:

Manager		Assistant	
Assistant manager		.....	
Officer		.....	

3. Gender:

Male		Female	
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4. Age:

Less 20 years		20-30 Years	
30-45 years		Over 45 years	

5. Educational Qualification:

Master's Level		M. Phil Level	
.....		PHD Level	

6. Working Experience:

Less than 1 year		1-3 years	
3-5 years		above 5 years	

**Part II: Information Regarding Green Banking Practices and Financial Performance**

Please Mark "" to show to what extent you agree with the following statements:

S.N.	Statements	Yes	No
01	My bank involves in setting up green branches (energy efficient buildings/green buildings).		
02	In my bank, head office level or top management involves in environmental protection related planning and implementation.		
03	My bank promotes and facilitates environmental oriented enterprises through special grants, loans and guidance.		
04	My bank purchases its stationeries, equipment's and other items from environmental friendly companies (e.g. printers, computers, and etc.).		
05	My bank implements environmental (green) reward system in the branches who support the green banking initiatives.		
06	My bank provides loan to environmental protection and energy saving related projects?		
07	My bank has initiatives to reduce paper usage and other wastage of materials?		
08	My bank provides training and education to the staff on environmental protection, energy saving, and etc.		

**Part III: Information Regarding Green Banking Practices**

1-Strongly agree	2-Agree	3-Neutral	4-Disagree	5-Strongly disagree
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Please Mark "" to show to what extent you agree with the following statements:

S.N.	Statements	1	2	3	4	5
	<b>Green Investment (GI)</b>					
01	Our bank increases the proportion of investment in environment project like solar energy. Hydropower and other similar projects.					
02	Our bank provides reasonable interest loan (Green loan) to consumer who initiate environmental project in social or individual level.					
03	Our bank encourages investment to the economic activities that help to recover environmental degradation.					
04	Our bank encourages investment to that project which helps to prevent deterioration of environment.					
05	Our bank encourages investment to those project that are not harmful to the environment.					
	<b>Risk management (RM)</b>					
01	Addressing environment issues in financial operations are a part of sound risk management in our bank.					
02	Our bank works with various national and international NGOs for insight & expertise on environmental management issues and performance.					
03	Our bank encourages projects which take care of performance and use of natural renewable resource.					
04	Our bank considers environmental risk management in business decisions.					
05	Our bank carries environmental rating of the investment proposal.					

Green HRM (GHR)						
01	Our bank follows green practices (online advertisement tools, use of email, video based telephone interviews) while recruiting and selecting staffs.					
02	Our bank conduct green banking training and capacity building program for the employees.					
03	In our bank employees actively participate in the green training programs.					
04	Green events like seminars, symposiums, discussion meetings etc. are conducted in our bank.					
05	Academic training and workshops on green banking. Environmental and social risk management was conducted in our bank.					
Green Product and Services (GPS)						
01	Our bank achieves lasting growth by offering sustainable financial products or services.					
02	Our bank focused on green products/services as our concern for green banking initiatives.					
03	Green products/services are more in demand by customers.					
04	Green products/services has low perceived financial risk.					
05	Our bank develop environment friendly product that combine social concern.					
Green Business Strategy (GBS)						
01	Each year our bank determine a set of yearly green target.					
02	Our bank prepare necessary budget for pursuing the strategic plan in synergy with green target.					
03	Our bank use online transaction (E-banking, mobile banking) for green banking.					
04	Our bank provide reasonable interest loan to promote green banking.					
05	Our bank use video conferencing instead of physical movement in order to promote green banking.					

#### Part IV: Information Regarding Perceived Financial Performance

1-Strongly agree	2-Agree	3-Neutral	4-Disagree	5-Strongly disagree
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Please Mark "☑" to show to what extent you agree with the following statements:

S.N.	Statements	1	2	3	4	5
Efficiency						
01	On almost all the green banking programmes/projects activities are done the same as before, but with fewer resources in term of money, staff, space etc.					
02	Green banking practices always look forward to getting out much in relation to how much they put in.					
03	Green banking always ensures that in every process there is best use of resource by getting it right first time.					
04	Every staff in the green banking practice endeavors to optimally use resources on time in the attainment of my bank objectives, targets and tasks.					
Effectiveness						
01	On all the green banking programmes/ projects the officers always look out the impact which is the output of all these functions either contributes to or influences financial performance as a whole.					
02	There is satisfaction on all green banking programmes / projects which is exhibited by how the service is perceived by both senior management and					

	the internal staff on these projects.					
03	There is a high level of modernization exhibited by the extent to which the bank has adopted green banking practices that would be regarded as being innovative and forward looking.					
04	All staff at the green banking practice strive to achieve the intended results in terms of quality in accordance with the set targets and performance standards for service delivery.					
	<b>Economy</b>					
01	The green banking practice aims at minimizing the cost of resources for all the available programmes/projects.					
02	The bank pays the price that is exactly for what goes into providing green service or product.					
03	The green banking practices generates cost savings on most of its procurements. That is, it does less with fewer resources.					
04	The green banking takes bulk discounts by buying/procuring in large quantities					
05	In the green banking cost is more significant than the quality of the service.					
06	In green banking quality of services is more significant than the costs.					
07	I always safeguard the public property/ assets entrusted to me to ensure that there is no damage.					
08	I always ensure that there is proper and economical utilization of public funds.					

.....  
Signature of Employee

**Thank You Very Much for Your Valuable Time, Cooperation, Patience and Information**