

GREEN BANKING PRACTICES BY COMMERCIAL BANKS IN
KATHMANDU DISTRICT

A Thesis
Submitted
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Certificate of Authorship

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as a part of requirements 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 this thesis itself has been acknowledged. I certify that all information sources and literature used are indicated in the reference selection of this thesis.

.....

Bhoj Raj Bhatt

December, 2020

RECOMMENDATION LETTER

It is certified that thesis entitled **Green Banking Practices by Commercial Banks in Kathmandu District** submitted by Mr. **Bhoj Raj Bhatt** is an original piece of research work carried out by the candidate under my supervision. Literary presentation is satisfactory and thesis is in a form suitable for publication. Work evinces 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.

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APPROVAL SHEET

We, the undersigned, have examined the thesis entitled **Green Banking Practices by Commercial Banks in Kathmandu District** presented by **Bhoj Raj Bhatt**, 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.

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TABLE OF CONTENTS

Contents	Page No:
<i>Title page</i>	<i>i</i>
<i>Certificate of authorship</i>	<i>ii</i>
<i>Recommendation letter</i>	<i>iii</i>
<i>Approval sheet</i>	<i>iv</i>
<i>Acknowledgement</i>	<i>v</i>
<i>Table of contents</i>	<i>vi</i>
<i>List of table</i>	<i>viii</i>
<i>List of figures</i>	<i>ix</i>
<i>Abbreviation</i>	<i>x</i>
<i>Abstract</i>	<i>xi</i>
CHAPTER I: INTRUCTION	1-9
1.1 Background of study	1
1.2 Statement of the problem and research questions	4
1.3 Purpose of study	4
1.4 Conceptual framework	5
1.5 Significance of the study	7
1.6 Limitation of the study	8
1.7 Chapter plan	8
CHAPTER II: LITERATURE REVIEW	10-28
2.1 Conceptual review	10
2.1.1 Green human resource	12
2.1.2 Green product and service	13
2.1.3 Green business strategy	13
2.1.4 Green investment	14
2.1.5 Risk management	15
2.1.6 Conceptual review of financial performance	15
2.1.6.1 Economy	16
2.1.6.2 Efficiency	16
2.1.6.3 Effectiveness	17
2.1.7 Effect of green banking and financial performance	17
2.1.8 Policies guideline regarding green banking	18

2.2 Review of previous works	19
2.2.1 Review of articles	19
2.2.2 Review of previous thesis	22
2.2.3 Review of Nepalese studies	26
2.3 Research gap	27
CHAPTER III: METHODOLOGY	29-36
3.1 Research design	29
3.2 Population and sample	29
3.3 Sources of data	31
3.3.1 Primary data	31
3.4 Data collection procedures	31
3.5 Data processing procedure	32
3.6 Data analysis tool and techniques	33
3.6.1 Financial ratios	34
3.6.2 Statistical tools	34
CHAPTER IV: RESULTS	37-59
4.1 Data presentation and analysis	38
4.1.1 Demographic characteristics of respondents	38
4.1.1.1 Job position of the respondents	38
4.1.1.2 Gender of the respondents	39
4.1.1.3 Age of the respondents	39
4.1.1.4 Academic qualification of respondents	40
4.1.1.5 Working experience of respondents	40
4.1.1.6 Opinion about green banking products	41
4.1.1.7 Knowledge about green banking	41
4.1.1.8 Satisfaction towards green banking system	42
4.1.1.9 Future of green banking system	43
4.1.2 Descriptive analysis	43

4.1.2.1 Responses of respondent on green banking practice and perceive financial performance	44
4.1.2.2 Green investment	44
4.1.2.3 Risk management	45
4.1.2.4 Green human resource management	46
4.1.2.5 Green product and services	47
4.1.2.6 Green business strategy	48
4.1.2.7 Efficiency	49
4.1.2.8 Effectiveness	50
4.1.2.9 Economy	51
4.2 Correlation matrix of selected banks	52
4.2.1 Correlation analysis	52
4.2.2 Regression analysis	56
4.3 Major finding	58
CHAPTER V: CONCLUSIONS	60-65
5.1 Discussion	60
5.2 Conclusions	62
5.2.1 Scope for future research	63
5.3 Implications	63
5.3.1 Managerial implication	64
5.3.2 Research implication	64
REFERENCES	66-70
QUESTIONNAIRE	71-75

LIST OF TABLES

Contents	Page No.
Table no. 3.1 Sample of study	30
Table no. 4.1 Job position of the respondents	38
Table no. 4.2 Gender of respondents	39
Table no. 4.3 Age of the respondents	39
Table no. 4.4 Academic qualification of respondents	40
Table no. 4.5 Work Experiences of respondents	40
Table no. 4.6 Opinions about green banking products	41
Table no. 4.7 Knowledges about green banking	41
Table no. 4.8 Satisfaction towards green banking system	42
Table no. 4.9 Future of green banking system	43
Table no. 4.10 Status of green investment	44
Table no. 4.11 Status of risk management	45
Table no. 4.12 Status of green human resource management	46
Table no. 4.13 Status of green Product and Services	47
Table no. 4.14 Status of green business strategy	48
Table no. 4.15 Status of efficiency	49
Table no. 4.16 Status of effectiveness	50
Table no. 4.17 Status of economy	51
Table no. 4.18 Correlation between green banking practices between perceived financial performance and non-financial performance	52
Table no.4.19 Regression analysis of impact of green banking practice on perceived financial performance	56
Table no. 4.20 ANOVA analysis	57
Table no. 4.21 Coefficients analysis	57

List of Figure

Contents	Page no.
Figure no. 1.1 Conceptual framework	5
Figure no. 3.1 Sample of study	30

ABBREVIATIONS

ADBL	:	Agricultural development bank ltd
ATM	:	Automated teller machine
BOK	:	Bank of Kathmandu
CFP	:	Corporate financial performance
CSP	:	Corporate social performance
CSR	:	Corporate social responsibility
EBL	:	Everest bank limited
E-Banking	:	Electronic banking
GBS	:	Green business strategy
GHR	:	Green human resource
GI	:	Green investment
GIME	:	Global IME bank ltd.
GPS	:	Green product service.
IDRBT	:	Institute of Development and Research in Banking Technology
IT	:	Information technology
KYC	:	Know your customer
N	:	Sample of Population
NIBL	:	Nepal Investment Bank ltd
NIC	:	Nic asia bank ltd.
NMB	:	Nepal merchant bank ltd
R	:	Correlation
RBB	:	Rastrya banijya bank ltd.
RM	:	Risk management
ROA	:	Return on assets
ROE	:	Return on equity
SBI	:	Nepal SBI bank ltd
S.D	:	Standard deviation
SPSS	:	Statistical package for the social science

ABSTRACT

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..

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. 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 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, ADBL, RBB, SBI, NMB, GIME and NIC. 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 and 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.

CHAPTER I

INTRUDUCTION

1.1 Background of the study

The concept of green banking is actually not entirely about new things. This concept studies the impact of development on the environment and the impact of environment on the development based on the concept of ecology. Ecology is the study of the interaction between living things and their environment. Green banking is also part of the development ecology that studies the good reciprocal relationships or interactions between development and living things or the environment. 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).

Green Banking 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 (Bihari & Pradhan, 2011).

A green bank is also called ethical bank, environmentally responsible bank, socially responsible bank, or a sustainable bank and also like a normal bank, which considers all the social and environmental or ecological factors with an aim to protect the environment and conserve natural resources” (Kaur, 2014).

Green banking is also called ethical banking or a sustainable banking which is controlled by the same authorities, but with an additional agenda toward taking care of the earth's environment (Jha & Bhome, 2013).

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. It is called as an ethical bank or a sustainable bank (Jain, 2013).

Society is facing the most complicated issues of climate change. People nowadays are more conversant with global warming and its adverse consequences on human life. So it is high time to bring changes to the policies in order to protect the environment in a sustainable manner as this is the need of the hour for the survival. It is not only the concern of the government and the direct polluters but also of other stakeholders like financial institutions such as banks, which are playing a fundamental role in development and response to the environment through “Green Banking” (Nath & Goel, 2014).

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).

Green Banking, as defined by Institute for Development and Research Technology, is an umbrella term referring to practices and guidelines that make banks sustainable in economic, environment, and social dimensions. It aims to make banking processes and the use of IT and physical infrastructure as efficient and effective as possible, with zero or minimal impact on the environment. Banking system occupies an important place in a nation's economy. A banking institution is indispensable in a modern society. It plays a pivotal role in the economic development of a country and forms the core of the money market in an advanced country (Lakshminarayanan, 2015).

“Green Banking” will ensure the greening of the industries but it will also facilitate in improving the asset quality of the banks in future. Banking and other financial institutions are more effective towards achieving this goal for the kind of intermediary role they play in any economy and for their potential reach to the number of investors. Environment is no longer the exclusive concern of the government and the direct polluters, but also the other partners and stake- holders in the business. It would certainly give the much needed impetus for the banking industry to expand the use of environmental information in their credit extension and investment decisions (Islam & Kamruzzaman, 2015).

Green Finance as a part of Green Banking makes great contribution to the transition to resource-efficient and low carbon industries i.e. green industry and green economy in general. As with traditional marketing, greening which can be linked to the social marketing concept involves identifying green attitudes and behaviors that could be used in developing green ideas and products, and encourage the integration of factors with economic, social, and environmental benefits when delivering values. Moreover, environment management in the banking business is like risk management. It increases the enterprise value and lowers loss ratio as higher quality loan portfolio results in higher earnings. Thus, encouraging environmentally responsible investments and prudent lending should be one of the responsibilities of the banking sector. Banks have to undertake some green growth initiatives 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).

As business of the commercial banks spread in all areas of the country, the performance of green banking by commercial banks may also be influenced by the performance of bank branches in other areas. Green banks adopt and implement environmental standards for lending, which are really a proactive idea that would enable ecofriendly business practices which would benefit our future generations. Banks have chances to implement green banking guidelines in this area for building sustainable environment friendly banking. But, it is not clear that at what extent green banking can be practiced easily with success in this area as its quite difficult to say if customers are aware about it or not. Since, the banking business consists of

management, bank employees and customers, so the success of green banking depends on all these parties and usually the key problems arise in the paths of successful implementation of green banking are customer's incognizance and negative perception.

1.2 Problem statement and research questions

Green Banking is comparatively a new development in the financial world. It is a form of banking taking into account the social and environmental impacts and its main motive is to protect and preserve environment. The majority of the banks simply follow the suggestions they receive from the head office and implement things that are suggested by the head office and nothing more (Islam & Das, 2013).

The commercial banks are facing a lot of challenges in controlling environment impact on their business. The role of banking sector which is on major financing source to the industries assumes high importance. Further the RBI do not clearly speak about the specification of rules that can hold banks responsible for scrutinizing investment project before financing and for the environmental protection (Nath & Goel, 2014).

Majority of the people are using bank accounts in Kathmandu district and they are using the green banking services provided by the bank. Green banks require talented, experienced staff to provide proper services to customers. The banks are ready to procure loans for environmental sustainable projects like renovation of building, eco-friendly businesses, installing solar system, less use of energy business etc., Though the banks encourage the customers to take the environmentally sustainable projects, the customers evince least interest in them. Thus, the statements of problem are:

- i. What are the green banking practices of commercial banks in Kathmandu District?
- ii. What is the green banking practice influence on perceived financial performance of commercial banks in Kathmandu District?

1.3 Purpose of the study

The general purpose of the study is to identify the current green banking practices of commercial banks in Kathmandu district. The present study is conducted with the objectives of assessing the topic of green bank with the comparative study of the six

commercial bank in Kathmandu district. The specific objectives of the study are given below:

- i. To identify the green banking practices of commercial banks in Kathmandu District.
- ii. To assess the green banking practice influence on perceived financial performance of commercial banks in Kathmandu District.

1.4 Conceptual 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.

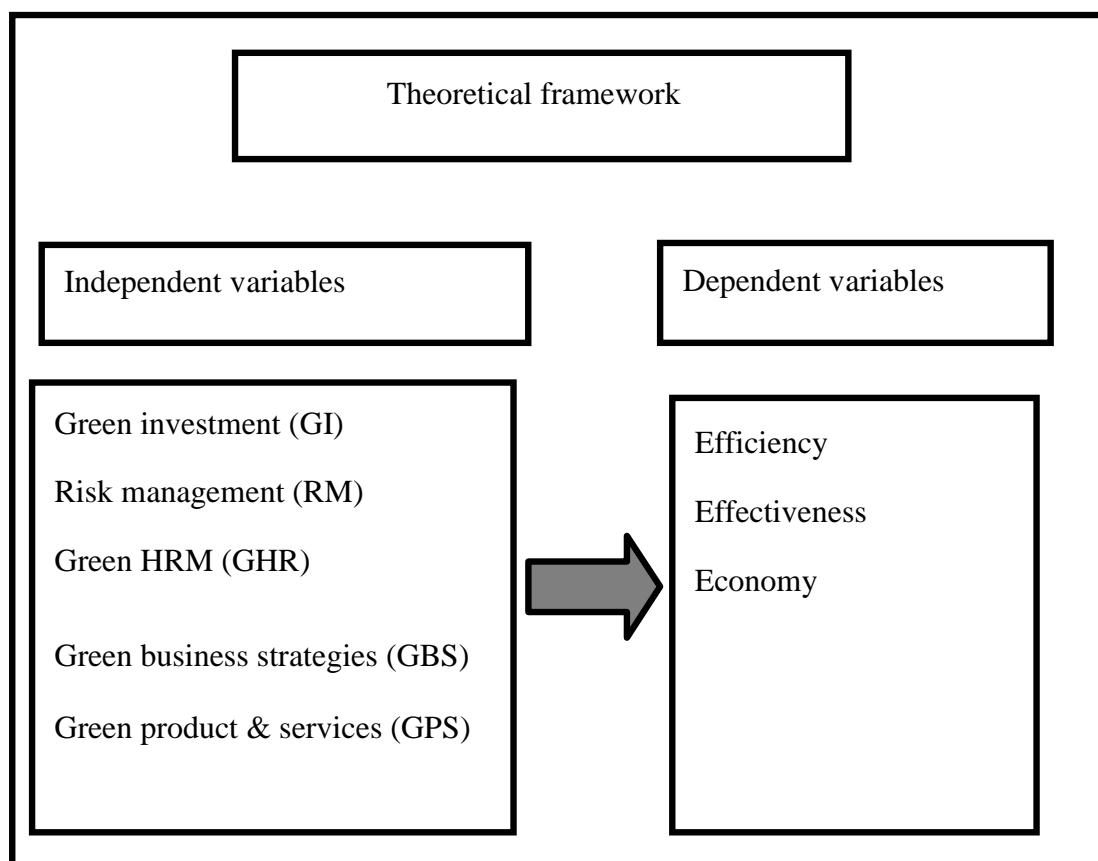


Figure 1.1: Conceptual Framework

Green Investment (GI): Green investment is an independent variable where efficiency, effectiveness and economy are dependent. There is an inverse relationship

between green investment and efficiency, effectiveness and economy. Proper green investment drive towards long term existence on banking sector.

Risk Management (RM): Risk management is independent variables. Risk management and efficiency have inverse relationship. The effective management of credit risk is a critical component of comprehensive risk management essential for long-term success of a banking institution.

Green HRM (GHR): Green HRM is an independent variable. Green HRM positively contributes to the environmental performance of the organization.

Green Business Strategies (GBS): Green business strategies is an independent variable. 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.

Green Product and Services (GPS): Green product and service is an independent variable. Green Banking products and services able to increase awareness of and improve the general perception of customers regarding green banking. Green product and services are:

Green Loans: It means giving loans to a project or business that is considered environmentally sustainable.

Green Mortgages: Green mortgages refers to type of mortgage that provides you a money-saving discount or a bigger loan than normally permitted as a reward for making energy-efficient improvements or for buying a home that meets particular energy-efficiency standards.

Green Credit Cards: Be it in form of environmentally friendly rewards or using biodegradable credit card materials or promoting paperless banking, credit cards are going green.

Green Saving Accounts: In case of Green Saving Accounts, banks make donations on the basis of savings done by customers. The more they save, the more the environment benefits in form of contributions or donations done by banks.

Mobile banking and online banking: These new age banking forms include less paperwork, less mail, and less travel to branch offices by bank customers, all of which has a positive impact on the environment.

Efficiency: Efficiency is a dependent variable. Efficiency is defined as the ability to produce something with a minimum amount of effort. It minimizes the waste of resources such as physical materials, energy, and time while accomplishing the desired output. Efficiency measurement determines how banks provide an optimal combination of financial services with a set of inputs.

Effectiveness: Effectiveness is dependent variables. Effectiveness the capability of producing a desired result or the ability to produce desired output. Effectiveness refers to the quality of results that are derived from tasks completed by both employees and their managers. It is different from efficiency, which is measured by the volume of output or input used.

Economy: Economy is dependent variable. Economy devoted to the holding of financial assets for others and investing those financial assets as a leveraged way to create more wealth. 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.

1.5 Significance of the 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. . It conclusion the importance of the study focuses at following points:-

- i. First, the study will be useful for Nepalese commercial banks in order to see the impacts of Green banking practices in comparison with the perceived financial performance of banking system.
- ii. It helps in understanding what green is banking and what actions should the banks take in order to benefit from the opportunities and how to overcome the challenges.
- iii. This study can be used for other researchers 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.
- iv. 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 an infant stage in the country.
- v. It also helps to policy maker of banks related with green banking practices.

1.6 Limitations 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.

- i. 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.
- ii. 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.
- iii. Most of the available data of previous research conducted may not explain specific to our country context of the area.
- iv. There are 27 banks and 300 employees selected for this study due to cost and time constraints.

1.7 Chapter plan

The present study is divided into five chapters. The entire study carried out to different stages and procedures as it needed. The study organized in the following chapters in order to make the study easy to understand. They are as follows:

Chapter-I: Introduction

The first chapter explains an introductory chapter which contains background of the study, statement of the Problem and research question, objective of the study, Conceptual framework, significance of the study, limitation of the study and organization of the study.

Chapter-II: Literature review

The second chapter includes concerned with review of literature. This chapter reviews the previous studies and literature related to green banking system. It helps to gain knowledge on the subject, to identify the research gap and to get proper guidance to carry on the study.

Chapter-III: Methodology

The third chapter includes the most important part of the study. It deals with the analysis of the data collected from customers of the selected banks and research methodology, which will be applied to collect the data and analyze them in this study. It will contain introduction, research design, sources of data, population and sample, financial analysis statistical tools used and data processing and analysis.

Chapter-IV: Results

The fourth chapter consists of an analyzing chapter, which data collected from the bankers of the selected banks and with presentation and analysis of relevant data through definite courses of research methodology with financial and statistical analysis related to green bank. This is the central and most important part of the thesis where the required results, inferences and findings of the analysis are derived. Major findings of the study will be presented consist of data presentation and analysis at the end of this chapter.

Chapter -V: Conclusion

This chapter included the summary, conclusion and implication of the study. It makes appropriate suggestions for effective functioning of the green banking system in the study area. An overall conclusion of the study is also given at the end of this chapter. This provides summary and conclusion, suggestions and recommendations for improving the future performance of the sample banks. Finally, an extensive, bibliography and appendices will also be presented at the end of the thesis work.

CHAPTER II

LITERATURE REVIEW

The purpose of the review of literature is to assess what much research work has already done, So far in the area specified by this researcher. This can help one to have a glimpse of the area traversed by the new researcher. Further, such an attempt helps to identify the research gap and lead the study to fill in such a gap. A detailed literature on the aspects of green banking system has been presented in this chapter. The purpose of the review of literature is to assess what much research work has already done, So far in the area specified by this researcher. This can help one to have a glimpse of the area traversed by the new researcher. Further, such an attempt helps to identify the research gap and lead the study to fill in such a gap. A detailed literature on the aspects of green banking system has been presented in this chapter.

2.1 Conceptual review

A bank's responsibility extends to Government, customers, shareholders, staff, and the community, Companies does have ethical responsibility, but it is not protected by limited liability from the consequences of their actions. A company's record and the perception of its ethics affect its reputation and ensure long-term success or failure. Further, he concluded that as we face increasingly complex and conflicting issues, our commitment to ethical behavior would be tested (Green 1989).

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 (Remus, 2007).

Green Banking involves pursuing of financial and business policies that are not hazardous to environment and help to protect environment. The purposes of Green Banking are to use resources with responsibility avoiding waste and giving priority to environment and society Bangladesh Bank Governor argued that all need to change mindset about environmental issues for making a better future through greening financial transactions (Star 2010).

Green banking is a stream of banking in which environmentalism is adopted as the operational base of banking activities like a conscious being (though the registered banking organization is regarded as artificial being) in a society. It persuades customers taking green projects and encourages the projects through lending along with putting in practice of conservation activities-using solar or renewable energy-within the bank premises. A study defines green banking as operational improvements, technology and changing client habits in the banking business as well as promotion of environment-friendly practices and reduction of the carbon footprint from banking activities. Green banking avoids as much paperwork as possible and rely on online/electronic transactions for processing so that we get green credit cards and green mortgages. Less paperwork means less cutting of trees (Singh & Singh, 2012).

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 (Jain, 2013).

Green banking refers to how environmentally friendly bank is, and how committed to green and ethical policies they are. This concept of green banking will mutually beneficial to the consumers, banks, industries and the economy (Dr. Chinnadurai & Sudhalakshmi, 2014).

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).

Green practices of bank 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 investment and loan. It refers to the initiatives taken by banks to encourage environment friendly investment 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 (Deka, 2015).

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 (Bussoli & Conte 2018).

Regular banking has a limited accessibility in which people only can conduct business at their brick-and-mortar locations. It makes customers inconvenience in doing their business. In the comparison, green banking has come out variety of services which fulfill the unsatisfactory in regular banking.

2.1.1 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)

2.1.2 Green product and service

Purchasing Services uses the following criteria to define a “green” product. Easily reused (either whole or through disassembly). Green product is use to avoid the risky factors in banking sectors. Green Banking is a practical way of future sustainability and a long-term business strategy that aims for sustainable environmental conservation rather than profit. 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).

2.1.3 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). The major forms of green banking strategy to promote green image, eco-friendly, product and services, green investment are:

- i. Major sources of natural energy such as -trees, water, wind, sun-shine have been ensured in each floor through green building architecture and interior designing.
- ii. Using sensor lighting equipment for saving electricity and environment.
- iii. Initiate the shared use of table stationeries instead of individual use.
- iv. Use both side of paper for internal consumption to reduce dusts and waste.
- v. Introduce online communication in the best possible manner to all the concerned.
- vi. Using more daylight to reduce electricity consumptions and ensure proper air circulation instead of using air conditioning.
- vii. Using energy saving bulbs, environment friendly cartage and tonner for printing.
- viii. Video/ Audio conference in lieu of physical travel to save environment, cost and energy.
- ix. Efficient use of printer cartridges, photocopy toner, office stationary, etc.
- x. Sharing electronic files, voice mail and e-mail instead of paper memos.

2.1.4 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.

2.1.5 Risk management

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 & Johnson, 2014).

2.1.6 Conceptual review of 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).

2.1.6.1 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.

2.1.6.2 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).

2.1.6.3 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 program 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, Grunberg, and Parlea, 2004).

2.1.7 Effect of green banking and financial performance

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).

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).

Financial statement is formal records of the financial activities and position of a business, person or other entity. Relevant financial information is presented in a structure manner and in a form which is easy to understand. 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.

2.1.8 Policies guideline regarding green banking

Banking policy can play a supportive role in addressing the institutional and market challenges to the provision of bank credit and investment for the green economy. Although the banking sector is affected directly and indirectly by environmental sustainability challenges, it also plays an important role in building financial resilience and creating economic opportunities for adapting to and managing environmental risks. Most large international banks have environmental and social governance programmers, but these are generally not core features of bank management and business strategy.

Banking policy can support the banking industry by promoting the mainstreaming of green banking practices and supporting banks in reallocating credit and investment capital to sustainable sectors of the economy. Green Banking acknowledges responsibility of the financial sector in supporting policy initiatives for transforming a country's economy towards a low carbon and climate resilient economy. Green Banking envisions inculcation of environmental consciousness as part of organizational culture and reorientation of banking products/services and operations to reduce environmental impact of banks and the economy.

Thus, Green Banking is a paradigm shift from business as usual approach and has profound implications for strategic focus, financing & investment portfolio assessments/ evaluations, development of financial instruments, products and services and consumption of natural resources in internal operations of banks/DFIs. The objective of the Green Banking Guidelines (GBG) is to reduce vulnerability of banks/DFIs from risks arising from the environment, fulfill their responsibilities for the protection of environment and provide finance to transform the economy into a resource efficient and climate resilient one. Banks/DFIs as facilitators of economic activities are directly vulnerable to environmental risks through the actions of their clients. While the primary responsibility of ensuring compliance with environmental laws and regulations rests with the borrowers, the banks/DFIs are encouraged to put in place appropriate mechanisms to identify, assess and mitigate environmental risks and, thereby, prevent undue financial losses.

2.2 Review of previous works

2.2.1 Review of articles

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.

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.

Pulicheri & 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.

Khawaspatil & 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 & 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.

Nath & 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.

Yadav & 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.

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.

Masukujjaman, Siwar, Mohammad & Alam, (2018) Banker's perception on green banking an empirical study on Islamic banks in Bangladesh. Green banking is a stream of banking in which environmentalism is adopted as the operational base of banking activities like a conscious being (though the registered banking organization is regarded as artificial being) in a society. It persuades customers taking green projects and encourages the projects through lending along with putting in practice of conservation activities-using solar or renewable energy-within the bank premises. A study defines green banking as operational improvements, technology and changing client habits in the banking business as well as promotion of environment-friendly practices and reduction of the carbon footprint from banking activities.

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.

2.2.2 Review of previous thesis

Joshi, (2003) 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.

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.

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.

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.

Jha & 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.

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.

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 (IDRBT, 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.

Sreesha, (2014) in his paper entitled A Study of Green Banking Initiatives of Selected Private and Public Sector Banks in India, in her paper entitled banking with technology green banking the various models or channels of green banking which are taken by the banking sector in the banking activities. This study also focuses on environment sustainability concept adopted by various private and public sector banks in India. According to the study, bank is not taking interest in green banking completely. Public sector banks are more interested in green banking as compare to private sector bank. For maintaining sustainability, bank should expand the use of environmental information in the banking operation, lending and investment decision. This will help them to improve environment sustainability and create long term value for the business.

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.

Rauth & 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.

Galpin, Whittington and bell, (2015) they founded in this study sustainability has become the strategic imperative of the twenty-first century. 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.

Lakshmi Narayan, (2015) a study on green banking system by commercial banks in Tiruvarur district. In this study, the simple random and convenient sampling method has been selected for the purpose of this study. From the Customers point of view we have selected 300 customers of the selected banks. There are 128 branches for 23 bank located in Tiruvarur District. Among them only 6 banks are (3 are public and 3 are private) taken for the study. These six banks have 93 branches in total and 50% of the banks alone are taken for analysis (i.e., 46 branches) from the banker's point of view. Fraction of percentage can be rounded off.

Jain & 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.

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.

2.2.3 Review of Nepalese studies

Dr. Mehta & Dr. Sharma, (2016) the present study is destined to scrutinize the awareness level of customers regarding Green Banking and to study the overall understanding of the customers regarding Green Banking initiatives and practices followed by banks in Nepal. That's why a descriptive research design has been followed in the present study to know the awareness and perception of customers regarding Green Banking. It is interesting to find that even having reduced level of

understanding of overall concept of „Green Banking“, it has been identified that the customers are agreed that „Green Banking“ initiatives are necessary for environment conservation and sustainable growth in future.

Risal and Joshi, (2018) the research paper concluded the energy efficient equipment's and green policy posed the significant impact on bank's environmental performance; green loan and green project as not. Similarly, the environmental training contributed mild to bank's environmental performance. The findings of the paper suggested the role of banks and government in encouraging environmentally sustainable technologies as highly important for increasing bank's reputation and awareness among customers.

Rai, (2019) this study green banking refers to the environmental-friendly practices that reduce the carbon footprint from both internally as well as externally. There are absolutely no studies that have sought to understand the various factors that influence customer's attitude or behavioral intention to adopt green banking practices. Green banking concept is new issue of adaptation in banks and very less explored. Customers are less aware about the green banking practices adopted. Nepal seems quite far from the global trend to promote green banking initiatives by their banks.

Tandukar, (2019) the findings of the study shows general understanding and awareness of bankers“ on green banking practices. Similarly, the study also reveals that there is significant relationship between dependent and independent variables. Likewise, the study found the correlation and regression between identified dependent and independent variables. This study is the first to identify the perspective of bankers“ on green banking in Nepalese context.

2.3 Research gap

Most of the previous studies 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

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

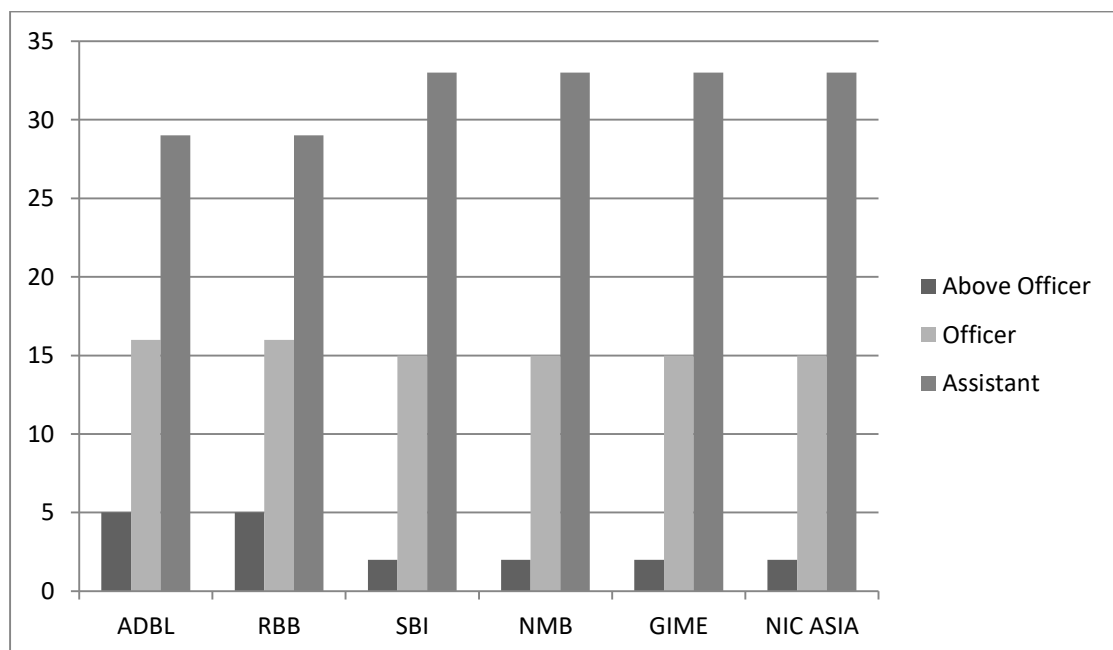
The population of the study constitutes both officer (i.e. Manager, Assistant Manager, Chief Executive) and assistant level (i.e. Senior Assistant, supervisor, Junior Assistant) employees working in six banks operated in Kathmandu valley. It constitutes the employees working in both corporate and branch offices of the banks operated in Kathmandu valley. Till now there are twenty seven commercial banks in Nepal. Out of them two government bank, two joint venture bank and two domestic bank are taken for research study on the based on their branch. Among them only six commercial bank (i.e. Government banks: ADBL bank and RBB bank, Joint venture

banks: SBI bank, NMB bank and Domestic banks: Global IME bank, NIC Asia 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	
ADBL	5	16	29	50
RBB	5	16	29	50
SBI	2	15	29	50
NMB	2	15	33	50
GIME	2	15	33	50
NIC	2	15	33	50
Total	18	15	33	300

Source: Survey 2019



Source: Survey 2019

Figure 3.1 Sample of Study

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. ADBL and RBB officer and above officer are higher and assistant is other banks are highest.

3.3 Sources of data

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

3.3.1 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 procedures

This study, case of primary data, some personal views and ideas of individual's respondent are collected. Data collection in this study will be present in the effective and useful way. The data is collected by using the research questionnaires some personal interview 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. The researcher had visited to the sampled banks in Kathmandu valley. The required primary data have been collected by means of structured Questionnaire administrated to the customers of ADBL, RBB, SBI, NMB, GIME and NIC, Kathmandu branch in Kathmandu district to elicit their responses. 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. This process helped refine the questionnaire, enhance its legibility and minimize the chances of misinterpretation it data was obtained from the respondents through a structured questionnaire. To clarify certain concepts of the study, secondary data have been collected from published reports of banks, standard text books and reputed journals. The researcher had visited to the sampled banks in Kathmandu valley. 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 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 & 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.

3.5 Data processing procedure

The researcher personally collects the data from the respondents of individual and in groups. The researcher used processing procedure to collect data namely questionnaires. The information or data obtained from the different sources are in raw form. From that information, direct presentation is not possible. So it is necessary to process data and converts it into required form. After then only, the data are presented for 2 banks this study. This process is called data processing. 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. The data so collected have been processed using statistical package SPSS Tools. Secondary information have been collected from different relevant books, journals, newspapers and published reports of the selected Bank. Information also has been collected from different websites for the study.

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.

3.6 Data analysis tools and techniques

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 Tools) 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. Financial performance has been examined as possible consequence of those influencing factors of green banking practices. Finally, the relationship between green banking practices and the financial performance have been measure by the numerical finding using appropriate parameters. Two kinds of tools have been used to achieve the certain goals.

- i. Financial Tools
- ii. Statistical Tools

3.6.1 Financial tools

Financial tools basically help to identify the financial strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and the profit and loss account.

3.6.2 Statistical tools

Some important statistical tools have been used to present and analyze the data for achieving the objectives such as coefficient of correlation between different variables, trend analysis which are presented below.

- i. Arithmetic Mean
- ii. Standard Deviation (S.D)
- iii. Correlation Analysis
- iv. Regression Analysis
- v. Standard Error
- vi. ANOVA

A. Arithmetic mean

Arithmetic Mean is the ratio of the sum of all the observations to the number of the observations.

We have,

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

Where,

$\sum X$ = Sum of all values of the observations

n = Number of observation

X = Values of variables

B. Standard deviation (S.D)

The standard deviation measures the absolute dispersion. The greater the amount of dispersion greater will be the standard deviation. In this study standard deviation can be computed in following way:

$$\text{S.D } (\sigma) = \sqrt{\frac{1}{N} \sum (X - \bar{X})^2}$$

Where,

N = Number of observations

X = Expected return of the historical data

C. Correlation analysis

Correlation Analysis is necessary in order to find out whether the selected variables in time series have any relation or not. If there is no correlation there would be no causality so this test is necessary. Correlation is a measure of the relation between two or more variables. The measurement scales range from -1.00 to +1.00. The value of -1.00 represents a perfect negative correlation, while a value of +1.00 represents a perfect positive correlation. A value of 0.00 or close to zero represents a lack of correlation.

$$\text{Correlation}(r) = \frac{\sum (X - \bar{X}) \cdot (Y - \bar{Y})}{\sqrt{\sum (X - \bar{X})^2 \sum (Y - \bar{Y})^2}}$$

The value of r lies between + 1, when r =+ 1, it means there is perfect positive correlation between the variables where r = -1 it means there is perfect negative correlation between variables. However in practice such value of r, as + 1, -1 and 0 are rare.

D. Regression analysis

In a simple regression analysis, one dependent variable is examined in relation to only one independent variable. The analysis is designed to derive an equation for the line that best models the relationship between the dependent and independent variables.

This equation has the mathematical form:

$$\text{Regression Equation}(y) = a+ bx$$

$$\text{Slope } (b) = (\text{N}\sum XY - (\sum X)(\sum Y)) / (\text{N}\sum X^2 - (\sum X)^2)$$

$$\text{Intercept}(a) = (\sum Y - b(\sum X)) / N$$

where,

x and y are the variables.

b = The slope of the regression line

a = The intercept point of the regression line and the y axis.

N = Number of values or elements

X = First Score

Y = Second Score

ΣXY = Sum of the product of first and Second Scores

ΣX = Sum of First Scores

ΣY = Sum of Second Scores

ΣX^2 = Sum of square First Scores

CHAPTER IV

RESULTS

This chapter is designed to analyse the opinion of the bankers of the selected commercial banks about their green banking system. This analysis is important from the point of view of service providers. Though the real beneficiaries reflect the opinion about green banking system of commercial banks to know how far the commercial banks in the study area are providing green banking system to their customers study has been made. 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 analysed and interpreted fewer than five dimensions: green investment (GI), risk management (RM), green human resource management (GHR), green products and services (GPS) and green business strategies (GBS).

For that purpose the researcher has designed separate questionnaire interview schedule to gather the opinion of the bankers of the selected commercial banks. This chapter discuss about Customers' attitude towards green banking system and Bankers' attitude towards green banking system. It is designed to analyze the socio economic profile of the respondents and their opinion about green banking system followed by the selected commercial banks in the study area. A set of 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 five-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) program tools. 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 Data presentation and analysis

Data collected from the bankers of the selected banks and with presentation and analysis of relevant data through definite courses of research methodology with financial and statistical analysis related to Green Bank. This is the central and most important part of the thesis where the required results, inferences and findings of the analysis are derived. These are the factors were consider for the evaluating how the commercial banks to take their part in the protecting environment. Major findings of the study will be presented consist of data presentation and analysis at the end of this chapter. These details are presented in the following below.

4.1.1 Demographic characteristics of respondents

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

4.1.1.1 Job position of the respondents

Table 4.1 Job position of the respondents

Position	Frequency	Percentage
Assistant	190	63.33
Officer	92	30.67
Above Officer	18	6.0
Total	300	100

Source: Survey 2019

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 (63.33%) of the respondents were assistant while 92 (30.67%) were officer and 18 (6 %) was above officer. It is found that most of the respondents 63.33 percentage is assistant which was presented in above table which was presented in above table 4.1.

4.1.1.2 Gender of the respondents

Table 4.2 Gender of the respondents

Gender	Frequency	Percentage
Male	160	53.33
Female	140	46.67
Total	300	100

Source: Survey 2019

The researcher has classified the respondents based on their gender. From the above table it is found that out of 300 respondents 160 (53.33%) of the respondents are male and the remaining 140 (46.67%) of the respondents are female. It is found that most of the respondents 53.33 percentage is male which was presented in above table 4.2.

4.1.1.3 Age of the respondents

Table 4.3 Respondents of ages

Age	Frequency	Percentage
Less than 20 year	2	0.67
20-30 year	192	64
30-45 years	80	26.67
Over 45 year	26	8.67
Total	300	100

Source: Survey 2019

Age factor affects the usage of the green banking services of the respondents. Hence the researcher has classified the respondents as a random factor in to four categories. It is found that out of 300 respondents 2 (0.67%) of the respondents are in the age of below 20 years, 192 (64%) of the respondents are in the age of 20-30 years, 80 (26.67%) of the respondents are in the age group of 30-45 years and the remaining 26 (8.67%) of the respondents are in the age of above 45 years. It is found that most of

the respondents 64 percentages is in the age group of 20-30 years which was displayed in table no 4.3.

4.1.1.4 Academic qualification of respondents

Table 4.4 Responses of academic qualification

Qualification	Frequency	Percentage
Intermediate Level	10	3.33
Bachelor Level	44	14.67
Master's Level	232	77.33
Above Master's Level	14	4.67
Total	300	100

Source: Survey 2019

Education offers a person to gain wide variety of knowledge to learn and use the technology when and where available. The researcher has classified the respondents on the basis of their educational qualification. It is found that out of 300 respondents 10 (3.33%) of the respondents are studied up to intermediate level of education, 44 (44.67%) of the respondents are studied up to bachelor level of education, 232 (77.33%) of the respondents are studied up to masters level of education and the remaining 14 (4.67%) of the respondents are studied above masters level course. It is found that most of the respondents 77.33 percentage is studied up to master's level of education which was showed in table no 4.4. 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.

4.1.1.5 Working Experience of respondents

Table 4.5 Respondents of working experience

Experience	Frequency	Percentage
Less than 1 year	54	18
1-3 year	86	28.67
3-5 year	66	22
Above 5 year	94	31.33
Total	300	100

Source: Survey 2019

To know whether the selected experienced one study has been made and it is found that out of 300 respondents 54 (18%) of the respondents have less than 1 year working experience, 86 (28.67%) of the respondents have 1-3 years of experience, 66 (22%) of the respondents have 3-5 years of experience and the remaining 94 (31.33 %) of the respondents have above 5 years of experience. It is found that most of the respondents 31.33 percentage has above 5 years of experience as customers. This was presented in above table 4.5.

4.1.1.6 Opinion about green banking products

Table 4.6 Opinion about green banking products

Opinion	Frequency	Percentage
Very good	195	65
Good	65	21.67
Medium	40	13.33
Total	300	100

Source: Survey 2019

The researcher has made study to know about the opinion of the respondents about the green banking products and it is found from the table 4.6 that out of 300 respondents 195 (65%) of the respondents opined that the green banking products are very good, 65 (21.67%) of the respondents felt that good and the remaining 40 (13.30%) of the respondents opined that the green banking products are medium in the commercial banks. It is found that most of the respondents 65 percentage opined that the green banking products are very good in the selected commercial banks in the study area.

4.1.1.7 Knowledge about green banking

Table 4.7 Knowledge about green banking

Knowledge	Frequency	Percentage
Fully	215	71.67
Partially	85	28.33
Total	300	100

Source: Survey 2019

The respondents are asked to give their opinion about the level of knowledge about the green banking and it is found that out of 300 respondents 215 (71.67%) of the respondents have full knowledge about the green banking system and the remaining 85 (28.33%) of the respondents have not full knowledge about the green banking system. It is found that most of the respondents 71.67 percentage have full knowledge about the green banking system in the study area.

4.1.1.8 Satisfaction towards green banking system

Table 4.8 Satisfaction towards green banking system

Satisfaction	Frequency	Percentage
Very high	127	42.33
High	130	43.33
Medium	32	10.67
Low	11	3.67
Total	300	100

Source: Survey 2019

To know the satisfaction of the respondents towards the green banking system of commercial banks study has been made by using 10 statements using five point scaling technique. The responses are coded as 5 points for very high, 4 points for high, 3 points for no opinion, 2 points for low and 1 point for very low responses. The responses for the ten statements are consolidated for all 300 respondents and the total score is divided as per the point's allocation. Based on the scores, the satisfaction of the respondents towards the green banking services of commercial banks is measured and the details are presented in the table 4.8. From the same table it is found that out of 300 respondents 127 (42.33%) of the respondents have very high satisfaction towards the green banking system of commercial banks, 130 (43.33%) of the respondents have high level of satisfaction towards green banking system, 32 (10.67%) of the respondents have medium level of satisfaction and the remaining 11 (3.67%) of the respondents have low level of satisfaction towards the green banking

system. It is found that most of the respondents (43.33%) have high level of satisfaction towards the green banking system of commercial banks in the study area.

4.1.1.9 Future of green banking system

Table 4.9 Future of green banking system

Future	Frequency	Percentage
Very Good	130	43.33
Good	125	41.67
Medium	30	10
Poor	10	3.33
Very Poor	5	1.67
Total	300	100

Source: Survey 2019

To know the future of green banking system of commercial banks, the responses for the ten statements are consolidated for all 300 respondents and the total score is divided as per the point's allocation. Based on the scores, the future of green banking services of commercial banks is measured and the details are presented in the table 4.9. From the same table it is found that out of 300 respondents 130 (43.33%) of the respondents have very good future the green banking system of commercial banks, 125 (41.67%) of the respondents have good of future green banking system, 30 (10%) of the respondents have medium of the future of green banking, 10 (3.33%) of the poor future of green banking and the remaining 5 (1.67%) of the respondents have very poor of future of the green banking system. It is found that most of the respondents (43.33%) have very good of future the green banking system of commercial banks in the study area.

4.1.2 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.

4.1.2.1 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.

4.1.2.2 Green investment (GI)

Table 4.10 Status of green investment

Observation statements	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	0.787
Our bank provides reasonable interest loan (Green loan) to consumer who initiate environmental project in social or individual level.	300	2.21	0.920
Our bank encourages investment to the economic activities that help to recover environmental degradation.	300	2.25	0.859
Our bank encourages investment to that project which helps to prevent deterioration of environment.	300	2.15	0.816
Our bank encourages investment to those projects that are not harmful to the environment.	300	2.17	1.037
Green Investment (GI)	300	2.131	0.6599

Source: Survey 2019

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 4.10 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.

4.1.2.3 Risk management (RM)

Table 4.11 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	0.845
Our bank works with various national and international NGOs for insight & expertise on environmental management issues and performance.	300	2.82	0.989
Our bank encourages projects which take care of performance and use of natural renewable resource.	300	2.29	0.891
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	0.831
Risk Management (RM)	300	2.401	0.6642

Source: Survey 2019

The descriptive analysis for the risk management in table 4.11 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.

4.1.2.4 Green human resource management (GHRM)

Table 4.12 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	0.959
Green Human Resource (GHR)	300	2.467	0.853

Source: Survey 2019

The descriptive analysis for the green human resource management in table 4.12 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.

4.1.2.5 Green product and services (GPS)

Table 4.13 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	0.901
Our bank focused on green products/services as our concern for green banking initiatives.	300	2.35	0.911
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	0.913
Our bank develop environment friendly product that combine social Concern.	300	2.30	1.02
Green Product and Services (GPS)	300	2.433	0.755

Source: Survey 2019

The descriptive analysis for the green product and service in table 4.13 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 0.901 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.

4.1.2.6 Green business strategy (GBS)

Table 4.14 Status of green business strategy

Observation statements	N	Mean	S.D
Each year our bank determines a set of yearly green target.	300	2.41	0.851
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	0.935
Our bank provide reasonable interest loan to promote green banking.	300	2.11	0.919
Our bank use video conferencing instead of physical movement in order to promote green banking	300	2.41	0.882
Green Business Strategy (GBS)	300	2.271	0.645

Source: Survey 2019

The descriptive analysis for the green business strategy in table 4.14 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 0.935 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.

4.1.2.7 Efficiency

Table 4.15 Status of efficiency

Observation statements	N	Mean	S.D
On almost all the green banking programs/projects activities are done the same as before, but with fewer resources in term of money, staff, space etc.	300	2.39	0.872
Green banking practices always look forward to getting out much in relation to how much they put in.	300	2.28	0.811
Green banking always ensures that in every process there is best use of resource by getting it right first time.	300	2.31	0.835
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	0.945
Efficiency	300	2.320	0.969

Source: Survey 2019

The descriptive analysis for the efficiency in table 4.15 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 programs/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.

4.1.2.8 Effectiveness

Table 4.16 Status of effectiveness

Observation statements	N	Mean	S.D
On all the green banking programs/projects the officers always look out the impact which is the output of all these functions ether contributes to or influences financial performance as a whole.	300	2.27	0.792
There is satisfaction on all green banking programs/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 strives 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	300	2.3517	0.691

Source: Survey 2019

The descriptive analysis for effectiveness in table 4.16 that describes the variables for effectiveness which includes four attributes. Among the five attributes, “On all the green banking programs/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.

4.1.2.9 Economy

Table 4.17 Status of economy

Observation statements	N	Mean	S.D
The green banking practice aims at minimizing the cost of resources for all the available programs/projects.	300	2.35	0.911
The bank pays the price that is exactly for what goes into providing green service or product.	300	2.50	0.879
The green banking practices generates cost savings on most of its procurements. That is, it does less with fewer resources.	300	2.37	0.798
The green banking takes bulk discounts by buying/procuring in large quantities.	300	2.31	0.974
In the green banking cost is more significant than the quality of the service.	300	2.21	0.906
In green banking quality of services is more significant than the costs.	300	2.03	0.767
I always safeguard the public property/ assets entrusted to me to ensure that there is no damage.	300	2.11	0.867
I always ensure that there is proper and economical utilization of public funds.	300	1.83	0.824
Economy	300	2.217	0.562

Source: Survey 2019

The descriptive analysis for the economy in table 4.17 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.

4.2 Correlation matrix of selected banks

It 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.

4.2.1 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 4.18 Correlation between green banking practice between perceive financial performance and non-financial performance

Independent Variables	Dependent Variables			Performance	
		Efficiency	Effectiveness		Economy
GI	Pearson Correlation	0.492**	0.312**	0.459**	0.473**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	300	300	300	300
RM	Pearson Correlation	0.463**	0.385**	0.365**	0.461**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	300	300	300	300
GHR	Pearson Correlation	0.416**	0.354**	0.293**	0.406**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	300	300	300	300
GBS	Pearson Correlation	0.315**	0.437**	0.467**	0.455**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	300	300	300	300
GPS	Pearson Correlation	0.452**	0.335**	0.255**	0.400**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	300	300	300	300

Source: Survey 2019

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

The correlation analysis of different variables in table 4.18 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.

➤ **Analysis of correlation between green investment with perceived financial performance:**

The correlation coefficient between green investment and the efficiency 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 (Efficiency 0.492, Effectiveness 0.312 and Economy 0.459) 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.

➤ **Analysis of correlation between risk management with perceived financial performance:**

The correlation coefficient between risk management (RM) and the Efficiency 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 (Efficiency 0.463, Effectiveness 0.385 and Economy 0.365) 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.

➤ **Analysis of correlation between green human resources with perceived financial performance:**

The correlation coefficient between green human resources (GHR) and the efficiency 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 (Efficiency 0.416, Effectiveness 0.354 and Economy 0.293) 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.

➤ **Analysis of correlation between green business strategy with perceived financial performance:**

The correlation coefficient between green business strategy (GBS) and the economy 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 (Efficiency 0.315, Effectiveness 0.437 and Economy 0.467) 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.

➤ **Analysis of correlation between green product and service with perceived financial performance:**

The correlation coefficient between green product and service (GPS) and the Efficiency were 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 (Efficiency 0.452, Effectiveness 0.335 and Economy 0.255)

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.

➤ **Analysis of correlation between the satisfaction and opinion about various factors of green banking system of commercial banks**

It is found that there is a high positive correlation between the satisfaction and efficiency factors of the green banking system of commercial banks. Hence the commercial banks selected for the study may concentrate on efficiency factor while providing green banking services to their customers in the study area. Further the banks may concentrate on the factors awareness, security and privacy, reliability and trust and loyalty factors of green banking to increase the satisfaction level of their customers which pave the way for the success of green banking system in India than the existing level.

➤ **Association between sources of knowledge of the respondents about green banking and opinion about green banking products**

It is found that the significance value for chi-square value of 5.884 is more than the acceptance level of 0.05 ($p=0.436$). Hence the null hypothesis is not rejected and it is concluded that there is no significant association between the source of knowledge of the respondents about green banking of the respondents and their opinion about green banking products.

➤ **Association between experience of the banker and their opinion about adoption of green banking system**

It is concluded that there is a significant association between experience of the bankers and their opinion about adoption of green banking system in commercial banks. That is the bankers differ significantly in their opinion about adoption of green banking system in their banks when they are classified based on their experience. Hence it is inferred that the opinion about adoption of green banking system of commercial banks is differ among the bankers when they are classified based on their experience in the study area.

4.2.2 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 4.19 Regression analysis of impact of green banking practice on perceived financial performance

Model summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.590 ^a	0.348	0.337	0.46786
a. Predictors: (Constant), GI, RM, GHR, GBS, GPS				

Source: Survey 2019

The impacts of green banking practice on perceived financial performance (PFP) indicate by table 4.20. It provides the R and R² values. The R value represents the simple correlation and is 0.59 the (R Column), which indicates a high degree of correlation. The R² value indicates how much of the total variation in the dependent variables, GI, RM, GHR, GBS and GPS can be explained by the independent variable. In this case 34.8 % can be explained.

Table 4.20 ANOVA analysis

ANOVA ^a					
Model	Sum of Squares	DF	Mean Square	F	Significance
Regression	34.353	5	6.871	31.388	0.000 ^b
Residual	64.353	294	0.219		
Total	98.706	299			
a. Dependent Variable: NFP					
b. Predictors: (Constant), GI, RM, GHR, GBS, GPS					

Source: Survey 2019

The analysis ANOVA table 4.20 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).

Table 4.21 Coefficients analysis

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Significance
	B	Std. Error	Beta		
(Constant)	.0813	0.125		6.513	0.000
GI	0.239	0.060	0.275	4.017	0.000
RM	0.137	0.076	0.158	1.792	0.74
GHR	0.017	0.062	0.025	0.268	0.789
GBS	0.009	0.053	0.012	0.175	0.861
GPS	0.255	0.056	0.286	4.525	0.000
a. Dependent Variable: NFP					

Source: Survey 2019

The analysis of coefficients indicate by table 4.22, it is observed that the beta for green investment is 0.239, risk management is 0.137, 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.

4.3 Major finding

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. The major findings of the study are as follows:

- i. It is concluded that there is a significant association between experience of the bankers and their opinion about adoption of green banking system in commercial banks. That is the bankers differ significantly in their opinion about adoption of green banking system in their banks when they are classified based on their experience. Hence it is inferred that the opinion about adoption of green banking system of commercial banks is differ among the bankers when they are classified based on their experience in the study area.
- ii. It is concluded that there is no significant association between the age of green banking system and adoption of green banking system in commercial banks. Hence it is inferred that the opinion about adoption of green banking system of commercial banks is not varied when the bankers of the selected commercial banks classified based on the age of green banking system.
- iii. It is concluded that there is no significant association between the response of the customers and adoption of green banking system in commercial banks. Hence it is inferred that the opinion about adoption of green banking system of

commercial banks is not varied among the bankers of the selected commercial banks when they are classified based on their opinion about response of the customers for adoption of green banking system.

- iv. 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.
- v. 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.
- vi. 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 foot prints from banking activities.
- vii. 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.
- viii. 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.
- ix. 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.

CHAPTER V

CONCLUSIONS

This provides summary and conclusion, suggestions and recommendations for improving the future performance of the sample banks. 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 discussion, 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 Discussion, second section provided the conclusion of the study and final section consists of the implication to solve the problem observed during the study.

5.1 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 2019). 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 & Bouma (1999), Weber (2017), Islam and jha (2013), Welford (2004), IFC (2007), 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, 2014).

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.

5.2 Conclusions

The study is finished by giving all the answers for the research questions raised. 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.

5.2.1 Scope for further research

The following are the related areas are identified by the researcher for the scope for further research in the present study.

- i. Green banking system of public and government sector banks - Comparative study.
- ii. Problems and prospects of green banking system
- iii. Customer's attitude towards green banking system - Comparative study of private and government sector banks.

5.3 Implications

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.

5.3.1 Managerial implication

- i. While banking sector are acknowledging the importance of perceive financial performance globally, Nepalese banking sector remains a challenge to be greener and sustainable.
- ii. These banks should emphasize towards the implementation of an effective strategy to achieve a financial performance state in term of green banking practices.
- iii. 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.
- iv. 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.
- v. Research has shown that an organization's culture operates at multiple levels, and developing and maintaining a culture of perceive financial performance, requires leaders to address each of these levels.
- vi. The commercial banks should also focus on environmental policies and strategically divine with perceive financial performance.
- vii. The banks can manage environmental risk by designing proper environmental management systems to evaluate the risks involved in the investment projects.
- viii. 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.

5.3.2 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.

- i. This study has covered only six commercial banks of Nepal. It does not cover other banks, financial institutions and other sectors of the economy.

- ii. 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.
- iii. 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.
- iv. Researchers can conduct whether there is any change in demographical characteristics, response on green banking factors and perceive financial performance, relationships between green banking practice and demographic characteristics, impact of green banking practice.
- v. Nepalese investor and green banking practice predictability of the corporate social responsibility (CSR) or not. That can be new topic for the further researcher.
- vi. 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 a study on green banking system by commercial bank in Kathmandu district 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. Bhoj Raj Bhatt, Bheemdatt-14, Kanchanpur, Mobile 9848844549 & 9806405360 or Email: bhojrajbhatt14@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:

ADBL Bank		SBI Bank		GIME Bank	
RBB Bank		NMB Bank		NIC Asia Bank	

2. Job Position:

Manager		Assistant	
Assistant manager		
Officer Assistant		

3. Gender:

Male		Female		Others	
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4. Age:

Less than 20 years		20-30 years	
30-45 years		Over 5 years	

5. Educational Qualification:

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

6. Working Experience

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

7. Opinion about Green banking products

Very Good		Good		Medium	
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8. Knowledge about Green banking

Fully		Partially	
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9. Satisfaction towards Green banking

Very high		High	
Medium		Low	

10. Future of Green banking system

Very Good		Good		Medium	
Poor		Very Poor		

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
1.	My bank involves in setting up green branches (energy efficient buildings/green buildings).		
2.	In my bank, head office level or top management involves in environmental protection related planning and implementation.		
3.	My bank promotes and facilitates environmental oriented enterprises through special grants, loans and guidance.		
4.	My bank purchases its stationeries, equipment's and other items from environmental friendly companies (e.g. printers, computers, and etc.)		
5.	My bank implements environmental (green) reward system in the branches that support the green banking initiatives.		
6.	My bank provides loan to environmental protection and energy saving related projects?		
7.	My bank has initiatives to reduce paper usage and other wastage of materials?		
8.	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

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

S.N	Statements	1	2	3	4	5
1.	Green Investment (GI) Our bank increases the proportion of investment in environment project like solar energy. Hydropower and other similar projects.					
2.	Our bank provides reasonable interest loan (Green loan) to consumer who initiate environmental project in social or individual level.					
3.	Our bank encourages investment to the economic activities that help to recover environmental degradation.					
4.	Our bank encourages investment to that project which helps to prevent deterioration of environment.					
5.	Our bank encourages investment to those projects that are not harmful to the environment.					
	Risk Management (RM)					
1.	Addressing environment issues in financial operations are a part of sound risk management in our bank.					
2.	Our bank works with various national and international NGOs for insight & expertise on environmental management issues and performance.					
3.	Our bank encourages projects which take care of performance and use of natural renewable resource.					
4.	Our bank considers environmental risk management in business decisions.					
5.	Our bank carries environmental rating of the investment proposal.					
	Green HRM (GHR)					
1.	Our bank follows green practices (online advertisement tools, use of email, video based telephone interviews) while recruiting and selecting staffs.					
2.	Our bank conduct green banking training and capacity building program for the employees.					
3.	In our bank employees actively participate in the green training programs.					
4.	Green events like seminars, symposiums, discussion meetings etc. are conducted in our bank.					
5.	Academic training and workshops on green banking. Environmental and social risk management was conducted in our bank.					
	Green Product and Services (GPS)					
1.	Our bank achieves lasting growth by offering sustainable					

	financial products or services.					
2.	Our bank focused on green products/services as our concern for green banking initiatives.					
3.	Green products/services are more in demand by customers.					
4.	Green products/services have low perceived financial risk.					
5.	Our bank develop environment friendly product that combine social Concern.					
	Green Business Strategy (GBS)					
1.	Each year our bank determines a set of yearly green target.					
2.	Our bank prepare necessary budget for pursuing the strategic plan in synergy with green target.					
3.	Our bank use online transaction (E-banking, mobile banking) for green banking.					
4.	Our bank provide reasonable interest loan to promote green banking.					
5.	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

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

S.N	Statements	1	2	3	4	5
	Efficiency					
1.	On almost all the green banking programs/projects activities are done the same as before, but with fewer resources in term of money, staff, space etc.					
2.	Green banking practices always look forward to getting out much in relation to how much they put in.					
3.	Green banking always ensures that in every process there is best use of resource by getting it right first time.					
4.	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					
1.	On all the green banking programs/projects the officers always look out the impact which is the output of all these functions ether contributes to or influences financial performance as a whole.					
2.	There is satisfaction on all green banking programs/projects which is exhibited by how the service is perceived by both					

	senior management and the internal staff on these projects.					
3.	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.					
4.	All staff at the green banking practice strives to achieve the intended results in terms of quality in accordance with the set targets and performance standards for service delivery.					
	Economy					
1.	The green banking practice aims at minimizing the cost of resources for all the available programs/projects.					
2.	The bank pays the price that is exactly for what goes into providing green service or product.					
3.	The green banking practices generates cost savings on most of its procurements. That is, it does less with fewer resources.					
4.	The green banking takes bulk discounts by buying/procuring in large quantities.					
5.	In the green banking cost is more significant than the quality of the service.					
6.	In green banking quality of services is more significant than the costs.					
7.	I always safeguard the public property/ assets entrusted to me to ensure that there is no damage.					
8.	I always ensure that there is proper and economical utilization of public funds.					

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Signature of Employee

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